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Carolyn Keane

*The University of Notre Dame Australia*

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**An Investigation of Nurse Education Service  
Models in Acute Care Metropolitan Hospitals  
across Australia**

**Carolyn Keane**

**20132784**

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

**School of Nursing and Midwifery  
The University of Notre Dame, Australia**

**2016**

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## List of Abbreviations

ABF	Activity Based Funding
A.C.T.	Australian Capital Territory
AHPRA	Australian Health Practitioner Regulation Agency
ANTS	Australian Nurse Teachers' Society
FTE	Full-time Equivalent
HREC	Human Research Ethics Committee
NSQHSS	National Safety and Quality Health Service Standards
N.S.W.	New South Wales
N.T.	Northern Territory
Qld	Queensland
S.A.	South Australia
SDE	Staff Development Educator
SDN	Staff Development Nurse
SMHS	South Metropolitan Health Service
SPSS	Statistical Package for the Social Sciences
TAFE	Technical and Further Education
Tas.	Tasmania
UK	United Kingdom
US	United States
Vic.	Victoria
W.A.	Western Australia
WHO	World Health Organization



## **Declaration of Authorship**

This thesis is the candidate's own work and contains no material that has been accepted for the award of any degree or diploma in any other institution.

To the best of the candidate's knowledge, the thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

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**Carolyn Keane**

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**April 2016**

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## Abstract

The provision of continuing professional development for nurses is necessary to support the delivery of safe patient care. Nurse education departments need to function as effectively and efficiently as possible, producing measurable outcomes to justify their cost in regard to the organisation's financial bottom line. In reviewing the literature, three recognised models of nurse education services within hospitals were identified. These are described as centralised, decentralised and combination models. All of these models have advantages and disadvantages that can affect service delivery, quality of service and cost.

The purpose of this study was to investigate the different nurse education service models in use, to evaluate the efficiency and effectiveness of the different model types with a view to making recommendations for future nurse education service delivery within healthcare organisations.

This research study used a mixed methods approach comprising three phases. Phase one involved interviews and focus groups with nurse educators at one tertiary teaching hospital in Perth, Western Australia (WA). Phase two involved focus groups and interviews with nurse educators in acute care metropolitan hospitals in W.A. Phase three of the study consisted of a national survey of nurse educators in acute care metropolitan hospitals across Australia.

The results indicated that in comparing the centralised, combination and decentralised models, the type of model in use did not appear to affect the educators, visibility in clinical areas or the development of specialist knowledge and skills.

However, significant results indicated that a centralised model:

- has more senior educators involved in the selection and education of junior educators
- requires educators to undertake less duties outside their role
- gives educators a more organisational-wide view
- makes educators feel less isolated
- allows for more continuous awareness of learning deficits at ward level

- uses less junior educators to fill staffing deficits
- allows more autonomy
- is more supportive of junior educators
- supports more consistency of training across the organisation
- has more coordinators as members of the executive or high-level committees.

The findings of this study demonstrate that a centralised nurse education service model undertakes more functions than, and delivers significant advantages over, the decentralised and combination models. The centralised nurse education service model encompasses the features of an ideal service model and was the model recommended by nurse educators across Australia.

# Chapter 1: Introduction

*Education is not the filling of a pail, but the lighting of a fire*

-Yeats-

## 1.1 Introduction

The provision of continuing professional development is necessary to support nursing staff in their delivery of safe patient care and to ensure they remain current with the rapidly changing healthcare environment in which they work (International Council of Nurses, 2015). Employing healthcare organisations have a responsibility to ensure that a range of professional development activities is available to staff to allow them to participate in continuing professional development and lifelong learning opportunities (Australian Nursing and Midwifery Federation, 2013).

Nurse education services within hospitals support nursing practice through the provision of ongoing high-quality education and training for nursing staff (Horner, 1995). They offer a range of services focussing on education, clinical support and professional development. Services offered by nurse education services within hospitals usually include continuing education courses, postgraduate specialist programs and coordination of graduate nurse programs and undergraduate students (Swansburg, 1995).

Most hospitals in Australia provide some form of nurse education service. These services can be delivered within the organisation in a number of ways. The aim of this study is to investigate nurse education service models in acute care metropolitan hospitals across Australia and to develop recommendations for future service delivery. This research study used a mixed methods approach with the research strategy containing three phases, commencing with a tertiary teaching hospital in Perth,

Western Australia (W.A.) before expanding to include acute care metropolitan hospitals in W.A. and then across Australia.

## **1.2 Background**

Staff development refers to the processes, programs and activities by which organisations develop, enhance and improve the skills, competencies and performance of their employees (Narayanasamy & Narayanasamy, 2007). Within healthcare settings, however, the term ‘staff development’ is often used to refer to a specific nursing education department or education service that functions within the organisation. These departments have multifaceted roles that include induction and orientation of new staff, competency management and training to support continuing professional development and safe patient care (Haggard, 2006a).

The terminology used to identify nurse education services and staff within healthcare organisations can vary widely between countries, states and even employing institutions (Conway & Elwin, 2007). Some of the terminology used in W.A. to name the nurse education department within hospitals includes the Learning and Organisational Development Unit, the Education Centre and the Staff Development Service. Nurse educator titles also vary between organisations and include Staff Development Educator, Staff Development Nurse, Program Coordinator and Program Facilitator. In addition to the title, the role, qualifications and scope of practice can also vary considerably. For example, nurse educators in the United Kingdom (UK) and the United States (US) often work both within academia and in the clinical environment, in comparison with nurse educators in Australia, who are solely employed by the hospital and work primarily in the clinical practice setting (Sayers & DiGiacomo, 2010).

In Western Australia, under the Department of Health and Australian Nursing Federation Industrial Award junior nurse educators are level two registered nurses (RNs) employed in education roles. An RN at this level is required to perform in the stream of clinical, management, research, or staff development duties delegated by a Senior Registered Nurse (SRN). The level 2 RN’s role includes delivering

comprehensive nursing care to a specific group of patients; providing support, direction, orientation and education; being responsible for planning and coordinating services; acting as a role model; assisting in the management of research projects/quality improvement programs and policy development; being responsible for education and training in relation to clinical practices and being responsible for the clinical supervision of nurses at Level 1 and/or enrolled nurses (Western Australia Health Department & Australian Nursing Federation, 2010).

In Australia, junior nurse educators working within hospitals may be required to undertake a variety of functions as part of their role, including participating in the hospital induction program and managing area-specific orientation for new nursing staff; planning, implementing and evaluating education and training programs to enable staff to achieve and maintain competency in clinical performance; and delivering area-specific and hospital mandatory competencies (McAllister, Oprescu & Jones, 2014). Junior nurse educators also provide clinical support and supervision to nurses who require performance management, assist with the supervision and development of undergraduate nursing students and undertake activities to identify and address nurse training and development needs (Conway & Elwin, 2007). This direct supervision encompasses the educator being present and personally observing, working with, guiding and directing the staff member or student being supervised (Australian Nursing and Midwifery Council, 2007).

In Western Australia, under the Department of Health and Australian Nursing Federation Industrial Award senior nurse educators are Level 3 SRNs employed in education roles. An SRN at this level is responsible for an expanded professional practice role, which may include, a role as team leader of health professionals; clinical/professional responsibility for a ward/ unit, an expanded role of clinical practice and/or management/leadership and the use of advanced problem solving strategies that influence, manage and coordinate patient care (Western Australia Health Department & Australian Nursing Federation, 2010).

Senior nurse educators working within hospitals are required to undertake a variety of functions as part of their role. These can include coordinating the development and

delivery of education and training programs to meet operational objectives and the learning needs of staff, and supporting the development of evidence-based standards and policies (Narayanasamy & Narayanasamy, 2007). Senior nurse educators are also responsible for human resource management and providing leadership, professional support and guidance for nursing staff (Conway & Elwin, 2007). This guidance may be in the form of assistance and advice given to nurse unit managers or junior nurse educators about their performance at work (McAllister, Oprescu & Jones, 2014).

### **1.2.1 History of Nurse Education in Hospitals**

Nurse education services and educators were first formally recognised in 1860 when Florence Nightingale established the first nurse training school at St Thomas' Hospital in London. The Nightingale School of Nursing revolutionised and professionalised nursing education, making nursing a viable and respectable option for women who desired employment outside the home. Following the establishment of the Nightingale School of Nursing, the Nightingale model of nurse education was quickly adopted worldwide by supervisors of public health institutions (Brooks, 2007).

The first nursing school in Australia commenced in 1868 when Florence Nightingale sent Lucy Osburn and five other English sisters to the Sydney Infirmary and Dispensary to improve the standards of the hospital. Osburn was successful in improving the standards of nursing, with the other sisters eventually taking up positions as matrons at other hospitals, which spread the Nightingale teaching model across the hospital system of the colony (South East Health, 2005).

The transfer of undergraduate nurse education from hospital-based training to university education commenced in the early 1980s and was completed in the 1990s. The initial qualification was developed at diploma level but soon progressed to a Bachelor's Degree and subsequently to Honours-level qualifications (Russell, 1990). Within healthcare organisations, specific nursing positions whose focus was education were created and implemented within the different career structures throughout the states of Australia (Henderson & Winch, 2008).



### **1.2.2 Continuing Nursing Education**

From the beginning, Florence Nightingale believed that continuing nurse education and lifelong learning were an important part of nursing practice. She stated that education did not finish with graduation and that nurses should never consider their training finished, as there was no end to what they may be learning every day (O'Shea, 2002).

Organised continuing nurse education efforts in hospitals have been traced to the depression years of the 1920s and 1930s. As the availability of work in nursing patients in their homes declined, nurses moved into staff positions in hospitals. This transition from private practice into group practice in an institutional setting was supported by orientation and training programs to acquaint new staff members with equipment, procedures and regulations (Poole, 1974). During World War II, the scope of nurse education expanded to include skills training to refresh inactive nurses returning to practice and to provide on-the-job training for volunteers and non-nursing workers. As professional needs grew over the years, nurse education services within hospitals grew in response, encompassing continuing education, leadership and management training, enhancing nurses' professional growth (O'Connor, 1986).

In reviewing the literature, three different models of nurse education services within hospitals were identified. These are described as centralised, decentralised and combination models. These different models are briefly described below but are examined in more detail in Chapter 2. When describing the structure of the different service models, it is clear that each model's structure supports specific advantages and disadvantages in how the service operates (Haggard, 2006b).

### **1.2.3 Centralised Model**

A centralised nurse education service model is one in which there is an organisation-wide approach to nurse training, where a central authority or department has the responsibility of meeting nurses' training requirements. In a centralised model, all education staff, even those placed within the clinical areas, report centrally to the

education department and coordinator of the education service (Cummings & McCaskey, 1992)

In a centralised model, there is a coordinator of the service who directs and influences all of the training being delivered across the site. In hospitals with this model, junior nurse educators may be based in clinical areas but report to senior nurse educators based in the central education department, outside the clinical area. The senior nurse educators and any other staff involved in the delivery of education, such as administration staff, all report to the coordinator of the nurse education service. In a centralised model, all of the educators have a reporting line to the education service and are also costed to this service (Haggard, 2006a).

#### **1.2.4 Decentralised Model**

Unlike the centralised model, in a decentralised nurse education service model there is no central training department, as educators within individual clinical areas are responsible for meeting the training needs of staff within their areas and report directly to the nurse unit managers. The nurse unit managers direct the nurse educators and have governance over education (Cummings & McCaskey, 1992)

In a decentralised nurse education service model, the junior and senior nurse educators are attached to individual clinical areas and report to the nurse unit manager of that area. There is no education and training service that operates across the organisation and no official reporting lines or relationships between the educators located within the different clinical areas (Haggard, 2006a). The individual nurse unit managers of each clinical area identify a need for a nurse educator and initiate the recruitment and selection process independently of other areas. In a decentralised nurse education service model, there is no overarching education department that delivers training across multiple areas or conducts hospital induction. Instead, all orientation, education and training needs are met in the individual clinical areas by the nurse educators employed in those areas.

### **1.2.5 Combination Model**

In a combination nurse education service model, there is a centralised education department delivering education and training across the organisation as well as clinically placed educators who are managed by the nurse unit managers and are independent of the education service. There is no relationship or reporting lines between the education department and the nurse educators managed by the nurse unit managers. A combination service model allows for the use of different aspects of the centralised and decentralised models. Some functions are delivered by the education service across the organisation, such as orientation and record keeping, while others are delivered in individual clinical areas by the nurse educators employed and managed by the nurse unit managers, such as unit-specific training (Cummings & McCaskey, 1992).

A combination service model can address the many conflicting demands placed on the nurse education service, such as maintaining ongoing routine programs such as hospital orientation, while also being able to respond rapidly to local unit needs that can emerge at short notice. A combination model allows nurse educators attached to the education service to focus on the delivery of programs across the organisation, such as graduate nurse programs and study days. The nurse educators employed by the clinical areas report to the nurse unit manager and can concentrate on delivering area-specific training with no connection to the education service (Cummings & McCaskey, 1992).

## **1.3 Topic and Purpose**

As outlined above, a number of different nurse education service models are used within acute care hospitals around Australia, including centralised, decentralised and combination models. All of these models have advantages and disadvantages that can affect service delivery, quality of service and cost.

In Perth, the capital city of W.A., there are a number of tertiary, general and specialist hospitals that are a mix of public and private organisations. All of these facilities have

nurse education departments that vary in size and function. In the 1960s and 1970s, all of these hospital nurse education services used a similar model, with the education staff reporting to a centralised education department and coordinator. However, in the 1980s and 1990s, a number of events occurred that directly affected the structure and function of these nurse education units.

These events included one of the hospitals in Perth changing the structure of its staff education service so that it delivered training across multiple hospitals within the one health service. A new national nursing staffing structure was also introduced that included junior and senior nurse education positions for the first time. In addition, new clinical divisions were developed within W.A. hospitals with services realigned under a new directorate structure. The result of this was that by the end of the 1990s the nurse education services within the hospitals in Perth had changed to a variety of service models (Sue Davies, personal communication, 15 May 2013; Gavin Leslie, personal communication, 4 June 2013; Spillman, 2008).

### **1.3.1 Significance of the Study**

The World Health Organization (WHO; 2013) estimates that the world will be short of 12.9 million health-care workers by 2035; with the shortage currently standing at 7.2 million. In regards to the nursing, it is predicted that 40% of nurses will leave health employment in the next decade worsening an already depleted workforce. In Australia nursing associations have identified significant shortages in the next 10 years, linked to the ageing population and the increasing complexity in health needs (Patty, 2016). The exodus from the nursing profession is expected to rise in the next few years with many surveys showing nurses are fed up with demanding workloads they are expected to take on (Health Times, 2015). Education and training for nursing staff is crucial to support the delivery of quality patient care by developing nurses' knowledge and skills to support their transition from novice to expert practitioner. However, continuing education is not just about addressing professional requirements for the job; it is also about developing other skills that allow for the promotion of both personal and professional growth (Sayers, DiGiacomo & Davidson, 2011).

Offering high-quality staff education can be one of the best ways to attract, motivate and retain talented people within the organisation. If an organisation has a good reputation for education and support, staff may choose to work there over other organisations and stay longer (Darbyshire, Downes, Collins & Dyer, 2005). Continuing nurse education is also a mandatory requirement of remaining registered with the national nursing regulatory body, the Nursing and Midwifery Board of Australia, which states that nurses must remain competent after registration and undertake continuing professional development of at least 20 hours each year (Nursing and Midwifery Board of Australia, 2010).

Continuing nurse education is required now more than ever. Nursing is under significant pressure with increases in the number, age and co-morbidities of patients, the rapid rise of technology and the emergence of new roles (Garrett, 2012; Henderson & Winch, 2008). However, it can often be difficult for nurse education departments to justify their existence when their activity and outcomes can be difficult to quantify. As the nurse education service is a support service within the organisation, in times of financial pressure the hospital executive can see education as something that can be cut to reduce costs. It is imperative that the nurse education department function as effectively and efficiently as possible and can produce measurable outcomes for the organisation to justify its cost in regard to the organisation's financial bottom line (Lindy & Reiter, 2006).

Another consideration is the Activity Based Funding (ABF) system, which commenced operation in W.A. in July 2010. Over time, ABF will extend to every aspect of the Australian public health system (Department of Health Western Australia, 2013). In 2009, the National Health and Hospitals Reform Commission recommended that the cost of clinical education be funded specifically in all relevant payment streams for public hospitals. This was prompted by a concern that without specific funding, education and training runs the risk of being squeezed out. The development of an ABF model for education and training is still in the planning phases, with work being undertaken to classify all of the elements of teaching and training, including scope, outputs and costs, to enable a model to be launched in 2018. This capturing and costing

of education as a separate activity in the future will have significant implications for healthcare organisations that will need to re-examine the structure, function and output of their education services (Council of Australian Governments, 2011).

Although numerous discussion articles have been published within the area of nurse education in healthcare facilities over the years, these papers appear to address specific aspects within the field, such as student and graduate nurse training and the development of specific clinical programs, with only a limited number focussing on the structure or model of nurse education services. In searching the literature, there appears to be only one American and one Canadian study that have undertaken research in the area, with their findings being weak and difficult to generalise. This study addresses this by looking specifically at nurse education service models and using a robust methodology to ensure the findings are generalisable.

No studies appear to have been conducted in Australia within this area, so it is unclear what nurse education service models are being used or the frequency of their use. This study addresses this gap by investigating the types of nurse education service models in use across Australia, the frequency of their use and the perceptions of the different models by nurse educators working within them. It also examines the factors perceived to have influenced the type of model adopted, as well as nurse educators' views regarding future priorities for nurse education. This study, undertaken within Australia using a robust methodology, adds to the existing body of knowledge and provides recommendations that will assist nurse education departments, which will need to be able to clearly define their business and demonstrate the direct results of their service on patient care outcomes to ensure the sustainability of nurse education services within healthcare organisations into the future.

### **1.3.2 Research Questions**

The purpose of this study is to investigate the different nurse education service models that are being used within hospitals across Australia to evaluate the efficiency and effectiveness of the different model types. To assist healthcare organisations to deliver on outcomes in the most cost-effective manner, it is imperative that research is

conducted into the various nurse education service models to demonstrate which is the most efficient and effective. The few studies that have been undertaken in this area to date have provided only weak evidence and are difficult to generalise. In light of the opening of a number of new hospitals across Australia, it is important to conduct further study in this area to inform the future models of nurse education services being developed for organisations to ensure the sustainability of the service into the future.

The research area of study is nurse education, with the research topic being nurse education services in acute metropolitan hospitals across Australia. The aim of the study is to investigate nurse education service models in acute care metropolitan hospitals across Australia and develop recommendations for future service delivery.

The research questions are:

1. What nurse education service model is used at Hospital One in Perth, W.A.?
2. What nurse education service models are used in other acute care metropolitan hospitals across W.A.?
3. What nurse education service models are used in acute care metropolitan hospitals across Australia?
4. What are the perceived factors that influence which nurse education service model is used at different acute care metropolitan hospital sites?
5. What are the views of nurse educators about the different nurse education service models used in acute care metropolitan hospitals across Australia?
6. What are the views of nurse educators about future nursing education priorities and services?

This research project contains three phases. Phase one focusses on Hospital One, a tertiary teaching hospital in Perth, W.A.; phase two expands the focus to acute care metropolitan hospitals in W.A.; and phase three includes all acute care metropolitan hospitals across Australia.

## **1.4 Summary**

This thesis presents a research project investigating nurse education service models across Australia. The research conducted in this area to date remains scarce and does not include the Australian context. This research project comprises three phases. Phase one focusses on one tertiary teaching hospital in Perth, W.A.; phase two expands the focus to include acute care metropolitan hospitals in W.A.; and phase three includes all acute care metropolitan hospitals across Australia.

This thesis comprises six chapters. Each chapter provides the reader with an understanding of the research, its findings, implications and conclusions. The aim of Chapter 1 has been to describe the background information for the research topic and research questions in relation to nurse education service models. Chapter 2 outlines the literature related to the area of nurse education and the different service models. Chapter 3 discusses the methodology of the research project, including the mixed methods approach and the methods of data collection and analysis across the three phases of the study. Chapter 4 provides an explanation of the qualitative and quantitative findings, including the demographics of the participants. Chapter 5 compares the study's findings with the literature and discusses the new knowledge gained from the study. Chapter 6 concludes by summarising the study and making recommendations for the future.



# Chapter 2: Literature Review

*An investment in knowledge pays the best interest*

-Benjamin Franklin-

## 2.1 Introduction

Ongoing education and training for nursing staff is essential to support the delivery of quality patient care. The delivery of continuing education is an important role of the nurse education service. The presence of an education and training service for nursing staff within hospitals has been demonstrated to be essential to support the development of nursing knowledge and skills, improve performance and influence clinical practice (Covell, 2009; Czurylo, Gattuso, Epsom, & Stark, 1999; Waddell, 1992).

A variety of nurse education service models are used within acute care metropolitan hospitals around Australia but to date little research has been conducted to investigate the efficacy of these different models. This study assists in addressing this gap by identifying the nurse education service models being used across Australia, investigating the different models and making recommendations to ensure the sustainability of nurse education services within healthcare organisations into the future.

In January 2013 and January 2015, a systematic literature search was performed using CINAHL, Medline and Google Scholar Databases to identify literature published in English. This literature included staff development and nurse/nursing education, structures, organisational design and models. Google searches were also carried out under the topics of centralised and decentralised organisational and management models. It is usual to do a search for the previous ten years plus any seminal works but as this topic had limited contemporary publications the search included publications of any date. Documents were included if they discussed staff development or nursing

education departments within healthcare facilities and were a discussion or research paper. Articles found in the Google search that addressed the general concepts of centralised and decentralised organisational models were also used.

The first section of this chapter describes continuing education and outlines the importance of continuing education for nurses. The chapter then discusses nurse education services and the factors that influence the functioning of nurse education services within healthcare organisations. It concludes by focussing in detail on the different nurse education service models outlined in the literature.

## **2.2 Continuing Education**

‘Continuing education’ is a term that gained popularity in the late 1960s (Houle, 1984). It was developed to describe a systematic approach to maintaining knowledge and competence. Continuing education is education and training provided for adults after they have left the formal education system, consisting mainly of short or part-time courses. This education is designed to give an individual further knowledge and skills to support them in undertaking their line of work (Gallagher, 2007). These programs often cover aspects of the employee’s job, such as new advancements in the workplace, and are used to develop an individual within a given field. Continuing education can also be used to develop staff in the more corporate areas, such as management and leadership training. Continuing education may be optional for some, but others may be required to undertake continuing education to maintain certification or their licence (Munro, 2008).

Nurse continuing education refers to a variety of formal and informal education and training activities that aim to improve nurses’ knowledge and skills, with the ultimate goal of improving the delivery of patient care (Quinn, 2001). Continuing education is a component of lifelong learning and consists of planned educational activities that build upon the educational and experience base of the professional nurse for the enhancement of practice, education, administration, research or theory development (American Nurses’ Association, 1984).

These planned learning activities are delivered to nurses after completion of their pre-registration nursing education program. Continuing education is necessary to allow nurses to maintain currency with the scientific and technological advances that are constantly changing the nature of nursing practice; it is now accepted practice in all healthcare facilities (Griscti & Jacono, 2006). The concept of continuing education in nursing is not new and has been mentioned in the literature since the beginning of the nursing profession, with Florence Nightingale encouraging nurses to continue to learn throughout their nursing careers (Gallagher, 2007).

Nurses undertake continuing education for a variety of reasons. It allows them to maintain, improve and broaden their clinical knowledge, expertise and competence. It also supports the development of the personal and professional qualities they will require throughout their professional lives (Nursing and Midwifery Board of Australia, 2010). The presence of education and training for nursing staff within hospitals has been demonstrated to be essential to the development of nurses' knowledge and skills and to support nurses in their delivery of quality patient care (Covell, 2009; Czurylo et al., 1999; Okougha, 2013; Waddell, 1992). For nurses, engagement with continuing education activities is influenced by a number of factors, including the need to develop professionally, the need to acquire a new technical or clinical skill, the financial cost incurred, the academic level of accreditation, and the potential for recognition or reward through career development (Munro, 2008).

The importance of continuing education has been highlighted recently in Australia, with the implementation of the National Safety and Quality Health Service Standards (NSQHSS). In recent years, the need to ensure the safety and quality of patient care has prompted the government to implement the NSQHSS across the Australian health system. These standards outline a number of requirements for organisations across 10 clinical areas of practice, including ongoing education and training for clinical staff (Australian Commission on Safety and Quality in Healthcare [ACSQHC], 2012).

The requirement for continuing education is also embedded within nurses' professional competency standards and performance appraisal processes. The Nursing and Midwifery Board of Australia has developed the National Continuing Professional

Development Registration Standard and the Registered and Enrolled Nurse Competency Standards to assist nurses in systematically evaluating their practice to identify learning and development needs and to demonstrate their continued competence to practice. The board sets standards for participation in continuing professional development and performance evaluation (Nursing and Midwifery Board of Australia, 2006, 2010, 2016).

Challenges to organisations successfully delivering continuing education include barriers that inhibit staff from being able to undertake the programs and lack of changes that occur as a result (Gallagher, 2007). Factors that inhibit staff from undertaking continuing education may include the availability of sufficient opportunities, the cost, lack of awareness, staff shortages, family commitments and lack of encouragement from managers. It is also important that continuing education is seen as effective and can demonstrate outcomes such as changes in behaviour, attitudes or improved patient care (Gallagher, 2007).

It has been proven that continuing education can increase nurses' knowledge and skill levels, change behaviours and attitudes, and have a positive effect on nursing practice (Covell, 2009; Czurylo et al., 1999; Waddell, 1992). For nursing professionals, continuing education is essential to maintain competence in practice and deliver effective nursing care. Studies have reported improvement in patient outcomes following nurse participation in continuing education, such as symptom management and the prevention and reduction in adverse events (Barriball & While, 1996; Cervero, 1985; Salahuddin et al., 2004). An examination of these studies indicates that reported improvements in patient outcomes can be achieved following nurse participation in continuing education if the program facilitates change of professional practice and uses ongoing learning activities over an extended period to sustain the changes (Barriball & While, 1996; Cervero, 1985; Salahuddin et al., 2004).

In 2014, Lee, Kim and Kim undertook a nursing study within hospitals to investigate the relationship between nurses' knowledge and outcomes in nursing performance. This study involved a survey of 192 registered nurses in three large healthcare organisations across South Korea who had at least one year of nursing experience. The

survey asked questions about demographic characteristics, implementation of core knowledge, management factors and outcomes of nursing performance. Outcomes of nursing performance examined included performance competency, performance attitude, willingness to improve performance and application of nursing process. The findings of this study identified a knowledge-sharing culture and organisational learning as core factors improving the outcomes of nursing performance. The study concluded by highlighting the importance of nurse educational systems and programs to encourage nurses' professional improvement.

As well as providing personal and professional outcomes for nurses, continuing education can have organisational outcomes. Several studies have highlighted that access to and support for educational opportunities can be major factors influencing nurses' job satisfaction (Bjørk, Tørstad, Hansen, & Samdal, 2009; Kuokkanen, Leino-Kilpi & Katajisto, 2003; Wilson, Squires, Widger, Cranley & Tourangeau, 2008). Continuing education has also been highlighted as an important factor in motivating staff, encouraging social networking and assisting in the recruitment and retention of nursing staff (Covell, 2009).

### **2.2.1 The Importance of Continuing Education in Australia**

The importance of continuing education as outlined above cannot be underestimated as Australia's nursing workforce is facing significant challenges. Such challenges are well documented and include an ageing population, increased demand for health services, increasing expectations for service delivery and the changing burden of disease (Health Workforce Australia, 2011).

It is predicted that in the next 50 years Australia will experience significant nursing workforce shortages (Health Workforce Australia, 2012). In 2013, Health Workforce Australia (HWA) undertook a review of health workforce programs to try and support the development of an increased number of practitioners to meet their forecast of critical nursing workforce shortages by 2025. Requirements identified were the need to enhance nursing workforce retention by offering nurses the opportunity to upskill and take on more senior and diverse roles. To assist with the retention of nurses in the

nursing profession and to support the large number of new nurses that will be needed, the provision of ongoing quality education and training is essential. This training must address the professional requirements for the job by developing nurses' knowledge and skills to support the delivery of quality patient care, while also supporting the development of management and leadership skills. This will allow for the promotion of nurses' personal and professional growth and support their progression into senior roles (Darbyshire, Downes, Collins & Dyer, 2005).

Global health trends such as the rise in chronic conditions, the growing threat of communicable diseases and the increasingly complex and varied healthcare environment mean that effective continuing education is vital to enable healthcare professionals to respond appropriately to the needs of contemporary health services (Clark, Draper & Rogers, 2015; WHO, 2013). Competency-based continuing education has been seen as a potential solution to predicted workforce shortages and has been championed as the way forward in health professional training (WHO, 2013). Outcome-focussed continuing education supports mobility into and across different nursing speciality positions within health and supports nurses in expanding their practice to function at the full scope of their role. These approaches will assist the system to respond in a timelier way to provide the workforce required to meet the expected changes in population health needs (Health Workforce Australia, 2013).

Hospital-based education services are vital in supporting the nursing workforce to meet future healthcare needs. A continuing education program is essential for the promotion and expansion of nursing knowledge, clinical wisdom and the transition from novice to expert practitioner (Darbyshire et al., 2005).

### **2.3 The Hospital-based Nurse Education Service**

To support the need for continuing education, education departments and services have been established within healthcare facilities. These education departments have multifaceted roles, including the induction and orientation of new staff, competency

management and training to support practice, and continuing professional development (Narayanasamy & Narayanasamy, 2007).

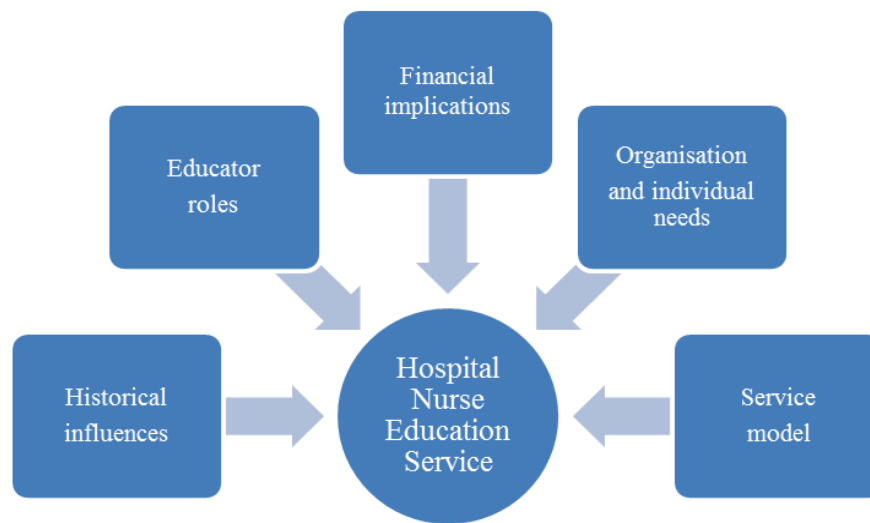
As well as delivering continuing education to staff, the education department has an important role in the overall success of an organisation (Burke & Hellwig, 2011). Hospital education departments are able to align themselves with the strategic direction of the organisation, prioritise work processes and focus on what matters most to the organisation. The education department can play an essential role in creating a culture of learning within the organisation (Burke & Hellwig, 2011). A supportive learning environment within the organisation is important in supporting continuing education and ongoing development of staff to improve service delivery and patient care (Burke & Hellwig, 2011).

Some of these hospital education departments are established as one service that supports the diverse education needs of all of the different occupational groups within the hospital, including nurses'. Other hospital education services are divided into separate streams within the service that cater for a specific group of staff within the organisation, such as the nurse education service (Narayanasamy & Narayanasamy, 2007). As both of these approaches support the delivery of education for nurses within the hospital, the author has referred to both as nurse education services, even though the scope for one is bigger than just delivering education to nursing staff.

The hospital-based nurse education service is involved in the planning, design, implementation and evaluation of educational activities for nursing staff, including provision of educational services to meet regulatory and registration requirements (McAllister, Oprescu & Jones, 2014). The nurse education service delivers training to maintain and increase nurses' competence in their delivery of patient care and collaborates in the process of quality improvement and risk management by responding to the need for educational activities (Haggard, 2006a).

In times of rising demands on the healthcare system to deliver safe patient care within ever-increasing budgetary restrictions, the nurse education service needs to justify the importance of its place within the healthcare organisation (Menix, 2007). The literature

has identified a number of factors that can affect the functioning of the nurse education service within healthcare facilities. These have been presented as a conceptual model (see Figure 2.1) and are discussed in detail below.



**Figure 2.1. Conceptual Model of Factors Affecting Hospital Nurse Education Services**

### **2.3.1 Factors Affecting Hospital Nurse Education Services**

Many factors affect the functioning of nurse education services within healthcare facilities. These factors include historical influences, the nurse educator role, financial implications, the organisation and individual registration needs, and the service model in use (Haggard, 2006b). The principles of adult learning (Knowles, 1980) that outline the factors motivating adult learners were also considered when reviewing the literature, but as they do not affect the functioning of the nurse education service, they are not discussed. The factors affecting the functioning of nurse education services are examined in detail throughout the remainder of this chapter.

#### **2.3.1.1 Historical Influences**

The history of nurse education is intertwined with the history of nursing and nursing's quest for a professional identity (Allen & Allison, 2006). Education has been vital in providing the knowledge, skills and ability to deliver quality care to patients, elevating nursing to a profession and gaining the respect of other professions. The path to



nursing's identification as an independent profession has not been easy, as nursing, dominated by women, was initially bound to the Victorian ideal of women and to the hospital's needs for an inexpensive source of workers (Allen & Allison, 2006).

In 1860, Florence Nightingale established the first nurse training school at St Thomas' Hospital in London. The curriculum was largely based around the nursing practice of that time, including instruction on the need for hygiene and task competence. The first trained Nightingale nurses began work on 16 May 1865 at the Liverpool Workhouse Infirmary. Florence Nightingale wrote 'Notes on Nursing' in 1859, which was used to support the curriculum at the Nightingale School and other nursing schools at that time (Florence Nightingale Museum, n.d.).

In Australia, the system of training nurses based on the Nightingale system was imported from the UK in the late 1800s to early 1900s. It was a vocational training program that included a theory and clinical component during which trainee nurses would be provided with board and receive the minimum wage. In exchange, the students were expected to provide service to the hospital (Russell, 1990). Trainee nurses resided in the nurses' home during the training period, where they were under the control of the home sister, who herself was a trained nurse. This 'living-in' was seen as an essential component of the program (Smith, 1969). During the training, nurses were rotated through specific clinical areas within the hospital to gain experience under the direct supervision of a nurse in each area. This clinical area was the main learning environment, with trainee nurses learning by doing and by trial and error (Russell, 1990).

In this system, the educational needs of the trainee nurse were secondary to the service needs of the hospital. The limited theory given was delivered by doctors, matrons or other healthcare workers in classes that had to fit around the requirements of the hospital. There was no separate budget for the education of nurses, with all hospitals offering nursing training courses at this time (Russell, 1990). These hospital-based training courses consisted of a subject syllabus that focussed on medicine and surgery rather than on nursing. The teaching of nursing care was relegated to the sister tutors, who were often unqualified educators. Smith (1969) noted that early hospital-based

nursing schools were little more than protected environments in which young women carried the major burden of nursing patients and were often required to teach younger students as well. Mary Nutting, one of the early leaders for reforming nursing education, was credited as the first nurse to evaluate the educational status of nursing in 1906 (Reilly, 1990).

Continuing education was used to correct the deficiencies in hospital-based training and provide information on modern trends and nursing research by offering short courses that focussed on nursing (Piercey, 1991). The initial continuing education programs for nurses were sponsored by the alumni associations of schools of nursing. These programs and postgraduate courses provided by hospitals were an effective means of complementing and updating the nurse's professional education (Piercey, 1991).

Although short courses for nurses were sponsored by The Teachers College in New York City as early as 1899, most colleges and universities became involved in providing formal continuing education offerings in the 1920s (O'Connor, 1986). In W.A. as early as 1910, nurses became aware that they needed to stay current with medical advances, motivating them to organise doctors to deliver lectures to them at their monthly meetings (Piercey, 1991). By 1954, the W.A. branch of the College of Nursing Australia had developed a training program to keep nurses up to date with any new developments in nursing. In the late 1950s and early 1960s, hospitals in Perth began offering a small number of continuing education courses (Piercey, 1991).

The changing nature of healthcare delivery had a significant impact on undergraduate nurse training. To keep up with the changes occurring in healthcare, undergraduate training began to develop and change its focus to include health promotion, health maintenance and prevention of disease (Piercey, 1991). Australian undergraduate nurse education changed from the Nightingale system of on-the-job training to professional preparation in institutions of higher learning (Spillman, 2008). In the late 1970s, the Royal College of Nursing Australia was the first to offer a pre-registration nursing course that was a non-hospital based training program that eventually developed into the Diploma of Applied Science (Nursing). In 1975, W.A. followed by becoming one

of the first states in Australia to commence delivering nurse education at higher level training institutions (Piercey, 2002).

The transfer of nursing education into the university sector continued throughout the 1980s, and gradually hospital schools ceased operating. In the early 1990s, universities granted nursing qualifications at bachelor degree level, rather than at diploma level. The first baccalaureate nursing program developed was the Bachelor of Applied Science (Advanced Nursing), a post graduate degree that required registration as a registered nurse as a prerequisite to admission and completion of 16 units (Russell, 1990).

In 1987, the implementation across Australia of the new national career structure for nursing, which included the implementation of a nurse education stream, was a major contributing factor to the expansion of continuing education and set the scene for the nurse education practices occurring in healthcare facilities today (Piercey, 1991). This development necessitated the employment of nurse educators.

### **2.3.1.2 Nurse Educator Role**

To support the provision of nurse education in hospitals, the nurse educator role was developed, even though there have been women appointed to teach nurses since the 1870s. The formal nurse educator role of 'sister tutor' was first introduced around 1918 (Brooks, 2007). Prior to this, an informal 'home sister' position was used in the Nightingale system to provide moral guidance for student nurses (Brooks, 2007). Throughout the history of nursing, nurse educators have played an important role in the professional development of nurses (Conway & Elwin, 2007).

A nurse educator is defined as a registered nurse who assesses, plans, implements and evaluates nursing education and professional development programs (Australian Nursing and Midwifery Federation, 2009). Nurse educators are a diverse group, consisting of those who work in a health service, as well as those who work in the Tertiary and Further Education (TAFE) and university settings (McAllister, Oprescu & Jones, 2014). The role of the hospital-based nurse educator is pivotal in supporting

both experienced and non-experienced nurses to undertake continuing education and apply formal learning to their clinical practice (Conway & Elwin, 2007).

The nurse educator's role is complex and includes the facilitation of an optimum learning environment to include both the development of nurses' clinical practice as well as their personal and professional development. The role consists of assessment of nurses' practice as well as evaluation of their own teaching role in relation to influencing patient care outcomes (Conway & Elwin, 2007). The role of the nurse educator is multifaceted and includes that of educator, facilitator, change agent, consultant, researcher and leader (Narayanasamy & Narayanasamy, 2007).

Internationally, as well as in Australia, there is a lack of a standardised approach to the nurse educator role title, description and scope of practice. The nurse educator working within the hospital especially has an unclear role that is poorly described in the literature (Sayers, DiGiacomo & Davidson, 2011). Role descriptions and boundaries have been found to vary between employing institutions and even between wards and units within the same organisation. There is also a lack of consistency of role responsibilities across a range of different categories of nurses who contribute to the continuing professional development of nursing staff (McAllister, Oprescu & Jones, 2014).

This lack of consistency is highlighted in a study undertaken by McCormack and Slater (2006) that evaluated the role of clinical education facilitators at a large teaching hospital in the UK. At all levels of the organisation, there was a consistent view that the role was needed to coordinate education and training across the site. The position was shown to have numerous tasks as part of the role, which differed across directorates. Core responsibilities centred on the identification, arrangement, monitoring, recording and evaluation of training days in the hospital; induction and mentorship of new staff; collaboration with outside institutions (e.g., universities) in the provision of training; and staff advocacy. However, although there were some commonalities across individual roles, there was little agreement about the core elements of the role or its effect on the learning culture of clinical settings (McCormack & Slater, 2006).

Role overload, a condition in which there is insufficient time to carry out all of one's expected role functions and role dumping in which functions that are not part of the role are given to the nurse educator have also been identified as factors that have added to the confusion of the nurse educator position in Australia (McAllister, Oprescu & Jones, 2014). Standards for the nurse educator role are critical in creating a vision for the role and articulating an expected level of performance. In nurse education arenas, standards have been developed to define the scope of nurse education practice and to advance the role of the nurse educator, although implementing these in a consistent manner has proven difficult (Rogan, Crooks & Durrant, 2008).

This is supported by findings of a recent study undertaken by Sayers et al, in 2015 examining the nurse educator role in Australian hospitals. This study identified that nurse educators can experience high job satisfaction levels, but that role ambiguity and role confusion continue to be issues and can adversely impact on the expectations, responsibilities and job satisfaction of nurse educators. The study concludes by indicating that role clarity, educator competencies and performance monitoring are important to the effectiveness of the nurse educator role (Sayers, et al. 2015).

The lack of clarity surrounding the nurse educator role has led to a shortage of nurse educators, with clinicians increasingly being appointed to or asked to assume positions as educators without sufficient preparation or training (McAllister, Oprescu & Jones, 2014). Novice nurse educators experience an identity struggle when they move from a clinical position into an educational role that is not clearly defined. They can feel a sense of loss when letting go of their clinical role and experience professional isolation as they begin to operate autonomously and independently of the clinical team.

Adding to nurse educators' sense of isolation is the fact that nurse educators in Australia are not required to be credentialed, making it difficult to guide their career progression and monitor standards and accountability (Sayers & DiGiacomo, 2010). There are also clear inconsistencies in nurse educators' access to and involvement in peer support and professional development opportunities (McAllister, Oprescu & Jones, 2014).

To assist in providing some clarity to the nurse educator role and to support the professional interests of nurse educators across Australia, the Australian Nurse Teachers' Society (ANTS) was established in 1975. The society represents clinicians, specialists and academics working within the field of nurse or nursing education. ANTS' aims are to promote and support nurse educators by the development of standards and policies around the field of nurse education and advocacy for nurse educators in political and professional arenas (ANTS, 2012).

In 2010, ANTS developed the Australian Nurse Teacher Professional Practice Standards, which describe the nurse educator's role and core competencies. These standards contain three domains, including teaching and learning, communication and professional practice. They also list a number of core components of the role, including the planning of quality learning experiences and programmes which support education and nursing practice, demonstrating effective communication and interpersonal skills at an advanced level and demonstrating advanced nursing knowledge and expertise in the context of teaching (ANTS, 2010).

It is of the utmost importance that nurses working within the clinical environment receive appropriate training and the support needed to prepare them to undertake a new role as a nurse educator. Nurse educators require ongoing support and development to foster their progression as a specialist educator and to ensure the growth of the speciality as a whole (Sayers & DiGiacomo, 2010). Nurse educators are instrumental in the preparation of the future nurse workforce, yet without sufficient training, support and leadership the nurse educator can be easily influenced by a number of competing factors (Carr, 2007). The pressure of the current economic climate, changing government policy and the over-emphasis on competency and skills training can force the nurse educator to become reactive, trying to meet constantly conflicting demands, rather than proactively planning comprehensive training with predetermined outcomes that align with organisational plans (McAllister, Oprescu & Jones, 2014).

This pressure on nurse educators from competing demands is supported by Carr (2007), who undertook a study at one London healthcare facility to examine changes within nurse education. Through interviews with nurse educators, it was identified that

nurse education was being affected by four key influences, including the government, health trusts, universities and the Nursing Council, each of which had contradictory visions of the nurse educator role and responsibilities. Among these competing pressures, the major driving force affecting nurse education was found to be government plans for the health services to achieve set performance targets (Carr, 2007).

Nurse educators hold positions of power and influence within healthcare organisations and can use this to influence decision makers. It is important that educators are knowledgeable about the organisation in which they work so they are aware of its values and goals and can tailor their activities to complement the achievement of these. To be successful, the nurse educator must establish effective links with individuals in all parts of the organisation. He or she needs to be politically astute and initiate relationships that will foster the hospital's goals (Puetz, 1987).

As healthcare resources become increasingly scarce, nurse educators will be expected to provide more cost-effective education to meet the organisation's mission and strategic goals (Tanner, 2002). This can only happen when educators collaborate with organisational leaders to identify actual educational needs in a proactive way. Rather than being reactive, educators must use a collaborative approach in forecasting these needs in a consistent and timely manner (Harton, 2007). This is best accomplished when the mission of the nurse education service is clear; the stakeholders are identified; and the tools and processes are in place to assess, plan, implement and evaluate educational offerings (Burk, 2008). One of the important healthcare resources that needs consideration is the financial implications of nurse education. The external and internal funding for education within an organisation is an important factor that can impact the hospital nurse education service.

### **2.3.1.3 Financial Implications**

In today's cost conscious society, it is important to be able to identify and rationalise the true cost of the hospital nurse education service (Tanner, 2002). The ABF system is part of the National Health Reform Agreement, which moves the Commonwealth



Government to a more consistent approach to funding public hospital services based on their activity. This agreement ensures that health services are paid, for every patient they see, taking into account the complexity of the patient's healthcare needs (Health Workforce Australia, 2012). In 2009, the National Health and Hospitals Reform Commission recommended that the cost of clinical education be specifically funded for public hospitals. This was prompted by a concern that education and training may not be continued without specific funding (Council of Australian Governments, 2011).

The development of an ABF model for education and training in Australia is still in the planning phases, with work being undertaken to classify all of the elements of training, including scope, outputs and costs, to enable a model of funding to be launched. This capturing and costing of education as a separate activity in the future will have implications for organisations that may need to re-examine the structure, function and output of their education services (Council of Australian Governments, 2011).

When cost containment is on the agenda, the training budget is often the first casualty (Levett-Jones, 2005). By analysing continuing education and training costs, educators can make critical cost-benefit decisions about training delivery and tailor programming to meet the organisation's needs and budgets (Fisher, Hume & Emerick, 1998). Continuing professional development for healthcare professionals must be cost-effective to avoid a waste of resources. Financial studies examining the service must therefore be of sufficient quality and quantity to allow conclusions to be drawn about the benefits (Brown, Belfield and Field, 2002).

An important aspect in assessing the cost-effectiveness of the nurse education service involves evaluation of the outcomes of training. Resources must be allocated to the completion of thorough program evaluation to allow for the demonstration of outcomes (Harton, 2007). Effective planning with goal setting is a critical element of the educational program evaluation process (Menix, 2007). Without appropriate data and evaluation processes examining learning activities, it is difficult for administrators, educators and other stakeholders to subsequently determine the worth, effectiveness and success or failure of educational programs (Harton, 2007).



With diminishing resources and calls from organisations for greater accountability, educators are applying a variety of methods and processes to conduct program evaluation (Menix, 2007). As more organisations see staff education as an investment and not just an indirect cost of doing business, they expect educators to be able to show linkages between training, staff and organisational performance, and educational goals.

The direct financial return on investment in education and training programs can be determined by using either a cost-benefit ratio or return on investment calculation (Tanner, 2002). The cost-benefit ratio is determined by dividing the program benefits (expressed in dollars) by the program costs. It requires that all benefits be reduced to a monetary figure and is expressed as a ratio of total cost of training versus the return (De Silets, 2010). The return on investment is calculated by the monetary value of the benefits of the program minus the program costs. These are then divided by the program costs and multiplied by 100 to achieve a percentage. These are direct financial gains; however, indirect returns may also be achieved.

Indirect financial returns on investment also need to be considered when analysing the benefits of training programs. This might include a reduction in staff turnover within an organisation that invests in staff education, which will have a direct effect on education service costs as the need for orientation and clinical support decreases. The ability to retain staff by offering them a quality education and training service, which includes development in areas such as leadership and management skills, is crucial in controlling costs (Tanner, 2002). At present, literature evaluating the financial return on investment of continuing education is rare, making it difficult to draw any feasible conclusions regarding the cost-effectiveness of continuing education for nurses (Brown, Belfield & Field, 2002). Nurse educators operate today in an environment of fiscal and human resource accountability. Educators now need to prove that training programs contribute economically and support the organisation's well-being and competitive advantage (Blake, 2000).

#### **2.3.1.4 Organisation and Individual Needs**

Hospital nurse education services are also influenced by the needs and demands of the organisation in which they function. The organisation as a whole has a number of mandated requirements that have to be met by the nurse education service. These include training requirements for hospitals to achieve and maintain accreditation status and the registration requirements for the healthcare professionals employed by the organisation.

The NSQHSS were developed in 2012 by ACSQHC with the aim of protecting the public from harm and improving the quality of health service provision. The standards were introduced to provide a quality assurance mechanism to ensure the meeting of minimum standards of safety and quality, and the establishment of quality improvement mechanisms to allow health services to meet their goals (ACSQHC, 2012). These standards highlight the clinical workforce as essential to the delivery of safe and high-quality healthcare. They outline the importance of education and training focussed on improving practices around safety and quality for staff, and emphasise that all staff need to be adequately trained in the roles and services for which they are accountable (ACSQHC, 2012).

The hospital accreditation process is recognised as an important driver for safety and quality improvement. The NSQHSS are integral to the accreditation process, as they determine how and against what an organisation's performance will be assessed (ACSQHC, 2012). Each of the 10 clinical standards (see Appendix 1) have numerous education and training requirements, including staff mandatory skill training that the nurse education service needs to address for the organisation to meet the standard requirements and gain accreditation (Waddell, 2001).

Continuing nurse education is also a mandatory requirement of the national nursing regulatory body, the Nursing and Midwifery Board of Australia, which states that nurses must remain competent after registration and undertake continuing professional development of at least 20 hours each year, with a number of nurses being randomly selected to provide evidence of this continuing education (Nursing and Midwifery

Board of Australia, 2010). Employing organisations have a responsibility to offer continuing education activities for staff to ensure they are able to meet their obligations each year for re-registration, with nurse education services being integral in offering these training opportunities for nursing staff (Allen & Allison, 2006). Aside from all of the factors mentioned above, such as historical influences, educator role variations, the financial implications, and organisation and individual needs, the hospital nurse education service is impacted by the model adopted to deliver nurse education to nurses. This factor has been explored under a separate section below, as nurse education service models are the area of focus for this research study.

## **2.4 Nurse Education Service Models**

Nurse education services can be organised in a number of ways. The primary objective of any nurse education service should be efficiency and effectiveness. The service needs to meet the needs of the organisation and have clear lines of communication allowing nurse educators to stay informed on organisational and clinical activity (Kelley, 1998). The literature suggests that the structure chosen may be dependent on the preference of the organisation's leadership team and the ability of the nurse education service to provide the services required (Haggard, 2006a).

To date, no studies have been conducted in Australia within the area of nurse education service models. Therefore, it is unclear what nurse education service models are being used or the frequency of their use. It is clear that further study using a robust methodology needs to be conducted within Australia in this area, with a view to adding to the existing body of knowledge and providing recommendations to support the delivery of a successful nurse education service. These recommendations will assist nurse education departments in hospitals who in the near future will be expected to clearly define their business and demonstrate the results of their service to justify their cost-effectiveness.

In W.A., there are currently a number of tertiary, general and specialist hospitals that are a mix of public and private organisations. All of these facilities have nurse

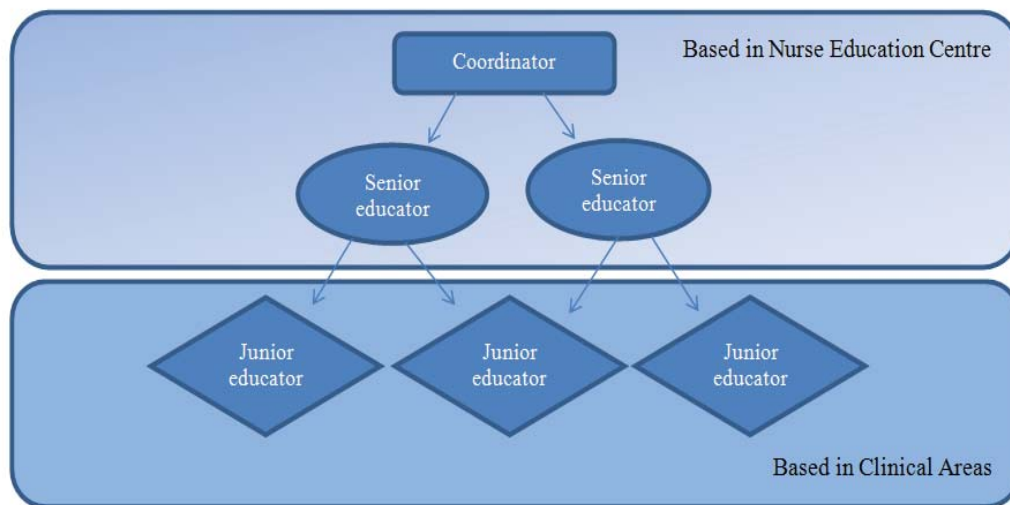
education departments that vary in size and function. In the 1960s, the hospital nurse education services all used a similar model, with the clinical nurse instructors reporting to a centralised principle tutor and the matron. However, as mentioned in Chapter 1, in the 1980s and 1990s, a number of events occurred that had a direct effect on the structure and function of these nurse education services. These events included moving to an area model of education service in which education was delivered across a number of different hospitals within a single health service and coordinated from one site; the introduction of the new national nursing staffing structure, which separated clinical, administration and teaching roles; and the reallocation of staff into new clinical divisions. The result of these events was that by the end of the 1990s the nurse education services within the hospitals in Perth had shifted to using a variety of different service models (Sue Davies, personal communication, 15 May 2013; Gavin Leslie, personal communication, 4 June 2013; Piercey, 2002; Spillman, 2008).

In reviewing the literature, three service models of nurse education became evident. These are the centralised, decentralised and combination models, discussed below. In reviewing the literature addressing the three different service models, more literature appears to have been published on the centralised model, requiring the section addressing that model to be slightly longer than those for the other models. In discussing the advantages and disadvantages of centralisation versus decentralisation within nurse education services, it is important to remember that centralisation and decentralisation are opposite points on a single continuum, with the advantages of one often being the disadvantages of the other. All of these models have advantages and disadvantages that can affect service delivery, quality of service and cost (Haggard, 2006a).

### **2.4.1 Centralised Model**

In a centralised nurse education service model, there is an organisational-wide approach to staff training in which a central authority or department has the responsibility of meeting staff training requirements across the whole of the organisation. In a centralised model, all education staff, even those placed within the clinical areas, report centrally to the education department and coordinator. Figure 2.2

illustrates the structure of a centralised model, with the arrows representing the lines of governance from the coordinator of the service down (Cummings & McCaskey, 1992).



**Figure 2.2. Centralised Nurse Education Model**

There are many advantages of having a centralised service. A centralised nurse education service allows for the service to have a clear vision and mission. The service is able to plan and develop strategic and operational plans proactively to support the needs of the organisation (O'Connor, 1986). With the coordinator of the service being a member of the hospital executive and/or of high-level committees within the organisation, he or she is familiar with current pressures and future organisational plans and can steer the education service to support the organisation in achieving its goals (Haggard, 2006b).

Changes affecting the entire nursing workforce can be communicated quickly using the clear reporting lines of the centralised nurse education service, and the education and training delivered implemented in a consistent manner. The coordinator of the service is able to ensure it can respond to organisational demands and can monitor and control the pace of change implementation within the nursing workforce to ensure the quality and consistency of practice (O'Connor, 1986).

A centralised nurse education service is considered efficient, effective and economical (Swansburg, 1995). Being centralised allows the one service to have control over all aspects of the training program, including the content, quality and functions such as

staffing, managing the budget and evaluation. With all of the educators reporting to one coordinator, clear evaluation of outcomes and goal achievement for the service is possible, as the service evaluates its effectiveness and impact on the organisation (Menix, 2007).

This is supported by King (1978), who compared different hospital education program structures and uncovered the issues affecting their service delivery such as accountability, communication and cost containment. It was recommended that a centralised model of hospital staff education increased cost-efficiency and accountability due to its ability to pool expertise.

A centralised model also facilitates the holding of equipment and training resources centrally to increase cost-efficiency. The service may purchase common resources for use in departments across the organisation at a more cost-effective rate (Sheriff & Banks, 2001). For example, expensive equipment required for training such as resuscitation manikins and manual handling equipment can be purchased once and used throughout the different clinical areas. Organisation-wide contracts can also be negotiated for consultancy services, information technology and training, instead of each area doing this individually. Support services required, such as administration staff, can also undertake their duties, such as copying and printing, in one central location. Resources can be pooled to meet specific goals when required, as they are all owned by the one service (O'Connor, 1986).

As well as managing equipment, a centralised service supports the sharing of training materials and education staff when required. Organisational-wide educational needs can be met without duplication of effort. Educators from each area need not 'reinvent the wheel' when developing teaching materials such as PowerPoint presentations, as these are held by staff in the central department and shared as required (Sheriff & Banks, 2001). Training programs can be developed so that they can be used across several different areas within the organisation, reducing duplication. When necessary, educators can move between areas to fill vacancies or provide cover, as the training delivered is standardised across the service. A centralised model also allows for equity

across the organisation, as resources and staff can be distributed as required to meet changing needs (Phelps, 1990).

This view is supported by Smith and Rice (2014), who outlined the advantages of developing a centralised service to organise education across a region that included 16 healthcare facilities. The service coordinated a centralised orientation program, nursing leadership development courses, and speciality specific and continuing education programs for nurses. The benefits of this model were found to include the ability to share educational materials and resources across sites, as nurse educators could be deployed from one site to another to either respond to situations requiring urgent intervention or collaborate on a joint project (Smith & Rice, 2014).

A centralised nurse education department or service also facilitates support of education as a specialty within the organisation and provides a career pathway for nurses (Haggard, 2006a). Most nurses move into the education role as expert clinicians, but with little formal qualifications in education. It is important that when commencing in the educator role, nurses are given adequate education, training and support by the nurse education department so they can develop into effective educators (Donner, Levonian & Slutsky, 2005). In a centralised nurse education service, educators benefit from close collegial relationships with other educators with whom they can share and build their identity as education specialists, as well as from the leadership provided by the coordinator of the service (Gilbert & Womack, 2012).

The centralised service model also allows the nurse education service to have a corporate presence within the organisation (Ferris, 1988). The centralised service can nominate educators to represent the service on committees and attend meetings so they are engaged at every level of the organisation and are kept up to date with any new developments (Sheriff & Banks, 2001). This presence and engagement allows the staff within the education service to see the bigger picture and react to change in a timely manner. The corporate presence of the department also allows it to be seen as an advisory and resource service that is valuable to the organisation and individual managers (Horner, 1995).

A centralised nurse education model is well placed to address the number of credentialing, licensing and accreditation requirements of the organisation and the individual. A centralised service model with administrative and information technology support can develop systems to maintain records and monitor the competencies of staff. This can assist the organisation to achieve certification with specialist bodies such as the Royal College of Nursing, or to become a Registered Training Organisation, as governance is possible over education and training standards across the organisation. This governance is enforced through the development and implementation of policies and procedures supporting quality education and training (Brunt, 2002).

In one of the two studies that have been undertaken in examining the efficacy of nurse education service models, Sheriff and Banks in 2001 conducted a qualitative study evaluating their centralised education service model in an academic health sciences centre. This was a 1196-bed organisation in Southern Ontario, Canada, situated across four hospital sites. Focus groups were held with educators, clinical managers, senior managers and directors to obtain their feedback about the centralised model that was being used. A separate focus group was held for each cluster of participants, with the sessions being led by an experienced facilitator external to the education department.

The results from the focus groups demonstrated that the educators, clinical managers and directors all expressed the desire to maintain the current centralised model. Only the senior manager group felt that they were not in a position to make recommendations about any particular education model. The results highlighted that the centralised model should remain at the organisation, as it was overwhelmingly the preferred choice for educators and clinical managers (Sheriff & Banks, 2001).

The study also stated that it may have implications for other healthcare organisations considering the structure of their education departments. However, this study had many limitations, including that there was no mention of the number of staff who were approached or who participated in the study or how they were chosen. There is also no reference to the questions asked during the focus groups, and no mention of how data obtained from the focus groups were analysed to obtain the results identified. Finally,

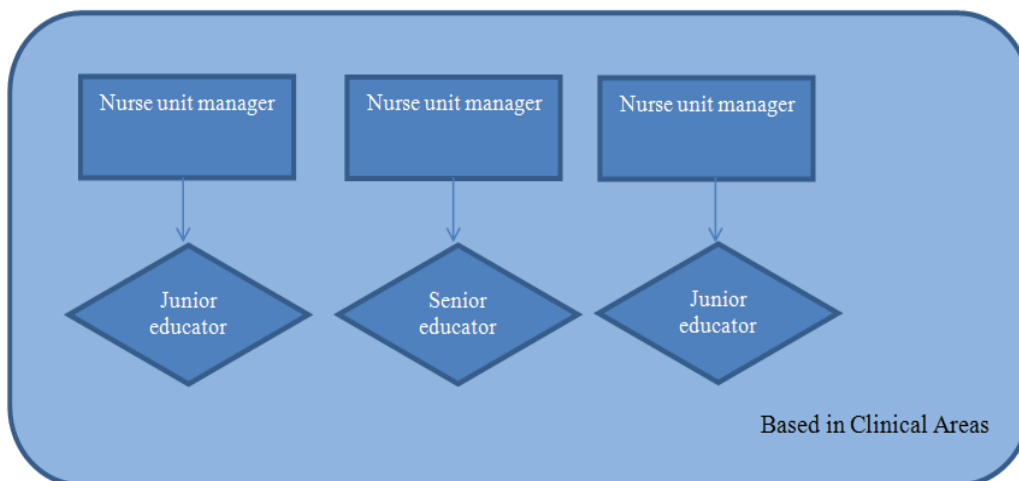


this study may have been affected by the bias of the organisation, as staff involved may have only worked in this one model and have been unaware of other possibilities, substantially reducing the generalisability of the results (Sheriff & Banks, 2001).

## 2.4.2 Decentralised Model

A recent trend in healthcare has been to decentralise or flatten the organisational hierarchy. The net effect of this is to eliminate one or more layers of management and encourage decision making at lower levels. In practice, each clinical nursing area becomes responsible for its own nurse education program (Kelley, 1998).

In a decentralised nurse education service model, nurse educators work within individual clinical areas and are responsible for meeting the training needs of nurses within their areas. They report directly to the nurse unit managers (Cummings & McCaskey, 1992). In this model, individual nurse educators, in collaboration with the nurse unit managers, have autonomy and authority for education within their clinical areas and do not report to an education centre. This autonomy allows each clinical area to develop its own practice. Accountability for nurse education falls to the educator for that area and the nurse unit manager. The nurse unit manager directs the nurse educator and has governance over education (see Figure 2.3).



**Figure 2.3. Decentralised Nurse Education Service Model**

Studies have shown that this lower-level decision making in a decentralised nurse education service can increase productivity, improve morale and decrease absenteeism (Swansburg, 1995). In a decentralised model, nurse educators are more motivated and gain a greater satisfaction from their role, as they have the ability to more directly influence outcomes and the direction of the unit (Iqbal, 2010). This is supported by Zabochnik (2002), who identifies that in centralised management models, when staff are constrained and forced to work on projects dictated by others rather than on projects in which they are personally interested, the hidden cost of trying to motivate them and of their reduced efficiency must be considered.

Working side-by-side with the nursing staff in a decentralised model, the educator maintains a currency in practice that enhances his or her credibility with staff as a nurse who understands the day-to-day problems of practice (Horner, 1995). This connection with practice also enables the educator to retain his or her identity as a nurse. Involvement at the direct-care level permits the educator to both stimulate and introduce innovative approaches to nursing care delivery (O'Connor, 1986).

A decentralised service model gives the nurse educator a more immediate awareness of the educational needs at the local level and the flexibility to respond to them more rapidly, as they do not need to liaise with the education department or have a whole organisation approach, but can work solely with the nurse unit manager in their allocated area (Horner, 1995). This can reduce the time required for planning and the costs involved so that education can more effectively respond to identified needs. This is supported by Iqbal (2010), who states that one of the advantages of decentralisation is that the people closest to the issues are able to make more timely and appropriate decisions.

As well as enabling educators to be the decision makers at a local level, a decentralised service allows independent nurse educators within clinical areas to maintain their expertise in specific clinical specialities, rather than spending time delivering generic topics to the larger organisation (Haggard, 1984). As educators in a decentralised service are not involved in delivering organisational-wide programs, such as orientation, or required to cover areas other than their own unit, they can focus on, and

develop their knowledge and skills in, their one area of expertise. A decentralised nurse education service model is a less complex model and supports clearer role definition, as educators' responsibilities are narrowed to the educational needs of individual clinical areas (Swansburg, 1995).

Working within a decentralised nurse education service model with autonomy and independence from an education service has also been shown to empower educators to be more innovative and creative in their approach (Cummings & McCaskey, 1992). Educators are effectively responsible for the education given in their department and, without the accepted practices of an education service directing their work, can develop new approaches and ideas when addressing educational needs (Haggard, 2006b).

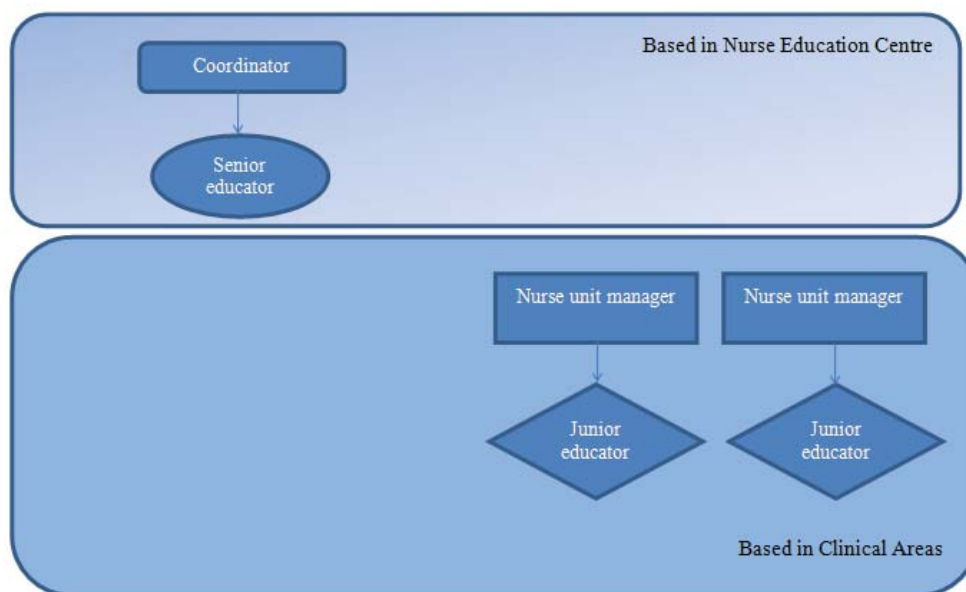
Siehoff (2003) describes an example of a hospital in the US successfully implementing a decentralised nurse education service model by the development of a staff educator registered nurse role. This role comprised registered nurses who provided registered nurse functions for 80% of their time, with two days allocated every fortnight to providing unit-specific education, in-service education and orientation. This position was responsible for coordinating all unit education activities to meet the educational needs of staff on the nursing unit. Although there were challenges, the implementation of this role was found to be successful and to enhance the effectiveness of learning within the clinical areas (Siehoff, 2003).

A study by Swisher, Woodard, Quillen and Monroe (2010) compared centralised and decentralised organisational models for interprofessional education for physical therapy and medical students. In comparing the strengths and weaknesses of the centralised and decentralised models, the authors found that the centralised model increased sustainability and stability and facilitated comprehensive evaluation, but that it was also more time consuming for planning and limited innovative learning experiences. The authors found that the decentralised model was easier to implement as it did not require system-wide changes, but that there were difficulties with consistency of delivery and seeing the whole picture when planning. They concluded that a centralised model requires organisational commitment but it holds the greatest

potential to sustain long-term change and support greater educational outcomes for educators and students.

### 2.4.3 Combination Model

The third nurse education service model outlined in the literature is the combination or hybrid model. In a combination nurse education service model, there is a centralised education department onsite that delivers programs across the whole of the organisation, such as orientation, and a decentralised component consisting of clinically placed nurse educators managed by nurse unit managers who work independently from the education service (see Figure 2.4). A combination service model allows for the use of the best aspects of the centralised and decentralised models (Cummings & McCaskey, 1992).



**Figure 2.4. Combination Nurse Education Service Model**

A combination service model can be advantageous as it is effective in meeting the many conflicting demands for nurse education. These include maintaining ongoing routine programs such as hospital orientation, while also being able to rapidly respond to emergent local unit needs (Gundlach, 1994). A combination model allows for the education service to meet organisational-wide training requirements and for some standardisation, but also supports increased flexibility to meet the needs of specialised

clinical areas. It gives the ward based nurse educators autonomy within their individual clinical areas while allowing for greater liaising and collegial support between educators (Swansburg, 1995).

As shown in Figure 2.4, in a combination nurse education service model, there is no connection between the two governance areas of the nurse education service and individual nurse educators situated in the clinical areas. This can raise a number of issues. Coordinators of the onsite nurse education service usually develop an informal relationship with the decentralised educators, to try to foster a coordinated approach to nurse education, maximise resource use and maintain standards to take advantage of the benefits of the combination model. However, as the coordinator lacks authority over these educators, who are accountable to the nurse unit managers, he or she may not always be successful in fostering a coordinated approach (O'Connor, 1986).

In 1992, Blocker undertook a study looking specifically at nurse education service models. This was the first of only two studies undertaken in this area, with the other being the Sheriff and Banks (2001) study discussed in Section 2.4.1. Blocker (1992) conducted a national survey to examine organisational models employed by staff development departments within similar healthcare facilities in the US. The organisational models were categorised as centralised, decentralised or combination. Staff development departments of non-governmental, not-for-profit and general medical-surgical hospitals containing 300 to 1000 beds were included, with the survey being sent to all hospitals meeting these criteria: a total of 117 hospitals across 30 states. Forty-eight responses were received (a 41% response rate). The responses showed that 11 (23%) staff development departments used a centralised organisational model, 11 (23%) used a decentralised model and 26 (54%) used a combination model.

The study posed questions relating to departmental organisation, instructor role, staff title, core responsibilities, percentages of work for the various departments, instructor educational preparation and demographic data to assist in categorising the model used and allow for comparison of the data between the different models. The results of this study were used to support the development and implementation of a combination staff development service model in the author's home institution, as this model was used by the majority (54%) of the respondents. The data indicated that a combination model

had a greater number of instructors with more varied educational preparation, supported larger hospitals and had more diverse core responsibilities (Blocker, 1992).

The article concluded that the data from this study were useful for staff development departments when deciding which organisational model to use and that the questions asked for this study could be used by others in the future to determine the most appropriate model for individual hospitals. The limitations of this study, however, were that the data were self-reported and that the effectiveness of the education and development departments were not examined. Further, the interpretation of the questions varied between sites, the validity and reliability of the survey were not calculated, and analysis was limited to simple descriptive statistics (Blocker, 1992).

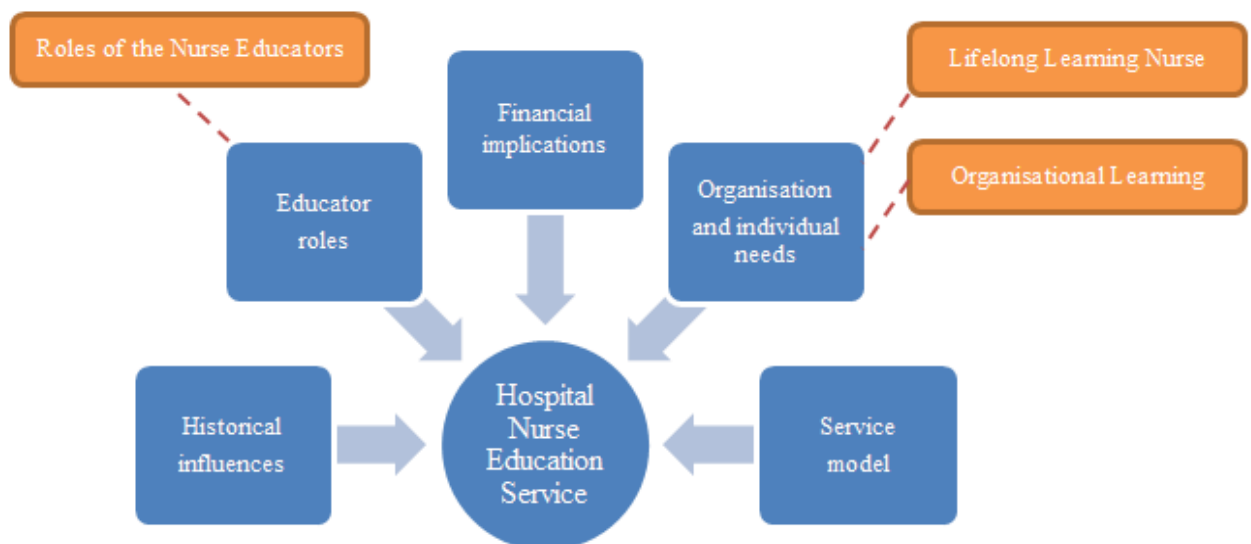
**Table 2.1 Summary of Key Research Findings**

<b>Study</b>	<b>Date</b>	<b>Country</b>	<b>Findings</b>
Blocker	1992	United States	<p>Eleven (23%) staff development departments used a centralised organisational model, 11 (23%) used a decentralised model and 26 (54%) used a combination model.</p> <p>The combination model had a greater number of instructors with more varied educational preparation, supported larger hospitals and had more diverse core responsibilities.</p>
Sherriff & Banks	2001	Canada	<p>All of the educators, clinical managers and directors expressed the desire to maintain the current centralised model. The senior manager group felt that they were not in a position to make recommendations about any particular education model.</p> <p>The centralised model was overwhelmingly the preferred choice for educators and clinical managers. The educators, clinical managers and directors all expressed the desire to maintain the current centralised model.</p>

This section has described the centralised, decentralised and combination nurse education service models and discussed their structure and approach in delivering a hospital-based nurse education service. In outlining the advantages of each service model, it is important to remember that centralisation and decentralisation are opposite points on a single continuum and that the advantages of one model can be the disadvantages of the other. Each service model has different advantages and disadvantages that can affect service delivery, quality of service and cost (Haggard, 2006a).

## 2.5 Theories that Impact on Nurse Education

Numerous theories around the areas of education can be found in the literature, including adult learning theory, functionalist education theory and education motivation theory. For the purpose of this study, the researcher has chosen to analyse three theories that most closely relate and impact on the delivery of nurse education within the healthcare setting, these are lifelong learning, organisational learning and role theory. The following sections discuss the theories of lifelong learning, organisational learning and role theory. See Figure 2.5 below.



**Figure 2.5. Impact of Theories on Nurse Education Service**

### 2.5.1 Lifelong Learning Theory

Lifelong learning is defined as ‘the development of human potential through a continuously supportive process which stimulates and empowers individuals to acquire all the knowledge, values, skills and understanding they will require throughout their life-times’ (Longworth & Davies, 2003, p. 2). The term ‘lifelong learning’ is not clearly understood and is often used interchangeably with continuing education, continuing professional development or professional development (American College



of Nursing, 2010). Lifelong learning is considered learning that occurs after the formal education years of childhood and into adulthood. Lifelong learning encompasses all types of ongoing learning through one's life time. It is a dynamic process, which includes both the informal and formal learning experiences of the person's personal and professional life. Lifelong learning involves seeking new knowledge and always questioning one's environment, knowledge, skills and interactions (Boulhuis, 2003).

This theory was chosen because lifelong learning has been clearly identified as a necessity to support professional nursing practice and is affected by the efficacy of the nurse education service (Davis, Taylor & Reyes, 2014). Lifelong learning supports the progression of nurses from novice to expert practitioners throughout their career by the acquisition of knowledge and skills (Benner, 1984). Lifelong learning in nursing requires a conceptual shift from the notion that registered nurses are merely competent health service providers to the view that they are highly skilled clinicians who engage in professional learning continuously throughout their career to keep their knowledge and skills current (Gopee, 2005). Although important in maintaining a level of competence for nurses, lifelong learning can be influenced by a number of factors, including individual/personal, organisational and socio-political factors. The nurse education service model is one of the organisational factors that can influence nurses' lifelong learning.

As individuals, nurses can commonly view the end of their compulsory nursing training as the end of their obligation to learn the concepts of their discipline. Schools of nursing and healthcare organisations have a responsibility to prepare nurses to become lifelong learners by teaching them how to learn (Davis, Taylor & Reyes, 2014). Reflective learning and critical thinking can help nurses to become more self-reliant by learning how to learn, making them better able to direct, manage and control their own learning process. The characteristics of a lifelong learner include questioning, enjoying learning, understanding the dynamic nature of knowledge and engaging in learning by actively seeking learning and development opportunities (Jarvis, 2005).

Socio-political factors can also influence the need and support for lifelong learning. Lifelong learning is essential for nurses to stay up to date with technological advances, deliver the latest evidence-based care, keep up with changes to societal attitudes and maintain their professional registration by meeting the requirements for continuing professional development (Mullins, 2005). It is imperative that hospital and nursing executive teams recognise the importance of lifelong learning, support lifelong learners and educate managers on how to best respond to them (Jarvis, 2005). At the organisational level, nursing education can thrive in organisations that embrace a culture of lifelong learning. A strong culture of learning is critical in developing opportunities for and supporting learning in the workplace. A learning organisation continually expands its capacity to create its own future by being committed to encouraging staff to develop themselves (Queensland Health, 2011).

## **2.5.2 Organisational Learning Theory**

Organisational learning theory outlines the process of increasing the capacity for the effective performance of an organisation through the use of employee knowledge and understanding (Carroll & Edmondson, 2015). Organisational learning theory can be traced to 1978, when researchers Chris Argyris and Donald Schon began to develop psychological concepts around learning within an organisation. This theory was chosen because organisational learning is essential to support the delivery of safe patient care within healthcare facilities, with the nurse education service having a pivotal role in supporting this. Organisational learning can occur at four different levels within the organisation, including at the individual, group, organisational and inter-organisational level.

In healthcare facilities, opportunities for learning are created using a wide range of formal and informal mechanisms, including feedback to staff, audits, clinical incident investigations, performance appraisals, simulation and benchmarking (Frost, 2010). As individuals, staff within organisations acquire knowledge and experience over time and this learning has the capacity to increase organisational effectiveness and efficiency through the use of shared knowledge and understanding (Frost, 2010). In healthcare organisations, patient care is delivered by teams of specialist healthcare providers.

These teams are composed of experts and novices from different occupational groups and diverse backgrounds working together to provide coordinated care (Carroll & Edmondson, 2015).

Organisational-level learning in healthcare is essential, as hospitals consist of complex systems in which staff perform various roles and responsibilities, communicate and transfer information and collectively deliver patient care (Ratnapalan & Uleryk, 2014). Learning at the organisational level is a continuous event that is critical in ensuring safe service delivery and organisational performance improvement. An organisation learns successfully when it is able to retain knowledge and disseminate it throughout the various departments within an organisation (Argyris & Schon, 1996). Inter-organisational learning occurs when different organisations within an area or partnership collaborate and learn from one another (Frost, 2010). Organisations can improve their processes and service delivery by incorporating new knowledge and insights from other organisations. Inter-organisational learning is usually critical to the success of networks, partnerships and other inter-organisational structures (Carroll & Edmondson, 2015).

### **2.5.3 Role Theory**

In role theory, each role within an organisation comes with a set of rights, duties, expectations, norms and behaviours that a person has to undertake and fulfil (Murray, 1998). Role theory's development began in 1966 and was prompted by the study of stage actors memorising their scripts to get into a role (Biddle & Thomas, 1966). Role theory is based on the observation that people behave in a predictable way, and that an individual's behaviour is context-specific, based on their position (Murray, 1998).

Role theory was chosen because it explains the interactions between individuals within organisations by focussing on the roles they play. Nurse educators especially play an important role within healthcare facilities as effective facilitators of training and in defining expectations for nursing staff (Brookes et al., 2007). The roles undertaken by staff within healthcare organisations shape the way they view themselves and define their behaviours. Staff in senior roles, such as nurse educators, are responsible for

motivating and leading others by communicating their expectations and modelling the behaviour they wish others to demonstrate (Lorette, 2015). The meaning of any given role is interdependent with other roles in the system. In healthcare, roles are reliant on one another and must complement each other. The role of the nurse educator is dependent on the role of the nurse interested in learning, and problems can arise when these roles either conflict with each other or become ambiguous. Role conflict, role strain and role ambiguity can be problematic across the many roles found in organisations (Bess & Dee, 2008).

Role conflict results when an individual encounters tensions as the result of incompatible roles (Bess & Dee, 2008). Role strain or pressure may arise when there is a conflict in the demands of one's role, or upon being asked to undertake work that is beyond one's capacity. Role ambiguity can be experienced when individuals have uncertainty about the expectations, behaviours and consequences associated with a particular role (Bess & Dee, 2008). The roles that staff play within the healthcare organisation guide the behaviour of the individual and influence the norms, expectations and behaviours of others. Role theory recognises the connection between individuals performing their duties effectively and the behaviour and performance across the whole of the organisation (Lorette, 2015).

## **2.6 Summary**

The aim of this literature review was to provide a conceptual framework around nurse education services, examine the concepts within the framework and investigate the published findings and theories around nurse education service models. Much of the literature in this area is dated, with only two studies having been conducted to specifically examine types of hospital education service models. These studies were undertaken in the US and Canada, and both are difficult to generalise to the Australian setting due to their many limitations. It is clear that further study in this area is needed to inform future hospital-based nurse education services to ensure their sustainability into the future. The application of the existing literature in developing the methodology for this study is discussed next, in Chapter 3.

## Chapter 3: Methodology

*Education is not the learning of facts, but the training of the mind to think*

-Albert Einstein-

### 3.1 Introduction

The aim of this study was to investigate nurse education service models in acute care metropolitan hospitals across Australia and develop recommendations for future service delivery. Researchers have different beliefs and ways of viewing the research topic and, as a result, the methodologies chosen are those that suit the specific topic. The principles that influence how a study is conducted are referred to as a paradigm. To gain a better understanding of why the researcher chose the particular approach used for this study, the paradigm adopted for this study will be outlined prior to discussing the specific methodologies used.

To address the research questions described in Section 1.5, a three-phase approach using mixed methods was deemed most appropriate. This chapter details the rationale for choosing the study's design, including the methodology and validity and reliability strategies. In sections 3.6–3.8, each phase is discussed systematically, including a description of the sample, data collection procedure and analysis method employed. It was decided to describe the three sections sequentially rather than separately to reflect the three phases of the study. Section 3.9 provides an explanation of the ethical considerations of the study and the chapter concludes with a brief summary in Section 3.10.

## 3.2 Research Paradigm

Weaver and Olson's (2006, p. 460) definition of a research paradigm reveals how research can be guided and influenced by a certain set of assumptions and principles: 'paradigms are patterns of beliefs and practices that regulate inquiry within a discipline by providing lenses, frames and processes through which investigation is accomplished'. Due to the nature of the research study, the researcher felt it appropriate to combine the interpretive paradigm with the positivist paradigm. The interpretive paradigm is a research approach that focuses on the way human beings make sense of subjective reality and attach meaning to it (Neuman, 2006). The positivist paradigm is a research approach that is based on the belief of universal laws and demands objectivity and neutrality (Thompson, 1995). The blending of both paradigms provided the researcher with the ability to explore the perceptions and views of nurse educators, while also allowing for statistical analysis of the data (Creswell, 1994). The following discussion describes how each paradigm and methodological approach was implemented in this study.

This study was conducted in three distinct phases. The approach used in phases one and two of the study sits within the interpretive paradigm. The interpretive paradigm is founded on the theoretical belief that reality is socially constructed and fluid and that what is known is always negotiated within cultures, social settings and relationships with other people (Myers, 2009). This paradigm takes the perspective that there are many truths and multiple realities and it supports qualitative methodology using naturalistic methods such as interviewing and focus groups (Neuman, 2006). This ensures sufficient interaction between the researcher and those with whom they interact to construct a meaningful reality collaboratively (Kaplan & Maxwell, 1994). These qualitative research methods allowed the researcher to achieve a more informed and detailed understanding of nurse education within the social world in which it exists (Creswell & Plano Clark, 2007). Qualitative methods also enabled meanings to emerge during the research process, which was important for this sequentially phased investigative study, allowing the researcher to develop and adapt the questions for the following phases in response to events as they occurred (Punch, 2005).

The approach used in phase three of the study fell within the principles of a positivist paradigm. The positivist paradigm is based in the physical sciences. It uses a systematic, scientific approach to conducting research (Hughes, 2001). The positivist paradigm sees the world as based on unchanging, universal laws, with the belief that everything can be explained by knowledge of these laws (Punch, 2005). It considers that, to understand these laws, it is necessary to observe and record events and phenomena in a systematic way to discover what is causing things to occur (Weaver & Olson, 2006). The positivist paradigm supports the use of quantitative methodology, as the structure of the quantitative methodological approach involves all aspects of the research process being decided upon before data collection begins (Kumar, 2005). In this study, a survey methodology with closed questions was used in phase three to generate quantitative data within this paradigm.

For this investigative study, a triangulation approach was used to verify and confirm the findings as it moved through its different phases. This involved the use of both qualitative and quantitative methodologies to firstly explore the views of nurse educators around the topic of nurse education models and the future priorities of nurse education and then to quantify the findings and frequency of the use of the different models and the views of nurse educators about the different models. Qualitative and quantitative data collection techniques used included semi-structured interviews, focus groups and a survey. Table 3.1 summarises the integrated research paradigm and gives examples of how the different methodological approaches were incorporated into the study. The next section of this chapter discusses mixed methods research and triangulation.

**Table 3.1. Summary of the Research Paradigms**

<b>Study Phase</b>	<b>Phase 1</b>	<b>Phase 2</b>	<b>Phase 3</b>
<b>Characteristic</b>	<b>Interpretive View</b>	<b>Interpretive View</b>	<b>Positivist View</b>
<b>Purpose</b>	Understand the significance nurse educators give to various issues surrounding their nurse education service models	Understand the significance nurse educators give to various issues surrounding their nurse education service models	Test the findings raised in phases one and two deductively
<b>Beliefs</b>	<ul style="list-style-type: none"> <li>• Many truths and realities</li> <li>• Different people have different perceptions and experiences</li> </ul>	<ul style="list-style-type: none"> <li>• Many truths and realities</li> <li>• Different people have different perceptions and experiences</li> </ul>	<ul style="list-style-type: none"> <li>• One truth exists</li> <li>• Must be objective</li> </ul>
<b>Research methods</b>	Qualitative	Qualitative	Quantitative
<b>Data type</b>	Descriptive and explanatory words of interview and focus group data	Descriptive and explanatory words of interview and focus group data	Measurable frequency numbers from survey questionnaire data
<b>Sample</b>	Participants who are able to provide expertise from different points of view at a few sites	Participants who are able to provide expertise from different points of view at a few sites	Many participants at many sites with clear and precise inclusion and exclusion data

(Adapted from Creswell & Plano Clark, 2007, p. 29)

### **3.3 Mixed Methods Research**

This research study used a mixed methods approach, which is a research design with underlying methodological assumptions as well as a method of investigation (Punch, 2005). As a method, the mixed methods approach focuses on collecting, analysing and mixing both quantitative and qualitative data in a single study or series of studies. The use of mixed methods offers the researcher the opportunity to take multiple measures in a number of different ways, to allow for a more complete understanding of the area of study (Creswell & Plano Clark, 2007). However, a mixed methods approach can take the researcher a great deal of time and the analysis of the data can be challenging, as it includes combining the two types of data (Punch, 2005).



The use of mixed methods was beneficial in this study, as it allowed the initial questions asked in phase one such as ‘What is your experience working with this model?’ to be refined for phase two into ‘What works well in your nurse education model?’ and ‘What doesn’t work so well in this model?’. These questions were then developed into a quantitative question for phase three, such as ‘In your opinion, the characteristics of an ideal nurse education model include:’ with a list of answers for the participants to rate on a Likert scale by level of agreement.

Triangulation is defined by Denzin (1978, cited in Jick, 1979, p. 291) as ‘the combination of methodologies in the study of the same phenomenon’. Combining two methodological approaches in one study allows the researcher to use the strengths, and compensate for the weaknesses, of the different approaches (Punch, 2005).

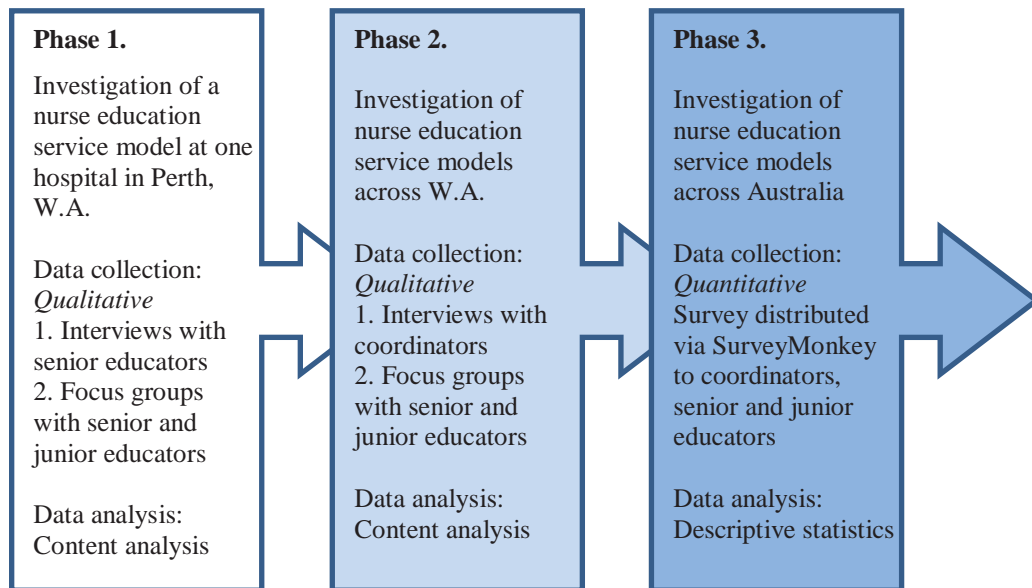
Triangulation is largely a process that allows for cross validation when two or more distinct methods are found to support each other and produce comparable data.

Blending and integrating a variety of data and methods, as triangulation demands, may be seen on a continuum that ranges from simple, such as a two-phase approach in which qualitative and quantitative methods are kept fairly separate, to complex designs, in which aspects of the two approaches are mixed at all stages of the research (Jick, 1979).

This study combined the use of mixed methodologies in a sequential format to allow the researcher to elaborate on and expand the findings of one method with the other method. This involved beginning with qualitative methods in phases one and two of the study to allow for exploration, before following up with a quantitative methodology in phase three involving a larger sample, so that the results could be generalised to the population (Creswell, 1994).

This research study used a sequential mixed design, in which three phases occurred chronologically, so that the conclusions from the first phase could lead to the formulation of the questions for the next phase, with the final findings being based on the results of all of the phases of the study (Teddlie & Tashakkori, 2006) (see Figure 3.1). This approach was the most appropriate for this investigative study, as it allowed for the interpretation of the data from one phase to influence the next phase and for a

variety of data collection methods and different types of data to be used to verify and triangulate the findings.



**Figure 3.1. Summary of the Study Design and Methodology**

A research framework using mixed methods allowed an investigation of the nurse education service model at one acute care metropolitan hospital in Perth, W.A., followed by the expansion of the study's scope to include a broader investigation of nurse education service models in acute care metropolitan hospitals across W.A., and then across Australia.

Phase one involved holding face-to-face interviews and a focus group with senior nurse educators and focus groups with junior nurse educators at a major teaching hospital in Perth, W.A., to gain qualitative data about the nurse education service model used at that organisation. Phase two of the study consisted of conducting face-to-face interviews with the coordinators of nurse education services at both public and private acute care metropolitan hospitals in W.A. (six hospitals) and focus groups with senior and junior nurse educators to gain qualitative data about the nurse education service models used at these organisations. Qualitative data gathered from phase one was analysed using content analysis to inform the questions asked in phase two. Qualitative data gathered from phase two was analysed using content analysis and used with the data from phase one to assist in the development of the survey tool used in phase three.

Phase three of the study consisted of a national survey of nurse educators in acute care metropolitan hospitals across Australia. The survey questionnaire was administered using SurveyMonkey, a web-based program that is used to create and deliver electronic surveys (SurveyMonkey, n.d.). Sixty-five hospitals, with approximately 1500 nurse educators, were considered eligible to be included in the study. Data were analysed using descriptive statistics.

### **3.4 Triangulation**

As outlined above, this study involved the inclusion of a number of different research methods across three phases within the one study, allowing for triangulation. The benefits of using triangulation include increased confidence that the research data accurately reflect the truth, an increased understanding of what is being studied and a variety of viewpoints providing a clearer understanding of the phenomenon (Thurmond, 2001). In this study, the researcher employed different types of triangulation including data, methodological and analysis triangulation. These methods involved using different sources of information to increase the validity of the study, using qualitative and quantitative methods of data collection and using multiple analysis approaches to validate data findings (Sarantakos, 2005). Below is an explanation of how each of these was used in this study.

#### **3.4.1 Data Triangulation**

Data triangulation involves using different sources of information to make a study more rigorous (Teddlie & Tashakkori, 2009). This may involve using different sources such as public records, observation or different stakeholders to highlight diverse perspectives. During the analysis stage, feedback from these different data sources are compared to determine areas of agreement and divergence (Creswell & Plano Clark, 2007).

In this study, data were collected from a number of different stakeholder groups and sites to allow for data triangulation. Participants involved in this study included

coordinators of nurse education services, senior nurse educators and junior nurse educators, allowing for comparison of the findings from the different groups. Data triangulation was also possible by comparing the findings from the different states and sites involved. In phase one, data were collected from one tertiary teaching hospital in Perth, W.A.; in phase two, data were collected from six acute care metropolitan hospitals in W.A.; and in phase three, data were collected from 65 acute care metropolitan hospitals across Australia. This allowed for findings to be compared between hospitals and across states to confirm and verify findings, strengthening the rigour of the study.

### **3.4.2 Methodological Triangulation**

Methodological triangulation involves the use of multiple qualitative and/or quantitative methods to study a phenomenon (Punch, 2005). This allows for the research topic to be studied a number of different ways with different data types being produced (Creswell & Plano Clark, 2007). In this study, methodological triangulation was used by including both qualitative and quantitative methods such as interviews, focus groups and a survey, as described in Figure 3.1.

### **3.4.3 Analysis Triangulation**

Analysis triangulation involves using multiple analysis approaches to review findings. This can provide a check on selective perception and illuminate blind spots in an interpretive analysis (Creswell & Plano Clark, 2007). The goal is to look at the data in different ways to gain a greater understanding of the phenomenon being investigated. For example, in this study, the data collected in phases one and two were qualitative and analysed using content analysis, while the survey developed for phase three from the data in phases one and two collected quantitative data that were analysed using descriptive statistics. The findings of the content analysis undertaken in phases one and two and the descriptive statistics completed in phase three were compared to identify similar themes emerging to further support the validity of the study and verify the

findings. In the next section, an explanation on how the rigour of the study was established is discussed.

## **3.5 Rigour**

Another important consideration in ensuring the validity of a study is rigour.

Rigour is the structured and controlled way of planning, developing, analysing and evaluating research to ensure accuracy in the research process and the outcomes of the study (Kumar, 2005). Rigour is an essential part of the research process and involves adhering to the truth by using an unbiased approach to each stage of a study.

Qualitative and quantitative research studies approach rigour in different ways. In phases one and two of this study, the qualitative approach to rigour was established using processes to ensure credibility, dependability, confirmability and transferability. In phase three, the quantitative approach to rigour was established using reliability and validity testing. Examples of rigour testing used in this study are listed below.

### **3.5.1 Phases One and Two**

#### **3.5.1.1 Credibility**

Credibility is the confidence in the truth of the findings (Neuman, 2006). In this study, a number of strategies were used to ensure credibility, including triangulation of data from multiple sources as discussed above, member-checking and peer debriefing with the researcher's supervisor (Lincoln & Guba, 1985). In phases one and two, during the final interviews and focus groups conducted, findings from previous sessions were posed to the group and individuals for comment such as 'In previous sessions, it was suggested that the future of nurse education will include a focus on simulation. What are your thoughts on that?' to confirm the credibility of emerging themes (Punch, 2005). Also during phases one and two, while the interviews and focus groups were being completed, transcriptions of the sessions and emerging themes were discussed with the researcher's supervisor to gain an independent perspective on the data.

### 3.5.1.2 Dependability

Dependability refers to the ability to show that findings are consistent and could be repeated (Lincoln & Guba, 1985). In this study, dependability was achieved through the use of overlapping methods, such as individual interviews and focus groups, a clear and detailed research design and describing the implementation of the study in detail through the use of a research journal. In consultation with the researcher's supervisor, a clear and detailed study design (see Figure 3.1) was developed, comprising clear phases incorporating mixed research methods, as this was considered the most appropriate means to achieve the aims and objectives of the study. While moving through the study, the researcher maintained a study journal outlining any changes to the methodology or approach and the details of how aspects were undertaken to allow for repetition of the study if required (see Figure 3.2).

	13/02/14 - FIRST INTERVIEW WITH SDE. (M)
	13/02/14 - SITE APPROVAL FROM SDE'S MANAGER.
14/2/14 - 2 <sup>ND</sup> SDE INTERVIEW. FM ←	15/02/14 - PERSONALLY TRANSCRIBED 1 <sup>ST</sup> SDE INTERVIEW.
17/2/14 - 3 <sup>RD</sup> + 4 <sup>TH</sup> SDE INTERVIEWS FM	1 <sup>ST</sup> & 2 <sup>ND</sup> MARCH - TRANSCRIBED 2 <sup>ND</sup> , 3 <sup>RD</sup> , 4 <sup>TH</sup> INTERVIEWS ALSO CODED FIRST 4 INTERVIEWS
5/3/14 - 5 <sup>TH</sup> SDE INTERVIEW FM.	4 <sup>TH</sup> MARCH - SENT FIRST 3 INTERVIEWS TO SUPERVISOR TO CODE TO CHECK AGAINST MINE.
<u>* CHANGE TO PLAN:</u>	7 <sup>TH</sup> MARCH - 1 <sup>ST</sup> FOCUS GROUP CONDUCTED WITH ×3 A/SDE'S THAT ARE NEW IN ROLE & NOT INCLUDED IN SDE INTERVIEWS OR SON FOCUS GROUPS (×1 DNA SO ONLY 2 ATTENDED).
- A/SDE'S INTERVIEWED.	
- A/SONS INTERVIEWED.	
- FOCUS GROUP WITH NEWLY A/SDE'S DONE.	
- MUST HAVE > 6 MONTHS EXPERIENCE.	
	7 <sup>TH</sup> MARCH - JMC ETHICS APPROVAL. JUST NEED DOW APPROVAL.

Figure 3.2. Researcher's Study Journal

### 3.5.1.3 Confirmability

Confirmability is the degree of neutrality or the extent to which the findings of a study are shaped by researcher bias, motivation or interest (Shenton, 2004). In this study, the researcher used a number of techniques including bracketing, review of the findings by

the researcher's supervisor and a reflective journal to minimise the impact on the study of the researcher's perspective, beliefs and values (Shenton, 2004). Before commencing the study, the researcher used bracketing by recording her thoughts, opinions and preconceptions regarding the study onto a digital recording device. This was then played back to the researcher throughout the study to assist her in surfacing and setting aside her preconceptions regarding the study (Tufford & Newman, 2010).

Another method of bracketing that was used by the researcher in this study was reflective journal keeping. Journaling began prior to commencing the study and was a conduit for the researcher to reflect on the progress of the study and impressions about participants (Ahern, 1999). Aspects documented in the reflective journal included the researcher's reasons for undertaking the research, assumptions regarding the study, potential role conflicts with research participants, and the researcher's personal value system (Hanson, 1994) (see Figure 3.3).

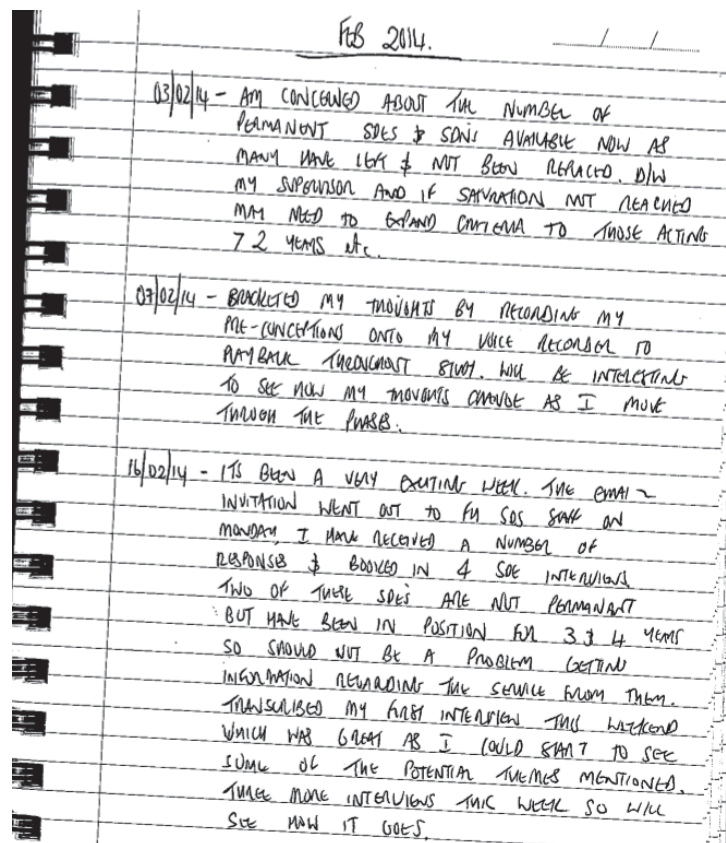


Figure 3.3. Researcher's Reflective Journal

#### **3.5.1.4 Transferability**

Transferability demonstrates that the findings of a study have applicability in different contexts (Lincoln & Guba, 1985). In planning and undertaking this study, transferability was ensured by including a wide variety of acute care metropolitan hospitals across the different states of Australia: 65 in total, with approximately 1500 nurse educators of different levels. This ensured that the results were more transferable and applicable across the larger population (Shenton, 2004). The following section explains how rigour was established for phase three of the study.

### **3.5.2 Phase Three**

#### **3.5.2.1 Validity**

Validity refers to how well a test measures what it is purported to measure (Punch, 2005). Three common types of validity require consideration when developing instruments of measure in research: construct, criterion and content validity (Trochim, 2006). Construct validity refers to the extent to which a test that has been developed by conceptualising a theory actually measures what the theory says it does. Criterion validity involves the correlation between the test and a known standard or against itself (Trochim, 2006). Content validity refers to the extent to which a measure represents all of the aspects of a given topic or the phenomenon being studied (Neuman, 2006). In this study, content validity was chosen as the method to test the validity of the survey instrument, as it was important to ensure that the survey questions comprehensively represented all aspects of the research topic. A panel of experts was used to review the survey questionnaire to examine if it represented the topic fully and whether the questions represented the issue they were supposed to measure (Kumar, 2005). The specific validity measures used in this study are outlined in detail in Section 3.8.3.2.

#### **3.5.2.2 Reliability**

Reliability is the degree to which an assessment tool produces stable and consistent results (Kumar, 2005). There are four approaches to assessing reliability. Inter-rater

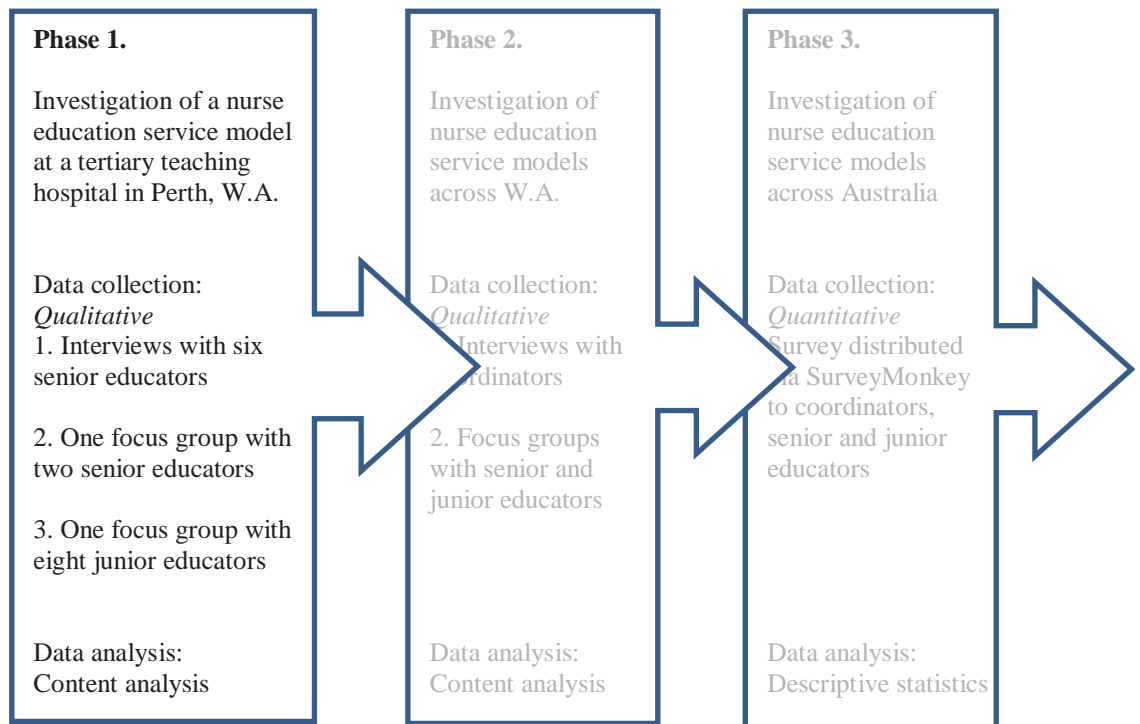


reliability measures the degree to which different raters/observers give consistent answers or estimates. Test-retest reliability measures the consistency of the tool evaluated over time. Parallel-forms reliability is the reliability of two tests constructed the same way from the same content. Internal consistency reliability is the consistency of results across the different items in the same tool, often measured with Cronbach's Alpha (Punch, 2005). In this study, test-retest reliability was ensured by administering the survey twice over a period of time to a group of individuals. The scores from time one and time two were then correlated to evaluate the test for stability over time (Kumar, 2005). The specific reliability measures used in this study are outlined in detail in Section 3.8.3.3. The following section outlines the sampling, data collection and data analysis approach used for phase one of the study.

## **3.6 Phase One**

### **3.6.1 Introduction**

This section contains information on the sampling, data collection methods and data analysis for phase one. The methodology outlined in this chapter has been presented following the three distinct phases of the study, as conclusions from the first phase led to the formulation of the questions for the second phase, and the findings from phases one and two led to the development of the questions in the survey tool in phase three. Therefore, the sampling, data collection and data analysis information in this chapter has been presented according to the phases of the study. Figure 3.4 offers a visual summary of the details of phase one, which focussed on one tertiary teaching hospital in Perth, W.A., with the senior nurse educators taking part in one-on-one interviews and the junior nurse educators participating in focus groups.



**Figure 3.4. Summary of Phase One**

### 3.6.2 Sampling—Phase One

Phase one concentrated on the nurse education service at one tertiary teaching hospital situated in the southern suburbs of Perth, W.A. (hereafter, Hospital One). As at the time of the study, Hospital One is part of the South Metropolitan Health Service and is one of three major teaching hospitals in W.A. It is a 350-bed public acute care tertiary hospital with a 24-hour emergency department. Hospital One offers a wide range of disciplines, including cardiothoracic surgery, nuclear medicine and advanced radiology services, and is the state referral centre for diving and hyperbaric medicine. It has a dedicated paediatric ward and a geriatric wing with full rehabilitation services. Hospital One supports approximately 300,000 occasions of service each year, with more than 40,000 people attending the emergency department annually (Government of Western Australia, Department of Health, n.d. a). Hospital One has an international reputation for its research, medical and surgical services, and nursing and allied health expertise, and is accredited by the Australian Council on Healthcare Services. In recent years, the hospital has set annual records for patient service, cost-effectiveness and patient numbers.

Hospital One was chosen as the site for phase one, as it maintains a model of nurse education service that is unique within W.A. metropolitan hospitals. Hospital One has continued to support its nurse education service as a centralised model, with all of the clinically placed junior nurse educators reporting centrally to the senior nurse educators, who are situated in the education centre and who report to the coordinator of the service. The nurse education service at Hospital One is responsible for education across the whole of the organisation and across a number of different disciplines.

In phase one of the study, it was planned that participants would be selected from Hospital One using purposive sampling. Purposive sampling is a non-probability sampling method that is characterised by the deliberate targeting of certain groups to gain a representative sample (Neuman, 2006). Purposive sampling was expected to allow the researcher to target permanently employed, experienced and informed nurse educators in an attempt to gain information about the education model that was as comprehensive as possible (Neuman, 2006). This assumed that nurse educators in permanent positions have a great deal of knowledge about their role and the education service in which they are employed (Punch, 2005). However, since the commencement of this study, the W.A. Metropolitan Health Service has entered a period of transition, with the planned opening of a number of new hospitals, the movement of staff and services between hospitals, and the transformation of the health service. As a consequence, the Department of Health placed a hold on the appointment of any permanent positions. The effect has been that as positions have become vacant, they have not been filled by permanent staff, but instead by people temporarily acting in the positions. As a result, a large number of the senior and junior nurse educator groups in W.A. are in acting rather than permanent positions. This forced the researcher to adjust her recruitment strategy to include all nurse educators, whether acting or permanent, who had been in a nurse education position for at least six months. It was expected that after six months in the role, nurses in education positions would be informed about their role and aware of their service model.

Another component of the reconfiguration of the South Metropolitan Health Service was the commissioning of the Fiona Stanley Hospital, which is a new major quaternary-level hospital that will service the southern corridor of the health service.

The Fiona Stanley Hospital met the inclusion criteria of this study, as it is an acute care metropolitan hospital. However, at the time of the study, the hospital was not operational and was not due to be fully operational until February 2015. Therefore, it was excluded from the study.

Senior nurse educators were defined as nurse educators employed in senior registered nurse level three education roles and junior nurse educators were defined as level two registered nurses employed in education roles (Western Australia Health Department & Australian Nursing Federation, 2010).

At Hospital One, recruitment of participants for phase one followed these steps:

1. After obtaining ethics approval from the Human Research Ethics Committee (HREC) at The University of Notre Dame (see Appendix 2), ethics approval was obtained from the South Metropolitan Health Service (SMHS) Nursing Research Review Committee (see Appendix 3).
2. The researcher attended a meeting attended by the senior and junior nurse educators where she outlined the study aims and participant requirements to the nurse educators present.
3. As nurse educators had previously reported to the researcher, an independent colleague assisted in the recruitment of participants for the study. The colleague sent an email to all senior and junior educators at Hospital One with the Participant Information Sheet attached (see Appendix 4), inviting them to participate in the study and to contact the researcher if they were interested in being involved.
4. Nurse educators who emailed the researcher indicating their interest in being involved were contacted by the researcher and a mutually agreeable date, time and venue was organised for the interview and focus group.

The entire senior nurse educator group (a total of 10 people) were invited to participate in interviews, with nine responding that they were interested in being involved. Six of the senior educators with the most experience (over two years) participated in individual face-to-face interviews, while three of the senior educators who had less than two years' experience in the role were invited to participate in a focus group, with

two attending (and one cancelling). The reason that the two senior educators with less experience in the role were offered a focus group was that it was felt this forum would be less intimidating than individual interviews and the answers and responses from one participant would assist in prompting the thoughts and opinions of the other (Krueger & Casey, 2009). All of the junior nurse educator group (approximately 38 people) were invited to participate in a focus group. Nine responded that they were interested in being involved, with eight attending the focus group that was held.

### **3.6.3 Data Collection Methods—Phase One**

In phase one of the study, which investigated the nurse education service model at Hospital One, qualitative data were collected using interviews and focus groups. Six face-to-face semi-structured interviews were conducted with senior nurse educators, a focus group was held with a further two senior nurse educators and a focus group was held with a group of eight junior nurse educators. These are discussed in more detail in the following sections. The guiding questions used by the researcher in the interviews and focus groups for phase one (see Appendix 5) were developed after an in-depth review of the literature around the topic and in discussions with the researcher's supervisor.

#### **3.6.3.1 Individual Interviews**

Interviews are defined as person-to-person interaction between two or more people with a specific purpose in mind and are a commonly used method of collecting qualitative data (Babbie, 2008). This study used semi-structured interviews, with a set of guiding questions to shape the interview and give it some direction (Kumar, 2005). The decision to use semi-structured interviews with the more experienced senior nurse educator group was made to allow this group of experts to express their opinions more openly without their colleagues being present to influence their responses.

Over a four-week period, six individual face-to-face semi-structured interviews were conducted with senior nurse educators at Hospital One. The six senior nurse educators

that were interviewed represented a variety of experience levels, ranging from 2.5 to 11 years as nurse educators. The interviews were held in meeting rooms or offices onsite at the hospital during the participants' usual work hours and according to their preferences. The date, time and venue for these were organised in negotiation with the individual nurse educators in advance and approval for their attendance during their usual work day hours was then sought from the coordinator of the nurse education service. Prior to attendance at the interview, the participants were sent the Participant Information Sheet outlining the study and their rights, and given the opportunity to contact the researcher with any queries. On commencement of the interviews, written consent was obtained from the participants (see Appendix 6). Each interview lasted approximately 45 minutes to one hour.

At the commencement of each interview, the researcher introduced herself to the participants and explained the study and the research questions. Written consent was obtained. The following points were raised with the participants:

- This study was the researcher's personal study being undertaken as a student at The University of Notre Dame, Australia, and not affiliated with Hospital One or the Department of Health.
- This session was confidential and anything said in the room would not be repeated or discussed with any party.
- Anything said by the participant would not be held against them as an employee of the organisation, as the researcher was trying to capture honest opinions.
- When transcribed, the data would be de-identified, with the names of who attended each session stored separately. Any mention of a person or place within the recording would not be transcribed.
- The participant was free to withdraw at any time, but once the interview had been analysed, the researcher would be unable to remove their data, as it would be de-identified.

The majority of the interviews were conducted in a meeting room, with one held in the participant's office. The digital recorder was placed on the table in front of the participants. There were no interruptions during most of the interviews, although the

hospital public address system did interrupt two of the interviews, causing these to be paused until the announcement was completed. Participants were able to answer the interview questions with prompts given when required. The following section discusses the focus group interviews undertaken for phase one.

### **3.6.3.2 Conducting Focus Groups**

Focus groups are different from individual interviews in that they capitalise on communication between research participants to generate data. This method is particularly useful for exploring peoples' knowledge and experiences and can be used to examine not only what people think but how they think and why they think that way (Babbie, 2008).

Focus group interviews can allow participants to open up more than they might do in other situations, as the interaction with other attendees can prompt responses and highlight hidden aspects of a topic (Krueger & Casey, 2009). Focus groups can be used either as a method in their own right or in conjunction with other methods. Sometimes, focus groups are used as the first stage of a research project, as they assist in the development of questionnaires and can complement other methods for triangulation and validity checking (Berg, 1998). For this study, the researcher conducted two focus group interviews in phase one. One focus group was held with two senior nurse educators (who were not interviewed one-on-one, as they had less senior nurse educator experience than other participants), and one was held with a group of eight junior nurse educators at Hospital One.

A focus group methodology was chosen for these groups as this forum was deemed less intimidating than individual interviews and it was considered that the answers and responses from one participant would be useful in prompting thoughts and opinions from the others (Krueger & Casey, 2009). For example, in the focus group held with the junior nurse educators, when they were asked if they could describe some of the activities they did on a daily basis as part of their role as a nurse educator, one reply given was:

Quite a considerable liaison with the ward management because you have to be close to what is working to be of any use to them, so you have to be involved in the functioning, you know there is a certain, it crosses over into the management of the ward and it needs to be involved enough to be useful. (Phase one, focus group two)

This answer prompted another participant to respond: ‘I agree, so if you have a new coordinator, you know how to do everything on the ward so you assist them, so even though we are involved with all the other training, often we are working on the floor mentoring new staff’ (Phase one, focus group two).

The two senior nurse educators who participated in the focus groups (a third cancelled and so did not attend) had approximately 12 months’ experience in the education role. The junior nurse educators had from two to five years’ experience. One of the eight junior nurse educators who attended the focus group was called away half way through the interview. Another of the junior educators who attended was sent as a replacement by another staff member who could not attend, but as she had less than six months’ experience in an education role she did not meet the inclusion criteria for the study and her contribution to the session was not transcribed.

The two focus group interviews were held in a meeting room onsite at the hospital during the participants’ usual work hours for ease of attendance for participants. The date, time and venue for these were organised in negotiation with the nurse educators in advance and approval for their attendance was then requested from the coordinator of the nurse education service. Prior to attendance, the participants were sent the Participant Information Sheet outlining the study and given the opportunity to contact the researcher with any further queries. On commencement of the focus groups, written consent was obtained from the participants. Each of the focus groups was conducted over approximately one hour.

At the commencement of the two focus group interviews, the researcher introduced herself to the participants and explained the study and the research questions. Written consent was obtained. The following points were raised with the participants:

- Anything said by the participants would not be held against them, as the researcher was trying to capture honest opinions. Those present may have



differences of opinion but they needed to ensure they treated each other respectfully.

- The researcher would be asking questions to guide the conversation, but they should feel free to respond to others' answers and have discussions among themselves.
- The session would be recorded, so participants should speak one at a time.
- When transcribed, the data would be de-identified, with the names of participants stored separately. Any mention of a person or place within the recording would not be transcribed.
- The participants were free to withdraw at any time, but once the focus group had been analysed, the researcher would be unable to remove their data, as it would have been de-identified.

The following section discusses the data analysis approach for phase one.

### **3.6.4 Data Analysis—Phase One**

Phase one of the study involved conducting face-to-face interviews and focus group interviews to generate qualitative data. The data generated in these interviews and focus groups were captured by digital recording of the proceedings and by taking notes during the session. These data were analysed using content analysis to assist the researcher in further focussing the research topic by developing a different set of questions for phase two and to assist in the development of the survey questionnaire for phase three of the study.

Content analysis is a method used to analyse qualitative data by focussing on the characteristics of language as communication with attention to the content or meaning of the text (Neuman, 2006). Content analysis allows the researcher to examine language in-depth for the purpose of classifying large amounts of text into an efficient number of categories that represent similar meanings (Creswell, 1994). Content analysis is a valuable research method when examining beliefs, organisations, attitudes and human relationships, although it does not allow the researcher to generalise

findings to the larger population, as it is bound by the cultural context of the communication itself (Neuman, 2006).

The researcher undertook content analysis in this study by looking at the words in the transcribed text to assist in establishing the categories under which to gather further data when developing the questions for phase two and the survey questionnaire for phase three of the study (Sarantakos, 2005). To assist in the content analysis, NVivo 10 was used. This is a qualitative data analysis software package that aids in importing, sorting and analysing transcribed text and documents (QSR International, 2014).

When analysing the qualitative data, the researcher completed three main steps: data reduction, data display, and drawing and verifying conclusions (Miles & Huberman, 1994). Before beginning transcription of the data, the researcher made backup copies of the digital recording and any notes, to safeguard the data in case the originals were damaged. The researcher also developed a transcribing key to allow display of nuances of the audio recording as it was documented (see Figure 3.5).

**Transcription Key**

Symbol	Meaning	Comments
(1.2)	pause, time	pause duration in seconds and tenths of seconds
@	laugh	one per pulse or particle of laughter
###	unintelligible	one symbol per syllable
<u>underscore</u>	emphasized words	stressed sounds or syllables
CAPS	loud talk	talk that is louder than surrounding talk
?	rising intonation	rising intonation at the end of a sentence, not necessarily a question

**Figure 3.5 Transcription Key**

The first steps of the data reduction phase involved the researcher transcribing the audio recordings and editing the transcripts for accuracy. The transcripts were then read and re-read, with brief notes made as themes started to emerge (see Figure 3.6).

who manages who in regards to the nurse educators in this structure, who everyone's reports to and how that's set up. The line management for myself is the director of staff development and there are colleagues within the department, other educators and we part of the team includes our clerical support staff and as with most other educators I have a staff development nurse team who are, work within their, their accommodation is within their speciality area.

What are some of the things you do with your staff development nurse team?  
 We often co-present several of the mandatory programs, I, some of those speciality areas that will I assist those staff to be more proficient in deliver of that speciality training. I, we have a meet on a very regular basis, monthly or more often as necessary as a business meeting and or of course I am there manager so that involves performance reviews and advisor to their professional development that might be advised to pursue. Yes.

TEAM INCLUDES CLERICAL STAFF  
 SDNs ACCOMMODATED IN SPECIALTY AREA  
 ASSIST STAFF TO BE MORE PROFICIENT  
 PERFORMANCE REVIEW  
 ADVISOR TO TURN PR

**Figure 3.6. Generating Initial Notes and Themes**

A new project was created in NVivo and the transcribed interviews were imported under external data sources. For example, when asked about their experience in working with their nurse education service model, replies included ‘having people to go and talk to who get this, is a great support’ (Phase one, interview two) and ‘the SDNs when I speak to them feel supported’ (Phase one, focus group one). Both of these statements were coded in a developed node titled ‘Positive’ and then placed in a developed subnode titled ‘Support and Share Ideas’. The data were summarised by coding important segments and themes into created nodes and subnodes. Memos were also created to note the researcher’s thoughts and insights and attached to the relevant nodes.

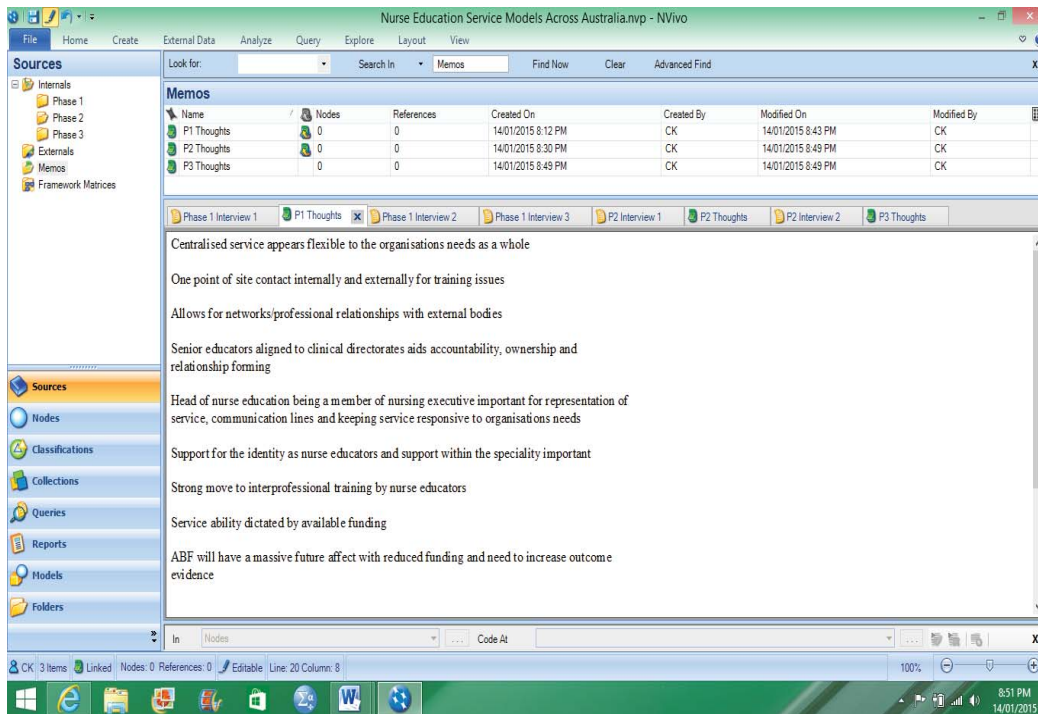
The second stage of analysis was data display. This entailed organising and further compressing the data and displaying it using charts and diagrams. Nodes and subnodes within NVivo were further refined to show relationships between themes emerging. For example, replies to the question ‘What factors do you think have influenced the model used at your hospital?’ included ‘I think a lot has been happening with accreditation and national standards’ (Phase one, focus group one) and ‘Well the national standards have made things, the focus of the department change quite considerably’ (Phase one, interview six). These two responses were initially coded under a developed node called ‘External Policy and Directives’, but in this stage, they were further refined under a new developed subnode called ‘New National Standards’.

Lists, charts and maps were used to display the data in different ways, such as the numbers of items under each node and the relationships between the nodes, and to allow exporting of the coded information (Miles & Huberman, 1994) (see Figure 3.7).

Name	Sources	References	Created On	Created By	Modified On	Modified By
Good Quotes	7	38	23/03/2014 11:13 AM	CK	21/06/2014 3:00 PM	CK
Q 1 Description of Model	7	22	23/03/2014 11:12 AM	CK	21/06/2014 3:05 PM	CK
Educator Role	2	2	23/03/2014 11:23 AM	CK	24/06/2014 6:22 PM	CK
External Liaison and Consultation	1	1	24/06/2014 6:20 PM	CK	24/06/2014 6:20 PM	CK
Implement Change	1	1	24/06/2014 6:14 PM	CK	24/06/2014 6:14 PM	CK
Mandatory Training	1	1	24/06/2014 6:22 PM	CK	24/06/2014 6:22 PM	CK
Networking	2	2	24/06/2014 6:18 PM	CK	24/06/2014 6:19 PM	CK
Planning and Teaching	3	3	24/06/2014 6:13 PM	CK	24/06/2014 6:21 PM	CK
Policy Development and Review	2	2	24/06/2014 6:14 PM	CK	24/06/2014 6:16 PM	CK
Problem Solving	1	1	24/06/2014 6:20 PM	CK	24/06/2014 6:20 PM	CK
Running Programs	2	3	24/06/2014 6:21 PM	CK	24/06/2014 6:22 PM	CK
Support the SDIs	3	4	24/06/2014 6:17 PM	CK	24/06/2014 6:19 PM	CK
Work with Manager to Support Staff	2	3	24/06/2014 6:12 PM	CK	24/06/2014 6:15 PM	CK
Q 2 Influences on Model	0	0	23/03/2014 11:12 AM	CK	23/03/2014 4:58 PM	CK
External Policy and Directives	0	0	23/03/2014 4:37 PM	CK	21/06/2014 3:09 PM	CK
Changes in Health Policy	3	3	23/03/2014 4:59 PM	CK	24/06/2014 6:15 PM	CK
Health Service Transition	1	1	23/03/2014 4:40 PM	CK	21/06/2014 3:00 PM	CK
New National Standards	3	3	23/03/2014 4:40 PM	CK	21/06/2014 3:00 PM	CK
Funding	5	7	23/03/2014 11:36 AM	CK	23/03/2014 4:49 PM	CK
Hospital Requirements	6	12	23/03/2014 11:42 AM	CK	25/03/2014 4:26 PM	CK
IT Systems	1	1	23/03/2014 4:48 PM	CK	25/03/2014 4:26 PM	CK
Physical Environment	2	2	23/03/2014 4:58 PM	CK	25/03/2014 4:26 PM	CK
Service Evaluation	1	4	23/03/2014 4:56 PM	CK	25/03/2014 4:26 PM	CK
Staff Involved	0	0	23/03/2014 4:44 PM	CK	21/06/2014 3:09 PM	CK
Q 3 Experience with Model	0	0	23/03/2014 11:13 AM	CK	23/03/2014 11:50 AM	CK
Negative	2	2	23/03/2014 11:45 AM	CK	23/03/2014 5:07 PM	CK
Conflict of Having Two Bosses	2	5	23/03/2014 12:53 PM	CK	23/03/2014 5:12 PM	CK

**Figure 3.7. NVivo Nodes and Subnodes for Phase One**

In the third stage of data analysis for phase one, a review of the coded data, memos (see Figure 3.8) and researcher notes allowed conclusions to be developed and verified (Miles & Huberman, 1994). For example, on review of all of the outputs from phase one, the frequency of responses and associated themes around the topic of support for the junior educators appeared to be a very strong positive aspect of the nurse education model investigated.



**Figure 3.8. NVivo Memos for Phase One**

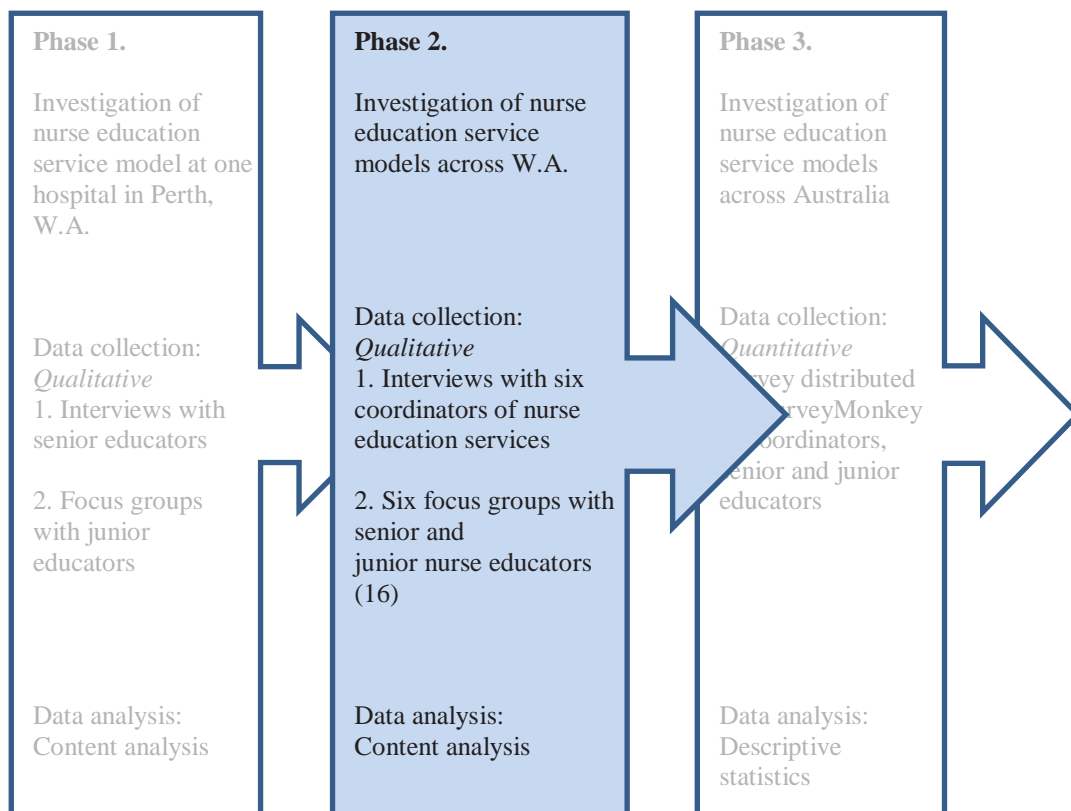
### 3.6.5 Summary—Phase One

This section outlined the sampling, data collection and analysis methods used for phase one, which included interviews and a focus group with senior nurse educators and a focus group with junior nurse educators at Hospital One. The data collected from phase one were analysed as outlined using the three-step Miles and Huberman (1994) approach and the findings were used to inform, shape and refine the questions for phase two.

## 3.7 Phase Two

### 3.7.1 Introduction

This section contains information on the sampling, data collection methods and data analysis for phase two. Figure 3.9 offers a visual summary of the details of phase two. Phase two focussed on acute care metropolitan hospitals within W.A., with the coordinators of nurse education services taking part in interviews and senior and junior nurse educators participating in focus groups.



**Figure 3.9. Summary of Phase Two**

### 3.7.2 Sampling—Phase Two

This study investigated nurse education service models at acute care metropolitan hospitals. Acute care is defined as the level of care delivered at a healthcare organisation that consists of emergency treatment and critical care (Medical Dictionary: The Free Dictionary, 2013). This study included adult generalist metropolitan hospitals in a capital city or location with a population of greater than 100,000 that offered a 24-hour service and had an emergency department and intensive care unit or high dependency unit (see Appendix 7). This was to allow for direct comparison between sites and Hospital One, which was the hospital used to collect data in phase one. Specialist hospitals and those that were not open 24 hours were excluded, as they are often smaller and may not be sufficiently resourced to support a nurse education department. Both public and private hospitals were included to allow for further comparisons.

At the time of the study, there were six acute care metropolitan hospitals in W.A. that met the inclusion criteria and were included in the study (hereafter Hospital Two, Hospital Three, Hospital Four, Hospital Five, Hospital Six and Hospital Seven). These hospitals are briefly described below and in Table 3.2:

- Hospital Two is a 450-bed tertiary teaching hospital and is the state's major adult trauma centre. It offers tertiary-level emergency medicine, mental health and specialist medical services (Government of Western Australia, Department of Health, n.d. c).
- Hospital Three is a 507-bed private health campus that includes a 20-bed hospice, a 24-hour emergency department, a 20-chair cancer centre, and a wide range of clinical and diagnostic services, including medical, surgical, paediatric, maternity, and critical and coronary care (St John of God Health Care, 2010).
- Hospital Four is a 242-bed general hospital with an emergency department and intensive care unit that provides general medical and surgical inpatient services as well as outpatient care (Government of Western Australia, Department of Health, n.d. c).
- Hospital Five is a 290-bed general hospital with an emergency department and intensive care unit that provides general medical and surgery services, rehabilitation, maternity, paediatric and neonatal, mental health, renal medicine and dialysis services, and ambulatory care (Government of Western Australia, Department of Health, n.d. c).
- Hospital Six is a 500-bed acute care hospital providing an extensive range of inpatient, outpatient and emergency services across both public and private hospital facilities (Ramsay Health Care, 2013).
- Hospital Seven is a 600-bed tertiary teaching hospital that provides clinical services including trauma, emergency and critical care, orthopaedics, general medicine, general surgery and cardiac care. It is home to W.A.'s only comprehensive cancer centre and is the state's principal hospital for neurosurgery and liver transplants (Government of Western Australia, Department of Health, n.d. b).



**Table 3.2. Summary of Hospitals Included in Phase Two**

Name	Bed numbers	Type	Services
Hospital Two	450 beds	Public Tertiary teaching	Major trauma Emergency medicine Mental health Specialist medical.
Hospital Three	507 beds	Private Acute care	Emergency care Medical and surgical Critical and coronary care Maternity and paediatrics Cancer centre.
Hospital Four	242 beds	Public General hospital	Emergency care Intensive care unit General medical and surgical.
Hospital Five	290 beds	Public General hospital	Emergency care Intensive care unit General medical and surgical Rehabilitation Maternity Paediatrics and neonatal Mental health Renal and dialysis services.
Hospital Six	500 beds	Public and private Acute care	Emergency care Medical and surgical.
Hospital Seven	600 beds	Public Tertiary teaching	Trauma and emergency care Orthopaedics General medicine and surgery Cardiac care Cancer centre.

Participants for phase two were selected by using purposive sampling. Coordinators of nurse education services in the six hospitals that met the inclusion criteria in W.A. were invited to participate in interviews. All six coordinators consented to be involved. All senior and junior nurse educators working in these six hospitals with more than six months' experience in the role that met the inclusion criteria were invited to participate in focus groups (one held at each site), with the numbers attending detailed as follows:

- Focus Group 1, Hospital Two—four participants
- Focus Group 2, Hospital Three—one participant, as two did not turn up on the day



- Focus Group 3, Hospital Four—two participants, one not transcribed due to less than six months' experience in role
- Focus Group 4, Hospital Five—five participants, one not transcribed due to less than six months' experience in role
- Focus Group 5, Hospital Six—three participants
- Focus Group 6, Hospital Seven—three participants.

Initial plans involved only conducting two focus group interviews with one to two nurse educators attending from across the different hospital sites; however, it was decided that one focus group for staff from each site would be more convenient for the participants to attend and would facilitate greater information sharing and discussion regarding the specific service model used at that site. A total of 132 junior and senior nurse educators were invited to participate across the six sites, with 16 (seven junior and nine senior) nurse educators participating in the six different focus groups. The same number of nurse educators participated as was initially planned, achieving adequate saturation before the conclusion of the final focus groups. Saturation refers to the point in the collection of qualitative data when sampling more data does not lead to any further information being discovered related to the research question, as all aspects of the topic have already been uncovered (Sarantakos, 2005).

Recruitment of participants for phase two followed the steps below:

1. The W.A. Department of Health website was used to identify hospitals within W.A. that met the inclusion criteria (see Figure 3.10).
2. Coordinators of nurse education departments were contacted via email by the researcher explaining the study and inviting them to participate in an interview, with the Participant Information Sheet attached (see Appendix 8).
3. Coordinators were also requested to forward an email and the Participant Information Sheet to their senior and junior nurse education staff, inviting them to participate in the focus groups.
4. Nurse educators willing to participate emailed the researcher and a mutually agreed date, time and venue for the focus group was organised.

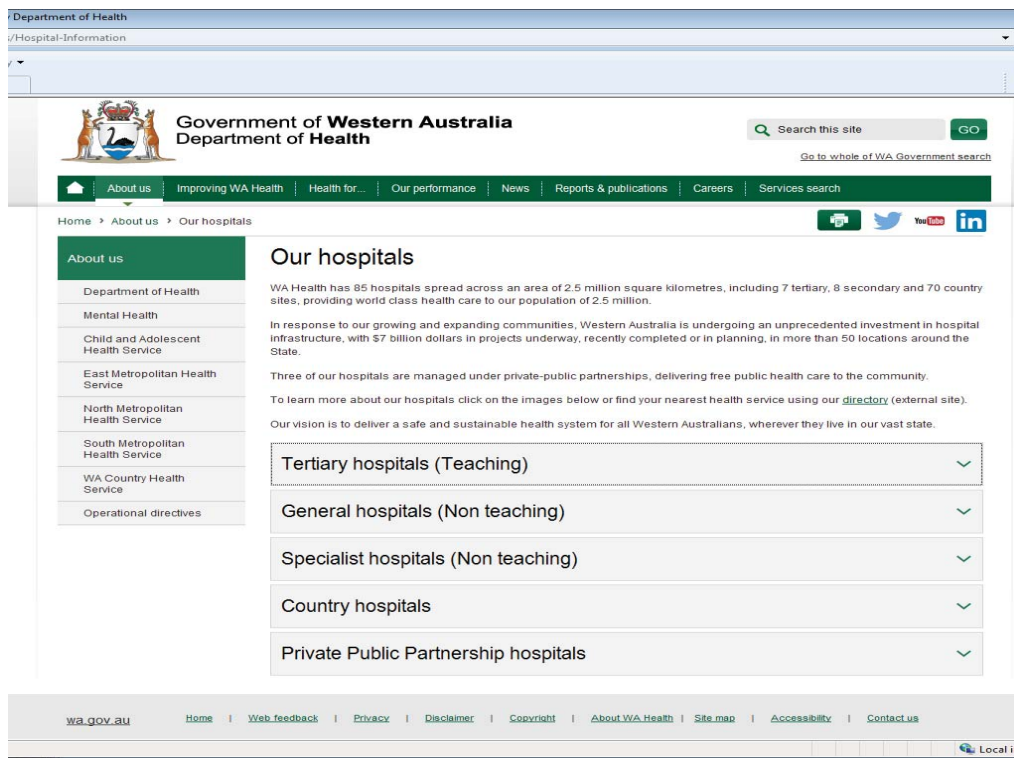


Figure 3.10. W.A. Department of Health Web Page

### 3.7.3 Data Collection Methods—Phase Two

In phase two of the study, individual face-to-face interviews were held with the six coordinators of nurse education services within W.A. included in the study. Focus group interviews with junior and senior nurse educators (with over six months' experience) were conducted at each site, with participant numbers ranging from one to four in each focus group. The use of interviews for the coordinators of nurse education services allowed the researcher to focus the sessions individually on certain themes as they emerged in more detail, and achieve a more in-depth investigation of the topic. As this senior group were responsible for implementing and supporting the nurse education service models at their sites, it was felt that they would have a high level of insight into the issues and that individual one-on-one interviews would encourage them to express their opinions more freely with the researcher than they would in a focus group with participants from other hospitals.

The use of focus groups for the senior and junior educators at each site allowed participants to raise opinions that were important to them, which prompted others to

respond and to bounce ideas and opinions off each other, furthering the discussions. For example, in one session, when asked about how they think nurse education will change in the future, one junior nurse educator answered ‘We are seeing more and more students going towards online learning so I think that it is going to be something in the future with multimedia and simulation’, which prompted another junior nurse educator to respond ‘But then we have to make sure we have a comprehensive clinical assessment aspect to it so we don’t let anybody fall through the gaps’.

The guiding questions used by the researcher in the interviews and focus groups for phase two were developed after reviewing the findings from phase one and developing new and refined questions to further investigate the topic and focus the study. For example, in phase one participants were asked to describe the nurse education service model used at their hospital, with some of the emerging themes including having a voice within the organisation, being centralised, being autonomous, delivering service across the whole hospital and being a one-stop-shop for all training. For phase two, participants were asked to describe the key characteristics of their model, what worked well, strategies for improvement and the role of the nurse education service within the hospital. This was done to delve deeper into these areas that were touched upon in phase one (see Appendix 9 for phase two interview and focus group questions).

Ethics and site approvals for the three hospitals involved in phase two that were not within the SMHS were submitted and approved prior to the commencement of the interviews and focus groups at these sites. The ethics and site approvals for the three SMHS hospitals were retrospectively sought, as initially the researcher had been informed that the ethics approval received from the SMHS Nursing Research Review Committee was sufficient for all of the SMHS sites. It was discovered after conducting the introductory sessions that this was not the case. After presenting the SMHS Nursing Research Review Committee Ethics Approval Letter to a number of the sites as approval to proceed, the researcher was informed by Hospital Seven that the letter did not meet the W.A. HREC requirements. With guidance from Hospital Seven, the researcher submitted the correct HREC and site approval for this hospital, which was approved, and then proceeded to retrospectively complete and submit HREC

applications and site applications for all of the SMHS hospitals (see appendices 10–16 for the hospital ethics approval letters).

### **3.7.4 Data Analysis—Phase Two**

Phase two of the study involved conducting interviews and holding focus groups to generate qualitative data. These data were analysed using the same three stages of data reduction, data display, and drawing and verifying conclusions as described previously for phase one. Content analysis was undertaken using NVivo 10 to assist with establishing concepts under which to gather further data when developing the survey questionnaire for phase three of the study (Sarantakos, 2005; QSR International, 2014).

Before beginning transcription of the data, the researcher made backup copies of the digital recording and any notes to safeguard the data in case the originals were damaged. The researcher also developed a transcribing key to allow display of nuances of the audio recording as it was documented. The first steps of the data reduction phase involved the researcher transcribing the audio recordings and editing the transcripts for accuracy. The transcripts were then read and re-read with brief notes made as themes started to emerge. A new folder for phase two was created in NVivo and the transcribed interviews were imported under external data sources. The data were summarised by coding significant segments of text and themes into created nodes and subnodes. For example, when asked how the success of their nurse education model was measured, replies included ‘people want to come and work in the department or put their hands up and work more frequently or volunteer for things’ (Phase two, interview one) and ‘retention is a lot, specifically the grads that we get on rotation’ (Phase two, interview two). These were coded under the created node of ‘Staff Satisfaction and Retention’. Memos were also created to note the researcher’s thoughts and insights (e.g., ‘nurse educators are training staff across all disciplines’) and attached to the relevant nodes.

The second stage of analysis was data display. This entailed organising and further compressing the data and displaying it using charts and diagrams. Nodes and subnodes within NVivo were further refined to show relationships between themes emerging.

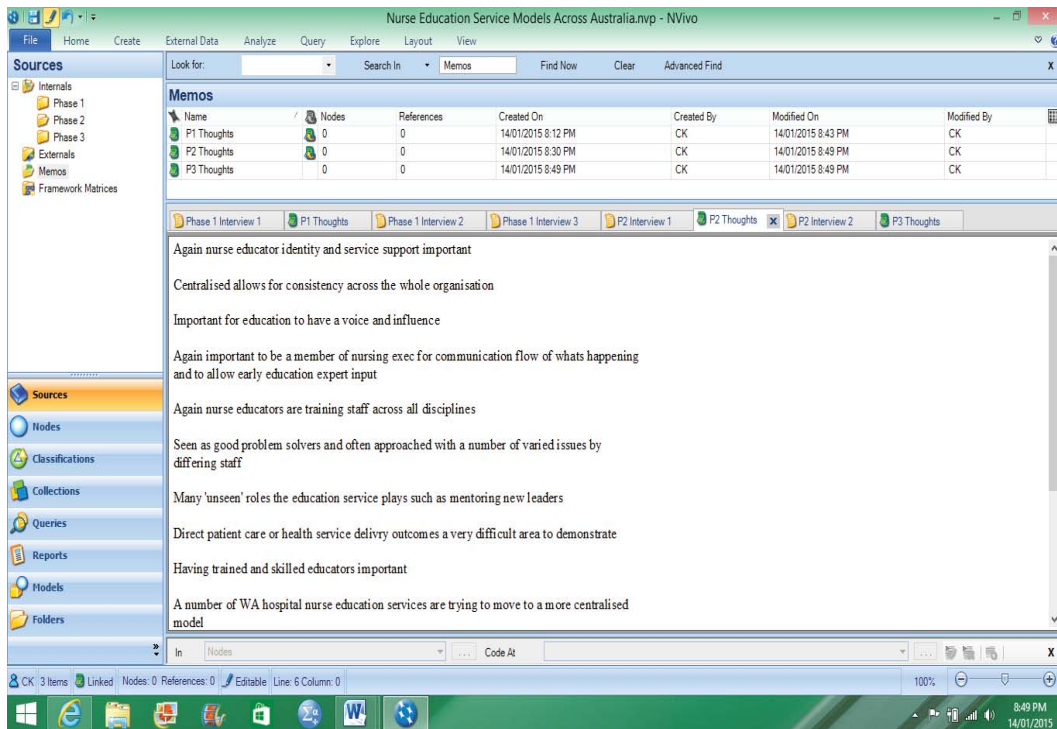
For example, under Question 2, the role of the nurse education service, the developed node of ‘Meeting Health Service Needs’ was further refined and separated into the subnodes of ‘Accreditation’, ‘Practice Change and Service Redesign’ and ‘Training to Fill Workforce Deficits’.

Lists, charts and maps were used to display the data in different ways, such as the numbers of items under each node and the relationships between the nodes, and to allow exporting of the coding information. Figure 3.11 illustrates the size of each node in comparison to the others (Miles & Huberman, 1994).



**Figure 3.11. NVivo Tree Map of the Size of Question Four's Nodes**

In the third stage of data analysis for phase two, a review of the coded data, memos and researcher notes allowed conclusions to be developed and verified (Miles & Huberman, 1994) (see Figure 3.12).



**Figure 3.12. NVivo Memos for Phase Two**

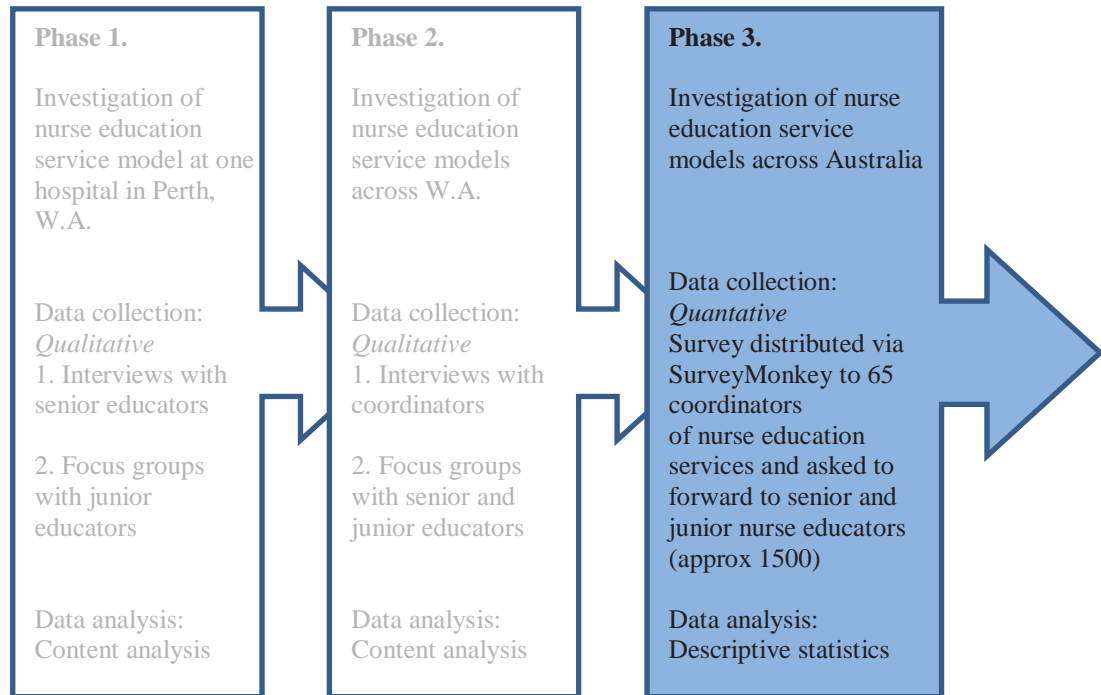
### 3.7.5 Summary—Phase Two

This section outlined the sampling, data collection and analysis methods used for phase two, which comprised interviews with coordinators of nurse education services and focus groups with senior and junior nurse educators from acute care metropolitan hospitals in W.A. The data collected from phase two were also analysed as outlined using the three-step Miles and Huberman (1994) approach and the findings were used to inform and shape the development of the survey tool for phase three.

## 3.8 Phase Three

### 3.8.1 Introduction

This section contains information on the sampling, development and testing of the survey instrument and preparation of the survey for phase three. Figure 3.13 offers a visual summary of the details of phase three. Phase three focussed on acute care metropolitan hospitals across Australia, with coordinators and senior and junior nurse educators participating in an online survey.



**Figure 3.13. Summary of Phase Three**

### **3.8.2 Sampling—Phase Three**

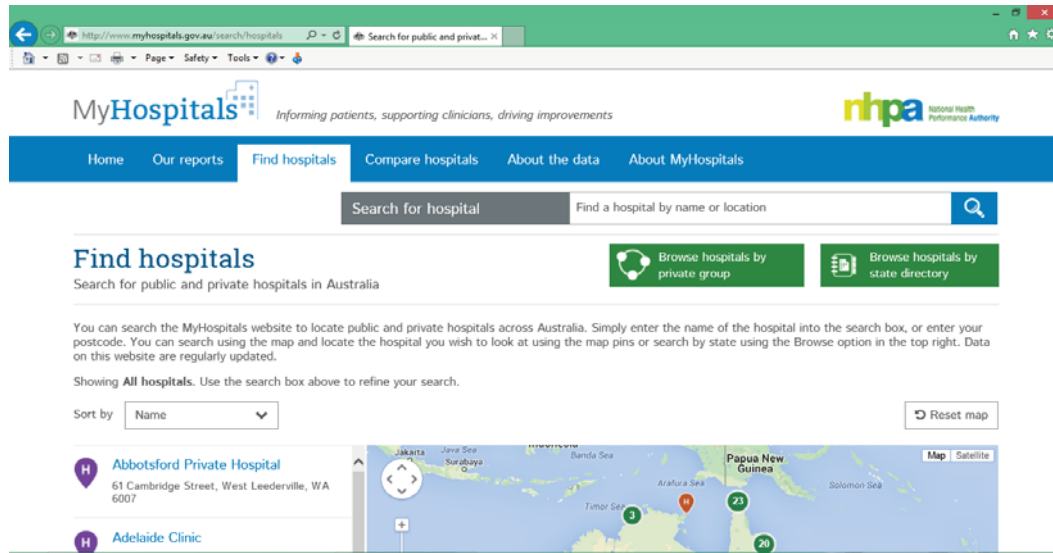
The participants in phase three consisted of nurse educators working in acute care metropolitan hospitals across Australia to allow for direct comparison of phase one, phase two and phase three findings. As in phase two, hospitals included were classified as ‘acute care’ and ‘metropolitan’ and the following criteria were used to determine their suitability for inclusion in the study:

- Adult general hospital
- Offer a 24-hour service
- Public and private hospitals
- Have an emergency department and intensive care unit or high dependency unit
- In a capital city or a location with a population of greater than 100,000.

The researcher searched the Australian state health services web sites and the national MyHospitals web page (see Figure 3.14) to identify hospitals across Australia that met these inclusion criteria. After reviewing all of the hospitals operating across Australia, it was found that 65 met the inclusion criteria, including the seven in W.A. from phases one and two. It was important to include these in phase three as well so that the



quantitative data collected could be compared between all Australian states and territories including W.A. (see Appendix 17 for a list of all of the hospitals included in the study).



**Figure 3.14. MyHospitals Web Page**

### **3.8.3 Data Collection Methods—Phase Three**

In phase three of the study, a quantitative survey questionnaire was developed and sent to the coordinators of nurse education services in acute care metropolitan hospitals nationally for dissemination to all nurse educators employed at those sites. Survey research involves the collection of information from a sample of the target population, with the participants in that sample responding to questions (Trochim, 2006). Surveys can be useful in gathering data about opinions, attitudes and perceptions and are an efficient method of data collection, as information can be obtained from a large number of participants quickly and at a relatively low cost (Dillman, 2000).

Survey as a research method is useful because it allows for sampling from large populations and is thus effective when the researcher wants to generalise the findings (Kumar, 2005). For this study, a survey was chosen as the data collection method in phase three to allow for the inclusion of a larger population of nurse educators situated in various locations across the country. Surveys are also useful, as they can sample from a range of different population subgroups, which allows the researcher to



examine trends and relationships across various groups (Check & Shutt, 2012). In this study, by collecting quantitative data via survey, it was possible to isolate subgroups for comparisons, such as the different states and public versus private hospitals. Finally, as email is the dominant communication method for this group of professionals, it was thought that delivering the survey electronically via SurveyMonkey would make it convenient for nurse educators to access, supporting a higher return rate.

### 3.8.3.1 Development of the Survey Instrument

In developing the survey tool, a number of steps were undertaken, including refining the purpose of the tool, deciding on the measuring techniques used, generating the questions from the earlier findings, developing and refining a draft, and pretesting and modifying the tool for use (Punch, 2005). To begin focussing and refining the purpose of the survey tool for this study, the researcher revisited the aim and research questions of the study and then developed a conceptual map of the questionnaire, beginning with general sections and then translating down into more specific variables (see Figure 3.15).

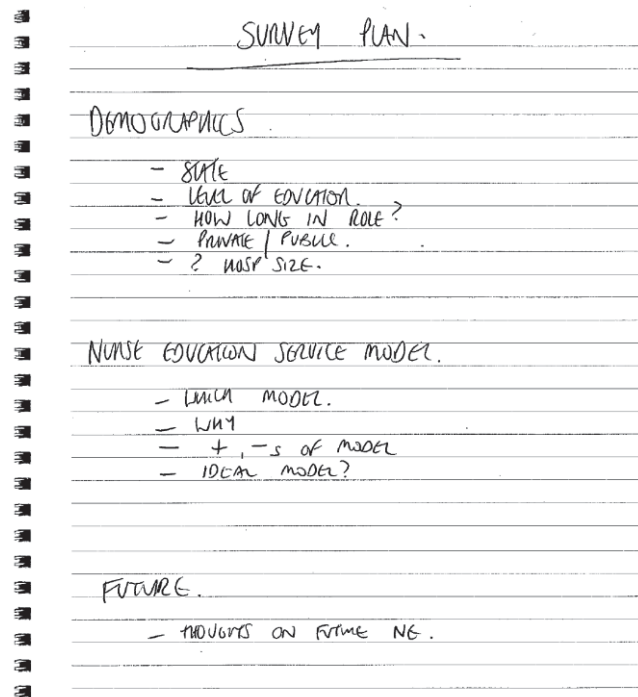


Figure 3.15. Conceptual Map of Survey Questionnaire

The measuring technique used in the survey comprised dichotomous questions, multiple choice questions and Likert scales, as this phase of the study was interested in collecting quantitative data to allow for statistical analysis. There was also one open-ended question that asked participants ‘What is your perception of why this nurse education service model is used?’ to allow them to give their thoughts. As no consensus on this question had been reached in the earlier phases, it was not possible to pose this as a closed question with pre-set options.

The specific variables that were measured by the survey were developed from the key themes that emerged from the data analysis of phases one and two of the study. The questions developed for the survey were designed to answer the research questions with the answer choices available to the participants reflecting the findings that arose from the first two phases. For example, Question 12 asked ‘In your opinion, the characteristics of an ideal nurse education model include:’, the participants were asked to rate on a Likert scale their level of agreement or disagreement with the statements developed from themes raised from the previous phases, such as ‘an area/district health service approach’, ‘close links with nurse managers’ and ‘clear nurse educator role definition’.

The survey questionnaire was developed to contain three main components:

1. Demographic information, such as the state in which the nurse educator currently worked and their position level.
2. Current nurse education service model used.
3. Future nurse education services and priorities, such as their opinion on the future of nurse education within their service model.

After the development of the specific questions, a draft of the survey was designed in SurveyMonkey. SurveyMonkey is a web-based tool for the creation and delivery of online surveys and it also assists in the collation of data. This online administration method was chosen because it allowed the survey to be emailed to a large group of participants at a low cost, and for results to be collected quickly and reviewed in real-time (SurveyMonkey, n.d.). Also developed and embedded into the draft at the beginning of the survey were an introductory page and a consent statement.

After developing the draft, the researcher went through the survey many times with her supervisor and four nurse educators who would not be participating in the final survey. The nurse educators were asked to examine each question and discuss with the researcher what meaning they ascribed to it. Their understandings were then compared with the meaning the researcher had in mind when she developed the question. These nurse educators were also asked if the instructions for answering the questions were clear. During this phase, numerous moderations in the wording of the questions and statements were made to clarify the meaning of the questions and statements for participants. As an example, Question 13 ‘the future of nurse education includes:’ was changed to ‘in your opinion, the future of nurse education within your service model will include:’, and the statement ‘allows you to see the bigger picture’ was changed to ‘allows you to get an organisational-wide view’. Finally, more formal pretesting of the survey using validity and reliability tests was undertaken, as outlined below.

### **3.8.3.2 Assessing Tool for Validity**

Validity is the extent to which an instrument measures what it claims to measure (Punch, 2005). There are a number of different approaches for testing a survey instrument for validity, with the main ones being categorised under content validity, construct validity and criterion validity (Trochim, 2006). Content validity focusses on whether the full content of the conceptual definition is represented in the measure (Neuman, 2006). Construct validity looks at the degree to which inferences can legitimately be made from the survey about the theoretical constructs on which the survey was based (Neuman, 2006). Criterion validity involves measuring the correlation between the test and a known standard or against itself, including concurrently and predictively (Trochim, 2006).

Content validity was chosen as the method to test the validity of the survey in this study, as it was important to ensure that the survey questions covered all of the various aspects of the nurse education topic area. Content validity is a qualitative test and examines whether elements enhance or detract from the survey (Trochim, 2006). To address the issue of content validity, the researcher approached five experts in the field to review the content of the questionnaire. It was determined that five experts would be

an appropriate number to provide a thorough level of feedback on how well each question measured the construct being addressed. The experts who undertook the content analysis ranged in age from 42 – 59 years of age. They all had considerable experience (minimum of 8 years) in the nurse education field as either senior educators or coordinators of service. They worked across the public and private sector within different health services, the Department of Health and the university setting.

Each reviewer was sent a link to the electronic survey, a PDF copy of the survey and the Participant Information Sheet to review. Feedback from the reviewers included comments regarding the need to clarify the meaning of some terminology, improving sentence structure and grammar corrections. For example, it was suggested to change the statement ‘junior nurse educators are used to fill staff deficits’ to ‘junior nurse educators are used to fill staffing deficits’ and that the statement, ‘allows you to stay aware of learning deficits at ward level’, be changed to ‘allows continuous awareness of learning deficits at ward level’ (see Appendix 18). Minor modifications were made to the wording and grammar of the survey as suggested by the reviewers prior to undertaking the test-retest reliability check.

### **3.8.3.3 Assessing Tool for Reliability**

Reliability refers to the degree to which an assessment tool produces stable and consistent results (Punch, 2005). There are three main types of reliability testing including test-retest, inter-rater and internal consistency reliability (Neuman, 2006). Test-retest is a measure of reliability obtained by administering the same test twice over a period of time to a group of individuals with the scores from Time 1 and Time 2 then being correlated to evaluate the test for stability over time (Kumar, 2005). Inter-rater reliability is used to assess the degree to which different people give consistent estimates of the same phenomenon (Trochim, 2006). Internal consistency testing looks at the multiple items of the survey and their consistency in regard to each other (Punch, 2003).

In this study, a test-retest assessment for reliability was thought to be the most appropriate to ensure the survey would be consistent when completed by a large

number of participants. Test-retest reliability was conducted to check the reliability of the survey over a two-week timeframe with nurse educators at three W.A. hospitals approached to participate via email, with 43 agreeing and 31 completing the test-retest. Both scores were evaluated for consistency and reliability, initially by calculating Kappa scores and then by calculating agreement frequencies.

Initially, Kappa scores were calculated for each of the questions to measure the test-retest variation. Kappa measures the percentage of data values in the main diagonal of the table and then adjusts these values for the amount of agreement that could be expected due to chance alone (McGinn et al., 2004). Kappa has a range from 0 to 1.00, with larger values indicating better reliability. Generally, a Kappa > .70 is considered satisfactory (McHugh, 2012).

In undertaking the calculations by looking at the variability of answers given by each of the participants between their first test answer and second test answer, a number of questions were found to demonstrate a high level of agreement when looking at the raw data but to have a low Kappa score. After investigation and in consultation with a biostatistician, it was discovered that due to the distribution of answers, which did not fall evenly across the various options in this survey, problems can arise with the calculation of a Kappa (Cicchetti & Feinstein, 1990; McGinn et al., 2004). It was therefore decided to use simple frequencies to accurately display the level of agreement between the test-retest scores (see Table 3.3).

**Table 3.3. Phase Three Test-Retest Kappa and Frequency Results**

No.	Question	Kappa	Agreement Frequency
4	In which Australian state or territory are you currently working?	1.00	100% N=31
5	Are you currently employed in a public or private hospital?	1.00	100% N=31
6	What is the bed number of the hospital?	0.44	77% N=24
7	At the AHPRA are you registered as a professional?	1.00	100% N=31
8	How long have you worked in an education role?	0.75	84% N=26

No.	Question	Kappa	Agreement Frequency
9	At what level are you employed?	0.85	93% N=29
10	On which model of nurse education is your service based?	0.76	90% N=28
12	<b>Please indicate which of the functions of a nurse education service listed below apply to your model.</b>		
12a	Undertakes staff mandatory training and competencies	1.00	100% N=31
12b	Orientates and supports new staff	1.00	100% N=31
12c	Implements practice changes	-0.03	93.3% N=28
12d	Meets accreditation needs for the hospital	1.00	100% N=31
12e	Supports formal training programs, e.g. postgraduate courses	0.36	84% N=26
12f	Upskills and trains staff to meet workforce deficits	1.00	100% N=31
12g	Coordinates the graduate nurse program	-0.05	84% N=26
12h	Mentors staff undertaking new roles	0.47	90% N=38
12i	Meets nurses' clinical skill training needs	1.00	100% N=31
12j	Coordinates student nurse placements	-0.14	71% N=22
12k	Supports service redesign	-0.05	81% N=25
13	<b>Which items below does your nurse education service use to measure the effectiveness of its model?</b>		
13a	Attendance rates	1.00	100% N=31
13b	Evaluation forms	1.00	100% N=31
13c	Number of clinical incidents	1.00	100% N=31
13d	Maintaining organisation accreditation	1.00	100% N=31
13e	Winning awards	1.00	100% N=31

No.	Question	Kappa	Agreement Frequency
13f	Nurse-sensitive indicators	1.00	100% N=31
13g	Partnerships with universities	1.00	100% N=31
13h	Staff skill competency levels	1.00	100% N=31
13i	Staff satisfaction and retention	1.00	100% N=31
13j	Mandatory competency compliance levels	1.00	100% N=31
<b>14</b>	<b>Which of the following statements apply to your nurse education model?</b>		
14a	The senior educators are involved in selection and performance development of the junior educators	0.36	90% N=28
14b	You are required to perform duties outside of the education role	0.61	81% N=25
14c	Allows you to get an organisational-wide view	0.54	90% N=28
14d	Can be isolating	0.63	90% N=28
14e	Allows continuous awareness of learning deficits at ward level	0.48	93% N=29
14f	Junior nurse educators are used to fill staffing deficits	0.33	61% N=19
14g	Allows autonomy	0.82	90% N=28
14h	Maintains visibility of nurse educators in clinical areas	0.47	90% N=28
14i	Junior nurse educators receive support from senior nurse educators	0.44	81% N=25
14j	There can be a lack of consistency in training across the organisation	0.48	61% N=19
14k	Allows for development of specialist clinical knowledge and skills	0.49	100% N=31
14l	Training is sometimes cancelled due to staffing constraints	0.25	81% N=25
14m	The coordinator/manager of the service is a member of high-level committees/nursing executive	0.41	61% N=19
<b>15</b>	<b>In your opinion the characteristics of an ideal nurse education model include:</b>		

No.	Question	Kappa	Agreement Frequency
15a	An area/district health service approach	0.32	61% N=19
15b	Clear nurse educator role definition	1.00	100% N=31
15c	Close links with unit nurse managers	1.00	100% N=31
15d	Junior nurse educators line managed by senior nurse educators	1.00	100% N=31
15e	An interprofessional approach	0.47	71% N=22
15f	Nurse educators having postgraduate education qualifications	0.73	87% N=27
15g	Being well resourced	1.00	100% N=31
15h	Being focussed on the hospital's vision	1.00	100% N=31
15i	Nurse educators being employed full time	0.55	77% N=24
15j	Having the ability to influence change across the organisation	1.00	100% N=31
15k	Ward-based nurse educators employed at a higher level than clinical staff	0.47	68% N=21
15l	Reporting against key performance indicators	0.49	84% N=26
15m	Senior nurse educator joint appointments with universities	0.27	61% N=19
15n	A service closely aligned with clinical practice	1.00	100% N=31
15o	Training for nurse educators	1.00	100% N=31
15p	A framework for education service delivery	1.0	100% N=31
15q	Nurse educators not filling staffing deficits	0.54	81% N=25
15r	Includes research education	0.52	74% N=23
15s	Evidence of the effectiveness/outcomes of education is available	1.00	100% N=31
<b>16</b>	<b>In your opinion the future of nurse education within your service model will include:</b>		



No.	Question	Kappa	Agreement Frequency
16a	A focus on simulation	0.64	93% N=29
16b	Interprofessional education	0.46	90% N=28
16c	Increased pay for nurse educators	0.44	71% N=22
16d	A focus on education in the non-critical care specialities	0.37	71% N=22
16e	More collaboration with universities	0.37	77% N=24
16f	Increased use of technology	0.28	93% N=29
16g	Postgraduate education qualifications for nurse educators	0.44	81% N=25
16h	Raising revenue to maintain operations in an Activity Based Funding (ABF) environment	0.36	68% N=21
16i	Increased collaboration between hospital sites	0.64	90% N=28
16j	Working towards set education quality standards	0.31	93% N=29
16k	An increase in the number of clinical staff undertaking a postgraduate qualification	0.72	90% N=28
16L	More flexible teaching modalities	0.52	87% N=27
16m	More self-directed education	0.21	81% N=25
16n	Empirical evidence of education outcomes	0.36	74% N=23
16o	A move away from theory back to practical hands-on training	0.23	58% N=18

Frequency levels of agreement were calculated for each question on the survey, with 61 of the 75 questions (81%) having an agreement of greater than 75%. To investigate the 14 questions that had a frequency of agreement of less than 75%, a number of the participants who had changed their scores between tests were interviewed. One change was made after these discussions, with the wording of 16n changed from 'Empirical evidence of education outcomes' to 'Strong evidence of education outcomes'. After including the suggested changes, the survey was considered ready for national

distribution. The following section outlines the preparation and process for administering the survey.

### **3.8.3.4 Preparation for the Survey**

All of the nurse educators identified as working in the hospitals that met the inclusion criteria (65 hospitals, see Appendix 17), including those in W.A., were invited to participate in the study (approximately 1500 people), to allow for comparison between all of the states and territories. Recruitment of participants for phase three followed the steps below:

1. The state health service and national MyHospitals web pages were used to identify hospitals across Australia that met the inclusion criteria.
2. Each hospital that met the inclusion criteria was contacted via telephone to identify the name of the coordinator of the nurse education department.
3. The coordinator of each nurse education department was contacted via telephone by the researcher to:
  - a. Introduce herself and inform them briefly about the study
  - b. Ask for the head count of nurse educators at the site
  - c. Request the coordinators' email addresses
  - d. Ask permission to send the coordinators an email with the Participant Information Sheet and link to the survey, inviting them and their nurse educators to participate in the study.
4. An introductory email (see Appendix 19) and Participant Information Sheet (see Appendix 20) was emailed to all of the nurse education service coordinators.
5. A separate email was then sent to all of the nurse education service coordinators with the link to the survey (see Appendix 21), inviting them to complete the survey and requesting them to forward the email to all of their nurse educators (see Appendix 22 for a copy of the survey).
6. Two reminder emails were sent to the nurse education service coordinators with the link to the survey, reminding them to complete the survey and forward it on.

7. Follow up telephone calls were made to the nurse education service coordinators that the researcher had not received a reply from after sending the previous emails.
8. Final survey reminders were sent to the nurse education service coordinators with the link to the survey, reminding them to complete the survey and forward it on.
9. Coordinators of the W.A. nurse education services included in phase three contacted to request permission for attendance of the researcher at a meeting of their nurse educators to invite those who had not yet completed the online survey to complete a paper copy of the questionnaire.

From all of the introductory emails sent to acute care metropolitan hospital sites across Australia, only The Alfred Hospital in Victoria and the North Sydney Local Health District, which includes the Royal North Shore, Manly, Hornsby Ku-ring-gai, Ryde and Mona Vale Hospitals, requested formal HREC approval before participating. These were submitted and approved before the survey was sent to their sites (see appendices 23 and 24).

### **3.8.4 Data Analysis—Phase Three**

Phase three of the study generated quantitative data through the use of a self-administered online survey. Data generated from this phase were initially collated within SurveyMonkey before being exported into the Statistical Package for the Social Sciences (SPSS) to allow for a more in-depth analysis using descriptive statistics. Descriptive statistics is the term given to the analysis of quantitative data that helps to describe and summarise the data in a meaningful way so that patterns might emerge (Punch, 2005).

The data were entered into SPSS using the data editor, with the variables on the column headings being named and the variable type set. The data consisted of categorical variables including a number of multiple-item scales. After transcribing the data into SPSS, rechecking was done to ensure the data had been entered correctly. As

data entry errors can frequently occur, this step was important. Once it had been confirmed that the data had been entered accurately, analysis using descriptive statistics began, including calculating the mean, median, mode, range, standard deviation and frequencies of all of the main variables.

After the initial descriptive analysis was completed, a more in-depth analysis of a number of relationships was undertaken. Cross-tabulations were calculated for the type of nurse education service model (Q7) against the state of the participants (Q1), public or private hospital (Q2) and hospital size (Q3) to determine significant differences and relationships. Cross-tabulations were also undertaken for type of nurse education service model (Q7) against functions undertaken by their nurse education service (Q9) and characteristics of the participants' current nurse education service model (Q11) to analyse the perceptions of nurse educators regarding the nurse education service model with which they were working. To analyse these cross-tabulations for significance, Chi-Square tests were used. When cell counts were not sufficient to calculate a Chi-Square, a Fishers exact test was undertaken. When the Fishers exact test did not converge to a result, a Monte Carlo exact test was used to give an accurate result (Little, 2013). Outputs obtained from SPSS included frequency tables and graph representations of the descriptive statistics findings by question, and tables and figures demonstrating the cross-tabulation findings (Kumar, 2005) (see Table 3.4 for an example of a cross-tabulation).

**Table 3.4. Cross-tabulations Table from SPSS**

Q2. Are you currently employed in a public or private hospital?	On which model of nurse education is your service based?				Total
	Combination	Centralised	Decentralised	Other	
Public	202	93	13	26	334
Private	23	32	1	3	59
Total	225	125	14	29	393

### 3.8.5 Summary—Phase Three

This section explained the process used in phase three, including sampling, the development of the survey instrument, testing the survey instrument for validity and

reliability, and the preparation for conducting the survey. The data collection methods and data analysis process were also discussed.

### **3.9 Ethical Considerations**

All research undertaken in Australia needs to comply with the National Statement on Ethical Conduct in Human Research (2007), which sets out the values and principles that apply to all human research. It is essential that researchers and review boards consider these values and principles and are satisfied that the research proposal addresses and reflects them. The ethical considerations that were addressed in this study were divided into those that affected the researcher, the participants and the research process methodology. These are addressed in the following sections.

#### **3.9.1 Researcher Bias**

Researcher bias can occur when the predisposed notions and beliefs of the researcher influence the study (Punch, 2005). It is important when conducting research that the researcher is aware of the impact their biases can have on the study and uses strategies to minimise these effects (Kumar, 2005). For this study, the researcher was aware that her most recent experience in nurse education was working within a centralised service model and, although she had previous experience working within a decentralised and also a combination model, she was vigilant in reducing the risk of bias by using the following strategies:

- Bracketing the researcher's pre-conceived ideas and expectations regarding the research study by recording them and playing them back throughout the study to maintain awareness of the potential for bias
- Discussing findings with the researcher's supervisor to receive feedback and challenge any assumptions
- Offering the interview and focus group participants the opportunity to review the analysed data
- Having the researcher's supervisor review and code some of the interview transcripts independently to ensure an objective approach.

### **3.9.2 Ethical Considerations in Relation to the Participants**

To address the issue of consent, an email containing a letter of introduction was sent to potential participants outlining the purpose of the study with a detailed explanation of what their participation in the study would entail. The letter contained information regarding the purpose of the study, informed interested parties that they were free to withdraw from the study at any time, included the contact details for both the principal researcher and her supervisor, and outlined the processes involved in maintaining the confidentiality and security of the data.

For phases one and two, consent forms were signed at the commencement of the interviews and focus groups. For phase three, consent was implied if potential participants completed the online survey after reading the consent statement on page two of that survey. At the beginning of each interview and focus group, permission was also gained for the use of a recording device to record the proceedings.

Participants were also informed of the confidentiality of the session and how the data obtained would be managed. The confidentiality of the research data was assured by:

- Maintaining confidentiality of data/records by separation of the list of participants and the transcripts for phases one and two
- Not discussing any issues arising from an interview/focus group with others in ways that might identify an individual
- Not disclosing what an individual had said in an interview/focus group
- Anonymising individuals and/or places in the dissemination of the study to protect their identity (Kumar, 2005).

The confidentiality and security of the original digital recordings of the interviews and focus groups taken in phase one and two were protected by being saved on an external password protected hard drive, held by the researcher. At the conclusion of the study, they will be saved on a CD and stored in a locked filing cabinet at The University of Notre Dame for a period of five years.

In this study, the possibility of harm could have existed in relation to the interview and focus group participants at Hospital One, as they may have had concerns regarding

their career and perceived role potential within the organisation. As the researcher was in a senior nursing position at the hospital and had acted as the coordinator of the nurse education service previously, she could have been perceived by staff as having influence over future employment opportunities, therefore affecting how the participants responded. A number of strategies to minimise this effect were implemented, including asking a colleague to assist in the recruitment process, outlining at the commencement of the interviews and focus groups that any views expressed would not be held against the participants, and allowing the participants to review the analysed data.

### **3.9.3 Ethical Considerations in Relation to the Research Process**

The research process can be affected by bias in a number of ways, including through errors in the study design and participant recruitment (Creswell, 1994). These errors can cause flaws in the data that cannot be compensated for during data analysis (Neuman, 2006). In this study, the research questions and methodology used were clearly defined and reviewed by a number of external reviewers, with the methodological approach adopted being the most appropriate for the study. The population and sample selection criteria and techniques were also clearly defined and adhered to (Kumar, 2005).

### **3.10 Summary**

Chapter 3 has outlined the methodology used for this study. A mixed methods approach, occurring over three distinct phases, was seen as the most appropriate means to investigate nurse education service models in acute care metropolitan hospitals across Australia. The design of the mixed methods study was explained, as was the sampling, data collection and data analysis processes. The chapter concluded by outlining the ethical considerations addressed for the study. Next, Chapter 4 details the data analysis findings for the three phases of the study and Chapter 5 provides an explanation of these findings.

# Chapter 4: Findings

*Education is the most powerful weapon which you can use to change the world*

-Nelson Mandela-

## 4.1 Introduction

This study was designed to investigate nurse education service models in acute care metropolitan hospitals across Australia and provide recommendations for future service delivery. Chapter 3 described the research methodology used in undertaking this study. This chapter outlines the findings of the three phases of the study, including the views of nurse educators about their education service models and the future of nursing education within hospitals and health services. The findings are presented in three sections, according to the three phases of the study.

This chapter provides a description of participant demographics and the findings from the qualitative and quantitative data analysis during the three phases of the study. A range of different methodologies and data types were used in this study:

- Phase 1: Interviews and one focus group with senior nurse educators and focus group interviews with junior nurse educators at Hospital One in Perth, W.A.
- Phase 2: Interviews with coordinators and focus group interviews with senior and junior nurse educators at acute care metropolitan hospitals across W.A.
- Phase 3: Survey distributed via SurveyMonkey to coordinators, senior and junior nurse educators at acute care metropolitan hospitals across Australia.

The participants in this study were all nurse educators, with a small number of participants in phase three (10%, n=39) being both nurse educators and midwives. The remainder of this chapter is divided into sections following the three phases of the study. For each phase, the demographics of the participants and the findings are presented.



## **4.2 Phase One: Hospital One**

### **4.2.1 Introduction**

This phase was an investigation of the nurse education service model at Hospital One. In Section 4.2.2, the demographics of the participants are presented to give context to the findings, which are presented in sections 4.2.3–4.2.6.

### **4.2.2 Demographics**

Phase one participants were nurse educators, with data collected through interviews and focus groups. The demographics of the junior and senior nurse educator participants involved in phase one are outlined below.

As mentioned in Chapter 3, it was planned that participants would be selected from Hospital One using purposive sampling to include permanent, experienced and informed nurse educators in an attempt to gain the most detailed information possible. This was not possible due to the Department of Health hold placed on the appointment of permanent positions leading into the transition of the SMHS in 2013–2014. As a result, senior and junior nurse educators were included in the study if they had been acting in an education position for a period of at least six months. It was considered that after six months in the role, nurses in education positions would be fully informed about their role and aware of their service model.

Of the 16 participants, eight were in permanent nurse education positions, seven had been acting in nurse education positions for a period greater than six months and one had only been acting in a nurse education position for two months, so her contribution in the focus group was not transcribed. The experience levels for those in permanent and acting positions ranged from 12 months to 11 years, with a mean of 3.9 years and standard deviation of 1.52. Of the 16 participants, 13 were female and three were male (see Figure 4.1). This ratio was not unexpected since nursing is a profession that is still predominantly female. The age of participants in phase one ranged between 30 and 64, with the mean being 46. This again is not unexpected with 40% of the Australian

nursing workforce recorded as being aged 50 or older (Australian Health Practitioner Regulation Agency, 2015). In relation to the participants, there were no significant differences of opinion seen in the responses to questions, in relation to the nurse educators' years of experience or gender.

**Table 4.1. Participants in Phase One**

Position	Gender	Permanency	Experience	Participated in
Senior Nurse Educator	7 female and 1 male	5 permanent 3 acting	1 year to 11 years	Interview and focus group
Junior Nurse Educator	6 female and 2 male	5 permanent 3 acting	1.5 years to 5 years	Focus group

### 4.2.3 The Nurse Education Service Model at Hospital One

Data from the interviews and focus groups that were undertaken in phase one were analysed to examine the nurse education service model at Hospital One. The nurse education model used at Hospital One was a centralised model. In a centralised staff development model, there is a hospital-wide approach to staff training in which a central department has the responsibility of meeting staff training requirements. In a centralised model, all education staff, even those within the clinical areas, report to the education department and coordinator (Cummings & McCaskey, 1992).

A variety of senior and junior nurse educators at Hospital One used certain descriptions and terminology to clearly articulate the features of this model, some of which included the structure and the reporting lines, such as 'It is a definite centralised structure where we have a department set up with a director with the second tier being educators and have different groups under them and are branched out into the different directorates' (Phase one, interview six). They also commented on the structure of the service within the larger organisation: 'Staff development at this hospital is autonomous and we have our own management structure and staff working and while we work with others within the local areas we are an autonomous department meeting needs for the entire hospital' (Phase one, interview three).

The leadership of the service and the influence of the director was highlighted:

I think the model that we use here by having a separate service as opposed to the education under the clinical managers means that education has more of a voice and a prominence within the organisation, I find sometimes education gets cut, it seems dispensable and the first thing to go but I think by having the model that we have here we have a system and a prominence and a director and a head and we maintain status and I think it's really important. (Phase one, focus group one)

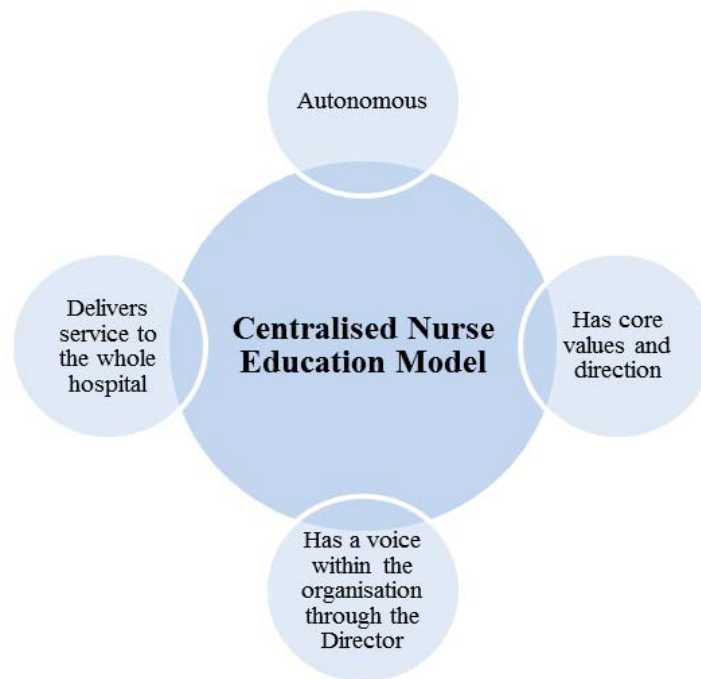
As was the value of future planning and independence from the clinical areas:

Well I do know because I have been in the department for a long time that it is a centralised model here. It's very unique, we don't actually belong to the clinical wards and we're self-sufficient, we make our own planning and we just run a staff development service and we can manage it how we want to do, we can time manage how we want to do things and we're not governed by what's happening clinically on the wards, we don't come in and make, have to take on a patient load or anything like that so it's really good. (Phase one, interview one)

The networking and consultative qualities of the service were also mentioned:

I see us as an independent service. And we are literally, I actually see us at the whim of the rest of the hospital, so we have our own processes, our own structure but our entire existence is based on meeting the needs of the other departments so you know if this department needs some education and training, or if they've got a problem, we get involved, we look at for example with nursing, the national standards we participate in all of the different committees so we can look at the educational component and see if we can relate that to the rest of the hospital. So I literally see us as a service to the whole hospital. (Phase one, interview five)

Overall, the nurse educators at Hospital One identified the features of a centralised model and isolated the key factors that characterise how this model is structured and functions. The senior nurse educator group, as one might expect, were more aware of the service model and its characteristics at an organisational level, with the junior nurse educators mainly aware of the management structure within the service model. Figure 4.1 summarises the characteristics of the model as identified by the participants in phase one.



**Figure 4.1. Characteristics of Nurse Education Model Used at Hospital One**

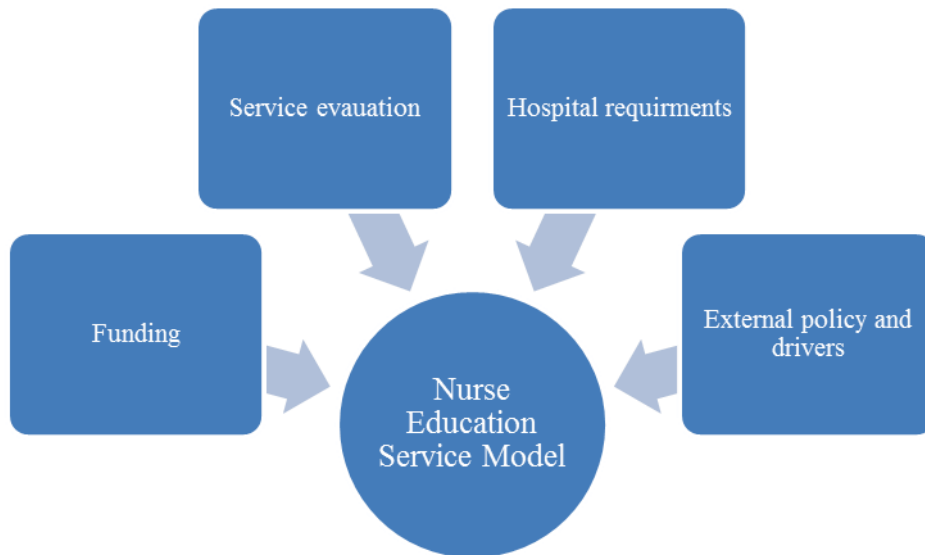
#### **4.2.4 Factors that Influence the Nurse Education Service Model Used**

In addition to examining the type of nurse education service model and its features, the factors that influence the type of nurse education service model used were investigated.

When questioned on influencing factors, participant responses included:

- funding
- service evaluation
- hospital requirements
- external policy and directives.

These concepts are summarised in Figure 4.2 and discussed in more detail below.



**Figure 4.2. Factors that Influence the Nurse Education Service Model at Hospital One**

#### **4.2.4.1 Funding**

Participants expressed that they felt funding influenced the nurse education service model. Comments highlighted a number of considerations, including the ability to deliver the planned training and the use of external training providers: ‘If we don’t have the funding there then we can’t run the study days that we want to run because we do bring a lot of external providers in’ (Phase one, interview one).

The number of full-time equivalent (FTE) staff in the education service was mentioned: ‘FTE numbers as well, the FTE has to be looked at and that can reduce some of the services in education as well’ (Phase one, focus group one), and the funding or budget allocated to the education service was also recognised as an influencing factor: ‘There are budgetary considerations, that comes high on the list as such’ (Phase one, interview three). The amount of money allocated to finance the education service can have serious effects on the quality of the service that is delivered due to constraints insufficient funding can have on the service delivery, resources and staff.

#### **4.2.4.2 Service Evaluation**

Participants outlined that they felt evaluating the nurse education service being delivered influenced the nurse education service model. Comments highlighted the importance of evaluation of the education service: ‘I think there is a lot more emphasis on evaluation of our, of the service we are providing, also on the quality of the education we provide, so evidence-based practice’ (Phase one, interview two). The value of being accountable and the ability to demonstrate outcomes was also mentioned: ‘I think you know as a service you have to decide are you doing a good job, who are you accountable to, how do you prove you are doing a good job and I think that we have certainly that’s evolved’ (Phase one, interview six). The results of evaluating education service delivery can assist educators and coordinators of service to improve the functioning of the service by implementing change in regards to how the service functions and is structured.

#### **4.2.4.3 Hospital Requirements**

In addition to the above, participants felt the requirements of the organisation, such as the addition of new specialist services and the growing size of the hospital, had all influenced the nurse education service model. Comments highlighted the effects that changes in clinical service delivery had had on the education service:

Obviously the clinical requirements for the hospital, so as we increased our service, like it was about, I can’t remember now maybe 10 years ago they brought in the cardiothoracic service so that was an extreme example of how we had to bring in education for that type of a service which was quite large. Yeah I suppose as we brought in new services, that influenced what education we had to evolve and that’s how the department has grown to the size that it is today. (Phase one, interview one)

The needs of specialty areas and developments in technology such as new equipment were mentioned: ‘Meeting the speciality area needs, discussions within speciality areas to manage expected new training, equipment’ (Phase one, interview three), and the expansion of the education service to meet the needs of the hospital was also outlined: ‘We have seen additional positions added where there has been a need so we’ve added positions as needs of the hospital has changed’ (Phase one, focus group two). The

requirements of the organisation can affect how the education service functions as the education service will change and adapt to meet the needs of the hospital such as changes in specialist services delivered.

#### **4.2.4.4 External Policy and Directives**

Participants also felt that external factors such as changes in health policy, at state and national levels, the implementation of the NSQHSS and the current reconfiguration of the SMHS were all factors influencing the nurse education service model at Hospital One. Comments mentioned the national policy developed by Health Workforce Australia, which identified that hospitals needed to increase their training capacity for undergraduate nurses and junior doctors as a top priority to address the predicted future workforce shortages and also briefly mentioned hospital accreditation: ‘It could be external policies we’ve seen a lot of change of policy in Health Workforce Australia and external directive changes within nurse training, within hospital training, I guess accreditation falls under that’ (Phase one, focus group one).

Comments also identified the publication of the NSQHSS by ACSQHC, which identified clear training priorities for organisations around 10 clinical practice areas that hospital-based education services were required to implement:

Well the national standards has made things, the focus of the department change quite considerably and even how we think about the training and register it in our own database, we are aligning it up to the standards to make reporting a lot more transparent and allow us to prioritise delivery of education a lot more around patient centred and developing staff so they can look after patients better and that has been a big change over the last two years (Phase one, interview six).

In addition, comments outlined the reconfiguration of the SMHS, with the opening of a new quaternary-level hospital and the involvement of Hospital One in planning workforce moves and upskilling staff for new specialty areas: ‘I definitely think the transition that is happening as well, that’s definitely a factor with everything especially education, because of upskilling of staff, looking at that how best to prepare staff for a new hospital’ (Phase one, focus group one).

The participants' responses regarding influencing factors, as outlined above, addressed factors such as changes required to the training delivered, changes to staffing within the service and resources available, but did not discuss influences that had changed the actual service model. Only two participants expressed their thoughts regarding what they considered had influenced the service model that was used at Hospital One with one responding: 'It's possible that the department was seen as managing speciality areas more efficiently' (Phase one, interview three). The other response given addressing influencing factors was: 'I understand that it was when the staff development nurses were more under the guidance of a nurse unit manager or something of the like, the education was a little bit more reactive and centralised just to that one area, without a global or strategic view of education. So hence it became a directorate in itself so it could meet the whole hospitals needs instead of just reacting in one area' (Phase one, interview six). This area was investigated further in phases two and three to gain greater insight into nurse educators' perceptions regarding factors influencing the nurse education service model implemented.

#### **4.2.5 The Nurse Education Service Model at Hospital One**

In addition to describing their nurse education model and what influenced it, nurse educators at Hospital One discussed their views on working within their model, including the perceived strengths and weaknesses of the model. The strengths of the model were expressed as:

- allows for a career pathway within nurse education
- has clear communication channels
- supports junior nurse educators
- meets the needs of the organisation
- allows for the streamlining of support services.

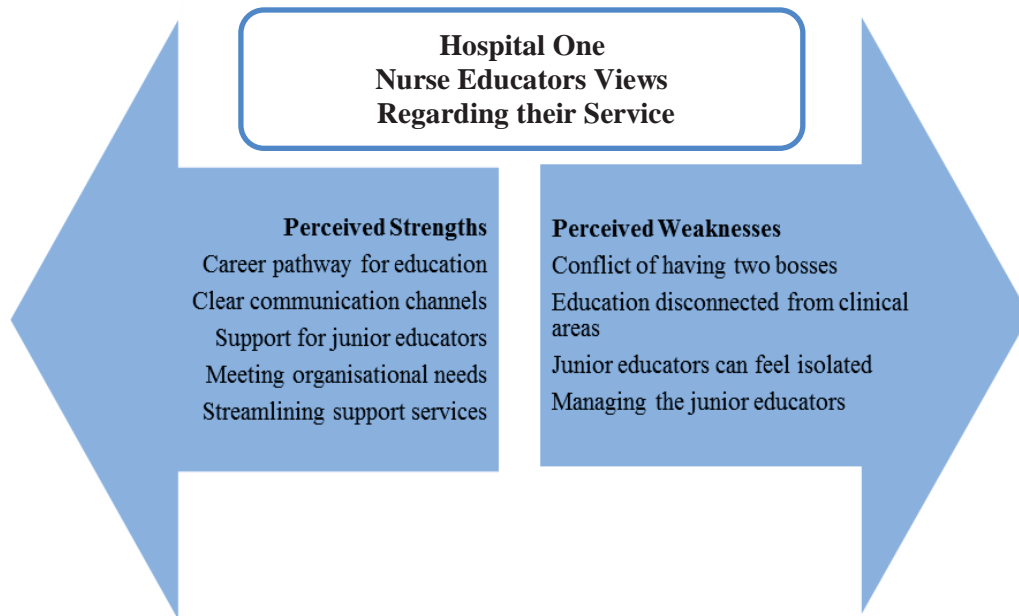
The weaknesses of the model as perceived by the nurse educators at Hospital One included:

- the potential conflict of junior nurse educators having two bosses
- the education service being disconnected from clinical areas



- junior nurse educators can feel isolated
- difficulty in managing junior nurse educators.

These strengths and weaknesses are summarised in Figure 4.3 and examined in more detail below.



**Figure 4.3. Summary of Hospital One Nurse Educators' Views about Their Model**

#### **4.2.5.1 Strengths of Centralised Model**

##### **4.2.5.1.1 Career Pathway**

Participants felt the centralised nurse education service model gave them a career pathway along which to progress. Having one nurse education service within the organisation that managed all of the nurse education positions allowed a clear pathway for junior educators to progress into a senior educator role and then coordinator of the service role. Comments highlighted that a centralised service supported opportunities to move into higher positions and between different areas or specialities: 'I think one of the positives of having that structure for the staff development service here is you can climb the ranks and move around' (Phase one, focus group two).

That the centralised service supported a career pathway for nurse educators was mentioned: 'There is a career pathway within this and you can be guided through that

pathway be identified for the things you are doing well and supported in the things you need support with' (Phase one, interview two). It also made possible ongoing education and support by other education specialists to assist nurse educators to develop into education specialists. Being managed by specialists in education allows for development of nurses new to the education field into skilled educators: 'I think we work well as educational specialists because that is what we are focussing on and our line managers are educational specialists' (Phase one, interview five). Participants also expressed the view that a centralised nurse education service model allowed a consistent orientation and training program to be given to nurse educators to develop them in their role: 'We give them education on how to take on their roles which they wouldn't have if they were clinically owned by the CNMs' (Phase one, interview one).

#### 4.2.5.1.2 Communication

Participants felt a centralised model supported clear communication channels within the service and within the organisation as a whole. The structure of a centralised service facilitates communication throughout the service as educators gather for meetings and information sharing. Comments outlined that a centralised model allowed educators to obtain an organisational-wide view of educational needs across the whole hospital and keep abreast of issues across the organisation: 'You get a whole of hospital view, it's not really tunnel vision into just your area' (Phase one, focus group one). The effective communication channels within the nurse education service, from the coordinator of the service down and the junior educators up, was highlighted: 'You can disseminate information up and down and I think that's core to what we do' (Phase one, interview four). The consistency in the development and presentation of education resources across the education service and organisation as a whole was mentioned: 'There's a very strict standard on the documents that we produce, the presentations we deliver all to a set template, they all set a benchmark and a standard' (Phase one, focus group one). Finally, the communication links to the clinical areas were identified as important: 'And you know its linking you to the clinical area as well and understanding what the issues are in that clinical area' (Phase one, interview four).

#### 4.2.5.1.3 Support for Junior Educators

Participants felt very strongly that the model at Hospital One allowed nurse educators to be well supported by the team, especially the junior educators as they are managed by senior nurse educators who are education specialists. These senior educators have experience of being in the junior role and so understand the pressures the junior educators can face and can support and mentor them. Comments outlined the advantage of consistency across the service and being managed by education experts: ‘I think it’s the supportiveness and the cohesiveness that everyone is singing off the same page, we are all experts in education or at least advancing to that’ (Phase one, interview four). The support that the junior educators can give each other was raised: ‘We’ve got some really novice SDNs and then some that have been around for a long time so they are able to share their ideas and some of them have really great ideas on how to improve teaching, how to improve education’ (Phase one, interview one). The ability of the education service and senior educators to deliver training to the junior educators to improve their knowledge and skills as educators was also highlighted: ‘We are able to support the SDNs and train them how to teach’ (Phase one, interview two).

#### 4.2.5.1.4 Meeting Organisational Needs

Participants expressed the view that the centralised service model allowed training to meet the different needs of the organisation. Comments highlighted that the centralised service supported educators being skilled in multiple areas, reducing the amount of training that might otherwise have been cancelled if the service had not been able to replace educators who suddenly became unavailable: ‘I do think cross fertilisation of knowledge and skills often work although we do have very specialised areas but we can work, in some instances across those specialty areas depending on what’s required at the time’ (Phase one, interview three). Nurse educators felt that being centralised allowed the service to meet the training needs of the hospital when required and on request: ‘We are self-resourcing and can meet most people’s needs most of the time’ (Phase one, interview three). The value of being able to deliver training across a number of areas, thereby reducing repetition and being more cost-effective was

identified: ‘If it’s bigger global picture we may need to look at it as a service and how we deliver it at a higher level so more people can attend’ (Phase one, interview four). Comments also highlighted the benefit of the centralised service supporting comprehensive planning of service delivery and prioritising the allocation of resources: ‘I think the strategic planning is less wasted opportunities in duplication and getting side tracked on the reactionary type education’ (Phase one, interview six).

#### 4.2.5.1.5 Streamlining Support Services

Participants expressed their views regarding a centralised model allowing them support within the service by having systems in place that provided administration and secretarial support. Clear procedures such as the processing of registration forms for programs and set publication printing schedules ensure a quality of service and reduce repetition. Comments outlined the support the administration team can give to the service: ‘So the admin team would deal with all the purchasing, venue management and so forth’ (Phase one, interview four). The importance of allocating tasks to the appropriate staff within the service was also outlined: ‘We don’t have to spend half a day making stuff like booklets we have a system to order what we need and it magically appears in our pigeon hole, which saves a huge amount of time’ (Phase one, focus group two).

### **4.2.5.2 Weaknesses of Centralised Model**

#### 4.2.5.2.1 Conflict of Having Two Bosses

Participants expressed the challenge posed by their nurse education service model of having to manage their relationship with the nurse unit manager and their nurse educator manager, as this was sometimes perceived as having two bosses and being pulled in two directions. Comments included: ‘It’s almost like having two bosses, but knowing which one you need to go to is probably the hardest part when you’re a SDN’ (Phase one, interview four), ‘I think sometimes like you said it is hard for the SDNs to

balance the manager and educator. I think that's a really important point because one of them can see things differently from the other' (Phase one, focus group one) and:

Although you work under the clinical model you are managed by a separate service so you tend to have two managers and that is sort of a conflict in itself at times, the frustrating thing about the model, but I guess, its, depending on your direct line manager in staff development on how supported you are to be able to facilitate all the roles that you have as a staff development nurse. (Phase one, focus group one)

#### 4.2.5.2.2 Education Service Disconnected from Clinical Areas

Participants expressed their concerns that the centralised nurse education model created a potential for disconnection between the clinical areas and the education service. With the service being located in an area physically away from the clinical areas and the senior nurse education teams being based in this one area, there were concerns they might not be able to be aware of clinical issues. Comments included:

I think there is always a risk when you are a separate department of having a disconnect from what's happening in the hospital and that's why it's very reliant on the SDNs liaising with their managers and the SDEs [staff development educators] also liaising strongly with the managers and touching base so they can keep an eye on what's actually happening out there because things change quite quickly and when things do happen they are usually urgent and you need to focus the education and training to try to mitigate any problems that might come up. (Phase one, interview five)

It's very easy I suppose to get stuck in your office, stuck down with your work and not be making contact with the people out there, and that disconnect just actually occurs. Yeah so I think, I suppose the risk is it comes down to the individual they to get up, they have to go out there. (Phase one, focus group one)

#### 4.2.5.2.3 Junior Nurse Educators Can Feel Isolated

Participants expressed the view that their nurse education service model could make junior educators, who are situated in the clinical areas, feel isolated. As they belong to a different team, they can feel isolated from the clinical staff team. Their office may be located away from the ward and they are often better informed of things happening within the organisation than are clinical staff, sometimes requiring them to keep things

confidential. Comments included: ‘You can feel isolated, you feel like, especially when you are in your clinical area that you are something separate from everybody else, that you don’t feel necessarily part of the clinical team’ (Phase one, interview four), ‘Sometimes you feel you are alone in the role because you are there and you can’t tell them half the things you know as well’ (Phase one, focus group one) and ‘When they are located away from the clinical area, they can feel a little bit isolated’ (Phase one, interview six).

#### 4.2.5.2.4 The Challenge of Managing Junior Educators

Senior educators can often be required to manage a number of junior educators from a variety of clinical specialities in which they themselves are not experts, which can make it difficult for them to make decisions or coordinate training programs in these areas. Also, the time it can require of the senior educator to support, educate and manage their junior team can make the educator role a challenge. Comments included: ‘Depending on how many SDNs you’ve got to manage it can be problematic at times because you just don’t have enough hours in the day to share with them all, to deal with their issues’ (Phase one, interview one) and ‘It can be problematic if your managing SDNs from different specialities, as it can make it quite difficult dealing with clinical issues’ (Phase one, interview three).

In undertaking the face-to-face interviews and focus group interviews for phase one, it was clear that the nurse educators had not considered that they were working within a nurse education service model and initially struggled to respond to questions regarding what service model was in use until asked more directly about reporting lines and the specific functions of the service.

In analysing all of the data from the phase one interviews and focus groups, the overarching theme that was raised most often by nurse educators of all levels was their opinion on the centralised nurse education service model in use at Hospital One as a model that facilitated a high level of support for educators. This included the support and education opportunities given to junior educators by the senior education staff as

they manage them, the ability of junior educators to support each other as they work collegially together within the service and the support for the role and education as a whole within the organisation.

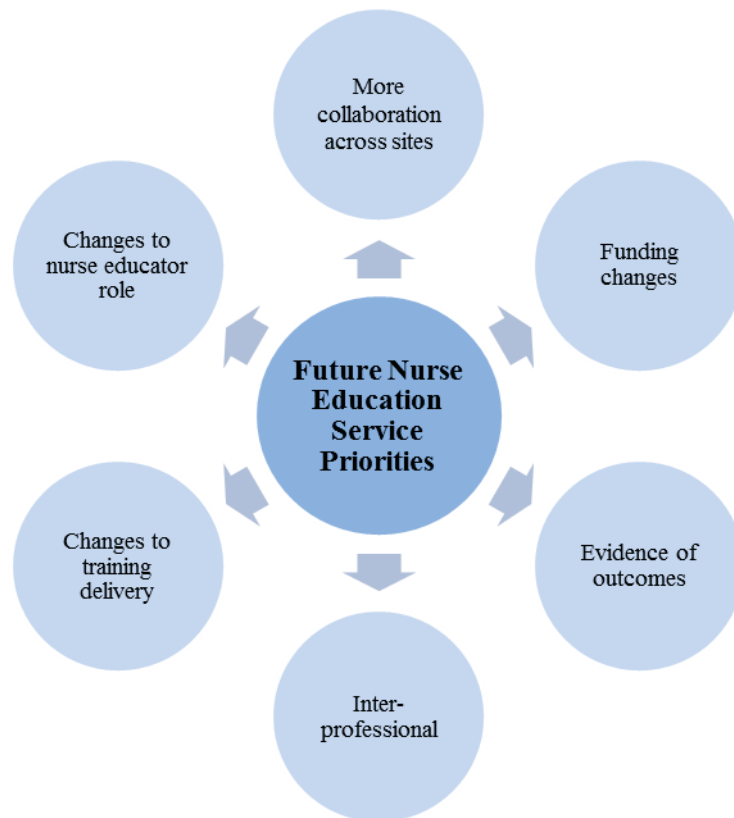
Another interesting finding was that the majority of participants, although only having worked at Hospital One in an education position, expressed their awareness of the different set ups of other hospital nurse education services, naming various hospital sites and making comments such as, ‘Anecdotally I have had feedback that they spend a significant amount of time on just being in the ward and taking a patient load’ (Phase one, interview three), and ‘I know they’ve had almost like a conflict between what’s wanted and what’s required’ (Phase one, interview four). These anecdotal observations were areas examined in phase two with the investigation of other nurse education service models across W.A.

#### **4.2.6 Future Nurse Education Service Priorities**

Senior and junior nurse educators at Hospital One expressed a number of views about the future of hospital-based nurse education, with themes emerging around the areas of:

- more collaboration across sites
- changes to the nurse educator role
- evidence of outcomes
- funding changes
- interprofessional training
- changes to training delivery.

These areas are summarised in Figure 4.4 and examined in detail below.



**Figure 4.4. Views Regarding the Future of Nurse Education in Phase One**

#### **4.2.6.1 More Collaboration across Sites**

Participants expressed that they felt that nurse education would become more collaborative across sites within the area health service and that relationships with universities would grow stronger. An area health service is the joining together of a number of public hospitals to provide health services to a defined geographical area of the state (Government of Western Australia, Department of Health, n.d. a).

Coordination of programs offered at different hospitals within the health service would reduce the repetition currently experienced, with all of the sites running the same programs. Also, hospitals and universities offering more training programs in partnership would give staff the benefit of expert clinical trainers, as well as a program that is university accredited and methodologically sound. Comments included: ‘I think that there will continue to be a growing collaboration between universities, and between hospitals. Currently you know we have the students and the grad nurses, but I think that at post grad level that needs to continue to grow and that collaboration between the uni’s and the clinical workforce is important’ (Phase one, interview two).



Comments also mentioned the importance of more structure and consistency across the different hospitals within the area: ‘A part of what we’re doing should be locally focussed but obviously I think, the area needs to have more structure so that there is continuity and standardisation across the area’ (Phase one, interview three).

#### **4.2.6.2 Changes to the Nurse Educator Role**

Participants expressed a number of views regarding changes to the nurse educator role in the future. Comments identified that as approaches to training change and become more technology-driven, less face-to-face formal study days will be required, affecting the need for and number of nurse educators, which could be reduced significantly: ‘So we are going to have to keep some sort of hands-on educators around but I don’t think it will be to the extent, I don’t think, I don’t see workshops and study days will be the thing of the future, I think they will become less and less’ (Phase one, interview one). The opinion was also expressed that in the future, nurse educators would be expected to display a higher level of specialisation by having specialist postgraduate qualifications in education as an essential condition for gaining an education position: ‘It might change with what we require for those positions, do our nurse educators need tertiary qualifications? Because certainly in management and other positions they are increasingly desirable’ (Phase one, focus group one).

#### **4.2.6.3 Evidence of Outcomes**

Participants expressed their views that increasingly the nurse education service would need to be able to demonstrate its outcomes in clinical practice to justify its existence. With increased financial scrutiny and emphasis on efficacy and efficiency of service delivery, all non-clinical support services will need to be able to clearly articulate and demonstrate measurable outcomes in organisational and financial terms. Comments included:

I think nurse education will need to move towards more evidence-based practice as well, the service or training you are delivering is it bang for your buck, is it having an effect? There will be more on that as there is more research to justify what you are doing. (Phase one, focus group two)

I think we need to be able to use research to prove how our education is making an impact on the floor to the actual patient outcomes and there are challenges in that but I think that's a big thing we need to address. (Phase one, interview two)

#### **4.2.6.4 Funding Changes**

Participants expressed concerns over securing future funding for the nurse education service, particularly with the commencement of the new ABF system for education, which, as mentioned in Chapter 2, will be implemented in the near future. Nurse educators' views emphasised the effect that this change to the funding model might have on future services delivery and that services might need to start raising independent revenue to support their business. Comments included: 'We may become less of a priority depending on funding, I mean the budget. The health budget is already stretched so I don't know' (Phase one, interview five), 'I guess I am concerned about how education will be funded when we go into activity based funding management because it's very hard to put a figure on that and show benefit' (Phase one, focus group one) and:

ABF funding for education, I don't think it's going to be positive for education. I think it's going to be a very traumatic time to maintain a level to ensure that we deliver high-quality care to our patients by providing excellent education. (Phase one, interview one).

#### **4.2.6.5 Interprofessional Training**

Participants expressed the view that the future of nurse education would include an increase in training. Training will be increasingly delivered to staff from a number of different disciplines together in the same session, as this has been shown to not only be cost-effective and reduce repetition but to increase team cohesion and understanding for staff of one another's roles within health (Swisher et al., 2010). Comments included: 'I think it needs to evolve as I have said a number of times to be multidisciplinary and I think that that's really important that we promote that' (Phase one, interview two) and 'I think it will multidisciplinary as well; there is a big push towards that' (Phase one, focus group two).

#### **4.2.6.6 Changes to Training Delivery**

Participants expressed their views regarding a number of changes to the delivery of training in the future. This included comments about the increased use of technology, such as online learning and simulation: ‘I can see a heavier reliance on eLearning and away from the face-to-face’ (Phase one, interview six), ‘I think the way we deliver education will be different in the future, we are slowly moving away from didactic lectures and moving over to more immersive/submersive type education’ (Phase one, interview four).

However, the opposite view was expressed by some educators who felt that training would become more competency-based and include more practical, at-the-bedside teaching: ‘I think we have to be smarter in how we are doing things and there is an emphasis on moving towards competency-based skill requirements and competency-based education’ (Phase one, interview five) and ‘So I think we will get back to some real practical mentoring at the bedside and stuff, that’s the stuff that will last I think’ (Phase one, interview six).

#### **4.2.7 Summary Phase One**

In this section, the demographics of the participants in phase one were described and a summary of the findings was outlined for the interviews and focus groups undertaken in phase one. The views of nurse educators on their nurse education service model, the influences affecting the model and future nurse education priorities were examined. The findings from phase two of this study are presented in the following section.

### **4.3 Phase Two: Across W.A.**

#### **4.3.1 Introduction**

This phase was an investigation of the nurse education service models at acute care metropolitan hospitals across W.A. Six acute care metropolitan hospitals met the inclusion criteria for this phase, with participants consisting of coordinators of nurse

education services and senior and junior nurse educators from these W.A. hospitals. Data collection for phase two consisted of six interviews with the coordinators of nurse education services and six focus groups with senior and junior nurse educators at these acute care metropolitan hospitals in W.A. In Section 4.3.2, the demographics of the participants are presented to give context to the findings, which are presented in sections 4.3.3–4.3.9.

### 4.3.2 Demographics

The participants for phase two were the coordinators of nurse education services and senior and junior nurse educators at acute care metropolitan hospitals in W.A. Table 4.2 outlines the participants involved in phase two.

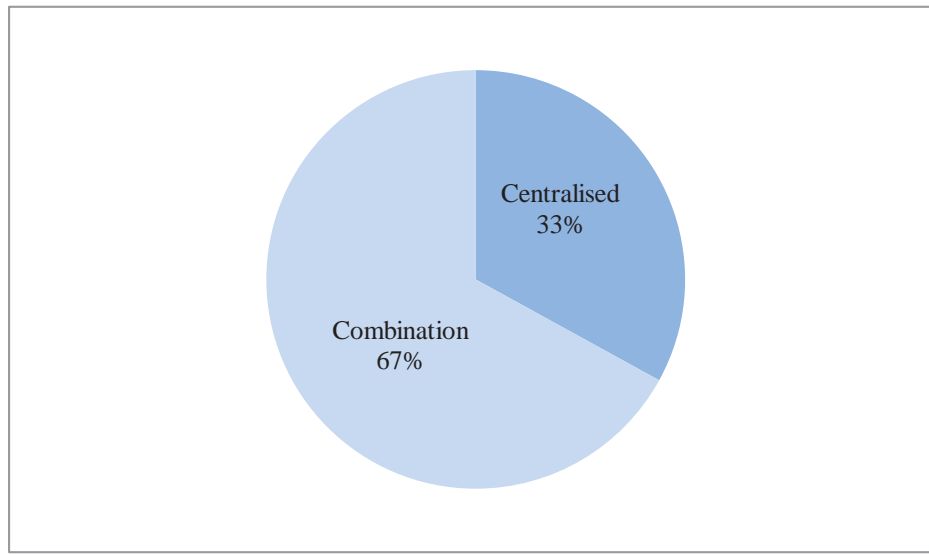
**Table 4.2. Participants in Phase Two**

Position	Gender	Permanency	Experience	Participated in
Coordinator	5 female and 1 male	All in permanent positions	5–14 years	Interview
Senior Nurse Educator	6 female and 2 male	4 permanent and 2 acting	1–7 years	Focus group
Junior Nurse Educator	10 female	8 permanent and 2 acting	9 months – 10 years	Focus group

It was planned that participants in phase two would be selected using purposive sampling to include permanent, experienced and informed nurse educators in an attempt to gain the most detailed information possible about the nurse education service models. This strategy became impossible due to the Department of Health hold placed on the appointment of permanent positions in the public health system in W.A. The researcher felt that the only way around this situation was to include senior and junior educators in the study provided they had been acting in an educator role for a period of at least six months. Experience levels for those in permanent and acting positions ranged from 9 months to 10 years, with a mean of 4.2 years and standard deviation of 3.44.

### 4.3.3 Nurse Education Service Models across W.A.

Data from the six individual interviews and six focus groups that were undertaken in phase two were analysed to investigate the nurse education service models used across W.A. Two of the six acute care metropolitan hospitals included in phase two ran a centralised nurse education service model, with the other four hospitals using a combination model (see Figure 4.5).



**Figure 4.5. Nurse Education Service Models in Use in Acute Care Metropolitan Hospitals within W.A.**

A central department in the centralised model has the responsibility of meeting staff training requirements across the whole organisation, with all education staff, even those placed within the clinical areas, reporting centrally to the education department within the hospital (Cummings & McCaskey, 1992).

Of the two hospitals with centralised nurse education service models, one was a public hospital and one was a private hospital. The coordinator of the nurse education service at one of these hospitals described the model as, ‘we’ve got a centralised model from here which covers a whole range of educational topics, not just nursing and we have the hospital service drive educational areas that report directly through each services SDE’ (Phase two, interview three). One of the senior nurse educators described the model by saying, ‘I believe the best way to describe it is that it is a centralised model so all the staff, education staff are employed by the education centre and then we

provide not only a service to our designated portfolios but also to you know the hospital as a whole, at large' (Phase two, focus group two).

The other four hospitals included in phase two ran a combination nurse education service model. In a combination model, educators are located in a training department onsite. These educators deliver programs across the organisation, such as orientation. In addition, there are educators located in the clinical areas that report to the nurse unit managers and who are not connected to the training department (Cummings & McCaskey, 1992).

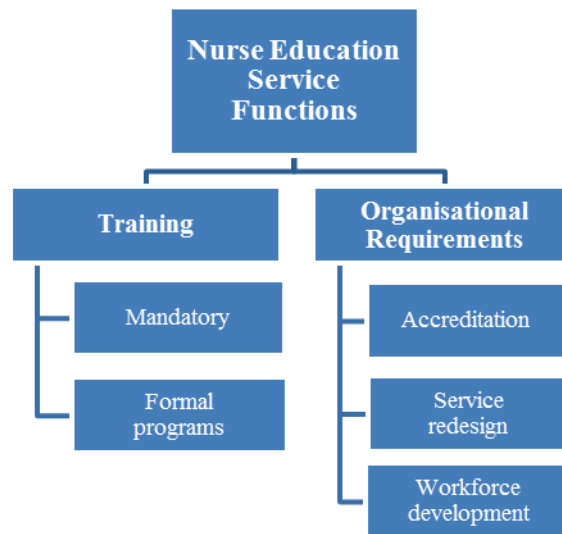
Of the four hospitals using a combination model, three were public and one was private. The coordinator of the nurse education service at one of these hospitals described the model as, 'The SDNs have a dual reporting role so they work for the manager and come out of their cost centre, so they're not governed totally by me but they work very closely with me' (Phase two, interview two). One of the senior nurse educators described the model by the comment, 'So all the SDNs are under the managerial infrastructure of their wards, their units and now even though we have SDEs on board which has only been for the last four to five years, they haven't got any managerial function over the SDNs they just kind of hover around' (Phase two, focus group four).

#### **4.3.4 Responsibilities and Functions of the Nurse Education Service**

To gain a deeper understanding of how the nurse education service model operates, the responsibilities and functions of the nurse education service was examined in phase two. Participants outlined the following areas as the activities and role of the nurse education service (see Figure 4.6):

- training
  - mandatory training and orientation
  - formal programs such as the graduate nurse program
- organisational requirements
  - support with accreditation
  - service redesign including upskilling staff to new clinical specialties

- workforce development including coordinating the undergraduate nursing students, coaching staff and delivering ward-based teaching sessions (in-service).



**Figure 4.6. Responsibilities and Functions of the Nurse Education Service within the Hospital**

The coordinators and senior and junior nurse educators gave the comments below to describe the responsibilities and functions of their nurse education services.

**Training:**

We're responsible for mandatory training so that takes up a huge proportion of time. (Phase two, interview one)

A big focus on induction and orientation. (Phase two, interview five)

Responsible for the graduate program which again takes up a huge proportion of time. (Phase two, interview one)

We do multidisciplinary education here as well as for allied health and also ancillary staff. (Phase two, focus group two)

**Organisational requirements:**

Supports the hospital in terms of the regulations associated with various requirements such as OSH [occupational health and safety] requirements and of course accreditation requirements. (Phase two, interview three)

It supports them in service redesign. (Phase two, interview three)

A number of our programs have been developed or are in progress due to workforce requirements where there has been I guess a lack of availability of a particular speciality or job type or skill set. (Phase two, interview five)

The core ones they will target you know that crop up in every hospital are your undergraduates. (Phase two, interview four)

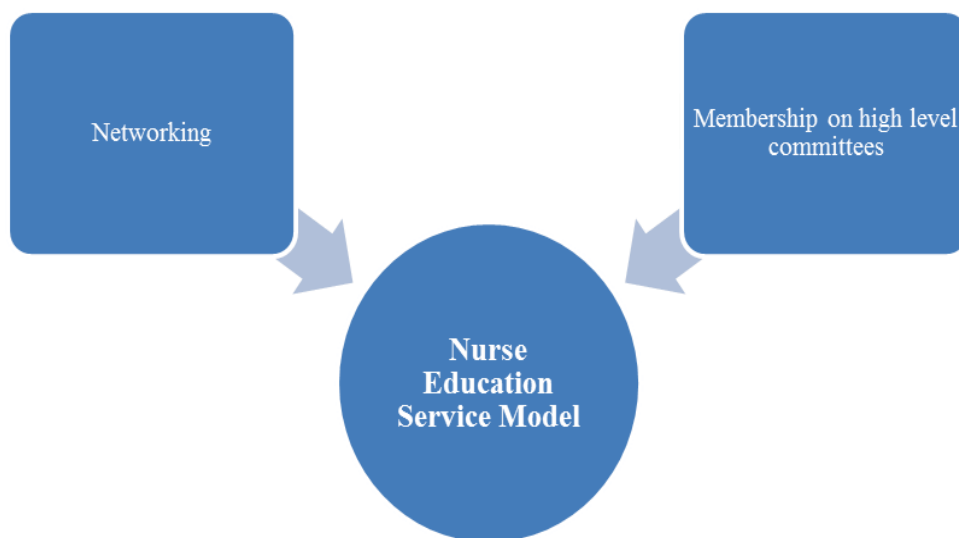
A lot of it is the informal mentorship and coaching with people. (Phase two, interview one)

Providing education to the areas in particular so for instance in theatre you know we have a lot of in-services on equipment and that sort of thing so quite area-specific. (Phase two, focus group two)

### 4.3.5 Coordinator Influence on the Nurse Education Service

To investigate further how nurse education services are influenced, the coordinators of the nurse education services were asked how they influence the functioning of their nurse education service. Responses given were categorised into two areas (see Figure 4.7):

- membership on high-level committees
- networking.



**Figure 4.7. Coordinator Influence on the Nurse Education Service**



#### **4.3.5.1 Membership on High-level Committees**

The nurse education coordinators highlighted the importance of being a member of the nursing executive team to have the authority to influence policy and practice across nursing services. They also outlined the importance of being a member of high-level committees within the organisation to keep abreast of changes, which allowed the education service to be involved at an early stage and to become proactive in regard to educational support. Comments included:

I am part of nursing exec so I sit within nursing exec and look at what we, nursing exec and all of the business that crops up, so I'll look at if there is incidents tabled, I'll then be able to go we need to do education, and be proactive about educational requirements. (Phase two, interview one)

Strategically through sitting on higher level committees at the hospital that allows me to be involved in higher level strategic direction setting. (Phase two, interview three)

#### **4.3.5.2 Networking**

The coordinators of nurse education services outlined that they used networking to influence the service by forming relationships both internally and externally. By forming effective working relationships internally with the nurse managers and other heads of departments and with external organisations such as universities and other training providers, the coordinators influenced practice and shaped the education service to meet the organisation's needs. Comments included:

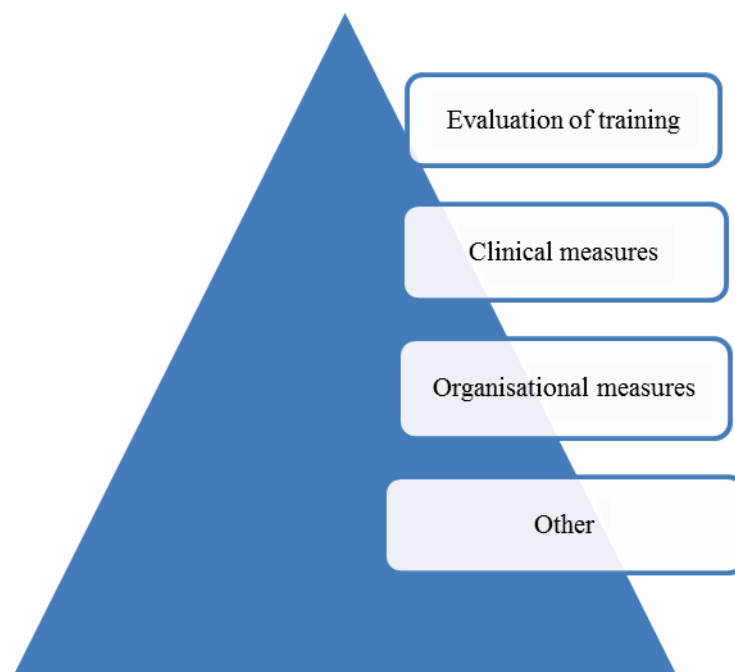
Close relationships with the nurse managers in their units and departments is key to how that works as well and then obviously my communication through my educators as well is paramount to that delivery. It's also pertains to partnerships with training providers that we are quite involved in so really those relationships with universities and TAFEs as well. (Phase two, interview five)

Well I guess its networking. It's like the work I have been doing with the executive director and the frontline leadership model ... and so the influence with that is having to meet with every single team throughout the entire hospital and getting an understanding of what we are trying to do as an organisation, the conversations and opportunities to participate in planning. (Phase two, interview three)

### 4.3.6 Nurse Education Service Measures of Success

To understand how the effectiveness of the nurse education service was assessed, the techniques that the coordinators and nurse educators used to measure the outcomes of their service were investigated. Responses given were categorised into four areas (see Figure 4.8):

- evaluation of training
- clinical measures
- organisational measures
- other.



**Figure 4.8. Measures of Success for Nurse Education Service Models**

#### 4.3.6.1 Evaluation of Training

Nurse education service coordinators and senior and junior nurse educators highlighted the use of reporting attendance rates and education hours in the evaluation of training delivered: ‘Historically it’s pretty much been education hours so number of people who attended sessions and how long those sessions went for to calculate the education hours’ (Phase two, focus group two). The use of feedback forms at study days was also identified. Nurse educators evaluated the study days and programs their services

delivered by asking participants to complete evaluation forms and provide feedback about how well their service was performing:

We have study days, medical study days, surgical study days and they will be given a feedback form at the end of that, what did you know before, were you prepared, did you feel better etc. so they'll be asked to give that feedback after every session that they have, that's the most frequent measurement tool on the formal education setting. (Phase two, focus group one)

#### **4.3.6.2 Clinical Measures**

Nurse education service coordinators and senior and junior nurse educators outlined their use of clinical measures to evaluate the effectiveness of their service. These included monitoring clinical incident report rates for medication errors and nurse-sensitive indicator rates, such as the number of falls and pressure injuries. Comments included:

You can look at responses to incidents so if you had an incident, increased falls for instance and then you provide a load of education the falls rate drops then you know you've got some kind of success along the way so you've got those quantitative measures that you can count the numbers. (Phase two, interview one)

Decrease in clinical incidents. We get quite a lot of feedback if we have an increase in clinical incidents in one area and they want us to put the education in so they can see the decrease of clinical incidents. (Phase two, focus group four)

#### **4.3.6.3 Organisational Measures**

Nurse education service coordinators and senior and junior nurse educators discussed their use of organisational measures to evaluate the effectiveness of their service. Recruitment and retention of staff and staff satisfaction were mentioned as organisational measures of the effectiveness of the education service:

Retention, specifically the grads that we get on rotation we do very well with them all wanting a job. Also the number of applications we will get for a graduate program. I think that that must show that we are doing something right because we get inundated for places. Staff satisfaction survey, the culture survey that we've just done. We rated quite highly on the culture, training and development and education available and offered to staff. (Phase two, interview two)

Staff mandatory competency and skill compliance levels were also outlined as organisational measures of an effective education service:

I mean we record things like mandatory competencies and all those things. (Phase two, focus group five)

and:

How many staff have you got that can cannulate, catheterise and you know those kind of things and there are other measures you can do that shouldn't just be done because its accreditation stuff that you should be doing because you are trying to increase the quality of care and you do that by having skilled staff. (Phase two, interview one)

#### **4.3.6.4 Other**

Nurse education service coordinators and senior and junior nurse educators named a number of other measures of the success of their service. Forming partnerships with universities and other external training providers to deliver programs and winning awards were mentioned as other measures that the service can use to measure its effectiveness: 'Other ways we do is through our partnerships with the universities, so as an example the partnership with Challenger for the advanced diploma that program actually won a training award' (Phase two, interview five). Supporting nurses with their Australian Health Practitioner Regulation Agency (AHPRA) registration continuing professional development requirements was highlighted as another way to measure whether the service was meeting the needs of the staff: 'I suppose you can look at AHPRA's auditing I mean the fact that we used to get many nurses that would not be able to meet their auditing requirements but I think there is less and less of that because most people are doing education' (Phase two, focus group five).

#### **4.3.7 Nurse Education Service Models across W.A.**

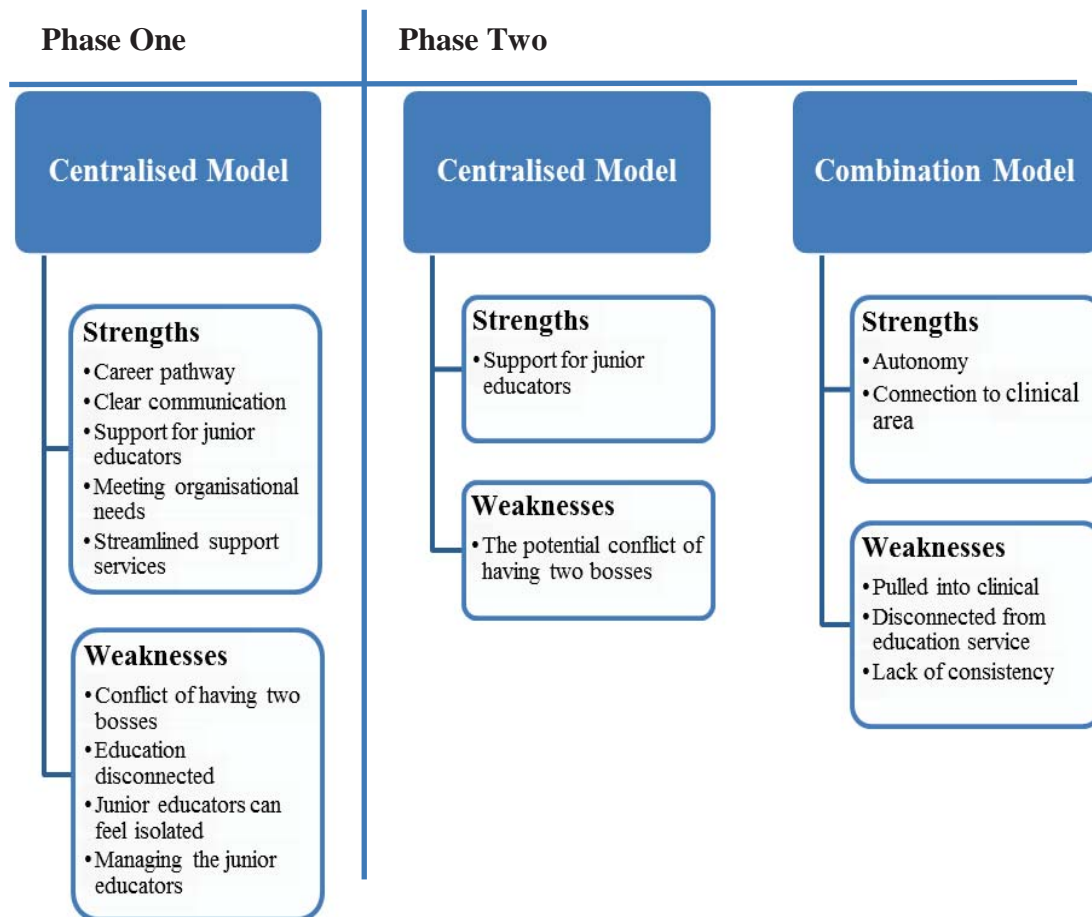
To investigate the aspects of the different nurse education service models in phase two, senior and junior nurse educators were asked to express their views on their nurse education service model. Their responses are outlined below. For those working in a centralised service model, the views expressed included the strengths and weaknesses of the model:

- Strengths
  - supports the junior nurse educators
- Weaknesses
  - the potential conflict of junior nurse educators having two bosses

For those working in a combination service model, the views expressed included the strengths and weaknesses of the model:

- Strengths
  - autonomy
  - connection to clinical area
- Weaknesses
  - pulled into clinical role
  - disconnected from education service
  - lack of consistency.

These have been examined in more detail below and these findings are compared to those from phase one in Figure 4.9.



**Figure 4.9. Nurse Educators’ Views of Their Nurse Education Service Models in Phases One and Two**

As demonstrated in Figure 4.9, not all of the strengths and weaknesses of the centralised nurse education service model that were identified by nurse educators in phase one were identified in phase two. This may be because, in phase one, all of the nurse educators were working within the centralised model, while the majority of participants in phase two were working within a combination model. The decentralised nurse education service model was not able to be investigated in phase two, as no hospitals that met the inclusion criteria in W.A. were using this model.

## **Strengths of Centralised Model**

### **4.3.7.1.1 Support for Junior Educators**

Nurse educators working in a centralised model viewed it as allowing support for the junior educators. This includes support from the senior educator group as specialist educators, support from fellow junior educators and the support for the education role as a speciality. This support by experts in education allowed junior educators to develop their skills as a specialist in education. Comments included:

Having that senior level of support around you is a really positive thing as I said not only for ease of information around you but if you've got a problem and need to sound someone out there is someone there. (Phase two, focus group two)

In a dedicated unit, a centralised model it is very clear that you are an educator and you know that is the role you do and the sheer volume of other educators around you make a real impact statement about educators that educate about nursing, rather than just a nurse that teaches. (Phase two, focus group three)

## **4.3.7.2 Weaknesses of Centralised Model**

### **4.3.7.2.1 The Conflict of Having Two Bosses**

Junior nurse educators working in a centralised model outlined the potential conflict of having two bosses when their senior nurse educator manager and the nurse unit manager had different priorities. With the nurse unit manager being present on the ward, junior nurse educators were often directed to undertake tasks or approach things in a way in opposition to the senior nurse educator's directions. This could leave the junior nurse educator conflicted, trying to please two senior staff members with opposing views. Comments included:

From an SDN point of view it's very much being pulled by your line manager on the floor and the SDEs as they tend to have different ideas of what needs are for the department. (Phase two, focus group three)

I had a situation last week where I had to get my SDE involved because the ward manager was not moving and she was coming to me and I was being very much stuck in the middle, one was saying you will do this and the other one was saying no we won't do this. (Phase two, focus group two)

### 4.3.7.3 Strengths of Combination Model

#### 4.3.7.3.1 Autonomy

Nurse educators in combination nurse education service models viewed the autonomy it gave them as a positive aspect of the model. They felt that they were closer to the clinical areas and could respond more quickly to educational needs, rather than waiting for direction from the education service. They were able to decide and act on educational needs for the unit immediately, in liaison with the nurse unit manager, without having to obtain approval from the education service. Comments included:

Gives us autonomy to do training needs analysis and find that gap and fill the gap. (Phase two, focus group four)

I like the autonomy; we can do whatever we want. We can respond, we can preempt to clinical incidence and do our own education and to whatever suits our unit. (Phase two, focus group five)

#### 4.3.7.3.2 Connection to Clinical Area

Nurse educators within combination nurse education service models viewed the model as allowing them to be closely connected to the clinical unit by reporting to the nurse unit manager, which supported them in being more aware of training requirements at the unit level and more visible and available for staff. As they are based in the clinical area, they are able to work with and supervise staff which allows them to be more aware of what is happening in the unit and with the staff:

Being at the grass root levels we can see where there are deficits, we can see where there are knowledge gaps and it becomes easier for us to say right we need help in this area and we know exactly who to ask. (Phase two, focus group five)

I am generally based in the department and I'm available for staff so if they are working in a new area or unfamiliar with a procedure I am generally available to talk them through it or work with them until they gain their confidence. I am very visible. (Phase two, focus group four)

They also expressed that it supported their development of specialist clinical knowledge and skills, as they were closely aligned with the clinical specialities and not



required to deliver generic training such as induction but can focus on their specialty area:

You know we tend to work in specialities so we have a lot of clinical input into that speciality and so you become very honed in to your own speciality. (Phase two, focus group one)

#### **4.3.7.4 Weaknesses of Combination Model**

##### **4.3.7.4.1 Pulled into Clinical Role**

Nurse educators within combination models overwhelmingly expressed the view that the junior educators were moved into clinical roles and out of their education positions frequently to fill staff vacancies. This may be due to the fact that the junior nurse educators are managed by the nurse unit manager and paid for by the unit. Nurse educators working within combination models outlined their frustration with having to cancel planned education and training due to being made to work clinically on the floor when the ward got busy or was short staffed:

Well if someone is off sick you are clinical for the day. (Phase two, focus group one)

We find SDNs get pulled out of the educator role into the clinical role on a fairly regular basis. (Phase two, focus group six)

Depending on our budget, we are pulled off and put on clinical staff so there's no actual education that occurs. (Phase two, focus group five)

##### **4.3.7.4.2 Disconnected from the Education Service**

Nurse educators in combination models commented on the disconnect they felt occurred between the junior nurse educators, working in the clinical area and managed by the nurse unit manager, and the senior nurse educators based in the education service. As the junior educators are not managed or supervised by the senior educator group it can be difficult for them to monitor and support or keep them in touch with what the education service is doing: 'performance management is incredibly hard, the SDE will get the feedback of the SDN that is poorly performing but the SDE can do nothing about it as they do not manage them' (Phase two, focus group four).

Nurse educators working within a combination nurse education service model also highlighted that their model did not support senior nurse educator involvement in the recruitment, orientation and ongoing education of the junior educators: ‘SDEs are not involved in recruitment so a lot of the SDNs are recruited on the basis that they are quite nice on the wards, they have a nice nurturing personality, not on their ability to teach’ (Phase two, focus group four). They also outlined that they were often asked to undertake duties outside their education role by the nurse unit manager: ‘the other disadvantage I suppose, not disadvantage but we do get passed a lot of work down from our level threes and fours. A lot of us do’ (Phase two, focus group one).

#### 4.3.7.4.3 Lack of Consistency across the Organisation

Nurse educators working within a combination nurse education service model highlighted the lack of consistency across the organisation, with each ward doing things differently, and the difficulties with attempting to roll out a new initiative or change across the whole of the organisation, such as the implementation of the NSQHSS. Comments included:

If you want to bring something out like the national standards, it’s difficult to have, for want of a better word control over the rollout to make sure that all of that information goes out in exactly the same way. (Phase two, focus group six)

There’s not that much communication between the two services, not in a bad way but like the clinical services are doing their thing and the non-clinical doing another thing and also because the services are quite a distance away as well there isn’t much collaboration. (Phase two, focus group one)

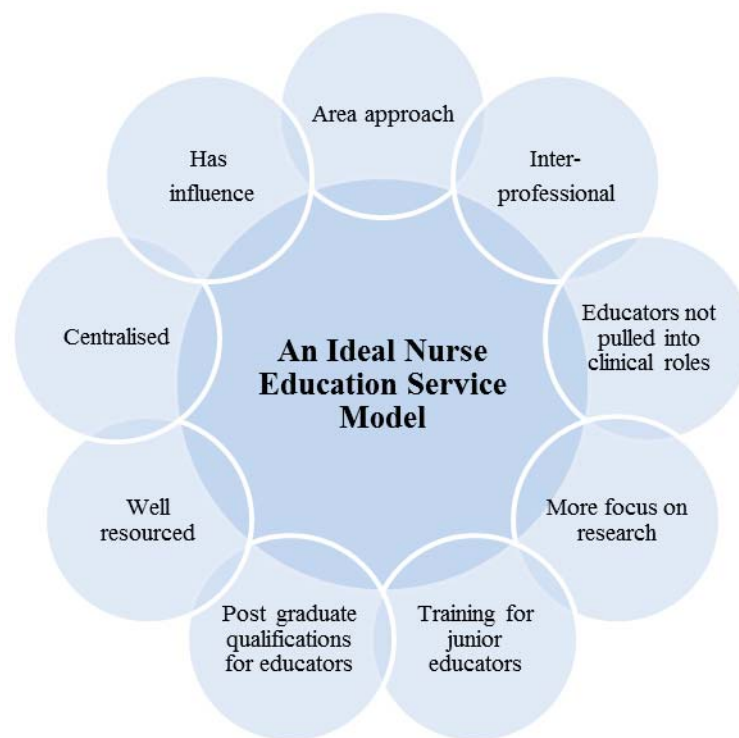
### 4.3.8 Characteristics of an Ideal Nurse Education Service Model

After expressing their views on their current nurse education service model, the participants of phase two were asked to describe the characteristics of what they considered an ideal service model. Responses included:

- an area approach
- a centralised model
- postgraduate education qualifications for educators

- interprofessional education
- having influence
- more focus on research
- educators not pulled into a clinical role
- training for junior educators
- well resourced.

These are summarised in Figure 4.10 and discussed in more detail below.



**Figure 4.10. Characteristics of an Ideal Nurse Education Model**

#### **4.3.8.1 Area Approach**

Nurse educators and coordinators felt that nurse education would benefit from coordination across the whole of the health service area, to more efficiently deliver training, reduce repetition and create a ‘nexus of expertise’ (Phase two, interview four) across a number of hospitals to support the sites that were less well resourced. An area health service is the joining together of a number of public hospitals to provide health services to a defined geographical area of the state (Government of Western Australia, Department of Health, n.d. a). Comments included:

Networking opportunities with other facilities across the west and east and everywhere, that’s just really paramount. I think we all work in silos

predominantly whether we like to admit it or not but certainly that sharing of information and knowledge is something I would like to see a bit more of. (Phase two, interview five)

More integration between sites. I would love to know what other hospitals are doing. There's no integration between sites. I just think there should be more integration more education. We are all part of SMHS. (Phase two, focus group four)

#### **4.3.8.2 Centralised Nurse Education Service Model**

Nurse education service coordinators, senior and junior educators stated that they felt having all of the nurse educators reporting to the education centre would allow more collaboration between the areas and more support for the junior educators as education specialists. Comments included:

I actually think that it would work better if all of the SDEs and staff development nurses were under the one education centre. (Phase two, interview three)

I would like to see a centralised service, so that clinical and non-clinical staff report under a centralised service. (Phase two, focus group one)

#### **4.3.8.3 Education Qualifications**

Nurse education service coordinators, senior and junior educators felt that an ideal nurse education service model would include nurse educators having postgraduate specialist qualifications in education so they are clear on the theories underpinning education practice. Comments included:

Well I would want all the staff to have education qualifications, that is paramount because it's a real challenge having staff who are teaching who have no idea what they are doing. (Phase two, interview one)

but also a model where your educators are well educated. I would like to see a JDF [job description form] that says to be an educator you need to have a Master's in education or working towards it, because I really do see an enormous difference between those who do level 3 level they really need to understand educational theory, the whole thing. (Phase two, interview six)

#### **4.3.8.4 Interprofessional Education**

Nurse education service coordinators, senior and junior educators felt that an ideal nurse education service model would include an interprofessional approach to education, with training being delivered across a number of professions and occupational groups. Comments included:

So first of all I have to say that I am pretty much pro for not just for having nursing education, I very much want to have, I think that's an old model, I think it's got its purpose but I think that the way today that we need to move beyond that, and we'll get a lot more benefit being an interprofessional education service. (Phase two, interview three)

I know that's a large part of education these days. We have plans to build, a purpose built education and training building, not just for nursing, but you know interprofessionally so we have a better link between medical education, nursing education, allied health education because education should be ultimately education. It shouldn't be split. (Phase two, focus group six)

#### **4.3.8.5 Having Influence within the Organisation**

Nurse education service coordinators, senior and junior educators highlighted the importance of the education service having influence within the organisation by being represented on high-level committees and the coordinator of the service being a member of the executive team. This was also highlighted as a characteristic of the centralised nurse education service model by nurse educators in phase one of the study. Comments included:

Have influence so you do need to sit, whoever is leading it needs to sit at all the right tables and be seen to be you know recognised for that. (Phase two, interview three)

I suppose one of the biggest factors would be actually recognising nurse education as being a priority because often in, particularly in a private organisation where finances are the focus, often it gets left behind. (Phase two, interview five)

#### **4.3.8.6 More Focus on Research**

Nurse education service coordinators, senior and junior educators discussed the need for an ideal model to have a greater focus on training staff in areas of research and a closer relationship with the organisation's research department. Comments included:

I would like us and research to be more as one so we could do good things together as a cooperative and let that guide our practice. (Phase two, interview two)

We should be able to teach people how to do research and things like that and that's all part of education. (Phase two, focus group one)

#### **4.3.8.7 Educators not Pulled into Clinical Role**

Nurse education service coordinators, senior and junior educators outlined the importance of an ideal nurse education service model protecting nurse educators' positions so they were not used to backfill clinical staffing shortages. Comments included:

I don't think they should be pulled onto the floor. Patient care does come first but I think it definitely does devalue our role. (Phase two, focus group six)

Totally designated time so that they can't be pulled like the doctors have. (Phase two, focus group four)

#### **4.3.8.8 Training for Junior Educators**

Nurse education service coordinators, senior and junior educators described an ideal nurse education service model as including training for junior educators on education by the senior educators, coordinators and the nurse education service. Comments included:

For me that would be great to have some support and if they are involved with orientation, I don't know how practical that is but still if we have an SDE orientating that's still a bit more supporting and bit more education, beneficial we can go a step ahead. (Phase two, focus group six)

In an ideal world they could be better supported to do education because your senior staff who are specialists in that area, teach them to educate. (Phase two, focus group four)

#### **4.3.8.9 Well Resourced**

Nurse education service coordinators, senior and junior educators expressed the importance of an ideal nurse education service model being well resourced to support the staff and provide the service required by the organisation. Comments included:

Funding, resources, technology, the right people and support from the executive, I believe that's worthwhile. (Phase two, interview three)

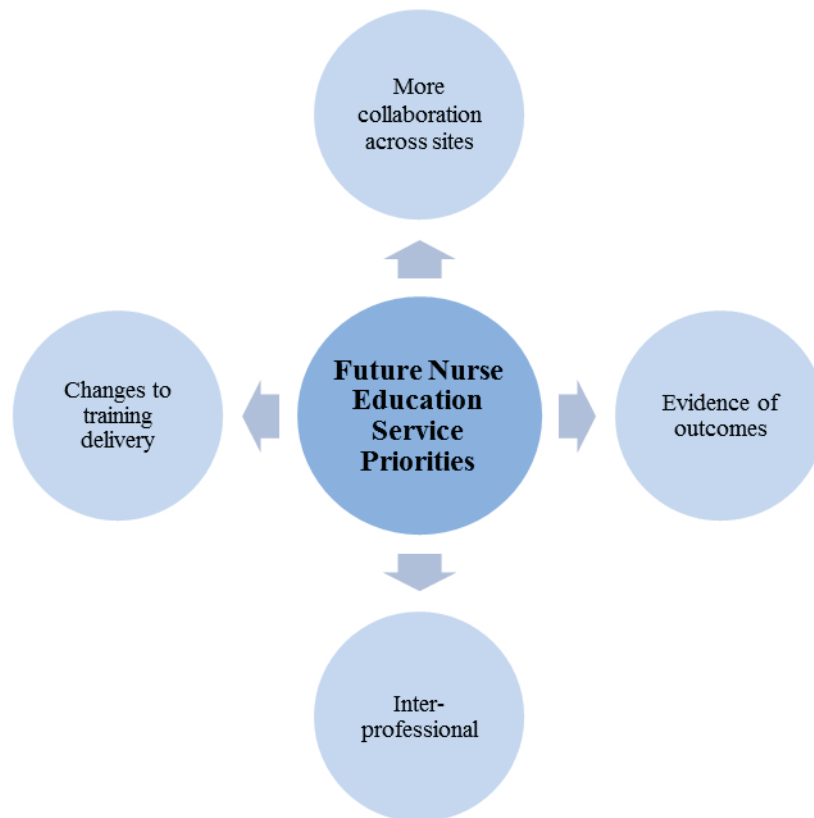
Well obviously you have to have an appropriate amount of funding and resources to be able to support what you are trying to achieve, I think the clinical skills centre is pretty critical. (Phase two, interview five)

#### **4.3.9 Future Nurse Education Service Priorities**

After outlining their views regarding their ideal nurse education service model, nurse education service coordinators, senior and junior educators were asked to discuss what they felt would be the future nurse education service priorities. Responses were categorised as follows:

- more collaboration across sites
- changes to training delivery
- evidence of outcomes
- interprofessional.

These responses are summarised in Figure 4.11 and examined in more detail below.



**Figure 4.11. Views Regarding Future Nurse Education Service Priorities**

#### **4.3.9.1 More Collaboration across Sites**

Nurse education service coordinators, senior and junior educators expressed that the future of nurse education services should include more collaboration across different hospital sites to increase the effectiveness, consistency and information sharing between hospitals: ‘Breaking down those boundaries between different sites, you know not only locally but nationally and internationally and really accessing the wealth of knowledge and information that’s out there’ (Phase two, interview five). They also outlined that future nurse education services should include a closer relationship with university education providers to collaboratively deliver training and support joint clinical and academic Chair positions: ‘I think we need to do a lot more in the area of true collaboration where you would have Chairs. I do think that universities and hospitals can be better aligned through joint Chair positions’ (Phase two, interview three).



#### **4.3.9.2 Changes to Training Delivery**

Nurse education service coordinators, senior and junior educators foresaw a number of changes to the delivery of training in the future. One of these was that the use of technology would play a larger role in future nurse education, as this is already happening for nurses completing undergraduate training supported by online learning platforms, mobile technology and applications: ‘Well I certainly think with technology advancing at such a rapid rate that that has already had an impact on how nursing education is delivered’ (Phase two, interview five). They also expressed the view that simulation would be a teaching modality used more widely in the future: ‘Simulation has been growing, it’s not the be all and end all of education by any means but it will continue’ (Phase two, focus group six).

Another identified change to the delivery of training was that learners would become more self-directed and accountable for their own learning and less reliant on nurse educators to deliver their training: ‘I think, one of the key differences I think will be the moving away of, people being a lot more self-directed’ (Phase two, focus group two). However, the opposing view was also expressed by some participants, that the current focus on theoretical educational modalities such as eLearning would shift back towards practical, face-to-face training: ‘Refocussing away from the theory back to the practical. I feel like we have gone away from the practical’ (Phase two, focus group five).

#### **4.3.9.3 Evidence of Educational Outcomes**

Nurse education service coordinators, senior and junior educators felt the future of nurse education would include the need for more evidence of outcomes to justify nurse education’s effectiveness and existence. They considered that clear evidence of the effectiveness of the education service at organisational levels would be required to substantiate the service’s funding and resource allocation. Comments included:

I think we need to do studies on how effective SDNs are by looking at patient outcomes because I think we don’t have a lot of empirical evidence to are we worthwhile or not and we need to know, looking at clinical incidences. (Phase two, focus group five)

Justification, they are always looking for justification for whatever we do and if we can't justify why we are educating there might be questions asked again in terms of accreditation so I am sure they will be looking to have evidence for whatever we do and that includes how we educate, who we educate, why we educate. (Phase two, focus group six)

#### **4.3.9.4 Interprofessional Education**

Nurse education service coordinators, senior and junior educators felt that the future of nurse education would include an increased focus on the implementation of interprofessional education. Comments included:

I think it will become interprofessional, partly why I did my health professional education and not nursing education. (Phase two, focus group one)

Well I think the interprofessional stuff obviously. I think they are having to get more engaged in education around the business of the hospital. (Phase two, interview six)

A number of the themes around an ideal nurse education service model that were raised by participants in phase two were also raised in phase one, including greater collaboration across sites, interprofessional training, changes to training delivery and the need for evidence of outcomes.

The overarching themes raised in phase two by the coordinators and the senior and junior nurse educators revolved around the nurse education service being valued by the hospital executive and having influence within the organisation. The participants expressed the importance of the nurse education service having a dedicated coordinator of the service and this coordinator being a member of the nursing executive group and of high-level committees.

The issue of nurse educators being pulled from their education roles into clinical roles to fill staffing deficits was also highlighted as a challenge at most of the sites. This caused difficulties with planning, and the cancellation of planned, educational programs. Interestingly, coordinators and nurse educators from three of the four sites currently working within a combination model expressed their wish to move to a centralised model to enable them to deliver a 'less fragmented service' (Phase two,

interview three) and to reduce the frequency of nurse educators being pulled into clinical roles, as they ‘are more protected because you are not paid by the ward, you are paid by education’ (Phase two, focus group one).

### **4.3.10 Summary Phase Two**

In this section, the demographics of the participants in phase two were described and a summary of the findings was outlined for the interviews and focus groups undertaken in this phase. The views of nurse educators on their nurse education service model, how the service was influenced and future nurse education priorities were examined. The findings from phase three of this study are presented in the following section.

## **4.4 Phase Three: Across Australia**

### **4.4.1 Introduction**

The purpose of phase three was to validate the findings from the first two phases of the study and collect quantitative data on the nurse education service models used throughout Australia and the views of nurse educators working within these models. A survey was developed from the findings of phases one and two and distributed via SurveyMonkey to the coordinators of nurse education services across Australia to forward to their senior and junior nurse educators. The survey consisted of 13 questions across three parts: demographics, nurse education service models and the future priorities for nurse education. In Section 4.4.2, the demographics of the participants are presented to give context to the findings, which are presented in sections 4.4.3–4.4.10.

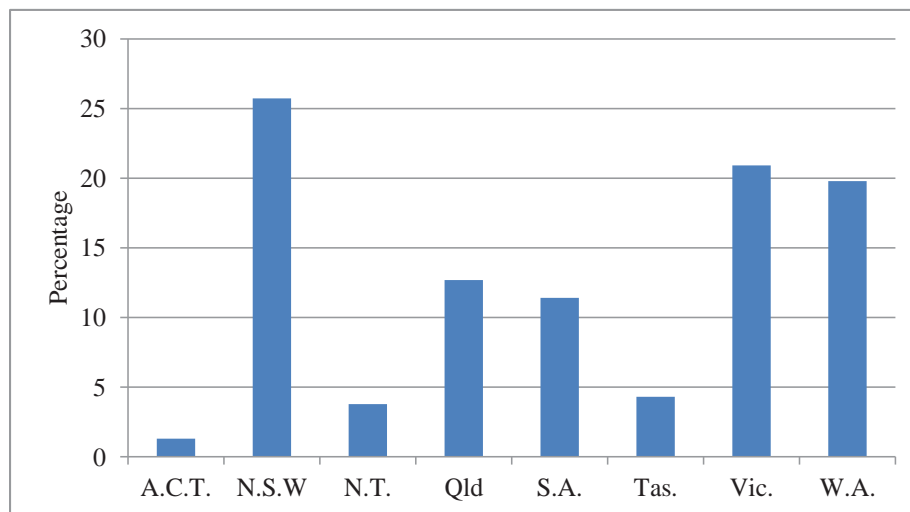
### **4.4.2 Demographics**

The survey was distributed nationally via SurveyMonkey. Participating states and territories included W.A., the Northern Territory (N.T.), South Australia (S.A.), Queensland (Qld), New South Wales (N.S.W.), Victoria (Vic.), the Australian Capital

Territory (A.C.T.) and Tasmania (Tas.). Responses to the survey were received over a three-month period, with multiple reminders sent to the sites. Four hundred and sixty responses to the survey were received, however a number of the respondents did not fully complete the survey (n=67). The incomplete surveys were removed from analysis, leaving a response rate of 26% (n=393), which is acceptable for a web-based survey (see Table 4.3 and Figure 4.12 for the final survey response rate by state) (Shih & Fan, 2008).

**Table 4.3. Survey Response Rates by State**

State	Frequency	Per cent
A.C.T.	5	1.3
N.S.W.	101	25.7
N.T.	15	3.8
Qld	50	12.7
S.A.	45	11.5
Tas.	17	4.3
Vic.	82	20.9
W.A.	78	19.8
Total	393	100.0



**Figure 4.12. Survey Response Rates by State**

The response rates by state were mostly representative of the nurse educator population in each state, with N.S.W. having both the highest number of nurse educators and the greatest number of respondents, followed by Vic. with the second highest number of

nurse educators and the second highest number of respondents. Interestingly, however, the states with smaller numbers of nurse educators, such as the A.C.T., Tas. and the N.T., were not similarly representative, as the A.C.T. had the higher number of nurse educators of these three, but the lowest number of respondents. This may be because only two A.C.T. hospitals were included in the study. If one of the nurse education service coordinators did not forward the email with the link to the survey to their educators, this would have significantly affected the number of participants responding from that state.

#### 4.4.2.1 Excluded Sample

To ensure that the results of the study were not biased by the exclusion of the incomplete responses, a comparison was made between the demographics of the participants with incomplete surveys that were excluded from analysis and those of the participants that submitted complete surveys that were analysed. Chi-Square cross-tabulations were calculated for each of the six demographic questions that were completed in full by those that did not fully complete the survey. No significance was found for any of the demographic questions except Question 4, which asked participants for their AHPRA registration category. There was one midwife in the group excluded from the study and none in the group included in the study (see Table 4.4).

**Table 4.4. Chi-Square ( $\chi^2$ ) Results for Comparison of Participants of Incomplete and Complete Surveys**

Question No.	Question Topic	Chi-Square ( $\chi^2$ )	p Value
1.	In which Australian state or territory are you currently working?	5.81 <sup>a</sup>	0.53
2.	Are you currently employed in a public or private hospital?	0.97	0.32
3.	What is the bed number of the hospital?	3.54 <sup>a</sup>	0.29
4.	At the AHPRA are you registered as a professional?	6.40 <sup>a</sup>	0.03
5.	How long have you worked in an education role?	5.55	0.13
6.	At what level are you employed?	2.70	0.44

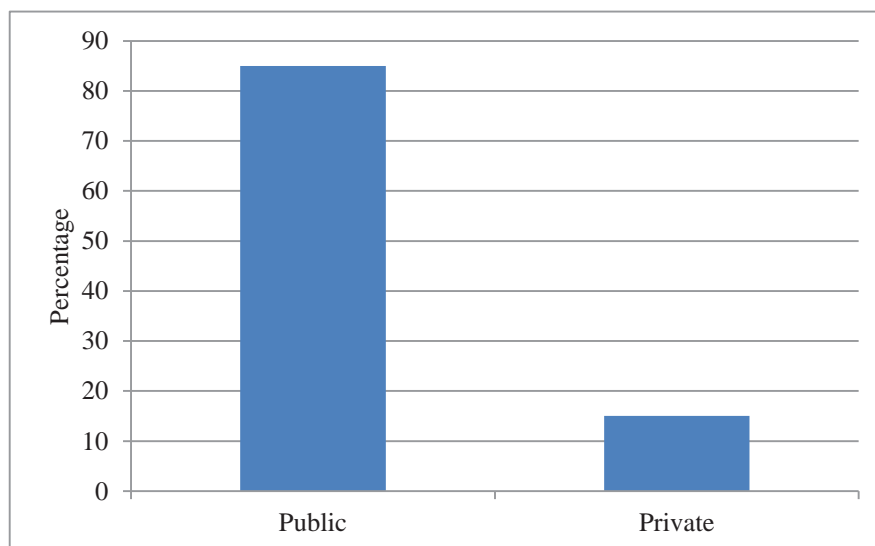
<sup>a</sup> Fishers Exact Test

#### 4.4.2.2 Public or Private Hospital

The second question in the survey asked nurse educators if they were employed at a public or private hospital. The majority (85%, n=334) were employed at a public hospital with 15% (n=59) employed at a private hospital. This majority of nurse educators being employed in public hospitals is again indicative of the population, in which the public health system dominates in the provision of health services across the country (see Table 4.5 and Figure 4.13).

**Table 4.5. Public and Private Hospital Nurse Educator Numbers**

Hospital Type	Frequency	Per cent
Public	334	85.0
Private	59	15.0
Total	393	100.0



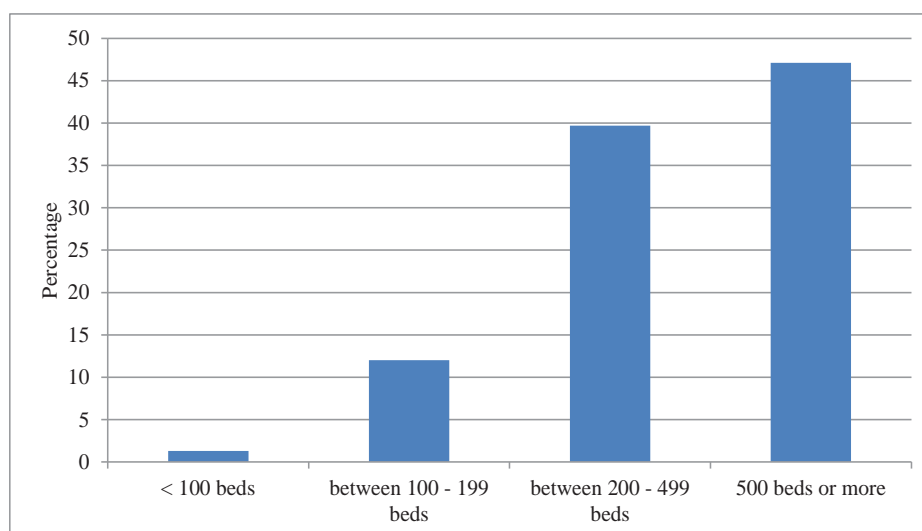
**Figure 4.13. Public and Private Hospital Nurse Educator Numbers**

#### 4.4.2.3 Nurse Educators' Hospital Size

The third question in the survey asked nurse educators the size of their hospital. The majority (47%, n=185) were employed at large acute care metropolitan hospitals with 500 beds or more or in hospitals with between 200 and 499 beds (39.7%, n=156). Only five nurse educators who responded were employed at hospitals with less than 100 beds (see Table 4.6 and Figure 4.14).

**Table 4.6. Nurse Educators' Hospital Size**

Hospital Bed Numbers	Frequency	Per cent
< 100 beds	5	1.3
between 100–199 beds	47	12.0
between 200–499 beds	156	39.7
500 beds or more	185	47.1
Total	393	100.0



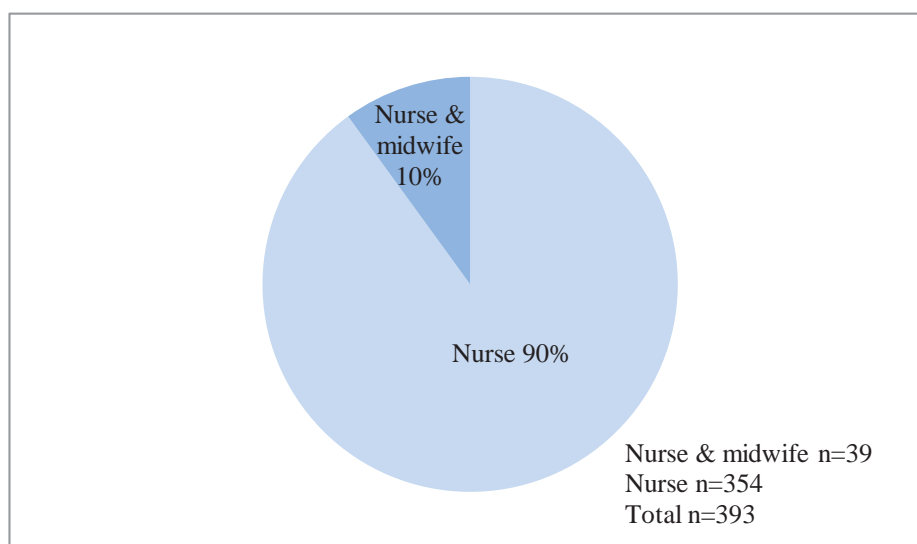
**Figure 4.14. Nurse Educators' Hospital Size**

#### 4.4.2.4 Nurse Educators' Registration Categories

The fourth question in the survey asked nurse educators what registration they held with the AHPRA. Ninety per cent of the respondents were registered as nurses (n=354) and 10% (n=39) were registered as both nurses and midwives (see Table 4.7 and Figure 4.15).

**Table 4.7. AHPRA Registrations of Nurse Educators**

AHPRA Registration	Frequency	Per cent
Nurse	354	90.1
Nurse and midwife	39	9.9
Total	393	100.0



**Figure 4.15. AHPRA Registrations of Nurse Educators**

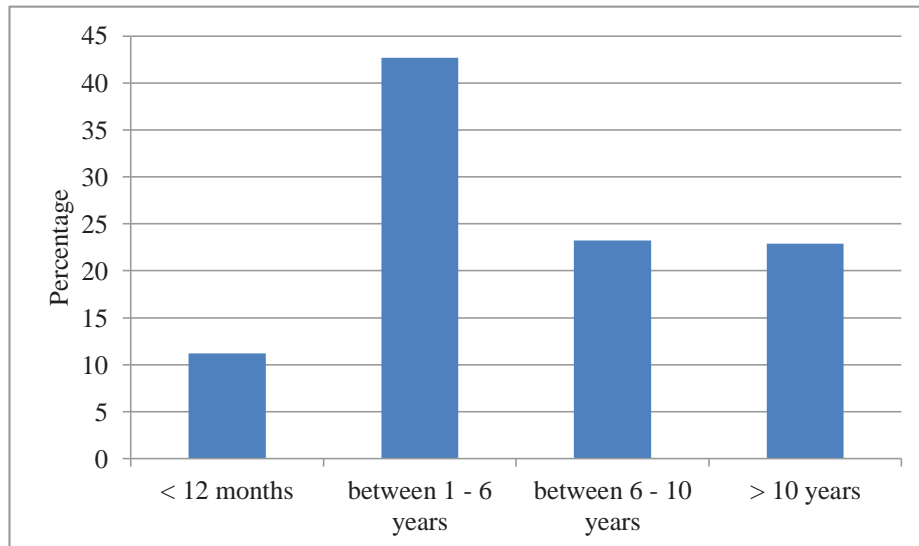
#### 4.4.2.5 Nurse Educators' Experience Levels

The fifth question in the survey asked nurse educators how long they had worked in an education role. The majority of nurse educators (43%, n=168) had worked in the role for between one and six years, 23% (n=91) had worked in the role for between six and 10 years, and 23% (n=90) had worked in the role for more than 10 years. Only 11% (n=44) had been in their role for less than 12 months. Thus, the majority of the sample of nurse educators had worked in the role for more than six years (see Table 4.8 and Figure 4.16).

**Table 4.8. Nurse Educators' Length of Time in Role**

Length of time in role	Frequency	Per cent
< 12 months	44	11.2
between 1–6 years	168	42.7
between 6–10 years	91	23.2
> 10 years	90	22.9
Total	393	100.0





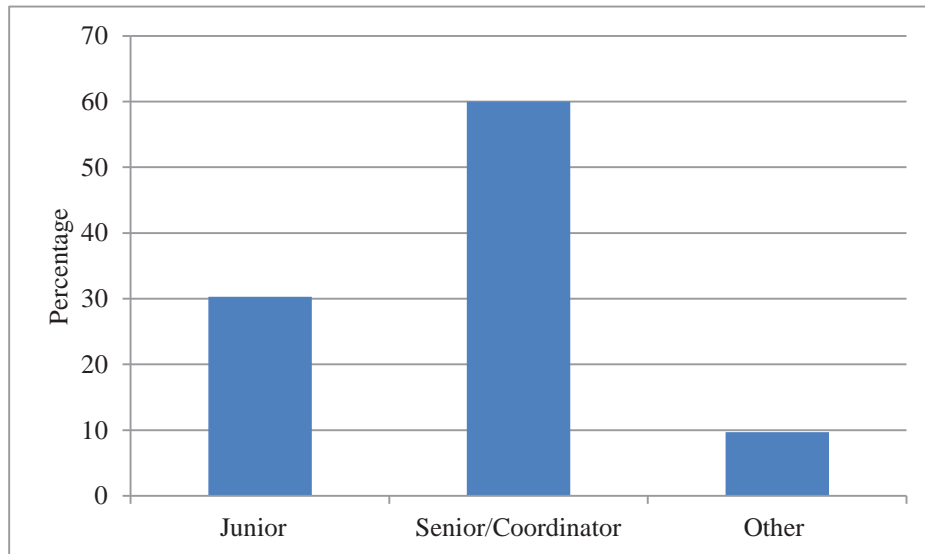
**Figure 4.16. Nurse Educators' Length of Time in Role**

#### 4.4.2.6 Nurse Educators' Level of Employment

The sixth question in the survey asked nurse educators their level of employment as educators. The majority of participants were in senior positions, either in senior nurse educator or coordinator positions (60%, n=236). This corresponds with the nurse educators' length of service. Thirty per cent (n=119) of the nurse educators who responded were junior nurse educators and 10% (n=28) were other. The responses under 'other' consisted of a variety of graded educator levels not outlined in the choices given in the survey question and nurse educators in joint educator and coordinator positions (see Table 4.9 and Figure 4.17).

**Table 4.9. Nurse Educators' Level of Employment**

Nurse Educator Level	Frequency	Per cent
Junior	119	30.3
Senior and coordinator	236	60.0
Other	38	9.7
Total	393	100.0



**Figure 4.17. Nurse Educators' Level of Employment**

#### **4.4.3 Nurse Education Service Models across Australia**

Question seven of the survey asked nurse educators what model their nurse education service was based on after giving participants a description of the three dominant model types outlined in the literature. Respondents were also given the choice of 'other' in cases in which their particular model was not one of the three mentioned in the literature. The majority of nurse educators were working within a combination service model (57%, n=225). Thirty-two per cent (n=125) worked within a centralised service model, and 4% (n=14) worked in a decentralised service model. The number of participants working within a decentralised model was very low at 14 (n=4%) compared to the other two models which indicates that this model is not commonly utilised in acute care metropolitan hospitals in Australia. This may be due to difficulties in using the decentralised model. Seven per cent of nurse educators (n=29) responded with 'other' (see Table 4.10 and Figure 4.18).

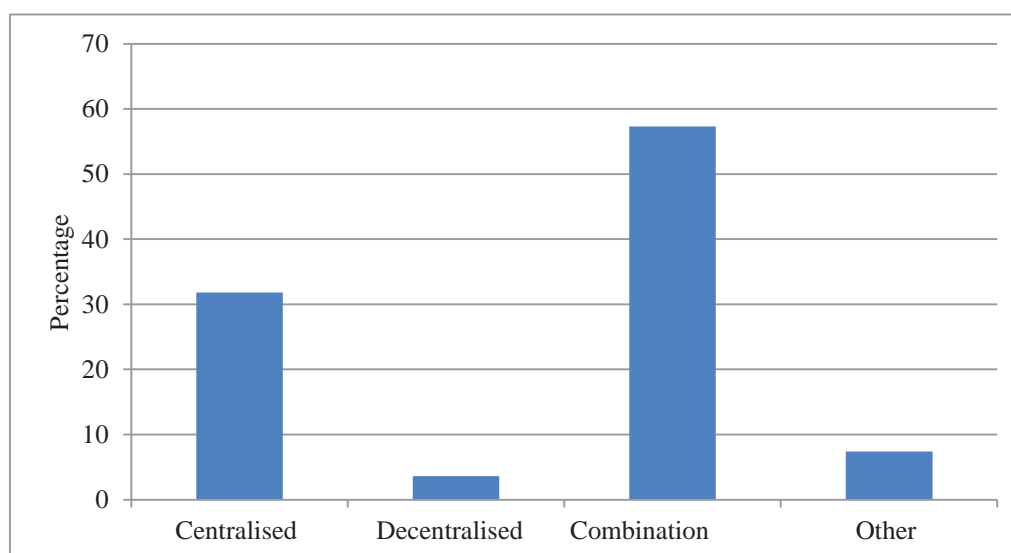
When reviewing the descriptions given by nurse educators under 'other' of their nurse education service structure, the researcher was able to categorise their responses into:

- combination model (n=16)
- centralised model (n=4)
- decentralised model (n=2)

- area/district combination model (n=6)
- unsure if combination or centralised, as this model had dominant characteristics of both (n=1).

**Table 4.10. Nurse Education Service Models**

Nurse Education Service Model	Frequency	Per cent
Centralised	125	31.8
Decentralised	14	3.6
Combination	225	57.3
Other (please describe)	29	7.4
Total	393	100.0



**Figure 4.18. Nurse Education Service Models**

#### **4.4.4 Factors that Influence the Nurse Education Service Model**

For Question 8 of the survey, nurse educators were asked what their perceptions were in regard to why their particular nurse education service model was being used. A total of 393 responses were received. Comments made on why the particular nurse education service model was being used included ‘traditional, established model rather than evidence-based model’ and ‘to be cost-effective and efficient’. Some educators were not sure of the reason the model had been implemented. The answers given were coded into the themes below:

- Historical: That the service model currently used was implemented in the past for historical reasons and has always been that way.
- Most effective: The respondents felt it was the most effective model for cost-efficiency, equity, communication and reporting.
- Meets specialist ward needs: Allows educators to specialise in their particular areas and meet the needs of the different clinical specialities.
- Meets needs of the organisation: Is able to have a hospital-wide approach to deliver training across the organisation, such as mandatory training and to coordinate graduates and undergraduates.
- Allows consistency across the organisation: Allows for a consistent approach across the organisation, such as in the orientation process and centralised planning.

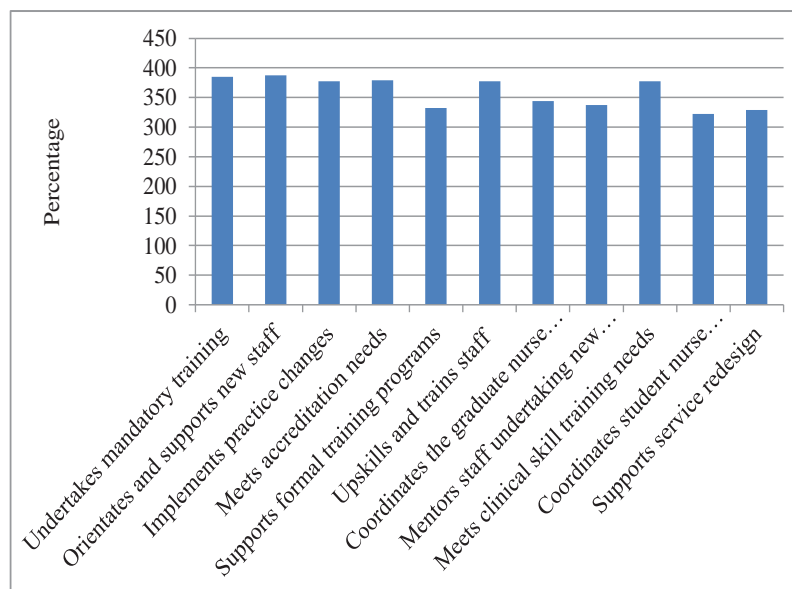
These factors are similar to those outlined in Chapter 2 as affecting the nurse education service within healthcare facilities.

#### **4.4.5 Responsibilities and Functions of the Nurse Education Service**

Nurse educators were asked to indicate the responsibilities and functions of their nurse education service. There was considerable consistency across the answers, with the vast majority agreeing their service undertook the functions listed in the survey. The functions ranked as undertaken by the majority of nurse education services were ‘orientates and supports new staff’ (98.5%, n=387), followed by ‘undertakes staff mandatory training and competencies’ (98%, n=385) and ‘meets accreditation needs for the hospital’ (96.4%, n=379). This confirms the findings in phase two of the study (see Table 4.11 and Figure 4.19).

**Table 4.11. Responsibilities and Functions of the Nurse Education Services**

Function	Yes	Total
Undertakes staff mandatory training and competencies	385 (98%)	393 (100%)
Orientates and supports new staff	387 (98.5%)	393 (100%)
Implements practice change	377 (95.9%)	393 (100%)
Meets accreditation needs for the hospital	379 (96.4%)	393 (100%)
Supports formal training programs, e.g. postgraduate courses	332 (84.5%)	393 (100%)
Upskills and trains staff to meet workforce deficits	377 (95.9%)	393 (100%)
Coordinates the graduate nurse program	344 (87.5%)	393 (100%)
Mentors staff undertaking new roles	337 (85.8%)	393 (100%)
Meets nurses' clinical skill training needs	377 (95.9%)	393 (100%)
Coordinates student nurse placements	322 (81.9%)	393 (100%)
Supports service redesign	329 (83.7%)	393 (100%)



**Figure 4.19. Functions of Nurse Education Services**

The responses above were cross-tabulated with the nurse educators' nurse education service model to look for any differences in the scope of functions offered by the different service models. Nurse educators from a combination nurse education service model had the highest level of agreement with two functions: 'undertakes staff mandatory training competencies' (99%, n=222) and 'orientates and supports new

staff' (99%, n=222). Nurse educators from a decentralised service model had the highest level of agreement with four functions: 'implements practice changes' (100%, n=14), 'meets accreditation needs for the hospital' (100%, n=14), 'upskills and trains staff to meet workforce deficits' (100%, n=14) and 'meets nurses' clinical skill training needs' (100%, n=14). Nurse educators from a centralised model had the highest level of agreement with the most functions: 'supports formal training programs, e.g. postgraduate courses' (94%, n=118), 'coordinates the graduate nurse program' (91%, n=114), 'coordinates student nurse placements' (89%, n=111), 'supports service redesign' (87%, n=109) and 'mentors staff undertaking new roles' (87%, n=195). These results confirm the findings in phase two of the study in which these functions were outlined by nurse educators as responsibilities of their nurse education services (see Table 4.12).

**Table 4.12. Functions of Different Nurse Education Service Models**

Function of Service	On which model of nurse education is your service based?				Total
	Centralised	Decentralised	Combination	Other	
Undertakes staff mandatory training and competencies	122 (98%)	13 (93%)	222 (99%)	28 (96%)	385 (98%)
Orientates and supports new staff	123 (98%)	13 (93%)	222 (99%)	29 (100%)	387 (98%)
Implements practice changes	123 (98%)	14 (100%)	216 (96%)	24 (83%)	377 (96%)
Meets accreditation needs for the hospital	123 (98%)	14 (100%)	215 (95%)	27 (93%)	379 (96%)
Supports formal training programs, e.g. postgraduate courses	118 (94%)	11 (79%)	182 (81%)	21 (72%)	332 (84%)
Upskills and trains staff to meet workforce deficits	124 (99%)	14 (100%)	214 (95%)	25 (86%)	377 (96%)
Coordinates the graduate nurse program	114 (91%)	8 (57%)	196 (87%)	26 (90%)	344 (87%)
Mentors staff undertaking new roles	109 (87%)	12 (86%)	195 (86%)	21 (72%)	337 (86%)
Meets nurses' clinical skill training needs	123 (98%)	14 (100%)	214 (95%)	26 (90%)	377 (96%)

Function of Service	On which model of nurse education is your service based?				Total
	Centralised	Decentralised	Combination	Other	
Coordinates student nurse placements	111 (89%)	12 (86%)	179 (79%)	20 (69%)	322 (82%)
Supports service redesign	109 (87%)	11 (79%)	187 (83%)	29 (100%)	336 (85%)
Total	125 (100%)	14 (100%)	225 (100%)	29 (100%)	393 (100%)

There was a significant difference between the service models for five of the functions offered by the nurse education services: ‘implements practice changes’, ‘supports formal training programs’, ‘upskills and trains staff to meet workforce deficits’, ‘coordinates the graduate nurse program’ and ‘coordinates student nurse placements’ (see Table 4.13). This indicates that the different service model structures do affect the scope of functions delivered by the nurse education service.

**Table 4.13. Nurse Education Service Functions Significance Test Summary**

Function of Nurse Education Service	Chi-Square ( $\chi^2$ )	p Value
Undertakes staff mandatory training and competencies	3.94 <sup>a</sup>	0.22
Orientates and supports new staff	3.17 <sup>a</sup>	0.34
Implements practice changes	10.29 <sup>a</sup>	0.12
Meets accreditation needs for the hospital	3.10 <sup>a</sup>	0.31
Supports formal training programs, e.g. postgraduate courses	17.12 <sup>a</sup>	0.00
Upskills and trains staff to meet workforce deficits	9.67 <sup>a</sup>	0.01
Coordinates the graduate nurse program	10.32 <sup>a</sup>	0.12
Mentors staff undertaking new roles	4.31 <sup>a</sup>	0.20
Meets nurses’ clinical skill training needs	5.16 <sup>a</sup>	0.12
Coordinates student nurse placements	8.29 <sup>a</sup>	0.03
Supports service redesign	3.10 <sup>a</sup>	0.36

<sup>a</sup> Fishers Exact Test

#### 4.4.6 Nurse Education Service Measures of Success

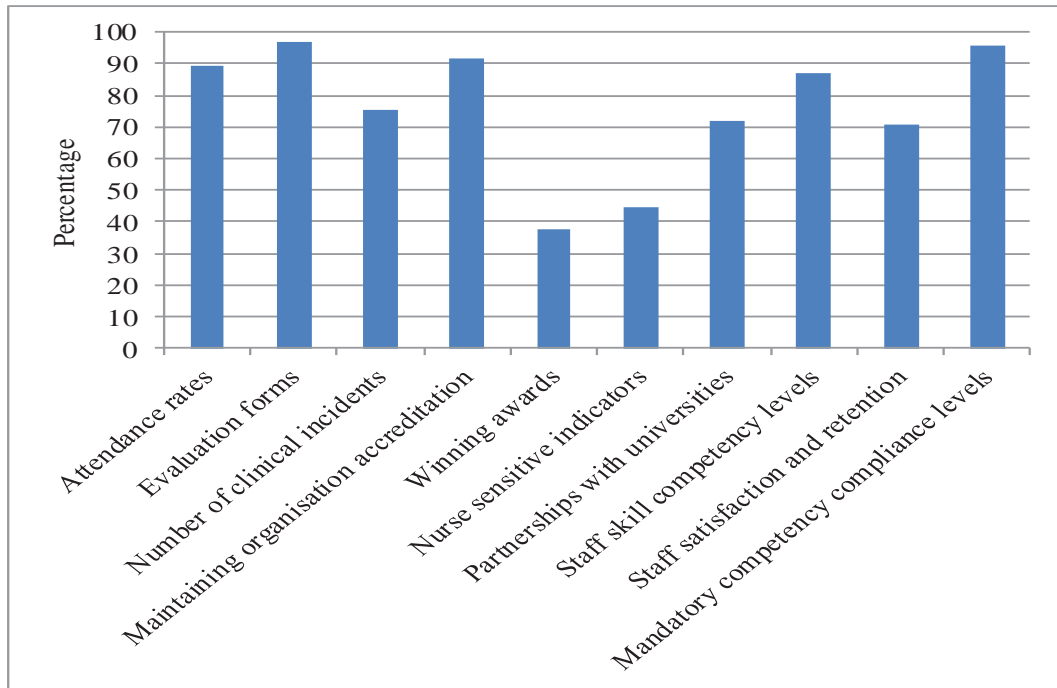
Nurse educators were asked to indicate how their nurse education service measured its success. The majority of nurse educators (96.7%, n=380) replied that ‘evaluation forms’ were used to measure the success, followed by ‘mandatory competency compliance levels’ (95.7%, n=376) and ‘maintaining organisation accreditation’

(91.9%, n=361). These findings confirm the findings of phase two in which these three measures of success were also raised by nurse educators. The second lowest level of agreement was for the use of ‘nurse-sensitive indicators’ (44.5%, n=175). These are patient measures in areas such as falls and pressure injuries that can be reduced with effective nursing care. The lowest level of agreement was for ‘winning awards’ (37.4%, n=147). These low levels of agreement are not unexpected, as nurse educators may not link their service with patient outcomes or consider winning awards a valid measure of success (see Table 4.14 and Figure 4.20).

**Table 4.14. Measures of Effectiveness of Nurse Education Service Models**

<b>Measure</b>	<b>Yes</b>	<b>Total</b>
Attendance rates	352 (89.6%)	393 (100%)
Evaluation forms	380 (96.7%)	393 (100%)
Number of clinical incidents	296 (75.3%)	393 (100%)
Maintaining organisation accreditation	361 (91.9%)	393 (100%)
Winning awards	147 (37.4%)	393 (100%)
Nurse-sensitive indicators	175 (44.5%)	393 (100%)
Partnerships with universities	283 (72%)	393 (100%)
Staff skill competency levels	342 (87%)	393 (100%)
Staff satisfaction and retention	278 (70.7%)	393 (100%)
Mandatory competency compliance levels	376 (95.7%)	393 (100%)





**Figure 4.20. Measures of Effectiveness of Nurse Education Service Models**

#### **4.4.7 Nurse Education Service Characteristics**

To examine nurse education services in more detail, nurse educators were asked to rate their level of agreement or disagreement with a number of statements describing the characteristics of their nurse education service model. All of the findings are examined in more detail in Section 4.4.8, where they are cross-tabulated against service model type to identify trends by service model, and compared to findings from phases one and two of the study.

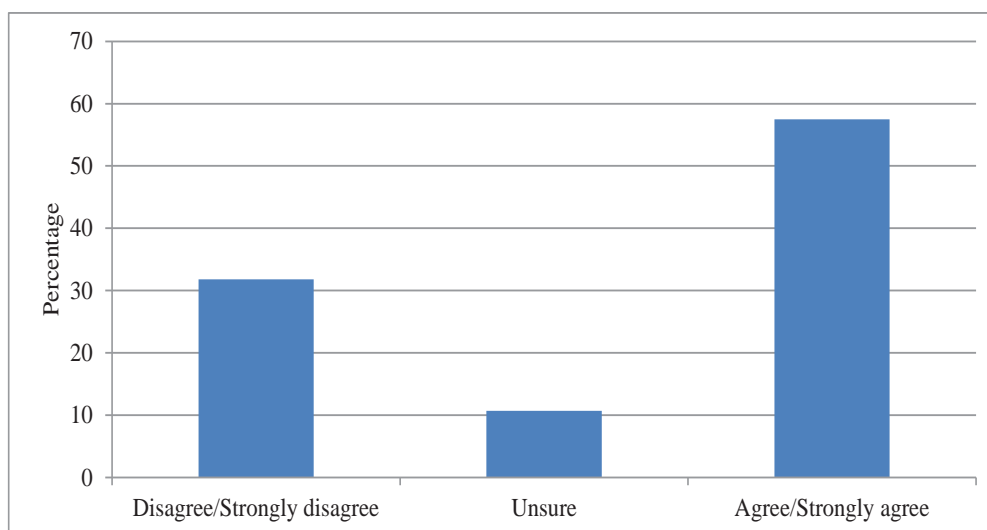
##### **4.4.7.1 The Senior Educators are Involved in Selection and Performance**

###### **Development of the Junior Educators**

The first statement was ‘the senior educators are involved in selection and performance development of the junior educators’, with the majority (57.5%, n=226) agreeing or strongly agreeing with the statement (see Table 4.15 and Figure 4.21).

**Table 4.15. The Senior Educators are Involved in Selection and Performance Development of the Junior Educators**

Answer	Frequency	Per cent
Disagree/Strongly disagree	125	31.8
Unsure	42	10.7
Agree/Strongly agree	226	57.5
Total	393	100.0



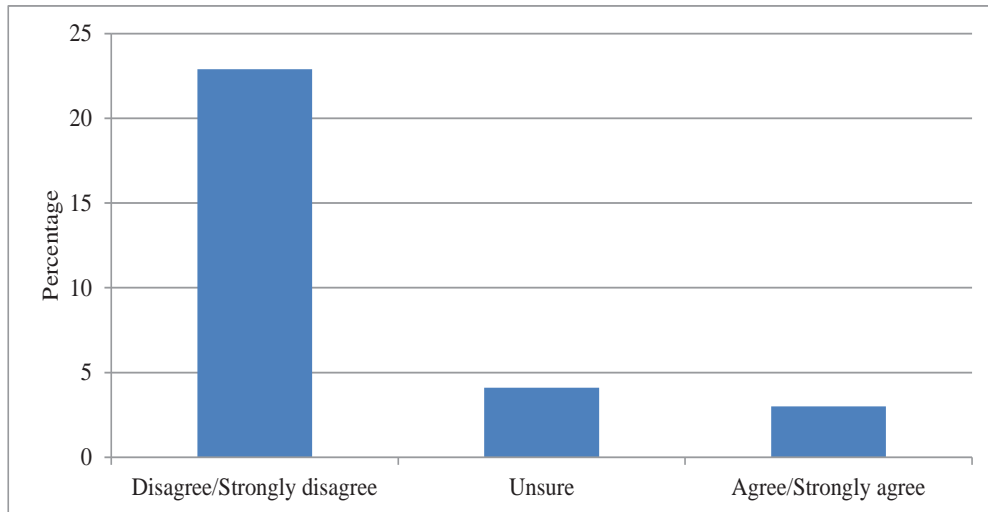
**Figure 4.21. The Senior Educators are Involved in Selection and Performance Development of the Junior Educators**

#### 4.4.7.2 You are Required to Perform Duties Outside of Your Education Role

The second statement was ‘you are required to perform duties outside of the education role’, with the majority (73%, n=287) agreeing or strongly agreeing with the statement (see Table 4.16 and Figure 4.22).

**Table 4.16. You are Required to Perform Duties Outside of the Education Role**

Answer	Frequency	Per cent
Disagree/Strongly disagree	90	22.9
Unsure	16	4.1
Agree/Strongly agree	287	73.0
Total	393	100.0



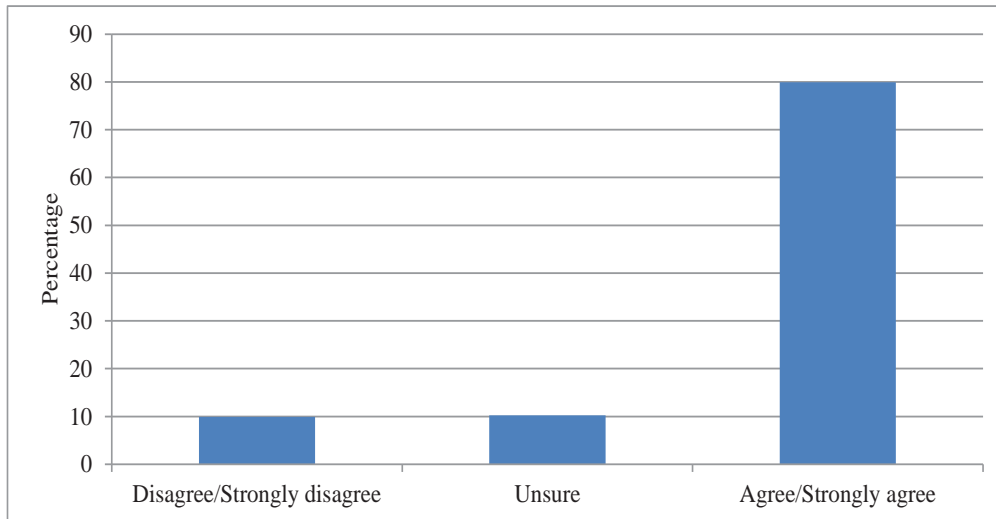
**Figure 4.22. You are Required to Perform Duties Outside of the Education Role**

#### 4.4.7.3 Allows You to Get an Organisational-wide View

The third statement was ‘allows you to get an organisational-wide view’, with the majority of nurse educators (79.9%, n=314) agreeing or strongly agreeing with the statement (see Table 4.17 and Figure 4.23).

**Table 4.17. Allows You to Get an Organisational-wide View**

Answer	Frequency	Per cent
Disagree/Strongly disagree	39	9.9
Unsure	40	10.2
Agree/Strongly agree	314	79.9
Total	393	100.0



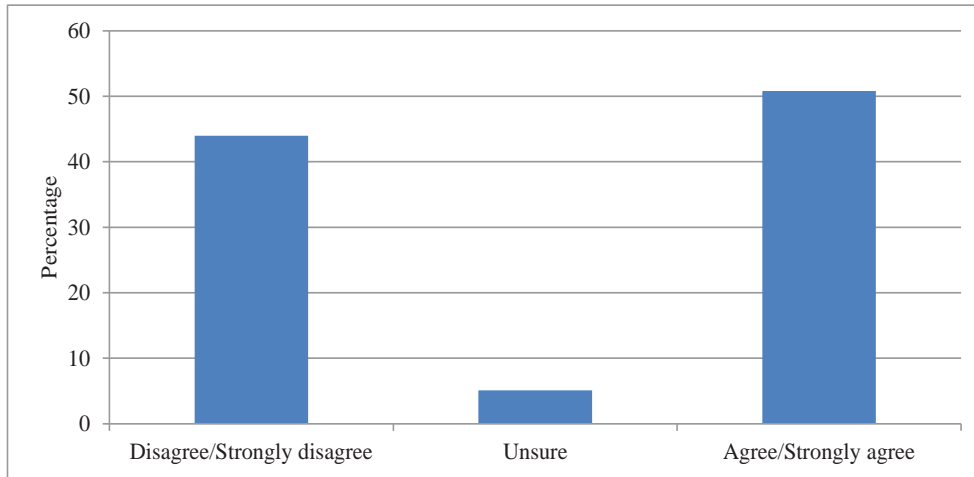
**Figure 4.23. Allows You to Get an Organisational-wide View**

#### 4.4.7.4 Can be Isolating

The fourth statement was ‘can be isolating’, with nurse educators split in their levels of agreement, with 50.8% (n=200) agreeing or strongly agreeing and 44% (n=173) disagreeing or strongly disagreeing. From this, 50.8% of educators do feel isolated and 44% do not feel isolated (see Table 4.18 and Figure 4.24).

**Table 4.18. Can be Isolating**

Answer	Frequency	Per cent
Disagree/Strongly disagree	173	44.0
Unsure	20	5.1
Agree/Strongly agree	200	50.8
Total	393	100.0



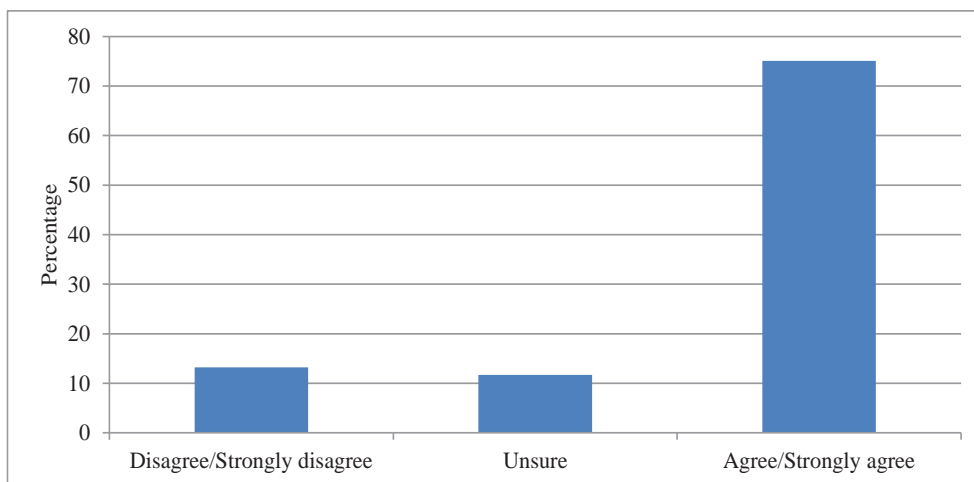
**Figure 4.24. Can be Isolating**

#### 4.4.7.5 Allows Continuous Awareness of Learning Deficits at Ward Level

The fifth statement was ‘allows continuous awareness of learning deficits at ward level’, with the majority (75.1%, n=295) agreeing or strongly agreeing with the statement (see Table 4.19 and Figure 4.25).

**Table 4.19. Allows Continuous Awareness of Learning Deficits at Ward Level**

Answer	Frequency	Per cent
Disagree/Strongly disagree	52	13.2
Unsure	46	11.7
Agree/Strongly agree	295	75.1
Total	393	100.0



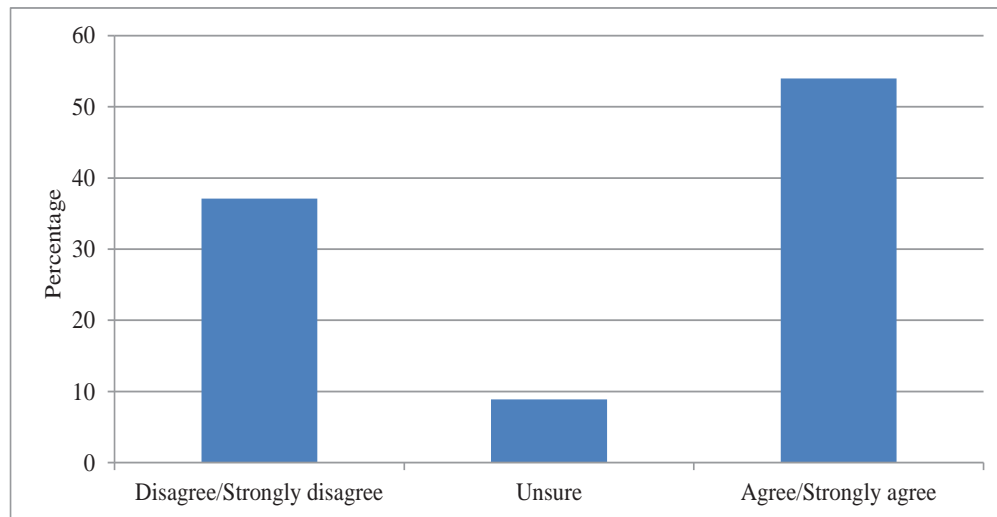
**Figure 4.25. Allows Continuous Awareness of Learning Deficits at Ward Level**

#### 4.4.7.6 Junior Nurse Educators Are Used to Fill Staffing Deficits

The sixth statement was ‘junior nurse educators are used to fill staffing deficits’, with the participants’ responses somewhat split, with (54%, n=212) agreeing or strongly agreeing with the statement and (37.1%, n=146) disagreeing or strongly disagreeing (see Table 4.20 and Figure 4.26).

**Table 4.20. Junior Nurse Educators Are Used to Fill Staffing Deficits**

Answer	Frequency	Per cent
Disagree/Strongly disagree	143	37.1
Unsure	35	8.9
Agree/Strongly agree	212	54.0
Total	393	100.0



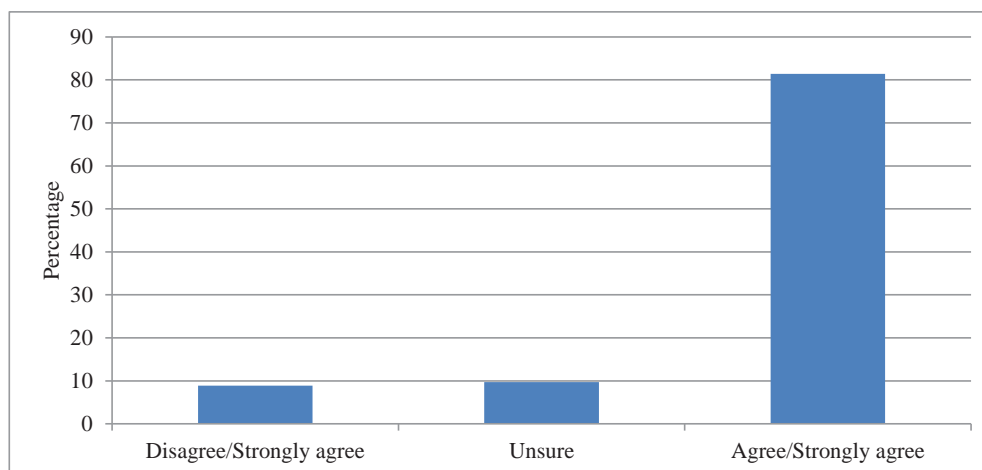
**Figure 4.26. Junior Nurse Educators Are Used to Fill Staffing Deficits**

#### 4.4.7.7 Allows Autonomy

The seventh statement was ‘allows autonomy’, with the majority of participants (81.4%, n=320) agreeing or strongly agreeing with the statement (see Table 4.21 and Figure 4.27).

**Table 4.21. Allows Autonomy**

Answer	Frequency	Per cent
Disagree/Strongly disagree	35	8.9
Unsure	38	9.7
Agree/Strongly agree	320	81.4
Total	393	100.0



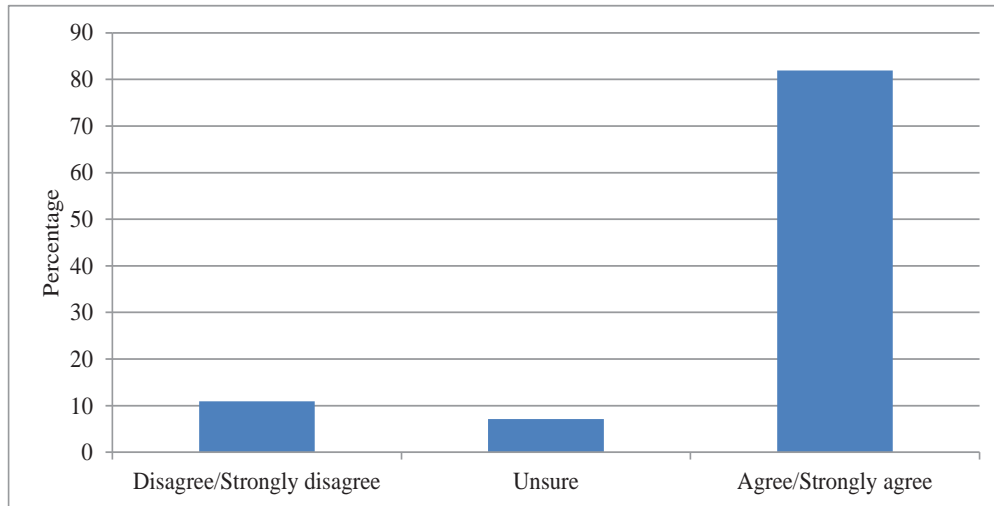
**Figure 4.27. Allows Autonomy**

#### 4.4.7.8 Maintains Visibility of Nurse Educators in Clinical Areas

The eighth statement was ‘maintains visibility of nurse educators in clinical areas’, with the majority of participants (81.9%, n=322) agreeing or strongly agreeing with the statement (see Table 4.22 and Figure 4.28).

**Table 4.22. Maintains Visibility of Nurse Educators in Clinical Areas**

Answer	Frequency	Per cent
Disagree/Strongly disagree	43	10.9
Unsure	28	7.1
Agree/Strongly agree	322	81.9
Total	393	100.0



**Figure 4.28. Maintains Visibility of Nurse Educators in Clinical Areas**

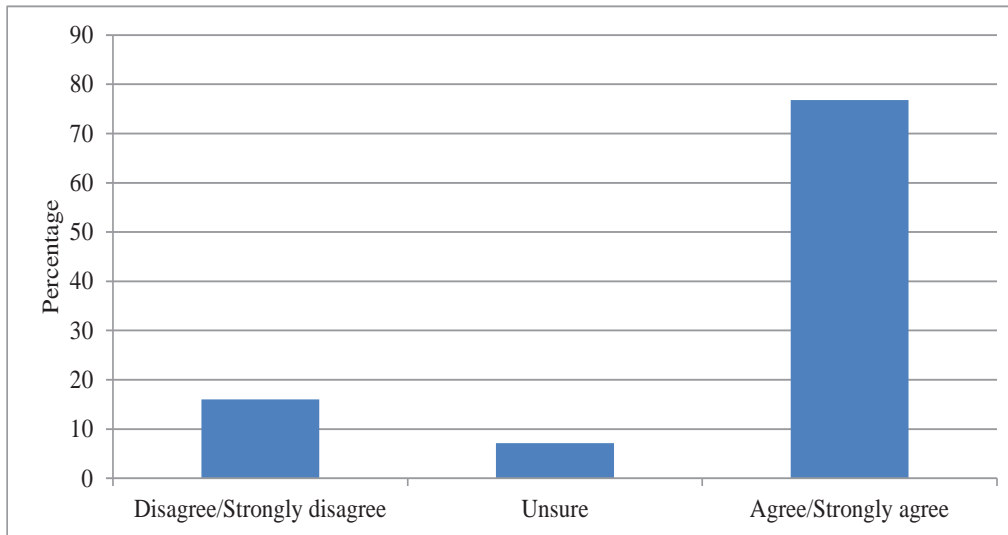
#### 4.4.7.9 Junior Educators Receive Support from Senior Nurse Educators

The ninth statement was ‘junior educators receive support from senior nurse educators’, with the majority of participants (76.8%, n=302) agreeing or strongly agreeing with the statement (see Table 4.23 and Figure 4.29).

**Table 4.23. Junior Nurse Educators Receive Support from Senior Nurse Educators**

Answer	Frequency	Per cent
Disagree/Strongly disagree	63	16.0
Unsure	28	7.1
Agree/Strongly agree	302	76.8
Total	393	100.0





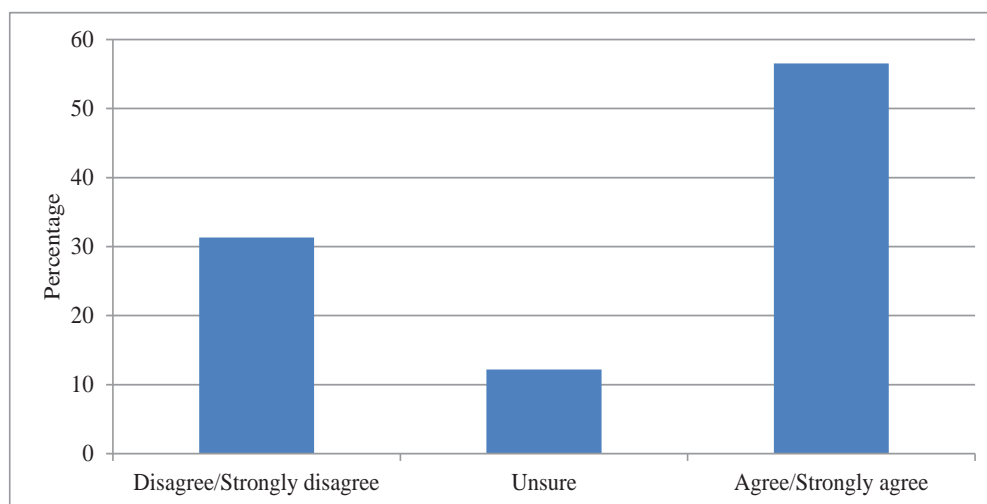
**Figure 4.29. Junior Nurse Educators Receive Support from Senior Nurse Educators**

#### 4.4.7.10 There Can Be a Lack of Consistency in Training across the Organisation

The tenth statement was ‘there can be a lack of consistency in training across the organisation’, with a slight majority of participants (56.5%, n=222) agreeing or strongly agreeing with the statement (see Table 4.24 and Figure 4.30).

**Table 4.24. There Can Be a Lack of Consistency in Training across the Organisation**

Answer	Frequency	Per cent
Disagree/Strongly disagree	123	31.3
Unsure	48	12.2
Agree/Strongly agree	222	56.5
Total	393	100.0



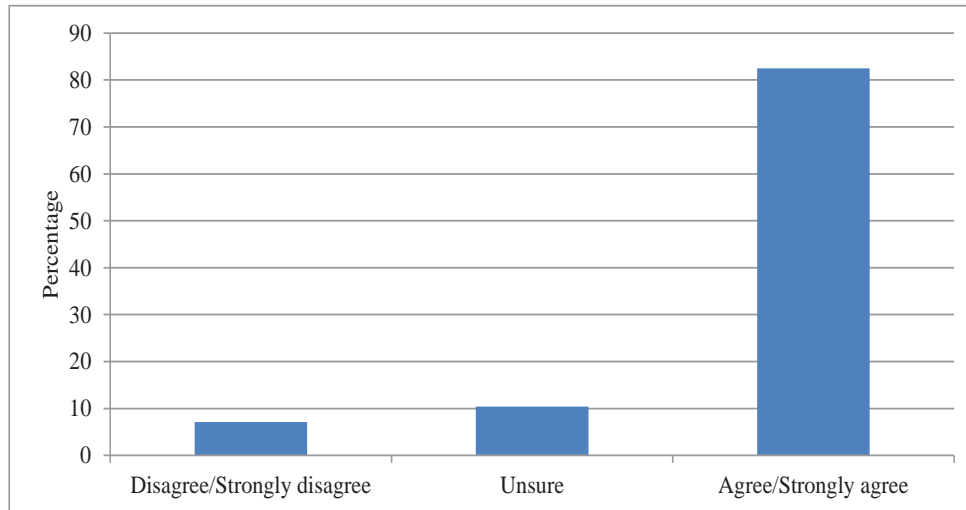
**Figure 4.30. There Can Be a Lack of Consistency in Training across the Organisation**

#### 4.4.7.11 Allows for Development of Specialist Knowledge and Skills

The eleventh statement was ‘allows for development of specialist clinical knowledge and skills’, with the majority of participants (82.5%, n=324) agreeing or strongly agreeing with the statement (see Table 4.25 and Figure 4.31).

**Table 4.25. Allows for Development of Specialist Clinical Knowledge and Skills**

Answer	Frequency	Per cent
Disagree/Strongly disagree	28	7.1
Unsure	41	10.4
Agree/Strongly agree	324	82.5
Total	393	100.0



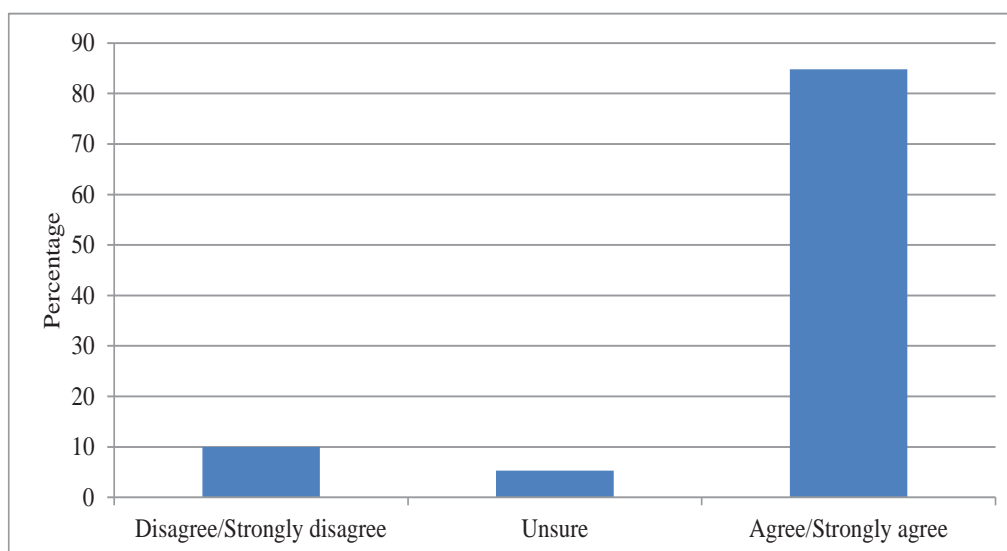
**Figure 4.31. Allows for Development of Specialist Clinical Knowledge and Skills**

#### **4.4.7.12 Training is Sometimes Cancelled Due to Staffing Constraints**

The twelfth statement was ‘training is sometimes cancelled due to staffing constraints’, with the majority of participants (84.8%, n=333) agreeing or strongly agreeing with the statement (see Table 4.26 and Figure 4.32).

**Table 4.26. Training is Sometimes Cancelled Due to Staffing Constraints**

<b>Answer</b>	<b>Frequency</b>	<b>Per cent</b>
Disagree/Strongly disagree	39	10.0
Unsure	21	5.3
Agree/Strongly agree	333	84.8
Total	393	100.0



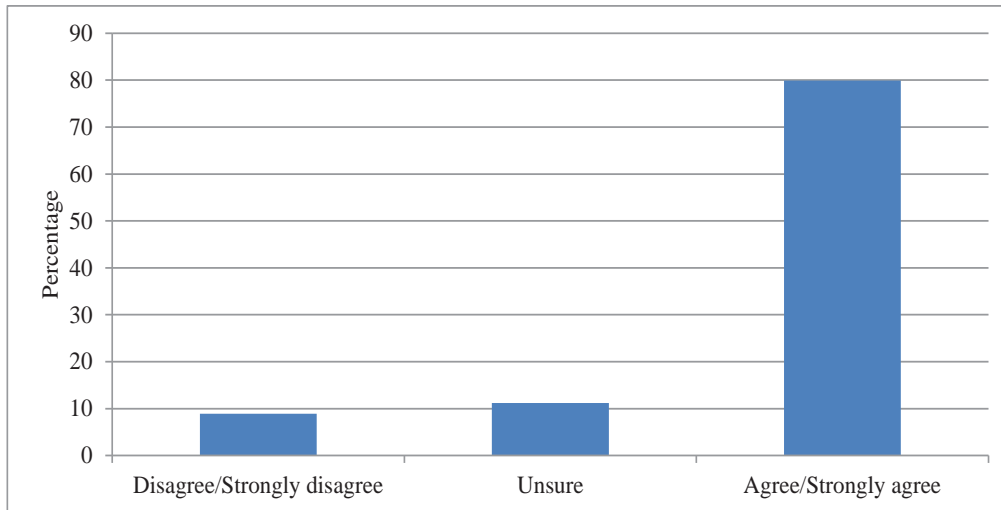
**Figure 4.32. Training is Sometimes Cancelled Due to Staffing Constraints**

#### **4.4.7.13 The Coordinator/Manager of the Service is a Member of High-level Committees/Nursing Executive**

The final statement was ‘the coordinator/manager of the service is a member of high-level committees/nursing executive’, with the majority of participants (79.9%, n=314) agreeing or strongly agreeing with the statement (see Table 4.27 and Figure 4.33).

**Table 4.27. The Coordinator/Manager of the Service is a Member of High-level Committees/Nursing Executive**

<b>Answer</b>	<b>Frequency</b>	<b>Per cent</b>
Disagree/Strongly disagree	35	8.9
Unsure	44	11.2
Agree/Strongly agree	314	79.9
Total	393	100.0



**Figure 4.33. The Coordinator/Manager of the Service is a Member of High-level Committees/Nursing Executive**

#### 4.4.7.14 Summary

There was some interesting variation across the responses to the statements regarding the characteristics of the nurse educators' nurse education service models. The majority of questions showed a significant level of agreement, with the highest level of agreement identified with the statement 'training is sometimes cancelled due to staffing constraints', with (84.8%, n=333) agreeing or strongly agreeing with the statement. There were, however, a number of statements that had a clear divide, with a significant number agreeing and a significant number disagreeing with the statement. These statements included 'can be isolating' and 'junior nurse educators are used to fill staffing deficits'. The greatest divide of responses was seen in the statement 'can be isolating', with 50.8% (n=200) of the nurse educators agreeing or strongly agreeing and 44% (n=173) disagreeing or strongly disagreeing. All of these results are reviewed in more detail in the following section, where they are cross-tabulated against service model type to look for patterns by service model.

#### 4.4.8 Nurse Education Service Model Characteristics

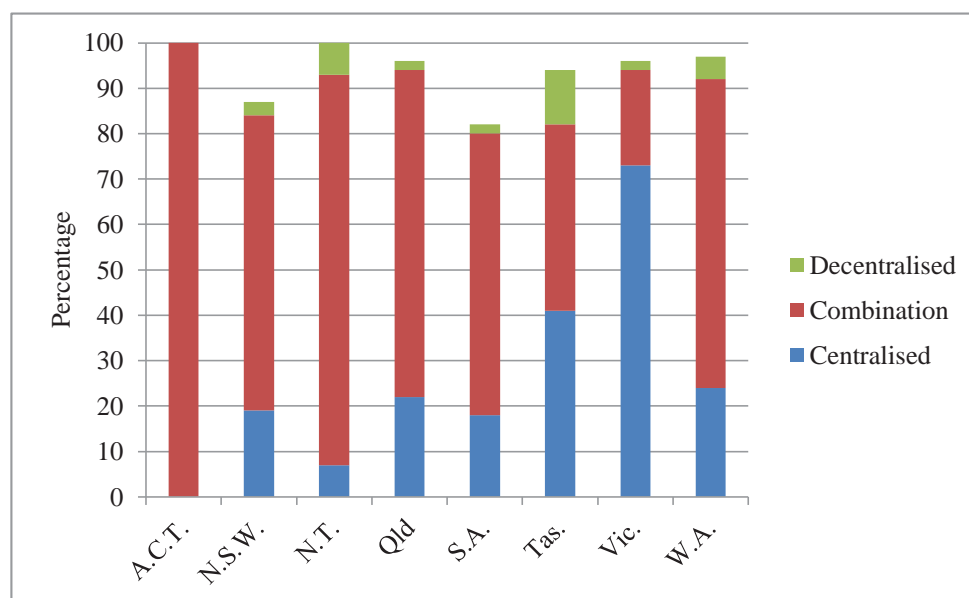
The data collated against a number of the hospital demographics and for responses regarding the characteristics of the model were cross-tabulated against the different nurse education service model types to look for relationships between the variables.

#### 4.4.8.1 Education Service Model Type by State

The combination nurse education service model was the dominant model used in the majority of states, with the exceptions of Tas., which had the same number of centralised and combination models, and Vic., which had a majority of centralised models. The N.T. had the greatest majority of combination service models (86%, n=13) (see Table 4.28 and Figure 4.34).

**Table 4.28. Nurse Education Service Model Types by State**

Q1. In which Australian State or Territory are you currently working?	On which model of nurse education is your service based?				Total
	Centralised	Combination	Decentralised	Other	
A.C.T.	0 (0%)	5 (100%)	0 (0%)	0 (0%)	5 (100%)
N.S.W.	19 (19%)	66 (65%)	3 (3%)	13 (13%)	101 (100%)
N.T.	1 (7%)	13 (86%)	1 (7%)	0 (0%)	15 (100%)
Qld	11 (22%)	36 (72%)	1 (2%)	2 (4%)	50 (100%)
S.A.	8 (18%)	28 (62%)	1 (2%)	8 (18%)	45 (100%)
Tas.	7 (41%)	7 (41%)	2 (12%)	1 (0.3%)	17 (100%)
Vic.	60 (73%)	17 (21%)	2 (2%)	3 (4%)	82 (100%)
W.A.	19 (24%)	53 (68%)	4 (5%)	2 (3%)	78 (100%)
Total	125 (32%)	225 (57%)	14 (4%)	29 (7%)	393 (100%)



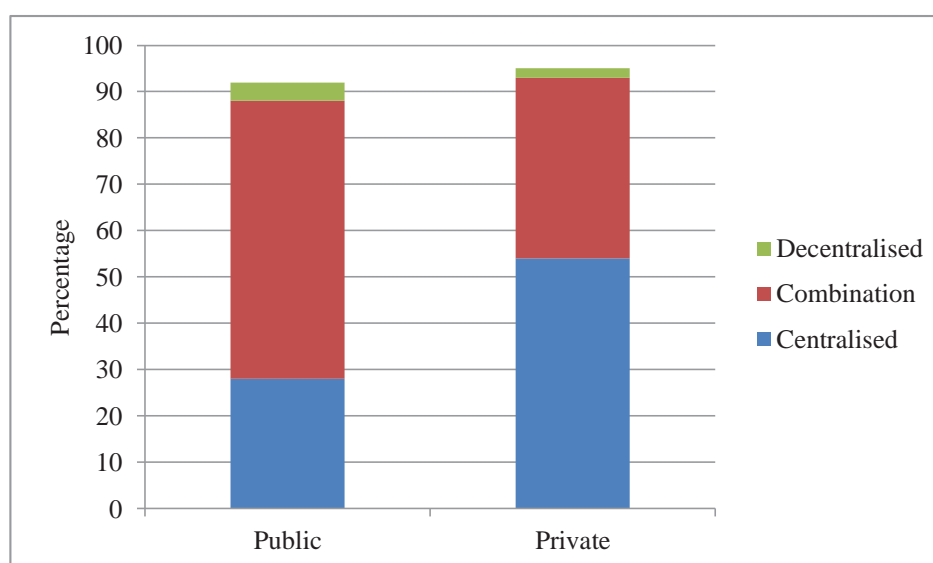
**Figure 4.34. Nurse Education Service Model Types by State**

#### 4.4.8.2 Education Service Model Type by Public or Private Hospitals

In examining nurse education service model type across all states against public and private hospitals, public hospitals were found to mostly use a combination model (60%, n=202), while private hospitals mostly used a centralised model (54%, n=32). This may be due to the historical nature of education services in public hospitals, where individual departments have developed and funded education positions independently as units are created or expanded, changing an organisation to a combination model (see Table 4.29 and Figure 3.45).

**Table 4.29. Nurse Education Service Model Types in Public/Private Hospitals**

Q2. Are you currently employed in a public or private hospital?	On which model of nurse education is your service based?				Total
	Centralised	Combination	Decentralised	Other	
Public	93 (28%)	202 (60%)	13 (4%)	26 (8%)	334 (100%)
Private	32 (54%)	23 (39%)	1 (2%)	3 (5%)	59 (100%)
Total	125 (32%)	225 (57%)	14 (4%)	29 (7%)	393 (100%)



**Figure 4.35. Nurse Education Service Model Types in Public/Private Hospitals**

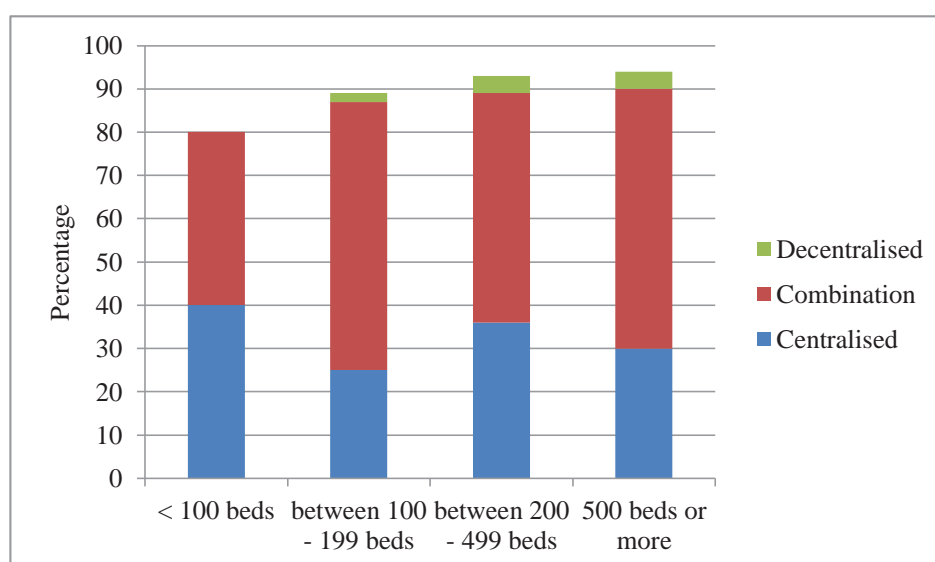
#### 4.4.8.3 Education Service Model Type by Size of Hospital

The size of the hospital did not seem to affect the type of nurse education service model used. All hospital sizes, apart from the hospitals with < 100 beds, mostly used a

combination service model. In hospitals with < 100 beds, an equal number of centralised and combination models were reported (see Table 4.30 and Figure 4.36).

**Table 4.30. Nurse Education Service Model Types by Size of Hospital**

Q3. What is the bed number of the hospital?	On which model of nurse education is your service based?				Total
	Centralised	Combination	Decentralised	Other	
< 100 beds	2 (40%)	2 (40%)	0 (0%)	1 (20%)	5 (100%)
between 100–199 beds	12 (25%)	29 (62%)	1 (2%)	5 (11%)	47 (100%)
between 200–499 beds	57 (36%)	82 (53%)	6 (4%)	11 (7%)	156 (100%)
500 beds or more	54 (30%)	112 (60%)	7 (4%)	12 (6%)	185 (100%)
Total	125 (32%)	225 (57%)	14 (4%)	29 (7%)	393 (100%)



**Figure 4.36. Nurse Education Service Model Types by Size of Hospital**

#### 4.4.8.4 Senior Educator Involvement by Education Service Model Type

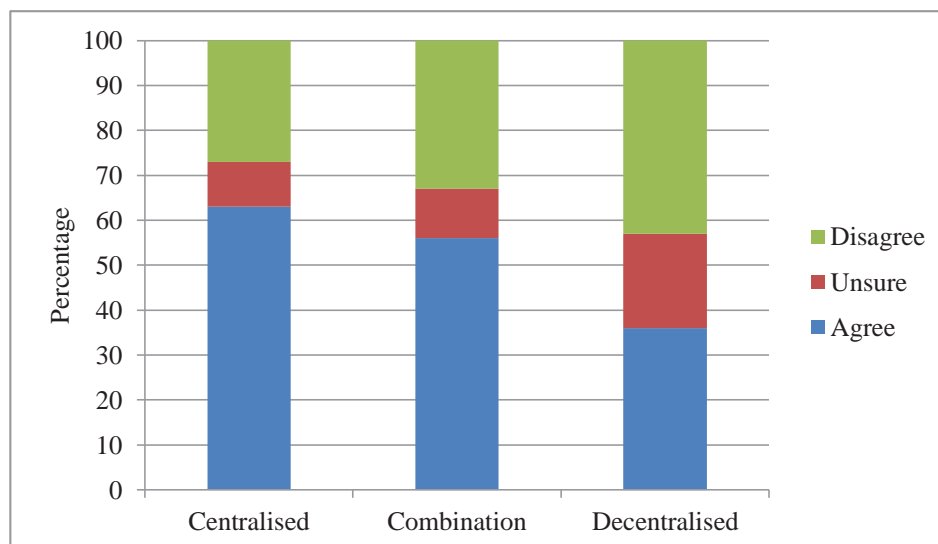
The type of service model did seem to affect the level of senior educator involvement in the selection and performance development of junior educators. Sixty-three per cent (n=78) of nurse educators in a centralised service model agreed or strongly agreed that senior educators were involved in the selection and performance development of junior educators, with 56% (n=126) of nurse educators in the combination model also agreeing or strongly agreeing. In contrast, the majority (43%, n=6) of nurse educators in a decentralised model disagreed or strongly disagreed that senior educators were involved in the selection and performance development of junior educators. This



supports the findings from phases one and two that a centralised model is more connected and supportive of junior educators’ development. This greater level of senior educator involvement in the selection and education of junior educators is enabled by the centralised model, as the junior educators report to the senior educators, and are therefore recruited, supported and educated by them. As the junior educators are managed, rostered and paid by the education service in a centralised model, senior educators can allocate them to relevant study days for their development and training as specialists in the field (see Table 4.31 and Figure 4.37).

**Table 4.31. Senior Educator Involvement in the Selection and Performance Development of Junior Educators by Education Service Model Type**

11a. The senior educators are involved in selection and performance development of the junior educators	On which model of nurse education is your service based?				Total
	Centralised	Combination	Decentralised	Other	
Disagree/Strongly disagree	34 (27%)	74 (33%)	6 (43%)	11 (38%)	125 (32%)
Unsure	13 (10%)	25 (11%)	3 (21%)	1 (3%)	42 (11%)
Agree/Strongly agree	78 (63%)	126 (56%)	5 (36%)	17 (59%)	226 (57%)
Total	125 (100%)	225 (100%)	14 (100%)	29 (100%)	393 (100%)



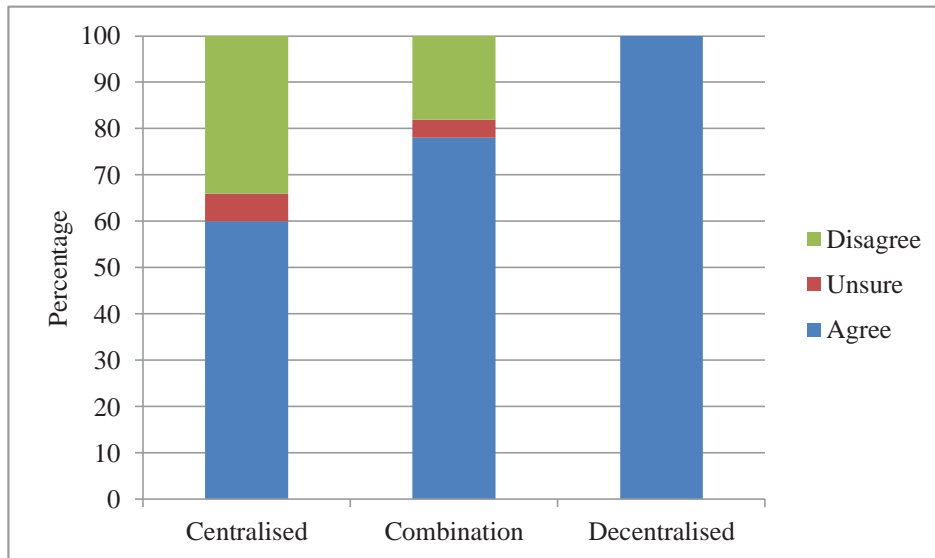
**Figure 4.37. Senior Educator Involvement in the Selection and Performance Development of Junior Educators by Education Service Model Type**

#### 4.4.8.5 Required to Perform Duties Outside Education Role by Education Service Model Type

The type of service model did seem to affect the nurse educators' perception of being required to perform duties outside the education role, with 100% (n=14) of nurse educators in a decentralised model agreeing or strongly agreeing, 78% (n=176) of nurse educators in the combination model agreeing or strongly agreeing and 60% (n=75) of nurse educators in a centralised service model agreeing or strongly agreeing. This confirms the findings of phase two, where this was also highlighted as a weakness of a combination model. The significant difference between the service models in being asked to perform duties outside the education role may be attributed to the junior nurse educators within combination and decentralised models being managed by nurse unit managers who have conflicting priorities and are not educators themselves and who may therefore be directing the educators to undertake other duties (see Table 4.32 and Figure 4.38).

**Table 4.32. Required to Perform Duties Outside of the Education Role by Education Service Model Type**

11b. You are required to perform duties outside of the education role	On which model of nurse education is your service based?				Total
	Centralised	Combination	Decentralised	Other	
Disagree/Strongly disagree	43 (34%)	40 (18%)	0 (0%)	7 (24%)	90 (23%)
Unsure	7 (6%)	9 (4%)	0 (0%)	0 (0%)	16 (4%)
Agree/Strongly agree	75 (60%)	176 (78%)	14 (100%)	22 (76%)	287 (73%)
Total	125 (100%)	225 (100%)	14 (100%)	29 (100%)	393 (100%)



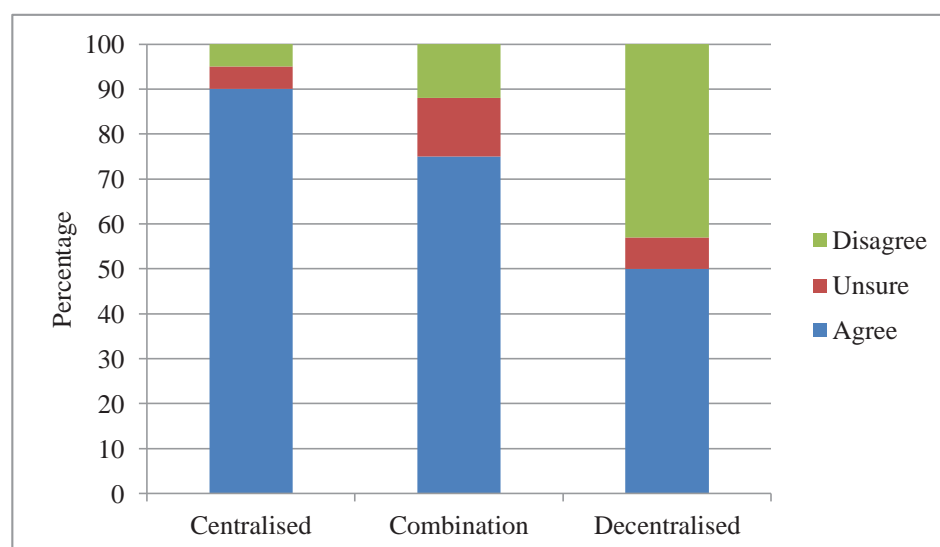
**Figure 4.38. Required to Perform Duties Outside of the Education Role by Education Service Model Type**

#### 4.4.8.6 Being Able to Get an Organisational-wide View by Education Service Model Type

The type of service model did seem to affect the nurse educators' perception of being able to achieve an organisational-wide view, with 90% (n=112) of nurse educators in a centralised service model agreeing or strongly agreeing, 75% (n=169) of nurse educators in a combination model agreeing or strongly agreeing and 50% (n=7) of nurse educators in a decentralised model agreeing or strongly agreeing. This demonstrates that the majority in all three models perceived that they were able to obtain an organisational-wide view, but that those working in a centralised model supported this more than those working in the other model types. A centralised model would allow a clearer organisational-wide view, as communication from the coordinator regarding discussions at the executive level is communicated down to the senior and junior educators and then developed into strategic and operational plans for the service (see Table 4.33 and Figure 3.39).

**Table 4.33. Being Able to Get an Organisational-wide View by Education Service Model Type**

11c. Allows you to get an organisational-wide view	On which model of nurse education is your service based?				Total
	Centralised	Combination	Decentralised	Other	
Disagree/Strongly disagree	6 (5%)	26 (12%)	6 (43%)	1 (3%)	39 (10%)
Unsure	7 (5%)	30 (13%)	1 (7%)	2 (7%)	40 (10%)
Agree/ Strongly agree	112 (90%)	169 (75%)	7 (50%)	26 (90%)	314 (80%)
Total	125 (100%)	225 (100%)	14 (100%)	29 (100%)	393 (100%)



**Figure 4.39. Being Able to Get an Organisational-wide View by Education Service Model Type**

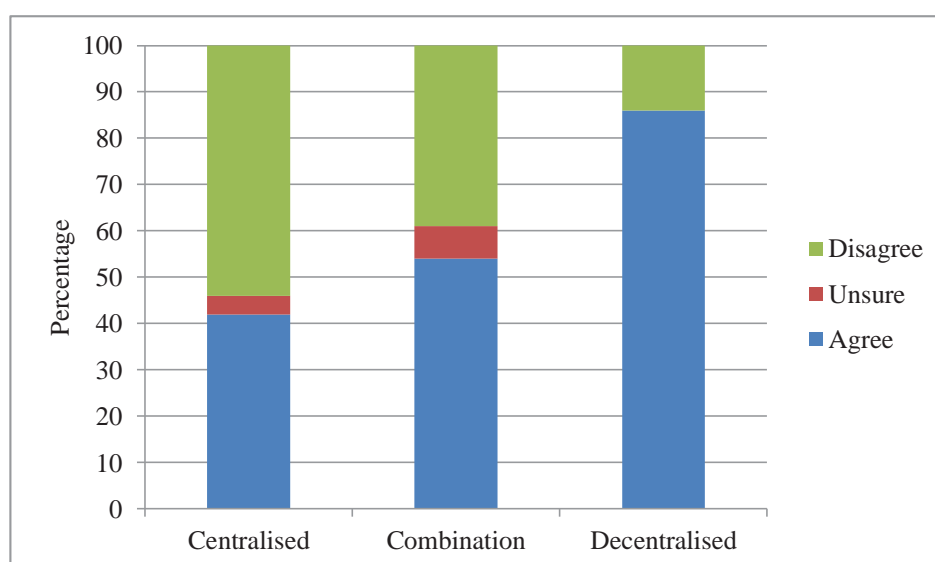
#### 4.4.8.7 Can be Isolating by Education Service Model Type

The type of service model did seem to affect the nurse educators' perception of being isolated, with 86% (n=12) nurse educators in a decentralised model agreeing or strongly agreeing, 54% (n=121) of nurse educators in the combination model agreeing or strongly agreeing and 42% (n=53) of nurse educators in a centralised service model agreeing or strongly agreeing. This was raised in previous phases as a weakness of both the centralised and combination models. This result reflects the previous findings that in a centralised model, the educators can feel isolated from the clinical areas, as they report to staff and are involved in activities outside their clinical areas. However, in a combination model, educators can feel isolated from the education service, as they report to the nurse unit manager and have no formal connection to the education

service. In a decentralised model, educators are independent, with no education service within the organisation, and so also appear to feel isolated (see Table 4.34 and Figure 4.40).

**Table 4.34. Nurse Educators Feel Isolated by Education Service Model Type**

11d. Can be isolating	On which model of nurse education is your service based?				Total
	Centralised	Combination	Decentralised	Other	
Disagree/Strongly disagree	68 (54%)	89 (39%)	2 (14%)	14 (48%)	173 (44%)
Unsure	4 (4%)	15 (7%)	0 (0%)	1 (4%)	20 (5%)
Agree/Strongly agree	53 (42%)	121 (54%)	12 (86%)	14 (48%)	200 (51%)
Total	125 (100%)	225 (100%)	14 (100%)	29 (100%)	393 (100%)



**Figure 4.40. Nurse Educators Feel Isolated by Education Service Model Type**

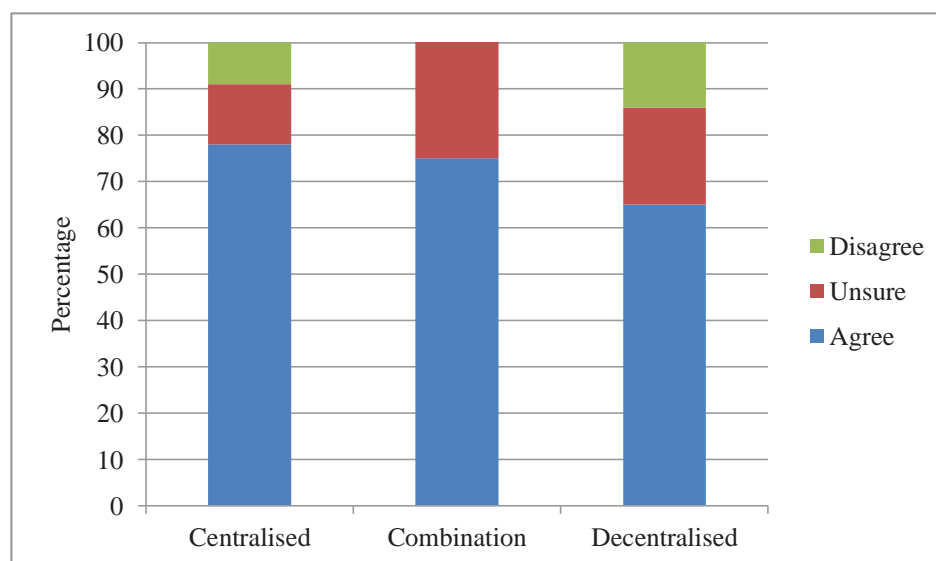
#### 4.4.8.8 Allows Continuous Awareness of Learning Deficits at Ward Level by Education Service Model Type

The type of service model did seem to affect the nurse educators' perception of whether their model allowed continuous awareness of learning deficits at ward level, with 78% (n=98) of nurse educators in a centralised service model agreeing or strongly agreeing, 75% (n=168) of nurse educators in the combination model agreeing or strongly agreeing and 65% (n=9) of nurse educators from a decentralised model agreeing or strongly agreeing. This contradicts the findings of phases one and two,

where this was raised as a weakness by participants in a centralised model and a strength of a combination model. It appears that educators in all three models felt they had continuous awareness of learning deficits at ward level, although the highest level of agreement was seen for nurse educators from a centralised service model. This may be because even though the junior educators in a centralised model are managed by the education service, they are still physically located and work within the clinical areas, keeping them aware of learning deficits (see Table 4.35 and Figure 4.41).

**Table 4.35. Allows Continuous Awareness of Learning Deficits at Ward Level by Education Service Model Type**

11e. Allows continuous awareness of learning deficits at ward level	On which model of nurse education is your service based?				Total
	Centralised	Combination	Decentralised	Other	
Disagree/Strongly disagree	11 (9%)	30 (13%)	2 (14%)	9 (31%)	52 (13%)
Unsure	16 (13%)	27 (26%)	3 (21%)	0 (0%)	46 (12%)
Agree/Strongly agree	98 (78%)	168 (75%)	9 (65%)	20 (69%)	295 (75%)
Total	125 (100%)	225 (100%)	14 (100%)	29 (100%)	393 (100%)



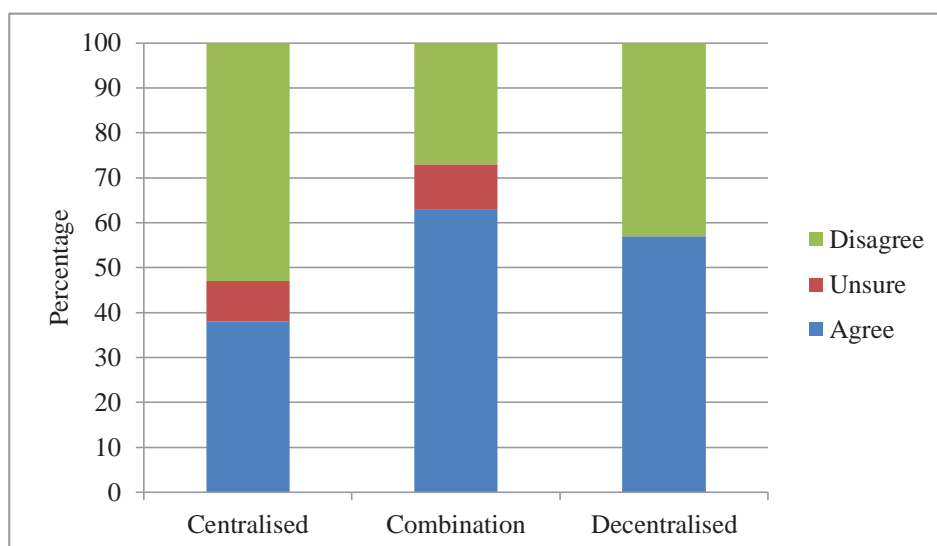
**Figure 4.41. Allows Continuous Awareness of Learning Deficits at Ward Level by Education Service Model Type**

#### 4.4.8.9 Junior Nurse Educators Used to Fill Staffing Deficits by Education Service Model Type

The type of service model did seem to affect the nurse educators' perception of junior nurse educators being used to fill staffing deficits, with 63% (n=142) of nurse educators in the combination model agreeing or strongly agreeing, 57% (n=8) of nurse educators in a decentralised model agreeing or strongly agreeing and 38% (n=48) of nurse educators in a centralised service model agreeing or strongly agreeing. This confirms the finding of phase two, where this was also raised as a weakness by those participants working in a combination model. This is a significant result, indicating that junior educators in the combination and decentralised models who are managed by the nurse unit managers and paid from the clinical cost centres are more often used to fill clinical staff deficits than are those in a centralised model (see Table 4.36 and Figure 4.42).

**Table 4.36. Junior Nurse Educators Used to Fill Staffing Deficits by Education Service Model Type**

11f. Junior nurse educators are used to fill staffing deficits	On which model of nurse education is your service based?				Total
	Centralised	Combination	Decentralised	Other	
Disagree/Strongly disagree	66 (53%)	61 (27%)	6 (43%)	13 (45%)	146 (37%)
Unsure	11 (9%)	22 (10%)	0 (0%)	2 (7%)	35 (9%)
Agree/Strongly agree	48 (38%)	142 (63%)	8 (57%)	14 (48%)	212 (54%)
Total	125 (100%)	225 (100%)	14 (100%)	29 (100%)	393 (100%)



**Figure 4.42. Junior Nurse Educators Used to Fill Staffing Deficits by Education Service Model Type**

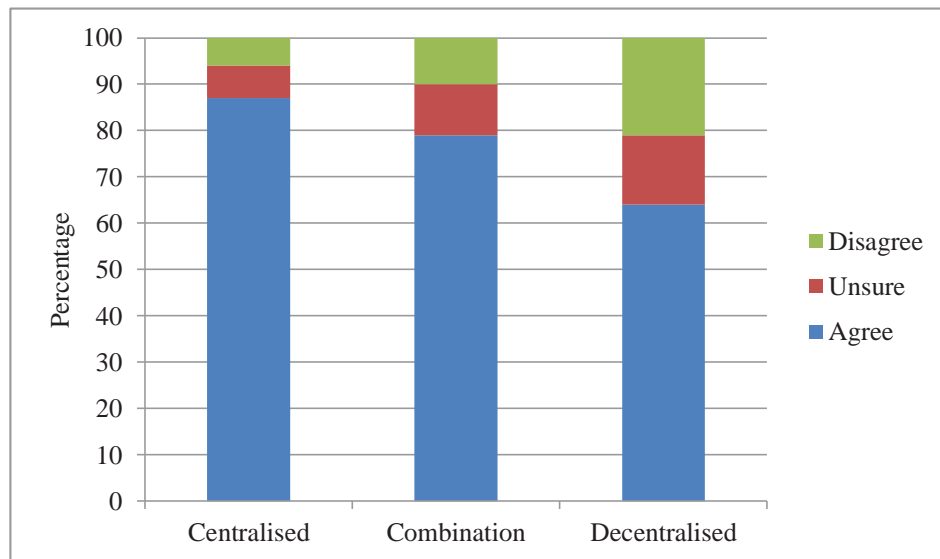
#### 4.4.8.10 Allows Autonomy by Education Service Model Type

The type of service model did seem to affect the nurse educators' perception of whether their model allowed autonomy, with 87% (n=109) of nurse educators in a centralised service model agreeing or strongly agreeing, 79% (n=179) of nurse educators in the combination model agreeing or strongly agreeing and 64% (n=9) of nurse educators in a decentralised model agreeing or strongly agreeing. This contradicts the findings in the literature and in phase two of this study, where this was raised as a strength of a combination model by participants. These results indicate that a higher majority of educators working within a centralised model feel autonomous than those in a combination or decentralised model. It may be that junior educators in the combination and decentralised models are being closely directed by their ward managers in what training is required and so feel less autonomous (see Table 4.37 and Figure 4.43).

**Table 4.37. Allows Autonomy by Education Service Model Type**

11g. Allows autonomy	On which model of nurse education is your service based?				Total
	Centralised	Combination	Decentralised	Other	
Disagree/Strongly disagree	7 (6%)	22 (10%)	3 (21%)	3 (10%)	35 (9%)
Unsure	9 (7%)	24 (11%)	2 (15%)	3 (10%)	38 (10%)
Agree/Strongly agree	109 (87%)	179 (79%)	9 (64%)	23 (80%)	320 (81%)
Total	125 (100%)	225 (100%)	14 (100%)	29 (100%)	393 (100%)





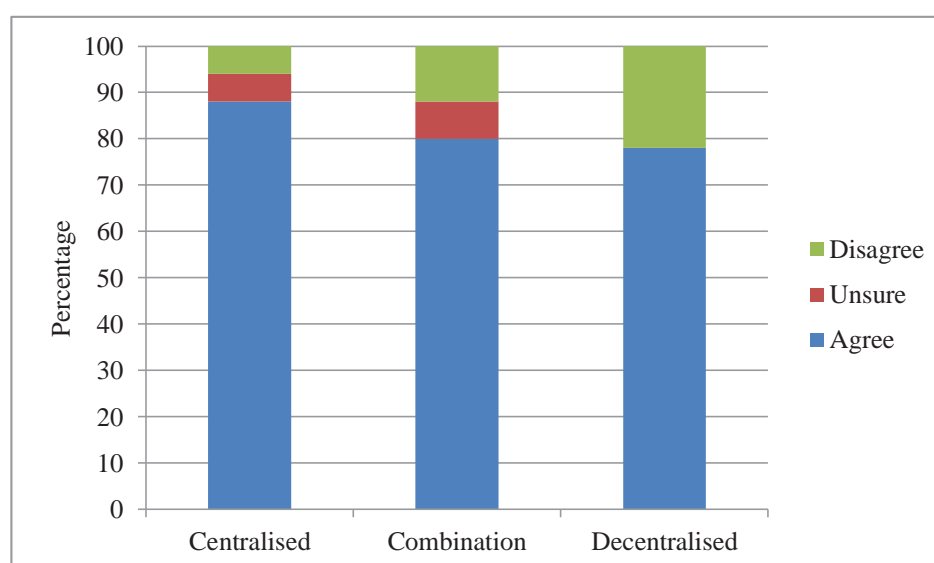
**Figure 4.43. Allows Autonomy by Education Service Model Type**

#### **4.4.8.11 Maintains Nurse Educators' Visibility in Clinical Areas by Education Service Model Type**

The type of service model did not seem to affect the nurse educators' perception of whether their model allowed them to maintain visibility in clinical areas, with 88% (n=110) of nurse educators in a centralised service model agreeing or strongly agreeing, 80% (n=180) of nurse educators in the combination model agreeing or strongly agreeing and 78% (n=11) of nurse educators in a decentralised model agreeing or strongly agreeing. This supports the finding in phase two, where this was highlighted as a strength of the combination nurse education service model by participants. In addition, it highlights that a centralised nurse education service model can maintain nurse educator visibility in clinical areas, as nurse educators from a centralised model demonstrated the highest level of agreement with this statement. The high level of agreement with this statement by nurse educators within a centralised model may be because the junior educators, even though they report to the central education service, are still based and visible in the clinical areas (see Table 4.38 and Figure 4.44).

**Table 4.38. Maintains Nurse Educators' Visibility in Clinical Areas by Education Service Model Type**

11h. Maintains visibility of nurse educators in clinical areas	On which model of nurse education is your service based?				Total
	Centralised	Combination	Decentralised	Other	
Disagree/Strongly disagree	8 (6%)	27 (12%)	3 (22%)	5 (18%)	43 (11%)
Unsure	7 (6%)	18 (8%)	0 (0%)	3 (10%)	28 (7%)
Agree/Strongly agree	110 (88%)	180 (80%)	11 (78%)	21 (72%)	322 (82%)
Total	125 (100%)	225 (100%)	14 (100%)	29 (100%)	393 (100%)



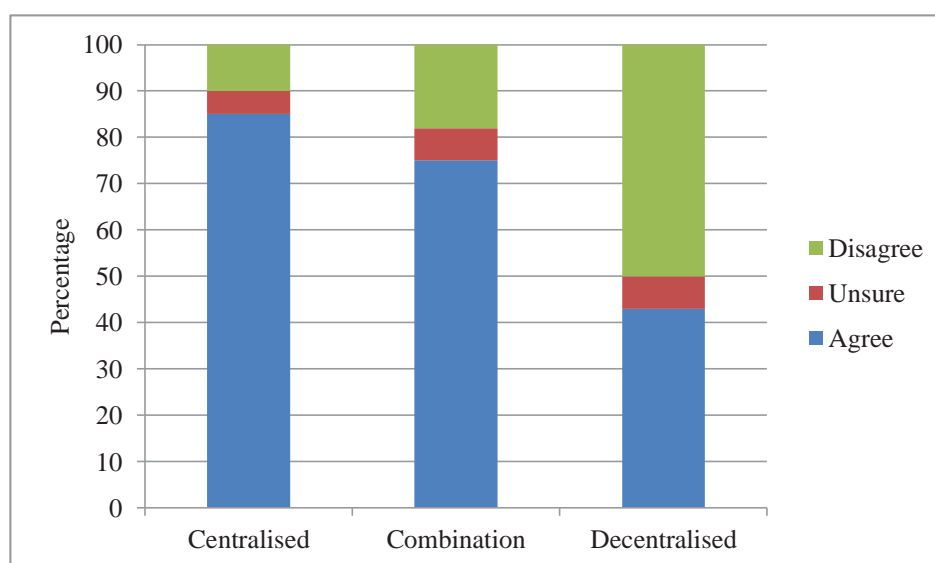
**Figure 4.44. Maintains Nurse Educators' Visibility in Clinical Areas by Education Service Model Type**

#### 4.4.8.12 Junior Educators Receive Support from Senior Nurse Educators by Education Service Model Type

The type of service model did seem to affect the nurse educators' perception of junior nurse educators receiving support from senior nurse educators, with 85% (n=106) of nurse educators in a centralised service model agreeing or strongly agreeing, 75% (n=168) of nurse educators in the combination model agreeing or strongly agreeing and 50% (7) of nurse educators in a decentralised model disagreeing or strongly disagreeing. This confirms the finding from phases one and two, where this was raised as a strength of the centralised model by participants in both phases. A centralised service is able to offer more support from senior educators to junior educators, who are recruited, orientated and managed by this group (see Table 4.39 and Figure 4.45).

**Table 4.39. Junior Nurse Educators Receive Support from Senior Nurse Educators by Education Service Model Type**

11i. Junior nurse educators receive support from senior nurse educators	On which model of nurse education is your service based?				Total
	Centralised	Combination	Decentralised	Other	
Disagree/Strongly disagree	12 (10%)	40 (18%)	7 (50%)	4 (14%)	63 (16%)
Unsure	7 (5%)	17 (7%)	1 (7%)	3 (10%)	28 (7%)
Agree/Strongly agree	106 (85%)	168 (75%)	6 (43%)	22 (76%)	302 (77%)
Total	125 (100%)	225 (100%)	14 (100%)	29 (100%)	393 (100%)



**Figure 4.45. Junior Nurse Educators Receive Support from Senior Nurse Educators by Education Service Model Type**

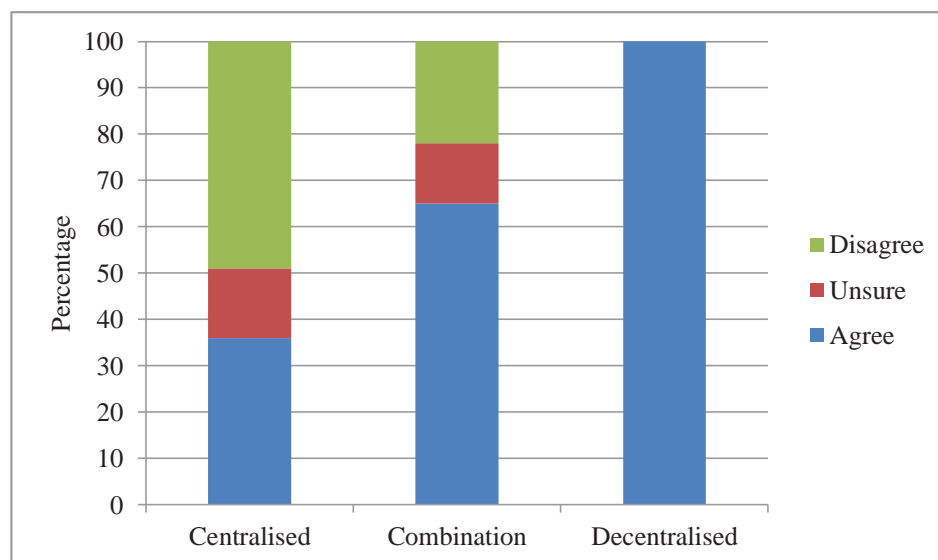
#### 4.4.8.13 Lack of Consistency in Training across the Organisation by Education Service Model Type

The type of service model did seem to affect the nurse educators’ perception of a lack of consistency in training across the organisation, with 100% (n=14) of nurse educators in a decentralised model agreeing or strongly agreeing, 65% (n=147) of nurse educators in the combination model agreeing or strongly agreeing and only 36% (n=45) of nurse educators in a centralised service model agreeing or strongly agreeing. This confirms the finding from phase two, where this was raised by participants as a weakness of a combination model. A centralised service allows for the organised dissemination and implementation of training across an organisation. It also supports

the development of training policies, standards and templates to ensure consistency in the content and standard of training (see Table 4.40 and Figure 4.46).

**Table 4.40. A Lack of Consistency in Training Across the Organisation by Education Service Model Type**

11j. There can be a lack of consistency in training across the organisation	On which model of nurse education is your service based?				Total
	Centralised	Combination	Decentralised	Other	
Disagree/Strongly disagree	61 (49%)	50 (22%)	0 (0%)	12 (42%)	123 (32%)
Unsure	19 (15%)	28 (13%)	0 (0%)	1 (3%)	48 (12%)
Agree/Strongly agree	45 (36%)	147 (65%)	14 (100%)	16 (55%)	222 (56%)
Total	125 (100%)	225 (100%)	14 (100%)	29 (100%)	393 (100%)



**Figure 4.46. A Lack of Consistency in Training Across the Organisation by Education Service Model Type**

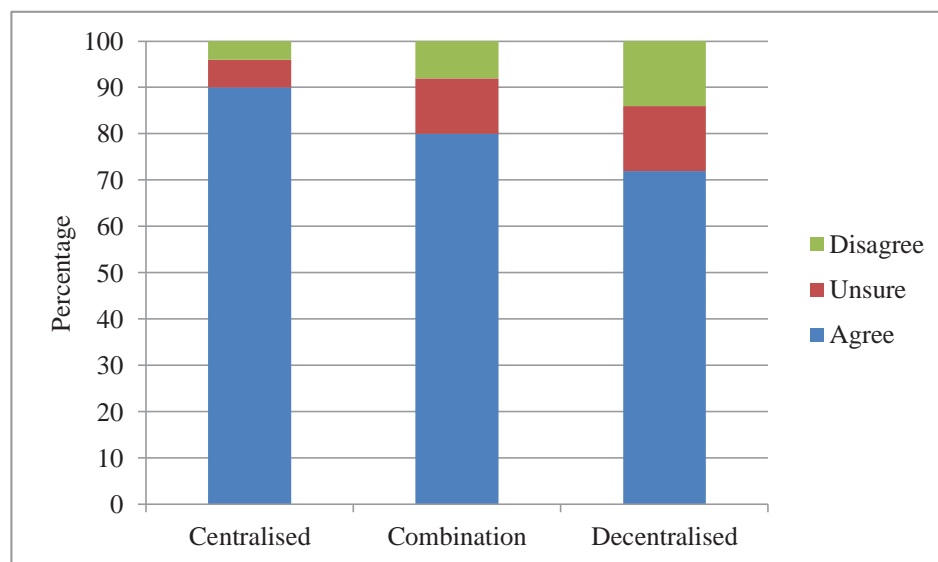
#### 4.4.8.14 Allows for Development of Specialist Knowledge and Skills by Education Service Model Type

The type of service model did not seem to significantly affect the nurse educators' perception of whether their model allowed for the development of specialist clinical knowledge and skills, with 90% (n=112) of nurse educators in a centralised service model agreeing or strongly agreeing, 80% (n=181) of nurse educators in the combination model agreeing or strongly agreeing and 72% (n=10) of nurse educators in a decentralised model agreeing or strongly agreeing. This supports the finding from

phase two, where this was highlighted by participants as a strength of a combination model, although nurse educators from a centralised model showed the highest level of agreement with this statement. The high number of nurse educators from a centralised model agreeing or strongly agreeing with this statement may be because, even though junior educators in a centralised model report outside the clinical area to the education service, they are physically situated and function within their specialised clinical areas and so are able to develop and maintain their specialisation (see Table 4.41 and Figure 4.47).

**Table 4.41. Allows for the Development of Specialist Clinical Knowledge and Skills by Education Service Model Type**

11k. Allows for development of specialist clinical knowledge and skills	On which model of nurse education is your service based?				Total
	Centralised	Combination	Decentralised	Other	
Disagree/Strongly disagree	5 (4%)	16 (8%)	2 (14%)	5 (18%)	28 (8%)
Unsure	8 (6%)	28 (12%)	2 (14%)	3 (10%)	41 (10%)
Agree/Strongly agree	112 (90%)	181 (80%)	10 (72%)	21 (72%)	324 (82%)
Total	125 (100%)	225 (100%)	14 (100%)	29 (100%)	393 (100%)



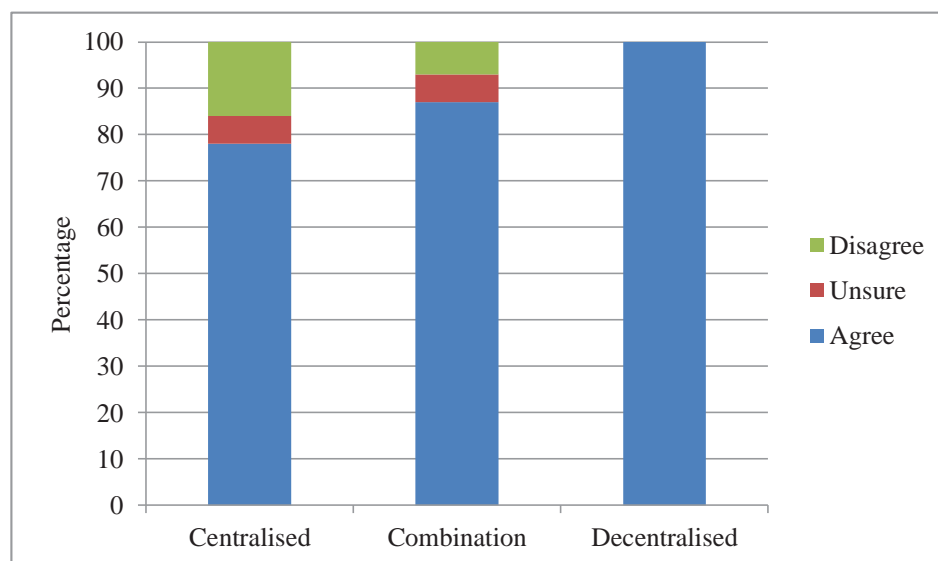
**Figure 4.47. Allows for the Development of Specialist Clinical Knowledge and Skills by Education Service Model Type**

#### 4.4.8.15 Training Cancelled Due to Staffing Constraints by Education Service Model Type

The type of service model did seem to affect the nurse educators' perception of training being cancelled due to staffing constraints, with 100% (n=14) of nurse educators from a decentralised service model agreeing or strongly agreeing, 87% (n=196) of nurse educators in the combination model agreeing or strongly agreeing and 78% (n=98) of nurse educators in a centralised service model agreeing or strongly agreeing. This supports the finding from phase two, where participants from a combination model highlighted this as a weakness of the model. This high percentage of agreement from educators from a centralised model may be explained by the inability to have adequate numbers of clinical staff released to attend training, forcing the cancellation of study days. It does not appear that a lack of educators is responsible for the cancellation of training (see Table 4.42 and Figure 4.48).

**Table 4.42. Training Cancelled Due to Staffing Constraints by Education Service Model Type**

111. Training is sometimes cancelled due to staffing constraints	On which model of nurse education is your service based?				Total
	Centralised	Combination	Decentralised	Other	
Disagree/Strongly disagree	20 (16%)	16 (7%)	0 (0%)	3 (10%)	39 (10%)
Unsure	7 (6%)	13 (6%)	0 (0%)	1 (4%)	21 (5%)
Agree/Strongly agree	98 (78%)	196 (87%)	14 (100%)	25 (86%)	333 (85%)
Total	125 (100%)	225 (100%)	14 (100%)	29 (100%)	393 (100%)



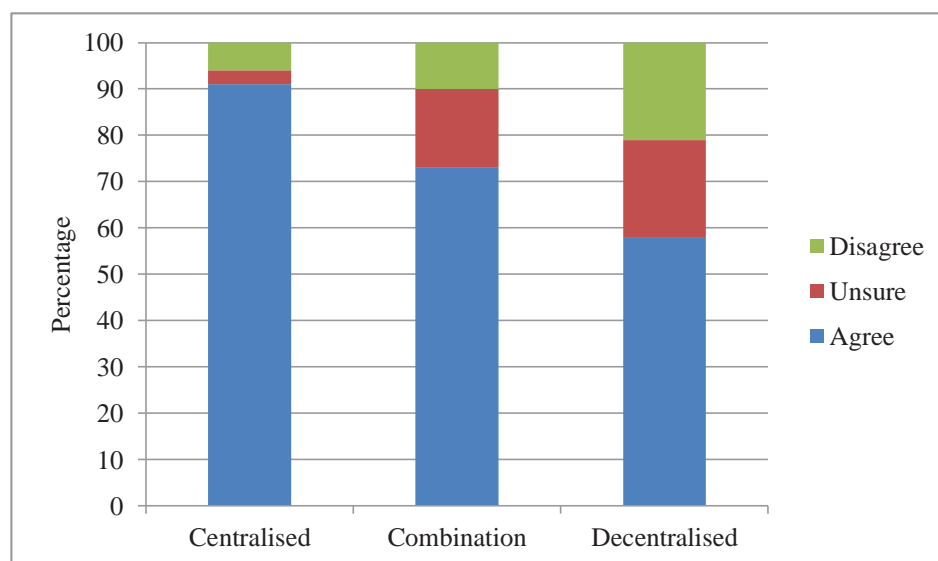
**Figure 4.48. Training Cancelled Due to Staffing Constraints by Education Service Model Type**

#### 4.4.8.16 Coordinator/Manager is a Member of High-level Committees/Nursing Executive by Education Service Model Type

The type of service model did seem to affect the nurse educators' perception of the coordinator/manager of the service being a member of high-level committees/nursing executive, with 91% (n=114) of nurse educators in a centralised service model agreeing or strongly agreeing, 73% (n=166) of nurse educators in a combination model agreeing or strongly agreeing and 58% (n=8) of nurse educators in a decentralised model agreeing or strongly agreeing. This result demonstrates that in a centralised service, the coordinator of the service is usually a member of the executive or has membership on high-level committees and is able to feedback information from these meetings to the service (see Table 4.43 and Table 4.49).

**Table 4.43. Coordinator/Manager is a Member of High-level Committees/Nursing Executive by Education Service Model Type**

11m. The coordinator/manager of the service is a member of high-level committees/nursing executive	On which model of nurse education is your service based?				Total
	Centralised	Combination	Decentralised	Other	
Disagree/Strongly disagree	7 (6%)	22 (10%)	3 (21%)	3 (10%)	35 (9%)
Unsure	4 (3%)	37 (17%)	3 (21%)	0 (0%)	44 (11%)
Agree/Strongly agree	114 (91%)	164 (73%)	8 (58%)	26 (90%)	314 (80%)
Total	125 (100%)	225 (100%)	14 (100%)	29 (100%)	393 (100%)



**Figure 4.49. Coordinator/Manager is a Member of High-level Committees/Nursing Executive by Education Service Model Type**

Chi-square significance testing was undertaken on the cross-tabulations examined above to look for areas of significance across the different nurse education service models. All of the questions tested had significant findings except ‘hospital size’, ‘maintains visibility of nurse educators in clinical areas’ and ‘allows for development of specialist knowledge and skills’ (see Table 4.44).

**Table 4.44. Cross-tabulations and Significance Test Summary**

Question No.	Question Topic	Chi-Square ( $\chi^2$ )	p Value
1.	In which Australian state or territory are you currently working?	102.03 <sup>a</sup>	0.00
2.	Are you currently employed in a public or private hospital?	14.57 <sup>b</sup>	0.00
3.	What is the bed number of the hospital?	6.90 <sup>a</sup>	0.60
11a.	The senior educators are involved in selection and performance development of the junior educators	23.46 <sup>b</sup>	0.01
11b.	You are required to perform duties outside of the education role	30.14 <sup>a</sup>	0.00
11c.	Allows you to get an organisational-wide view	29.43 <sup>b</sup>	0.00
11d.	Can be isolating	33.16 <sup>b</sup>	0.00
11e.	Allows continuous awareness of learning deficits at ward level	25.70 <sup>b</sup>	0.00
11f.	Junior nurse educators are used to fill staffing deficits	30.89 <sup>b</sup>	0.00
11g.	Allows autonomy	19.58 <sup>b</sup>	0.04
11h.	Maintains visibility of nurse educators in clinical areas	11.99 <sup>b</sup>	0.36
11i.	Junior nurse educators receive support from senior nurse educators	24.03 <sup>b</sup>	0.01
11j.	There can be a lack of consistency in training across the organisation	55.53 <sup>a</sup>	0.00
11k.	Allows for development of specialist clinical knowledge and skills	17.86 <sup>a</sup>	0.07
11l.	Training is sometimes cancelled due to staffing constraints	25.42 <sup>a</sup>	0.00
11m.	The coordinator/manager of the service is a member of high-level committees/nursing executive	44.68 <sup>a</sup>	0.00

<sup>a</sup> Monte Carlo; <sup>b</sup> Fishers Exact Test

#### 4.4.8.17 Summary

As outlined above, there was a significant difference in the perceptions of nurse educators within the different service models for 13 of the 16 questions examined, with



the most significant difference seen for ‘There can be a lack of consistency in training across the organisation’ and ‘The coordinator/manager of the service is a member of high-level committees/nursing executive’.

From the above responses, when comparing the centralised, combination and decentralised models, it was found that the type of model in use did not appear to affect the educators’ visibility in clinical areas or the development of educators’ specialist knowledge and skills. However, significant results were found for a number of responses, indicating that a centralised model has the following characteristics:

- involves more senior educators in the selection and education of junior educators.
- requires educators to undertake less duties outside their role.
- gives educators a more organisational-wide view.
- makes educators feel less isolated.
- allows for more continuous awareness of learning deficits at ward level.
- uses less junior educators to fill staffing deficits.
- allows more autonomy.
- is more supportive of junior educators by senior educators.
- supports more consistency of training across the organisation.
- has more coordinators as members of the executive/high-level committees.

Although as examined throughout the review of the literature and in the findings of phases one and two, each of the nurse education service models has advantages and disadvantages, it appears from the results of phase three of this study that a centralised nurse education service model provides more advantages in the delivery of a nurse education service than do the other models. In the following section, nurse educators’ perceptions regarding an ideal nurse education service model are examined.

## 4.4.9 Characteristics of an Ideal Nurse Education Service Model

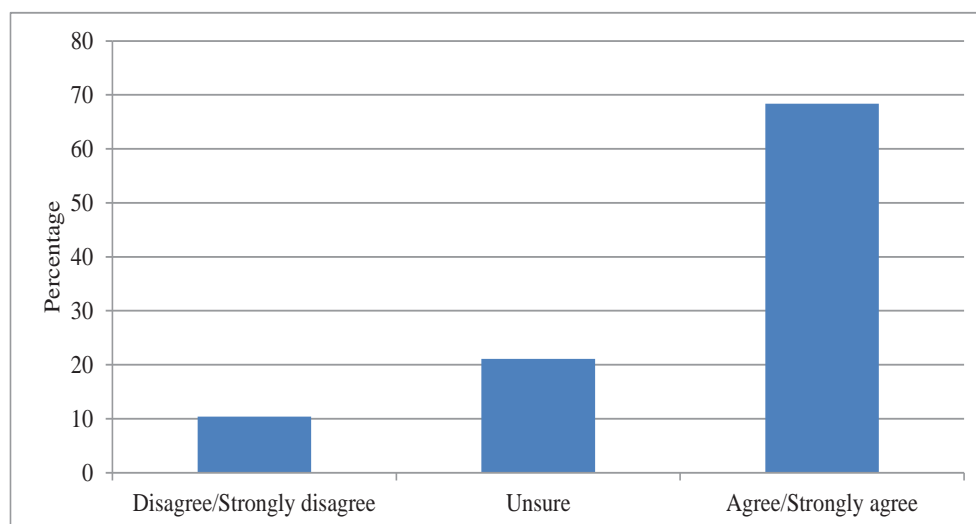
For Question 12 of the survey, nurse educators were asked to rate their level of agreement or disagreement with a number of statements regarding their perceptions of an ideal nurse education service model.

### 4.4.9.1 An Area/District Health Service Approach

The first statement was ‘an area/district health service approach’, with the majority (68.4%, n=269) agreeing or strongly agreeing with the statement. This confirms the finding of phase two, where this was raised as an aspect of an ideal nurse education model. Nurse educators felt that coordinating training across a number of health sites within a health service area/district would decrease repetition and increase efficiency (see Table 4.45 and Figure 4.50).

**Table 4.45. An Area/District Health Service Approach**

Answer	Frequency	Per cent
Disagree/Strongly disagree	41	10.4
Unsure	83	21.1
Agree/Strongly agree	269	68.4
Total	393	100.0



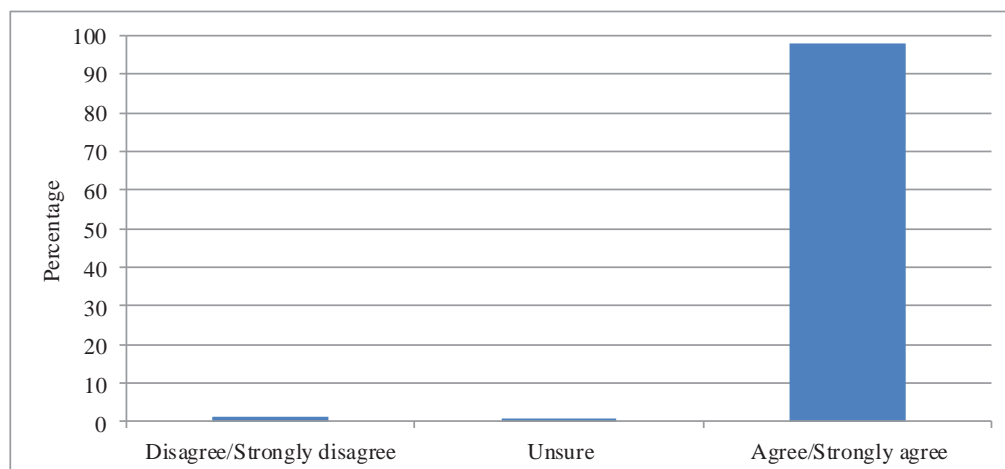
**Figure 4.50. An Area/District Health Service Approach**

#### 4.4.9.2 Clear Nurse Educator Role Definition

The second statement was ‘clear nurse educator role definition’, as the scope of the nurse educator is not always clearly defined and nurse educators can be unclear on what is expected of them. The vast majority of nurse educators (98%, n=385) agreed or strongly agreed with the statement. Earlier question responses highlighted that nurse educators can struggle with a clear role identity, as they are often asked to undertake duties outside their role. This result of a high level of agreement indicates that clear role definition is very important to nurse educators at all levels, irrespective of which model they currently work within (see Table 4.46 and Figure 4.51).

**Table 4.46. Clear Nurse Educator Role Definition**

Answer	Frequency	Per cent
Disagree / Strongly disagree	5	1.3
Unsure	3	0.8
Agree / Strongly agree	385	98.0
Total	393	100.0



**Figure 4.51. Clear Nurse Educator Role Definition**

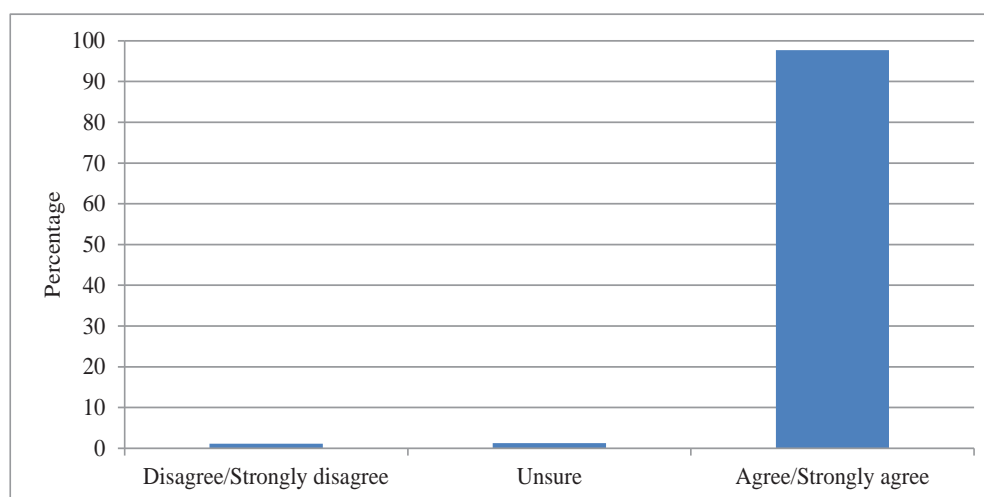
#### 4.4.9.3 Close Links with Nurse Unit Managers

The third statement, ‘close links with nurse unit managers’, refers to the nurse educators forming effective working relationships with the nurse unit managers and meeting with them frequently to keep abreast of issues arising within the clinical area. The overwhelming majority of nurse educators (97.7%, n=384) agreed or strongly

agreed with the statement. This is a high level of agreement that demonstrates that educators of all levels and from different service models all understand the value of an effective relationship with and the importance of working closely with the nurse unit manager (see Table 4.47 and Figure 4.52).

**Table 4.47. Close Links with Unit Nurse Managers**

Answer	Frequency	Per cent
Disagree/Strongly disagree	4	1.1
Unsure	5	1.3
Agree/Strongly agree	384	97.7
Total	393	100.0



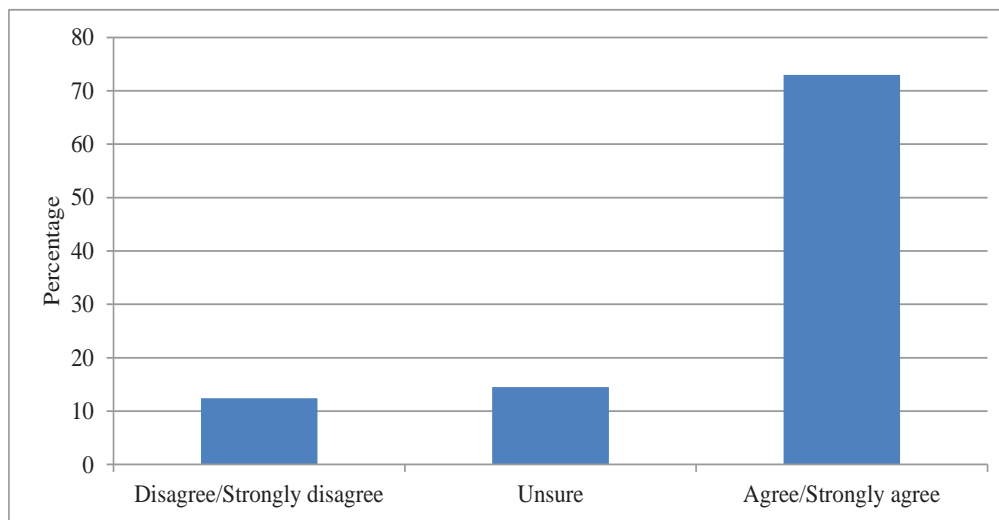
**Figure 4.52. Close Links with Unit Nurse Managers**

#### 4.4.9.4 Junior Nurse Educators Are Managed by Senior Nurse Educators

The fourth statement was ‘junior nurse educators are managed by senior nurse educators’, with the majority (73%, n=287) agreeing or strongly agreeing with the statement. This was also raised in phase two as an aspect of an ideal nurse education model when nurse educators suggested that a centralised model was ideal. With only 32% (n=125) of participants in this phase working within a centralised model, it is interesting that 41% (n=162) of the 73% agreeing or strongly agreeing with this statement were working within a non-centralised model in which junior nurse educators did not report to the senior nurse educators. Thus, they were expressing their opinion that a model other than theirs was ideal (see Table 4.48 and Figure 4.53).

**Table 4.48. Junior Nurse Educators Are Managed by Senior Nurse Educators**

Answer	Frequency	Per cent
Disagree/Strongly disagree	49	12.4
Unsure	57	14.5
Agree/Strongly agree	287	73.0
Total	393	100.0



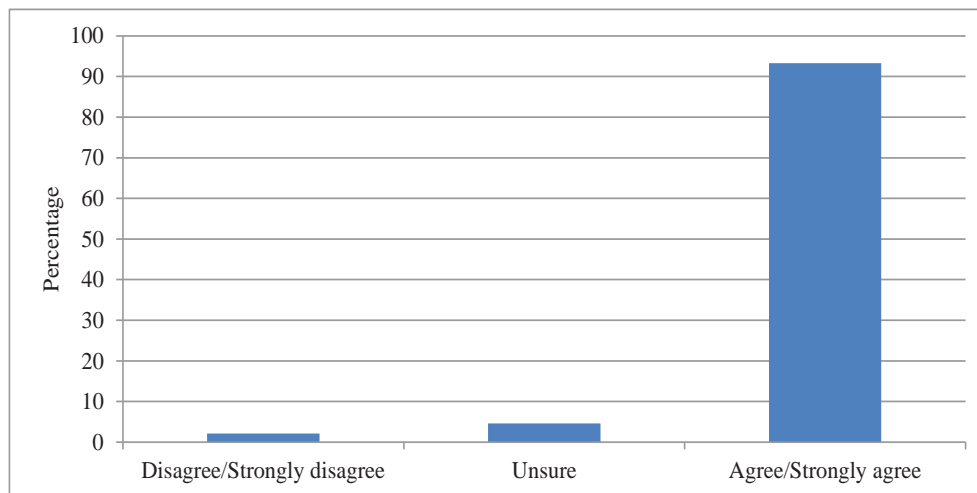
**Figure 4.53. Junior Nurse Educators Are Managed by Senior Nurse Educators**

#### 4.4.9.5 An Interprofessional Approach

The fifth statement was ‘an interprofessional approach’ to the delivery of training, with the majority (93.3%, n=367) agreeing or strongly agreeing with the statement. This was also raised as an aspect of an ideal nurse education service model by participants in phase two. This result is not surprising, as there has been significant literature published in support of this approach, with most educational services attempting to incorporate it into practice where possible, especially in training teams such as Medical Emergency Teams (Swisher et al., 2010) (see Table 4.49 and Figure 4.54).

**Table 4.49. An Interprofessional Approach**

Answer	Frequency	Per cent
Disagree/Strongly disagree	8	2.1
Unsure	18	4.6
Agree/Strongly agree	367	93.3
Total	393	100.0



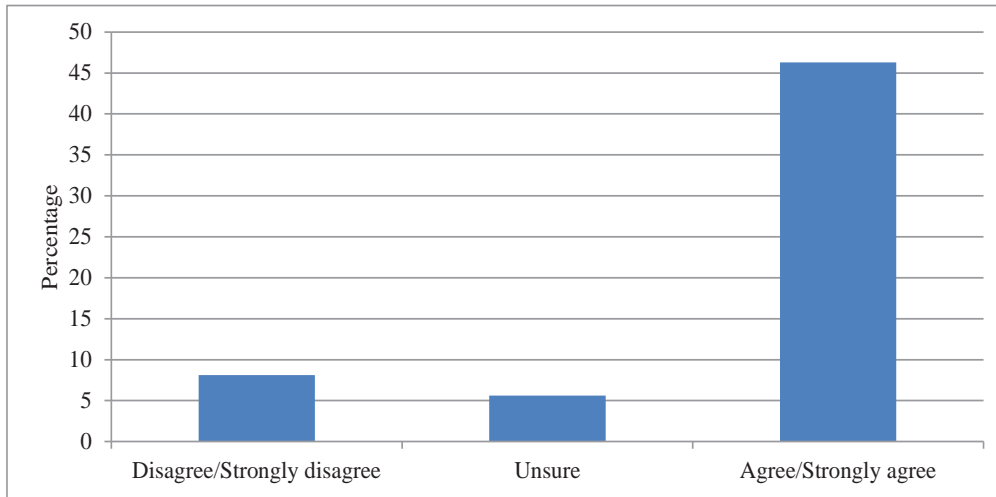
**Figure 4.54. An Interprofessional Approach**

#### 4.4.9.6 Postgraduate Qualifications for Nurse Educators

The sixth statement was ‘nurse educators having postgraduate education qualifications’, with the majority (86.3%, n=339) agreeing or strongly agreeing with the statement. This verifies the finding of phase two, where this was raised as an aspect of an ideal nurse education service model. Nurse educators in phase two expressed that having postgraduate qualifications was important for raising the recognition of nurse education as a speciality within nursing, as postgraduate qualifications for clinical nurses have been an expectation for some time (see Table 4.50 and Figure 4.55).

**Table 4.50. Nurse Educators Having Postgraduate Education Qualifications**

Answer	Frequency	Per cent
Disagree/Strongly disagree	32	8.1
Unsure	22	5.6
Agree/Strongly agree	339	86.3
Total	393	100.0



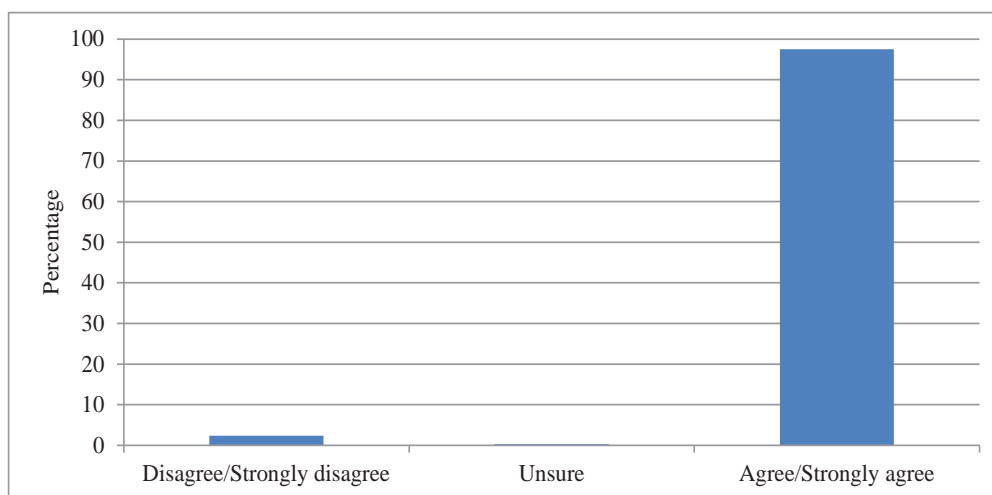
**Figure 4.55. Nurse Educators Having Postgraduate Education Qualifications**

#### 4.4.9.7 Well-resourced Education Service

The seventh statement concerned whether the education service was ‘well resourced’, with the majority (97.5%, n=383) agreeing or strongly agreeing with the statement. This was also raised in phase two as a feature of an ideal nurse education service model. Nurse educators expressed the importance of the education department having sufficient funds to purchase training equipment and ongoing supplies and to employ the staff to deliver the service required by the organisation (see Table 4.51 and Figure 4.56).

**Table 4.51. Being Well Resourced**

Answer	Frequency	Per cent
Disagree/Strongly disagree	9	2.3
Unsure	1	0.3
Agree/Strongly agree	383	97.5
Total	393	100.0



**Figure 4.56. Being Well Resourced**

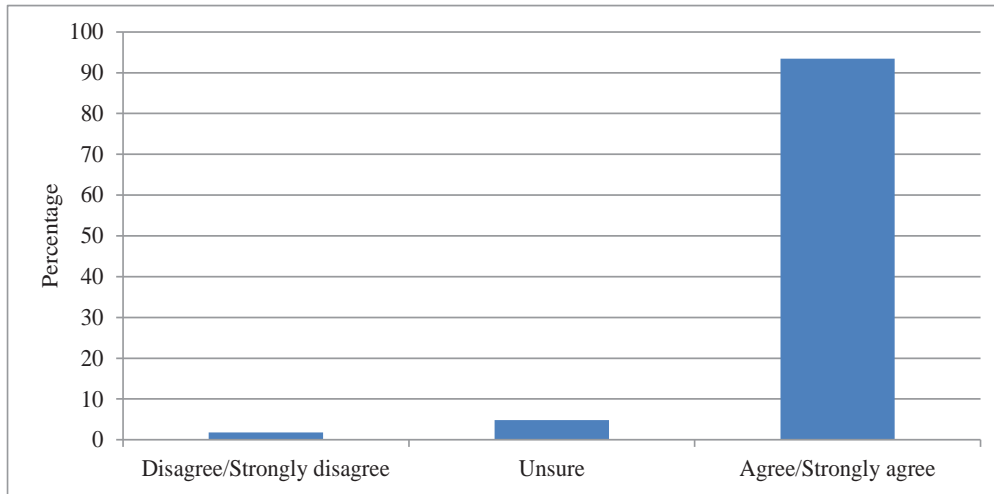
#### 4.4.9.8 Being Focussed on the Hospital’s Vision

The eighth statement, ‘being focussed on the hospital’s vision’, refers to how the education service supports the hospital executive in achieving their goals. The majority of nurse educators (93.4%, n=367) agreed or strongly agreed with the statement. Nurse educators highlighted that in an ideal nurse education service, the nurse education service needs to engage with the hospital executive to keep abreast of the organisation’s plans and should organise its business to support the hospital’s vision and strategic plans (see Table 4.52 and Figure 4.57).

**Table 4.52. Being Focussed on the Hospital’s Vision**

Answer	Frequency	Per cent
Disagree/Strongly disagree	7	1.8
Unsure	19	4.8
Agree/Strongly agree	367	93.4
Total	393	100.0





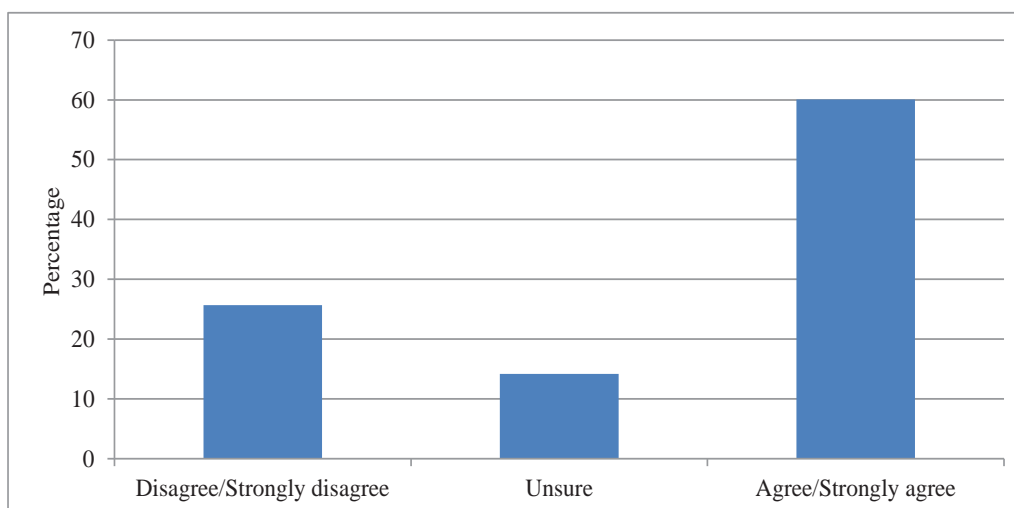
**Figure 4.57. Being Focused on the Hospital's Vision**

#### 4.4.9.9 Nurse Educators Employed Full Time

The ninth statement was 'nurse educators being employed full time', with the majority (60.1%, n=236) agreeing or strongly agreeing with the statement. This was quite a low agreement rate compared to the responses for the other statements. This may demonstrate that nurse educators not being full time is not a widespread issue and that the view is that nurse educators do not necessarily need to be full time (see Table 4.53 and Figure 4.58).

**Table 4.53. Nurse Educators Being Employed Full Time**

Answer	Frequency	Per cent
Disagree/Strongly disagree	101	25.7
Unsure	56	14.2
Agree/Strongly agree	236	60.1
Total	393	100.0



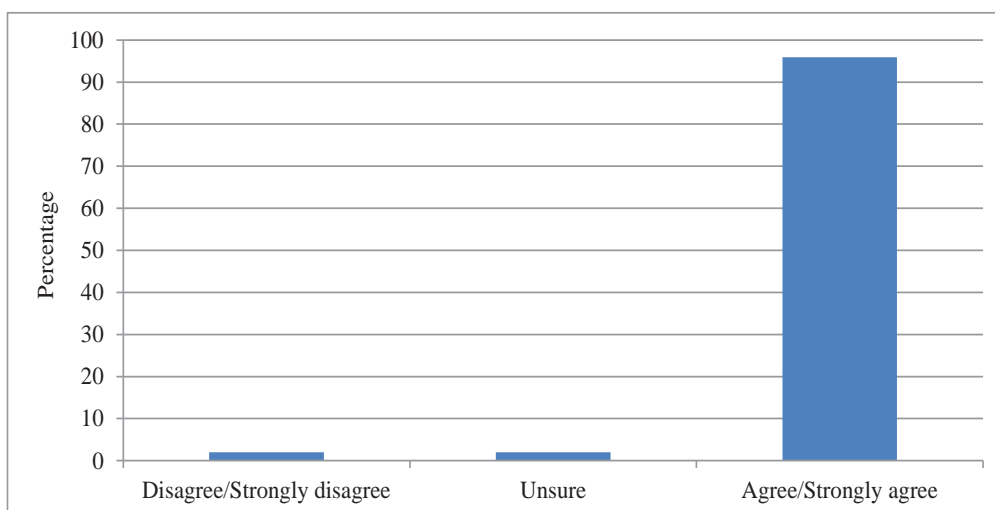
**Figure 4.58. Nurse Educators Being Employed Full Time**

#### 4.4.9.10 Ability to Influence Change

The tenth statement was ‘having the ability to influence change across the organisation’, with the majority (95.9%, n=377) agreeing or strongly agreeing with the statement. This confirms the finding of phase two, where this was also raised as a component of an ideal nurse education service model. In phase two, the nurse education service was found not to be represented at the executive level at a number of organisations, affecting the service’s ability to influence change across the organisation (see Table 4.54 and Figure 4.59).

**Table 4.54. Having the Ability to Influence Change Across the Organisation**

Answer	Frequency	Per cent
Disagree/Strongly disagree	8	2.0
Unsure	8	2.0
Agree/Strongly agree	377	95.9
Total	393	100.0



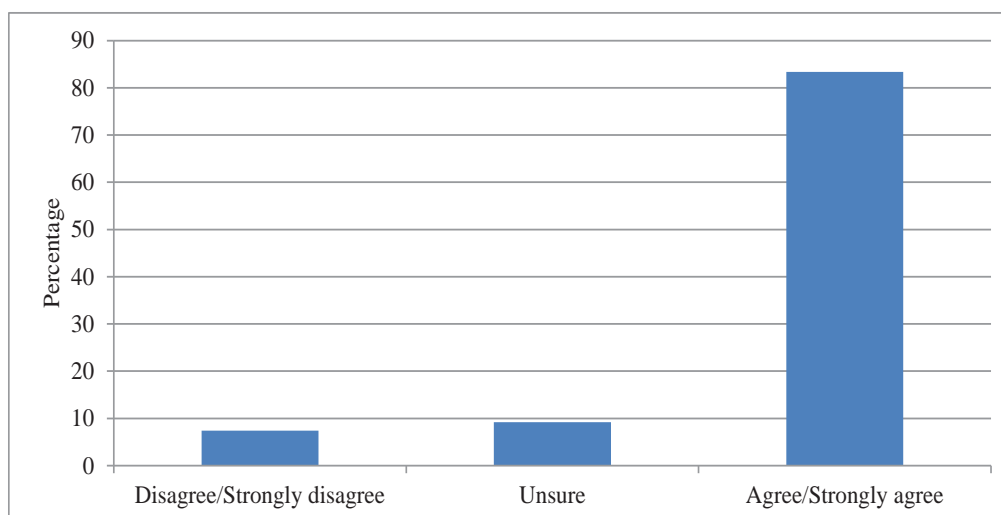
**Figure 4.59. Having the Ability to Influence Change Across the Organisation**

#### **4.4.9.11 Ward-based Educators Employed at a Higher Level than Clinical Staff**

The eleventh statement was ‘ward-based nurse educators employed at a higher level than clinical staff’, with the majority (83.4%, n=328) agreeing or strongly agreeing with the statement. This is seen as an issue for junior and senior nurse educators, who are often asked to monitor performance and educate nursing staff at the same employment award/level as them. This makes it difficult if staff refuse their advice or guidance, as the educators have no authority over them. Interestingly, since the commencement of this study, one hospital in W.A. has attempted to address this issue by reclassifying the employment level of their junior educators so that they are at a higher level than the clinical nurses (see Table 4.55 and Figure 4.60).

**Table 4.55. Ward-based Nurse Educators Employed at a Higher Level than Clinical Staff**

<b>Answer</b>	<b>Frequency</b>	<b>Per cent</b>
Disagree/Strongly disagree	29	7.4
Unsure	36	9.2
Agree/Strongly agree	328	83.4
Total	393	100.0



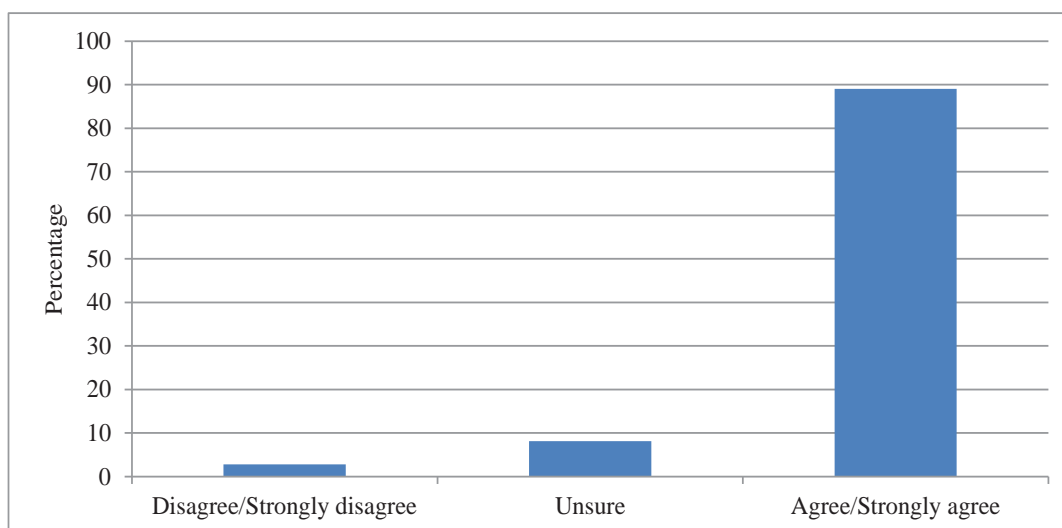
**Figure 4.60. Ward-based Nurse Educators Employed at a Higher Level than Clinical Staff**

#### 4.4.9.12 Reporting against Key Performance Indicators

The twelfth statement was ‘reporting against key performance indicators’, with the majority (89%, n=350) agreeing or strongly agreeing with the statement. This is a strong result and demonstrates that nurse educators are becoming more aware of the importance of operating in a quality improvement and financial environment in which they can clearly set, articulate and demonstrate the outcomes of their service (see Table 4.56 and Figure 4.61).

**Table 4.56. Reporting Against Key Performance Indicators**

Answer	Frequency	Per cent
Disagree/Strongly disagree	11	2.8
Unsure	32	8.1
Agree/Strongly agree	350	89.0
Total	393	100.0



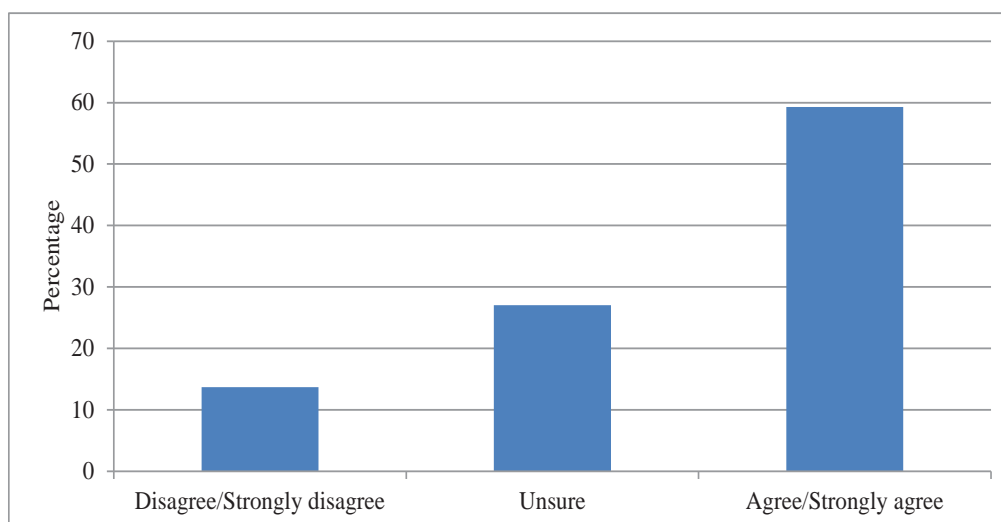
**Figure 4.61. Reporting Against Key Performance Indicators**

#### **4.4.9.13 Senior Nurse Educator Joint Appointments with Universities**

The thirteenth statement was ‘senior nurse educator joint appointments with universities’, with the majority (59.3%, n=233) agreeing or strongly agreeing with the statement. Although ‘closer links with universities’ was raised in phase two as an aspect of an ideal model, this is the lowest level of agreement seen with a statement in this question, indicating that nurse educators value this as the least important aspect of an ideal nurse education service model. This may be due to a lack of awareness of the role and its value to the service, or because educators feel it is not essential to the functioning of a nurse education service model (see Table 4.57 and Figure 4.62).

**Table 4.57. Senior Nurse Educator Joint Appointments with Universities**

<b>Answer</b>	<b>Frequency</b>	<b>Per cent</b>
Disagree/Strongly disagree	54	13.7
Unsure	106	27.0
Agree/Strongly agree	233	59.3
Total	393	100.0



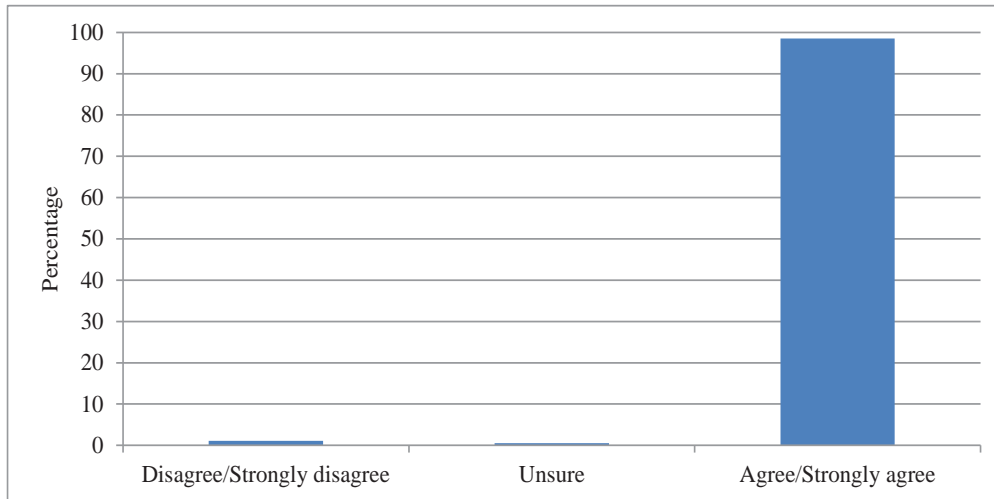
**Figure 4.62. Senior Nurse Educator Joint Appointments with Universities**

#### 4.4.9.14 Service Closely Aligned with Clinical Practice

The fourteenth statement was ‘a service closely aligned with clinical practice’, with the overwhelming majority (98.5%, n=387) agreeing or strongly agreeing with the statement. Nurse educators expressed the importance of strong relationships with staff and a visible presence in clinical areas to remain current with the business of care delivery and meet the needs of clinical areas (see Table 4.58 and Figure 4.63).

**Table 4.58. A Service Closely Aligned with Clinical Practice**

Answer	Frequency	Per cent
Disagree/Strongly disagree	4	1.1
Unsure	2	0.5
Agree/Strongly agree	387	98.5
Total	393	100.0



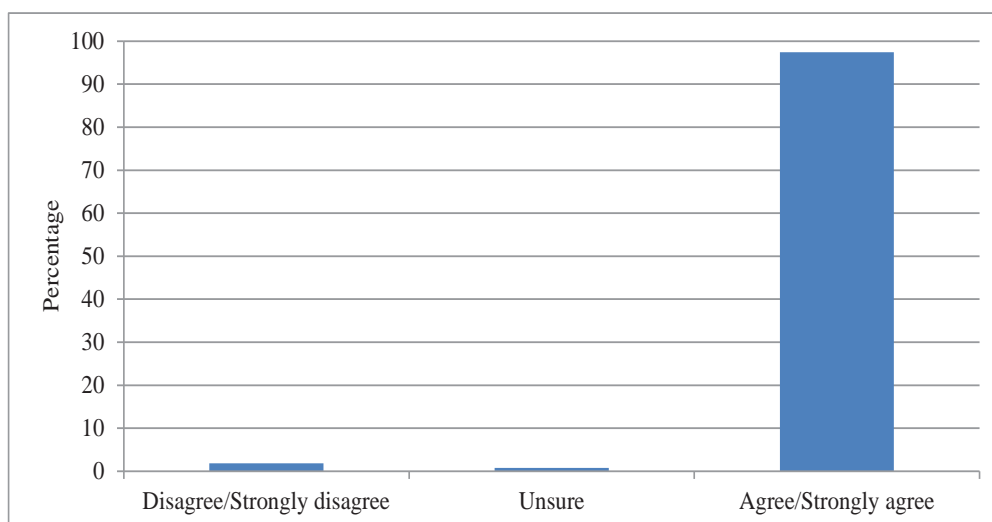
**Figure 4.63. A Service Closely Aligned with Clinical Practice**

#### **4.4.9.15 Training for Nurse Educators**

The fifteenth statement was ‘training for nurse educators’, with the vast majority (97.4%, n=383) agreeing or strongly agreeing with the statement. This was also raised in phase two as an important facet of an ideal nurse education model. To develop as a specialist in education, it is important that nurse educators are given the opportunity to undertake training in education, delivered by experienced, expert educators, to develop their knowledge and skills (see Table 4.59 and Figure 4.64).

**Table 4.59. Training for Nurse Educators**

<b>Answer</b>	<b>Frequency</b>	<b>Per cent</b>
Disagree/Strongly disagree	7	1.8
Unsure	3	0.8
Agree/Strongly agree	383	97.4
Total	393	100.0



**Figure 4.64. Training for Nurse Educators**

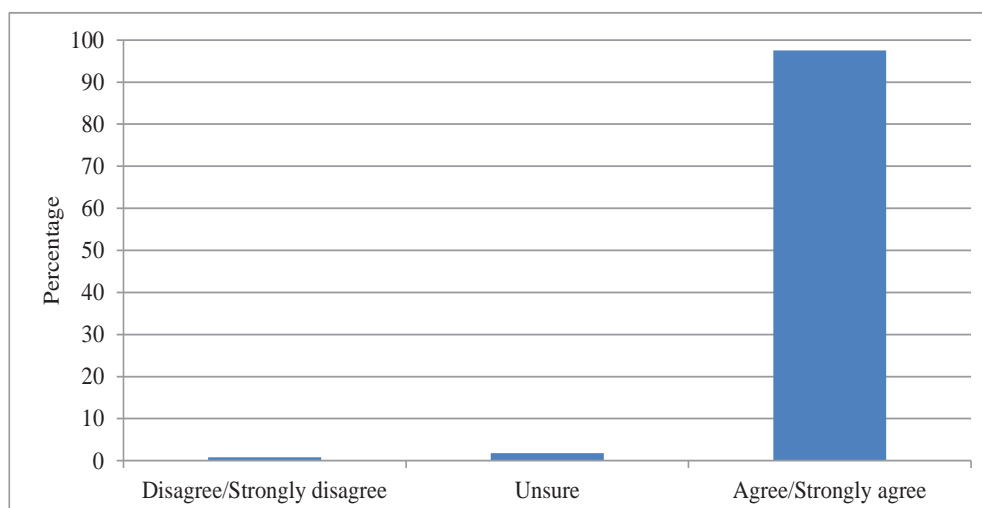
#### 4.4.9.16 Training Framework for Education Service Delivery

The sixteenth statement was ‘a training framework for education service delivery’, with the great majority (97.5%, n=383) agreeing or strongly agreeing with the statement. This is a strong result, demonstrating that nurse educators understand the importance of working within a framework for education service delivery to ensure there is an organised plan, directing their educational topics and the reasons these are needed (see Table 4.60 and Figure 4.65).

**Table 4.60. A Training Framework for Education Service Delivery**

Answer	Frequency	Per cent
Disagree/Strongly disagree	3	0.8
Unsure	7	1.8
Agree/Strongly agree	383	97.5
Total	393	100.0





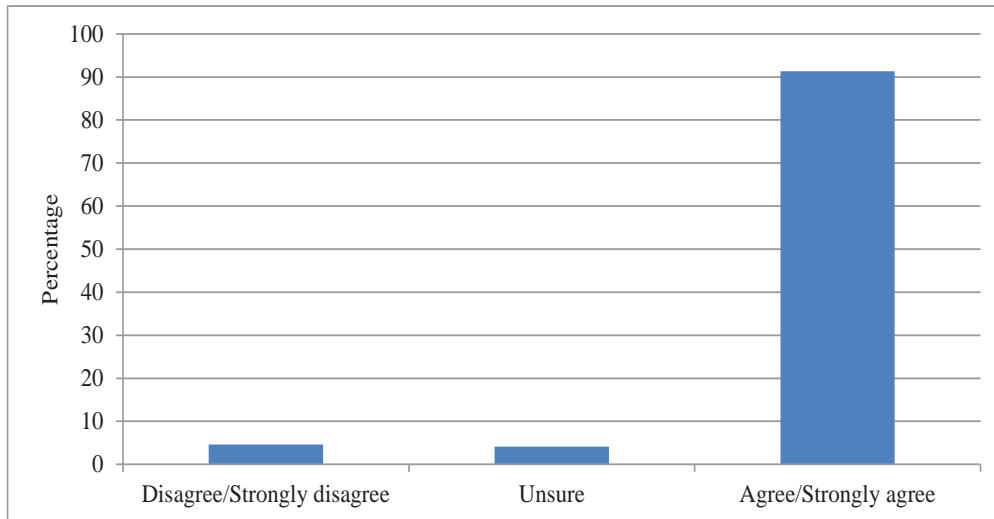
**Figure 4.65. A Training Framework for Education Service Delivery**

#### 4.4.9.17 Nurse Educators Not Filling Staffing Deficits

The seventeenth statement was ‘nurse educators not filling staffing deficits’, with the majority (91.3%, n=359) agreeing or strongly agreeing with the statement. This was also raised in phase two as an important aspect of an ideal nurse education model to allow continuity of practice and prevent cancellation of training and other services (see Table 4.61 and Figure 4.66).

**Table 4.61. Nurse Educators Not Filling Staffing Deficits**

Answer	Frequency	Per cent
Disagree/Strongly disagree	18	4.6
Unsure	16	4.1
Agree/Strongly agree	359	91.3
Total	393	100.0



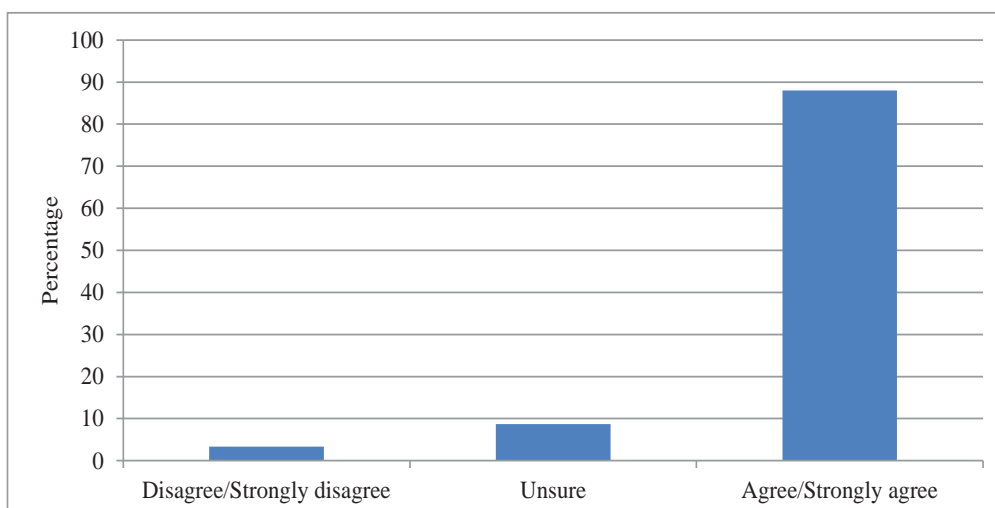
**Figure 4.66. Nurse Educators Not Filling Staffing Deficits**

#### 4.4.9.18 Includes Research Education

The eighteenth statement was ‘includes research education’, with the majority (88%, n=346) agreeing or strongly agreeing with the statement. This verifies the phase two finding, where this was also raised as a component of an ideal nurse education model. Nurse educators highlighted the importance of a closer relationship between research and nursing education and the need to develop nurses in this area by delivering more training on research methodology. This is important to support the increasing emphasis on evidence-based practice and clinical improvement audits to demonstrate the delivery of a quality service (see Table 4.62 and Figure 4.67).

**Table 4.62. Includes Research Education**

Answer	Frequency	Per cent
Disagree/Strongly disagree	13	3.3
Unsure	34	8.7
Agree/Strongly agree	346	88.0
Total	393	100.0



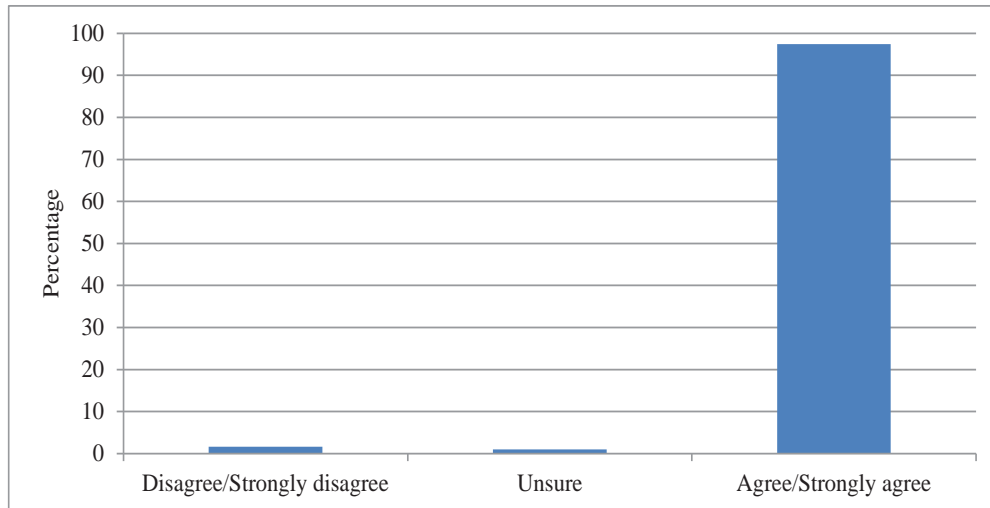
**Figure 4.67. Includes Research Education**

#### **4.4.9.19 Evidence of the Effectiveness/Outcomes of Education Is Available**

The nineteenth statement was ‘evidence of the effectiveness/outcomes of education is available’, with the majority (97.4%, n=383) agreeing or strongly agreeing with the statement. Nurse educators were aware of the increasing pressure within organisations to be able to produce clear evidence of the outcomes of the investment in education (see Table 4.63 and Figure 4.68).

**Table 4.63. Evidence of the Effectiveness/Outcomes of Education Is Available**

<b>Answer</b>	<b>Frequency</b>	<b>Per cent</b>
Disagree/Strongly disagree	6	1.6
Unsure	4	1.0
Agree/Strongly agree	383	97.4
Total	393	100.0



**Figure 4.68. Evidence of the Effectiveness/Outcomes of Education Is Available**

#### **4.4.9.20 Summary**

The majority of responses to statements regarding the nurse educators' ideal nurse education service model showed a significant level of agreement, with the highest level of agreement for the statement 'a service closely aligned with clinical practice', with (98.5%, n=387) agreeing or strongly agreeing with the statement. There were, however, a small number of statements that had a clear divide, with a significant number agreeing and a significant number disagreeing with the statement. These statements were: 'nurse educators being employed full time', with only 60.1% (n=236) agreeing or strongly agreeing with the statement and 'an area/district health service approach', with 68.4 (n=269) agreeing or strongly agreeing with the statement. The statement with the lowest level of agreement was 'senior nurse educator joint appointments with universities', with only 59.3% (n=233) agreeing or strongly agreeing with the statement and 27% (n=106) unsure.

#### **4.4.10 Future Nurse Education Service Priorities**

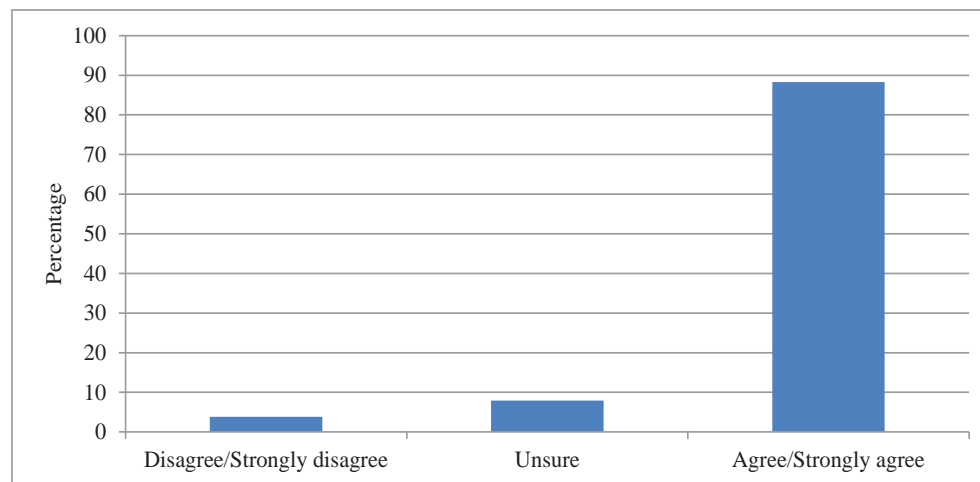
For Question 13 of the survey, nurse educators were asked to rate their level of agreement or disagreement with a number of statements regarding their opinions on the future priorities of their nurse education service.

#### 4.4.10.1 A Focus on Simulation

The first statement was ‘a focus on simulation’, with the majority of nurse educators (88.3%, n=347) agreeing or strongly agreeing with the statement. This validates the findings of phases one and two in which participants also raised simulation as a component of the future of nurse education. In phases one and two, simulation was highlighted by nurse educators as a growing area of practice within the clinical training arena, with the majority of education services now using it to enhance clinical training (see Table 4.64 and Figure 4.69).

**Table 4.64. A Focus on Simulation**

Answer	Frequency	Per cent
Disagree/Strongly disagree	15	3.8
Unsure	31	7.9
Agree/Strongly agree	347	88.3
Total	393	100.0



**Figure 4.69. A Focus on Simulation**

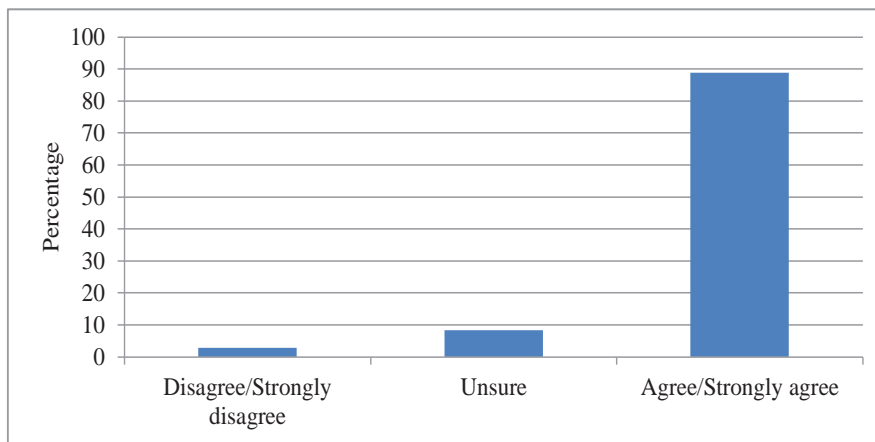
#### 4.4.10.2 Interprofessional Education

The second statement was ‘interprofessional education’, with the majority (88.8%, n=349) agreeing or strongly agreeing with the statement. Again, this confirms findings from phases one and two, where interprofessional education was highlighted as playing a role in the future of nurse education. As mentioned earlier, interprofessional training has been demonstrated to be valuable in developing teams and assisting clinicians in

understanding each other's roles (Swisher et al., 2010) (see Table 4.65 and Figure 4.70).

**Table 4.65. Interprofessional Education**

Answer	Frequency	Per cent
Disagree/Strongly disagree	11	2.8
Unsure	33	8.4
Agree/Strongly agree	349	88.8
Total	393	100.0



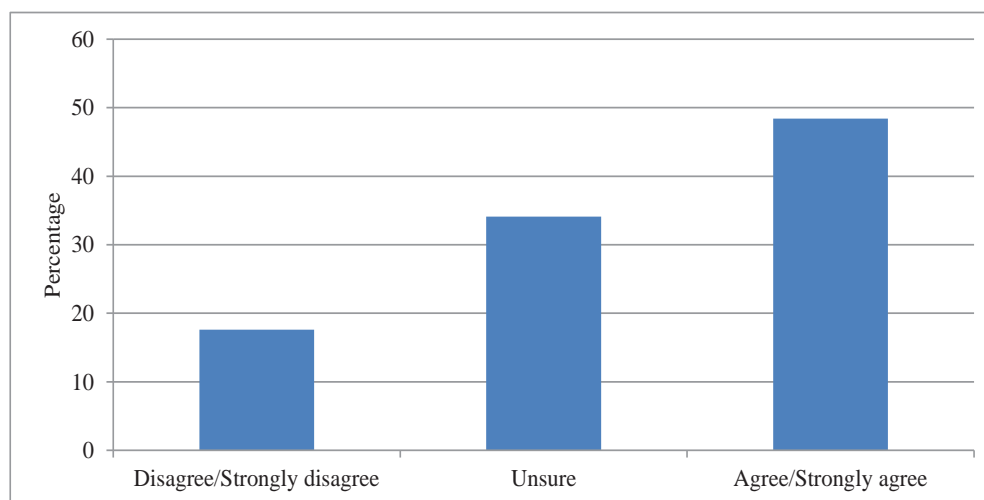
**Figure 4.70. Interprofessional Education**

#### 4.4.10.3 Increased Pay for Nurse Educators

The third statement was 'increased pay for nurse educators', with a slight majority (48.4%, n=190) agreeing or strongly agreeing with the statement, 34.1% (n=134) unsure and 17.6% (n=69) disagreeing or strongly disagreeing with the statement. This is a surprising result, as it is the second lowest level of agreement with a statement in this question, demonstrating that an increase in educators' wages is not high on nurse educators' priority list for the future (see Table 4.66 and Figure 4.71).

**Table 4.66. Increased Pay for Nurse Educators**

Answer	Frequency	Per cent
Disagree/Strongly disagree	69	17.6
Unsure	134	34.1
Agree/Strongly agree	190	48.4
Total	393	100.0



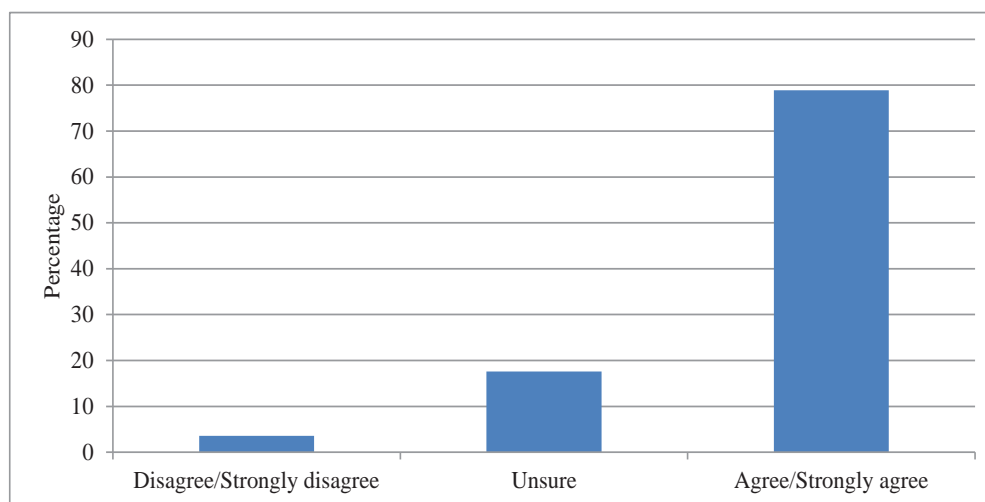
**Figure 4.71. Increased Pay for Nurse Educators**

#### **4.4.10.4 A Focus on Education in the Non-critical Care Specialties**

The fourth statement was ‘a focus on education in the non-critical care specialties’, with the majority (78.9%, n=310) agreeing or strongly agreeing with the statement. In phase two, nurse educators raised that they felt that, at present, many in-house and university-based postgraduate programs focussed on high-acuity specialties such as critical care areas. Nurse education providers are beginning to understand that nurses require further training in the more general specialties such as medical, sub-acute care, aged care and surgical nursing to develop their knowledge and skills as specialists in these areas (see Table 4.67 and Figure 4.72).

**Table 4.67. A Focus on Education in the Non-critical Care Specialities**

Answer	Frequency	Per cent
Disagree/Strongly disagree	14	3.6
Unsure	69	17.6
Agree/Strongly agree	376	78.9
Total	393	100.0



**Figure 4.72. A Focus on Education in the Non-critical Care Specialities**

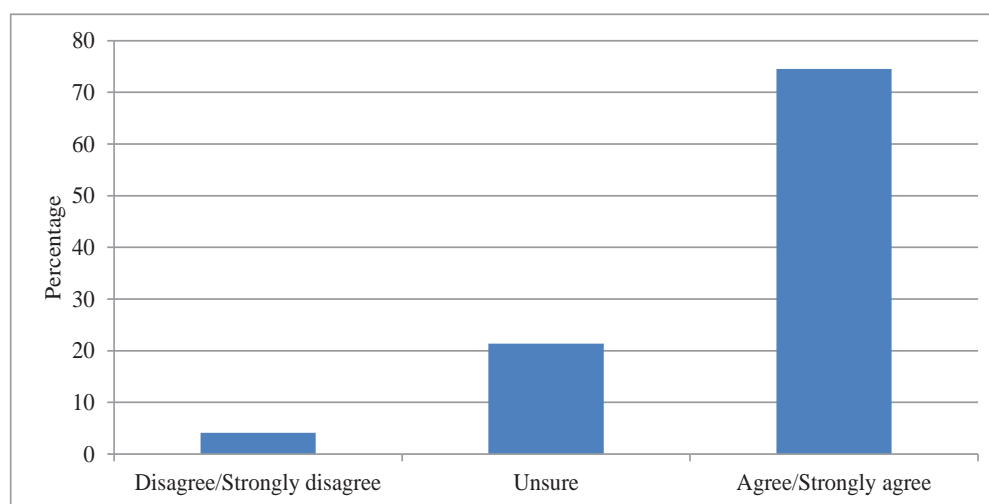
#### 4.4.10.5 More Collaboration with Universities

The fifth statement was ‘more collaboration with universities’, with the majority (74.5%, n=293) agreeing or strongly agreeing with the statement. This was also raised in phase two by participants as an aspect of the future of nurse education. This is an interesting result, as the statement ‘Senior nurse educator joint appointments with universities’, listed as an aspect of an ideal nurse education service model in the previous question, had the lowest level of agreement (59.3%, n=233). This response may indicate that nurse educators see the value in collaborating in the delivery of postgraduate programs, but do not see the value of having joint appointment positions (see Table 4.68 and Figure 4.73).



**Table 4.68. More Collaboration with Universities**

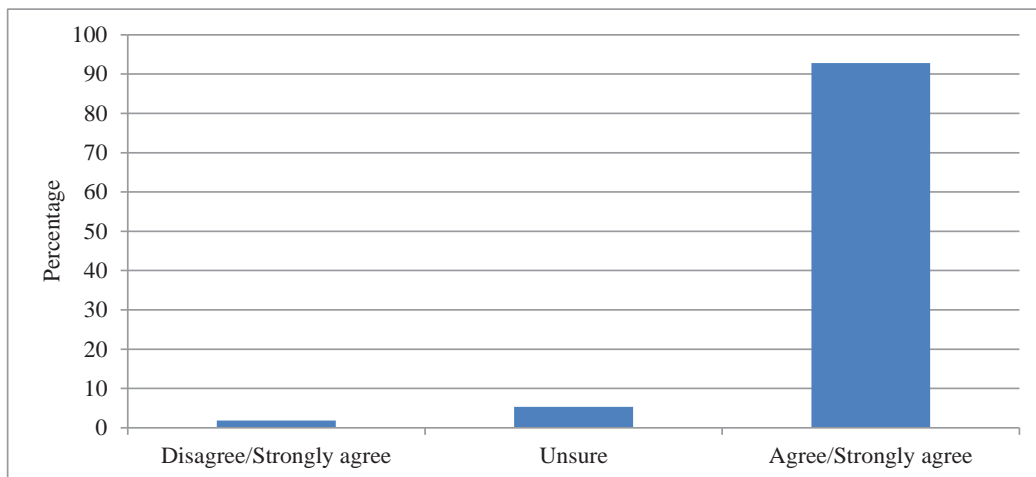
Answer	Frequency	Per cent
Disagree/Strongly disagree	16	4.1
Unsure	84	21.4
Agree/Strongly agree	293	74.5
Total	393	100.0

**Figure 4.73. More Collaboration with Universities****4.4.10.6 Increased Use of Technology**

The sixth statement was ‘increased use of technology’, with the majority (92.8%, n=365) agreeing or strongly agreeing with the statement. This confirms the findings of phases one and two, where this was raised by participants as a characteristic of the future of nurse education in their service model. Technology is becoming an integral part of education delivery and an expectation for new nurses who have completed their undergraduate training using online learning, learning management systems and simulation. There is pressure on nurse educators to stay up to date with advances in technology and use them in their everyday practice (see Table 4.69 and Figure 4.74).

**Table 4.69. Increased Use of Technology**

Answer	Frequency	Per cent
Disagree/Strongly disagree	7	1.8
Unsure	21	5.3
Agree/Strongly agree	365	92.8
Total	393	100.0



**Figure 4.74. Increased Use of Technology**

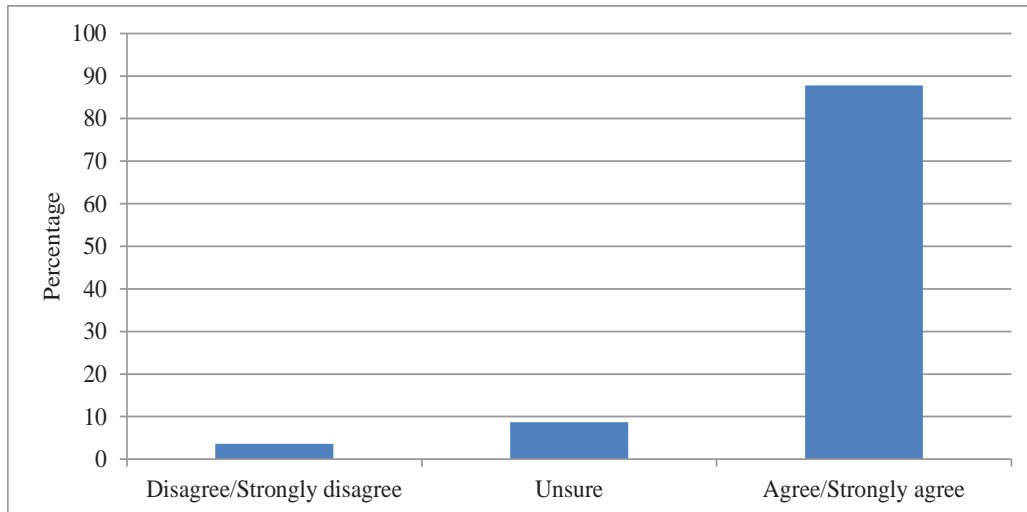
#### 4.4.10.7 Postgraduate Education Qualifications for Nurse Educators

The seventh statement was ‘postgraduate education qualifications for nurse educators’, with the majority (87.8%, n=345) agreeing or strongly agreeing with the statement.

This was also raised by participants as a component of an ideal nurse education service model in the previous question and is clearly important to nurse educators, who feel that having postgraduate qualifications will support a high quality of practice and lead to a greater recognition of the speciality (see Table 4.70 and Figure 4.75).

**Table 4.70. Postgraduate Education Qualifications for Nurse Educators**

Answer	Frequency	Per cent
Disagree/Strongly disagree	14	3.6
Unsure	34	8.7
Agree/Strongly agree	345	87.8
Total	393	100.0



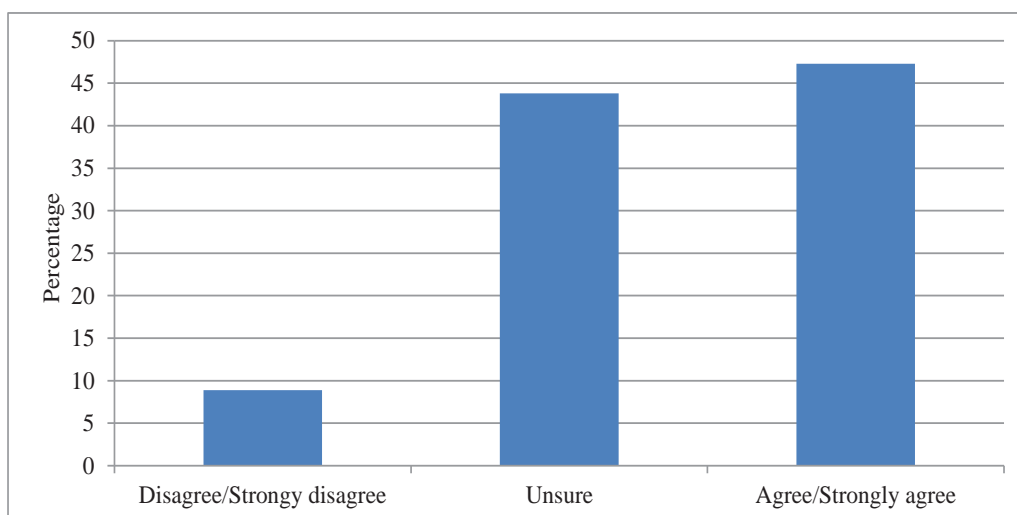
**Figure 4.75. Postgraduate Education Qualifications for Nurse Educators**

#### 4.4.10.8 Raising Revenue to Maintain Operations in an ABF Environment

The eighth statement was ‘raising revenue to maintain operations in an ABF environment’, with the majority (47.3%, n=186) agreeing or strongly agreeing with, or unsure about (43.8%, n=172), the statement. This is the lowest level of agreement for any statement in this question. The large number answering ‘unsure’ may indicate that many of the participants were not aware of ABF and the future impact it will have on nurse education services (see Table 4.71 and Figure 4.76).

**Table 4.71. Raising Revenue to Maintain Operations in an ABF Environment**

Answer	Frequency	Per cent
Disagree/Strongly disagree	35	8.9
Unsure	172	43.8
Agree/Strongly agree	186	47.3
Total	393	100.0



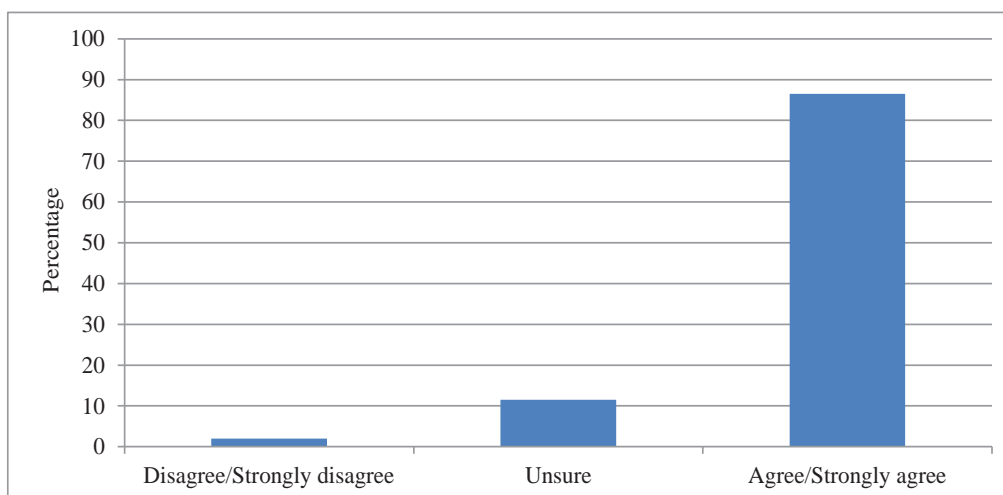
**Figure 4.76. Raising Revenue to Maintain Operations in an ABF Environment**

#### 4.4.10.9 Increased Collaboration between Hospital Sites

The ninth statement was ‘increased collaboration between hospital sites’, with the majority (86.5%, n=340) agreeing or strongly agreeing with the statement. This was also raised by participants in phases one and two of the study as an aspect of the future of nurse education within their service model. As mentioned earlier, nurse educators expressed that collaboration between sites would increase the efficiency of nurse education services, as it would reduce duplication of services (see Table 4.72 and Figure 4.77).

**Table 4.72. Increased Collaboration Between Hospital Sites**

Answer	Frequency	Per cent
Disagree/Strongly disagree	8	2.0
Unsure	45	11.5
Agree/Strongly agree	340	86.5
Total	393	100.0



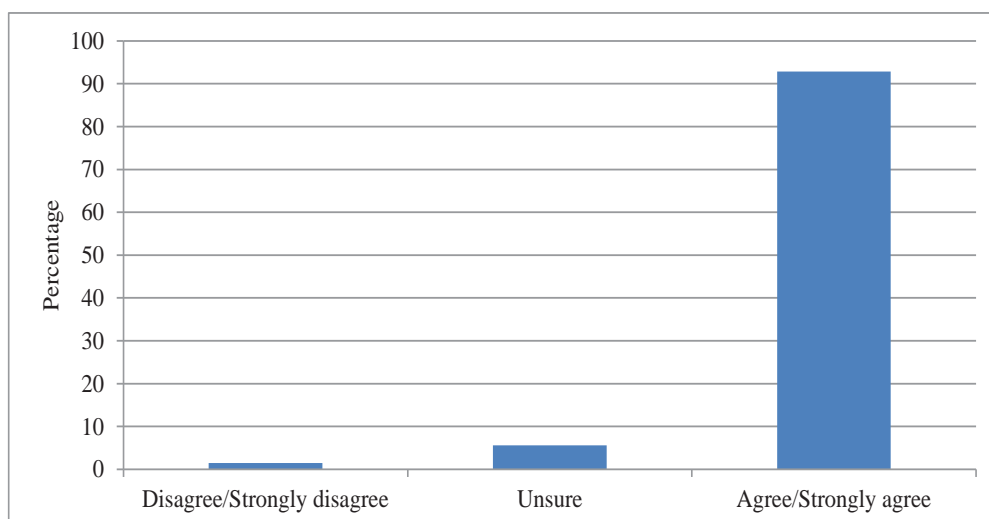
**Figure 4.77. Increased Collaboration Between Hospital Sites**

#### 4.4.10.10 Working Towards Set Education Quality Standards

The tenth statement was ‘working towards set education quality standards’, with the majority (92.9%, n=365) agreeing or strongly agreeing with the statement. This is a high level of agreement, which demonstrates that nurse educators are aware of the quality and safety environment in which they operate or to which they should aspire (see Table 4.73 and Figure 4.78).

**Table 4.73. Working Towards Set Education Quality Standards**

Answer	Frequency	Per cent
Disagree/Strongly disagree	6	1.5
Unsure	22	5.6
Agree/Strongly agree	365	92.9
Total	393	100.0



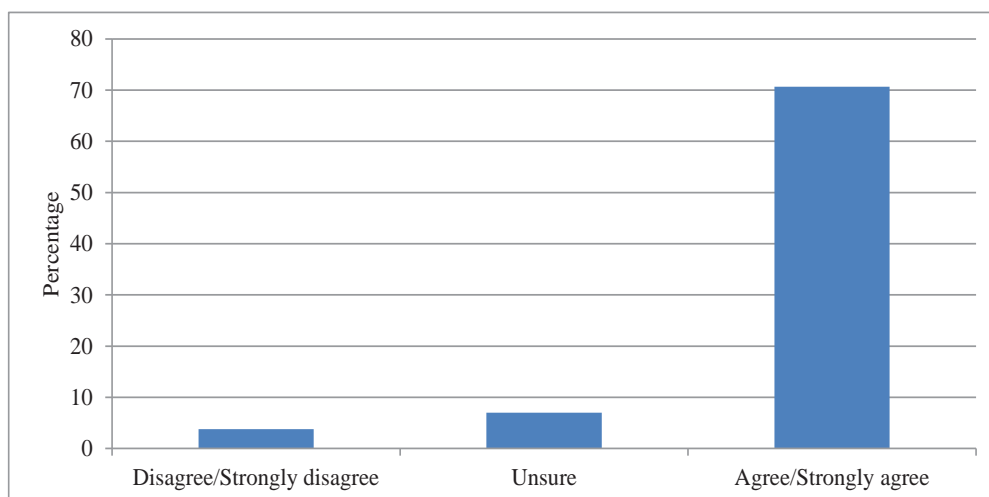
**Figure 4.78. Working Towards Set Education Quality Standards**

#### **4.4.10.11 An Increase in the Number of Clinical Staff Undertaking a Postgraduate Qualification**

The eleventh statement was ‘an increase in the number of clinical staff undertaking a postgraduate qualification’, with the majority (83.4%, n=328) agreeing or strongly agreeing with the statement. This demonstrates that nurse educators see a trend in clinical staff engaging with ongoing formal training by undertaking postgraduate qualifications throughout their careers (see Table 4.74 and Figure 4.79).

**Table 4.74. An Increase in the Number of Clinical Staff Undertaking a Postgraduate Qualification**

Answer	Frequency	Per cent
Disagree/Strongly disagree	15	3.8
Unsure	50	12.7
Agree/Strongly agree	278	70.7
Total	393	100.0



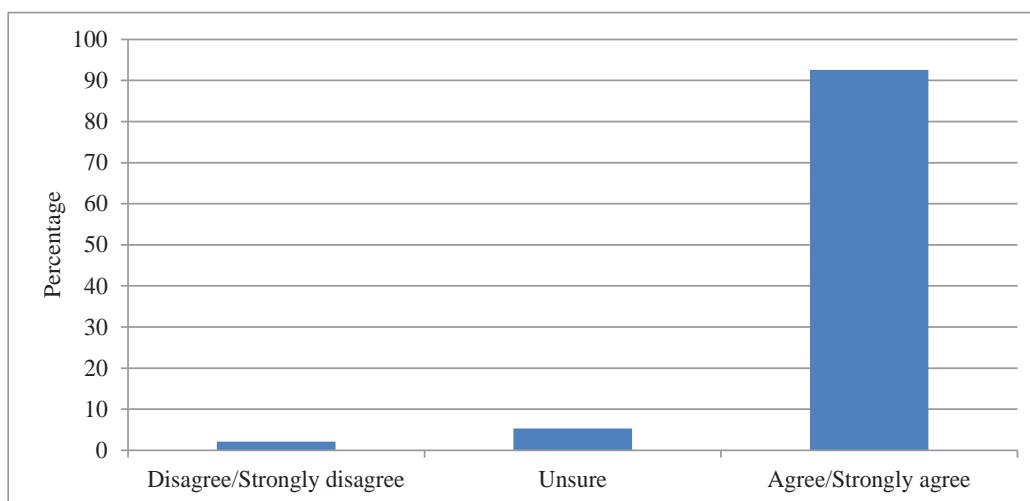
**Figure 4.79. An Increase in the Number of Clinical Staff Undertaking a Postgraduate Qualification**

#### 4.4.10.12 More Flexible Teaching Modalities

The twelfth statement was ‘more flexible teaching modalities’, with the majority (92.6%, n=364) agreeing or strongly agreeing with the statement. This was also outlined in phases one and two by participants as the future of their nurse education service. Nurse educators stated that they would need to be flexible and innovative in how they delivered training in the future, as the traditional face-to-face delivery mode could be resource intensive and made it difficult to attract participants (see Table 4.75 and Figure 4.80).

**Table 4.75. More Flexible Teaching Modalities**

Answer	Frequency	Per cent
Disagree/Strongly disagree	8	2.1
Unsure	21	5.3
Agree/Strongly agree	364	92.6
Total	393	100.0



**Figure 4.80. More Flexible Teaching Modalities**

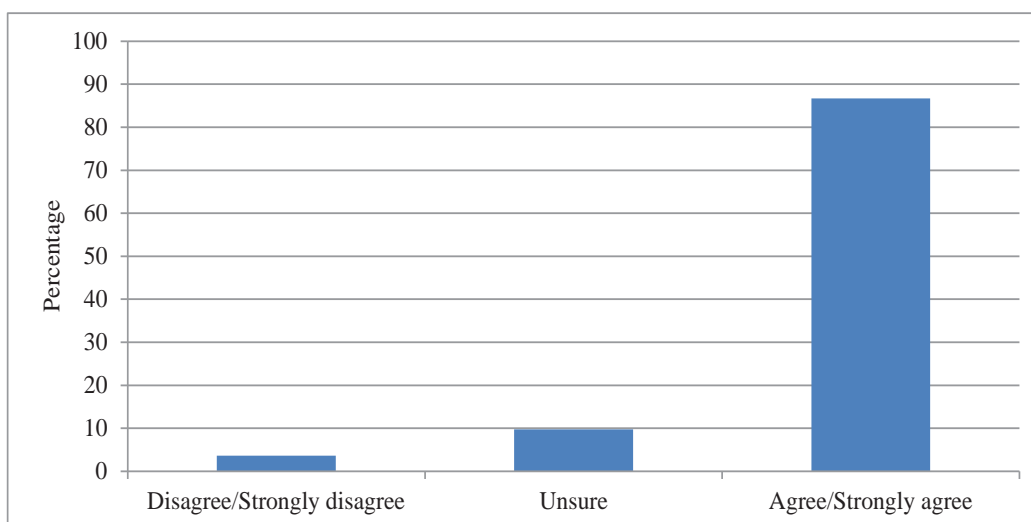
#### 4.4.10.13 More Self-directed Education

The thirteenth statement was ‘more self-directed education’, with the majority (86.7%, n=341) agreeing or strongly agreeing with the statement. This confirms the findings of phase two, where this was also raised by participants as a component of the future of the nurse education service. Nurse educators felt that, in the future, nurses would be more accountable for their own training rather than relying on the nurse education service and so would be more directed in resourcing their own training or undertaking the training delivered by the nurse education service (see Table 4.76 and Figure 4.81).

**Table 4.76. More Self-directed Education**

Answer	Frequency	Per cent
Disagree/Strongly disagree	14	3.6
Unsure	38	9.7
Agree/Strongly agree	341	86.7
Total	393	100.0





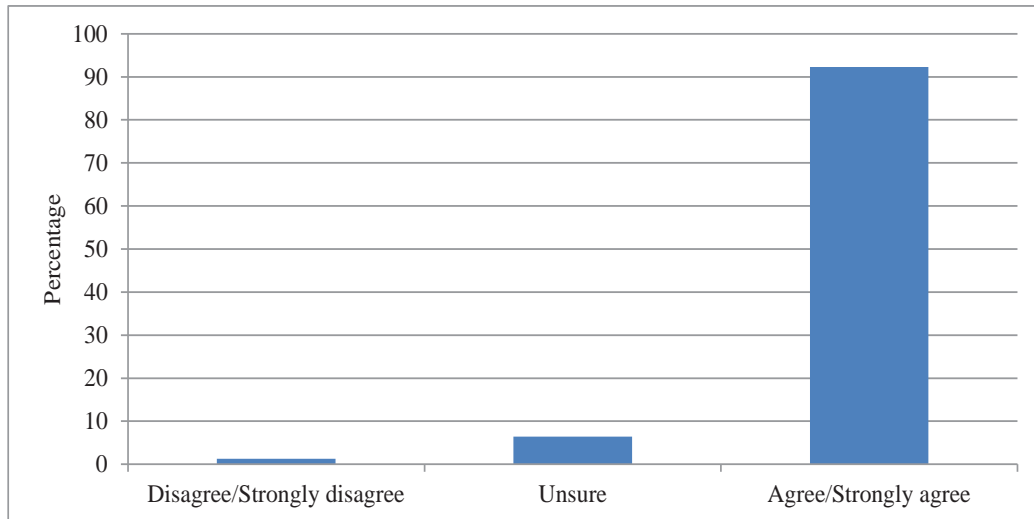
**Figure 4.81. More Self-directed Education**

#### 4.4.10.14 Strong Evidence of Education Outcomes

The fourteenth statement was ‘strong evidence of education outcomes’, with the majority (92.3%, n=363) agreeing or strongly agreeing with the statement. This was also raised in phases one and two as the future of the nurse education service. Again, this demonstrates the awareness that nurse educators have of the environment they will be functioning within in the future, where they will need to be able to demonstrate the outcomes of their service to justify the costs associated with funding it (see Table 4.77 and Figure 4.82).

**Table 4.77. Strong Evidence of Education Outcomes**

Answer	Frequency	Per cent
Disagree/Strongly disagree	5	1.3
Unsure	25	6.4
Agree/Strongly agree	363	92.3
Total	393	100.0



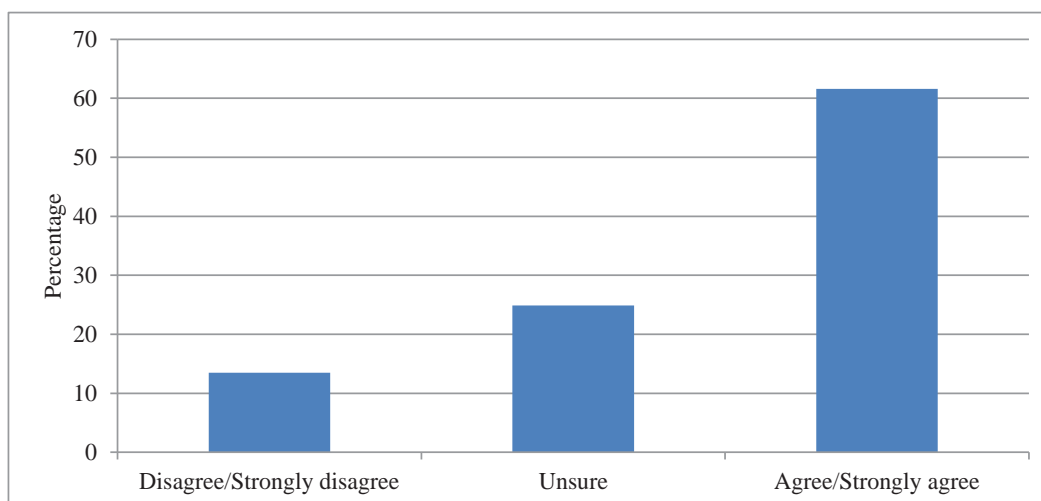
**Figure 4.82. Strong Evidence of Education Outcomes**

**4.4.10.15 A Move Away from Theory Back to Practical, Hands-on Training**

The fifteenth statement was ‘a move away from theory back to practical, hands-on training’, with the majority (61.6%, n=243) agreeing or strongly agreeing with the statement. As mentioned earlier, nurse educators were aware of the need to move away from formal face-to-face training in the classroom and back to practical, hands-on training, either using simulation or in the clinical area (see Table 4.78 and Figure 4.83).

**Table 4.78. A Move Away from Theory Back to Practical, Hands-on Training**

Answer	Frequency	Per cent
Disagree/Strongly disagree	53	13.5
Unsure	98	24.9
Agree/Strongly agree	242	61.6
Total	393	100.0



**Figure 4.83. A Move Away from Theory Back to Practical, Hands-on Training**

#### **4.4.11 Summary Phase Three**

The majority of responses to the statements regarding the future priorities for nurse education in healthcare facilities showed a significant level of agreement, with the highest level of agreement for the statements ‘working towards set education quality standards’, with 92.9% (n=365) agreeing or strongly agreeing with the statement, and ‘increased use of technology’, with 92.8% (n=365) agreeing or strongly agreeing. There was, however, one statement that had a clear divide, with a significant number agreeing and a significant number disagreeing with the statement: ‘increased pay for nurse educators’, with only 48.4% (n=190) agreeing or strongly agreeing with the statement and 34.1% (n=134) unsure. The statement with the lowest level of agreement was ‘raising revenue to maintain operations in an ABF environment’, with only 47.3% (n=186) agreeing or strongly agreeing with the statement and 43.8% (n=172) unsure.

### **4.5 Summary**

This chapter has presented the results of the interviews and focus groups in phases one and two of the study and the survey results of phase three of the study. The responses demonstrate that the majority of nurse education services across Australia are using a combination model (57%, n=225), but that in comparing the centralised, decentralised and combination models, the centralised model undertakes more functions and holds

more advantages in supporting the delivery of nurse education services across an organisation.

In describing an ideal nurse education model, nurse educators highlighted the most important aspects of the service as that it is closely aligned with clinical practice and that nurse educators have clear role definition. Nurse educators did not feel that senior nurse educator joint appointments with universities or being employed full time were of high importance in an ideal nurse education service.

When describing the future of nurse education within their service models, nurse educators outlined the most important aspects as working towards set education quality standards and the increasing use of technology. Nurse educators did not feel that increased pay for nurse educators or raising revenue to maintain operations in an ABF environment were of high priority for the future.

In the following chapter, the findings across the three phases of the study are examined in more detail to provide a comprehensive description of the findings in relation to nurse education service models and nurse educator perceptions as outlined in the existing literature and within an Australia context.

# Chapter 5: Discussion of Findings

*Wisdom ... comes not from age, but from education and learning*

-Anton Chekhov-

## 5.1 Introduction

In this chapter, the overall findings of this research are discussed further, including in relation to the existing research, literature and theories examined. This study was designed to investigate nurse education service models in acute care metropolitan hospitals across Australia and provide recommendations for future service delivery. This study has demonstrated that the majority of nurse education services across Australia use a combination model (57%, n=225) but that in comparing a centralised, decentralised and combination model, a centralised model undertakes more functions and holds more advantages in supporting the delivery of nurse education services across an organisation.

This section commences with a comparison of the qualitative and quantitative research findings from the three phases of the study and then compares the research findings with the existing literature. The new knowledge gained and how this project addresses the gaps in the literature are then presented, followed by the research limitations.

## 5.2 Comparison of the Qualitative and Quantitative Findings

For this study, the qualitative and quantitative data collection was undertaken in separate phases as outlined in Chapter 3. A research framework using mixed methods allowed an investigation of the nurse education service model at one acute care metropolitan hospital in Perth, W.A., followed by the expansion of the study's scope to

include a broader investigation of nurse education service models in acute care metropolitan hospitals across W.A., and then across Australia.

Phase one involved holding face-to-face interviews and a focus group with senior nurse educators and focus groups with junior nurse educators at a major teaching hospital in Perth, W.A., to gain qualitative data about the nurse education service model used at that organisation. Phase two of the study used face-to-face interviews with the coordinators of nurse education services at both public and private acute care metropolitan hospitals in W.A. (six hospitals) and focus groups with senior and junior nurse educators to gain qualitative data about the nurse education service models used at these organisations. Phase three of the study consisted of a national survey of nurse educators in acute care metropolitan hospitals across Australia. Sixty-five hospitals (employing approximately 1500 nurse educators) were considered eligible for inclusion in the study. The data from phase three were analysed using descriptive statistics.

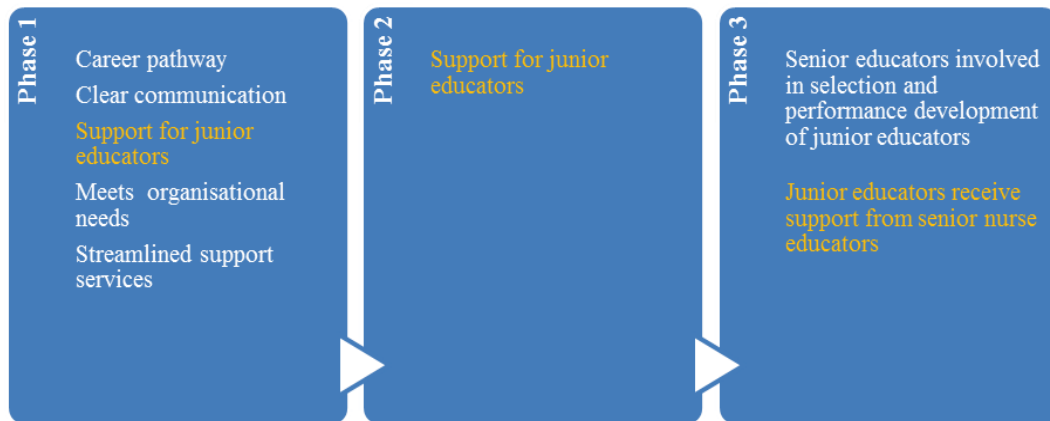
## **5.2.1 Comparing the Different Nurse Education Service Models**

### **5.2.1.1 Centralised Nurse Education Service Model**

In a centralised nurse education service model, there is an organisational-wide approach to staff training in which a central authority or department has the responsibility of meeting staff training requirements. In this model, all education staff, even those placed within the clinical areas, report centrally to the education department and the coordinator of the service (Cummings & McCaskey, 1992).

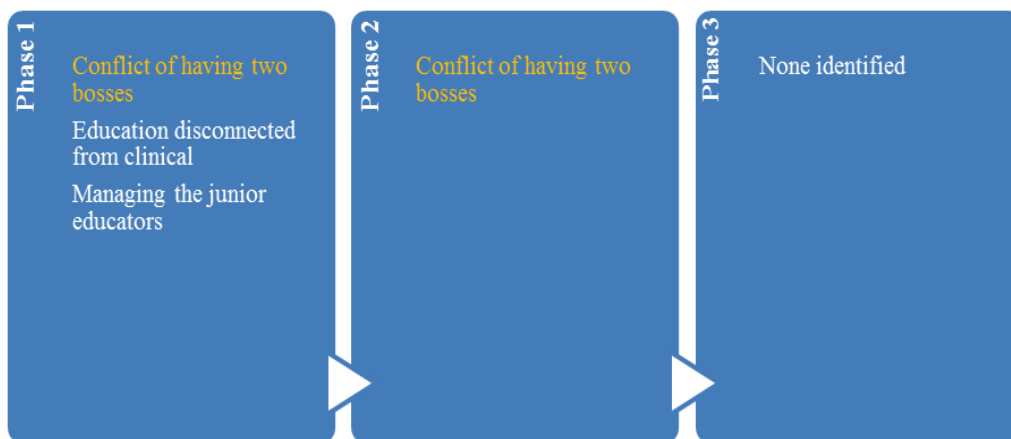
In phase one, nurse educators described the strengths of their centralised service model as allowing for a career pathway within nurse education, having clear communication channels, supporting junior educators, meeting the needs of the organisation and providing streamlined support services. In phase two, nurse educators also identified the strength of a centralised model as the support it afforded junior nurse educators. These findings were confirmed in phase three, as the nurse educators working in a centralised model demonstrated the highest level of agreement (62%, n=78) with the

statement ‘The senior educators are involved in the selection and performance development of junior educators’, and the highest level of agreement (86%, n=106) with the statement ‘Junior nurse educators receive support from senior nurse educators’ (see Figure 5.1).



**Figure 5.1. Strengths of a Centralised Nurse Education Service Model**

The weaknesses of a centralised model were also identified. In phase one, the weaknesses were described as the conflict of having two bosses, problems with managing junior educators and education being disconnected from the clinical areas. In phase two, the potential conflict of having two bosses was also identified as a weakness of a centralised model. However, these findings were not supported in phase three, where the results of the survey revealed that no weaknesses of a centralised model were identified by nurse educators (see Figure 5.2).

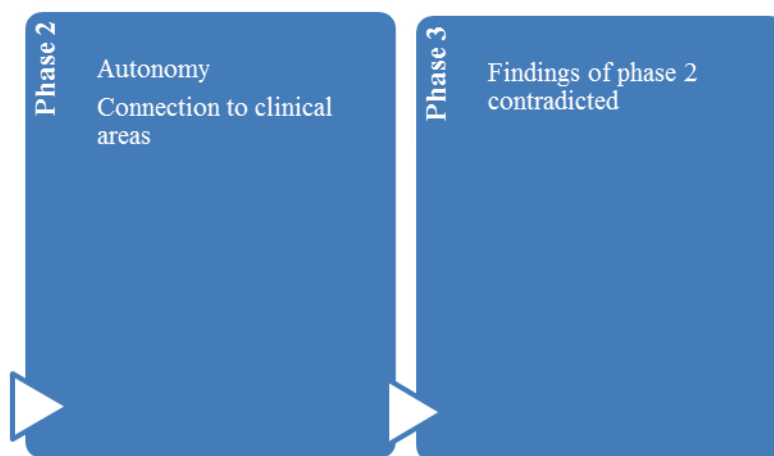


**Figure 5.2. Weaknesses of a Centralised Nurse Education Service Model**

### 5.2.1.2 Combination Nurse Education Service Model

In a combination model, the onsite training department, in which educators are located, delivers programs across the organisation (e.g., staff orientation). There are also educators located in the clinical areas that report to the nurse unit managers, who are not connected to the training department (Cummings & McCaskey, 1992).

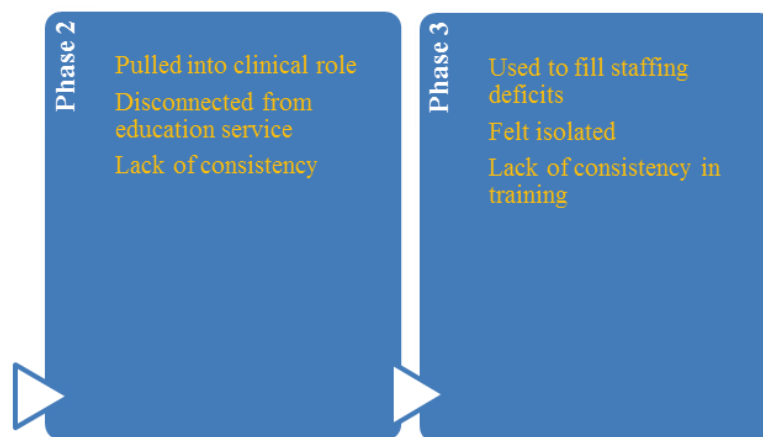
Phase one did not address the combination model, as it involved collecting qualitative data from nurse educators within a centralised nurse education service model only. In phase two, autonomy was identified as a strength of a combination nurse education service model by nurse educators. In phase three, however, this was contradicted, as ‘Allows autonomy’ was rated significantly higher by nurse educators within a centralised model (87%, n=109) compared to those working within a combination model (70%, n=179). Another strength of the combination model that was raised in phase two was educators’ connection to clinical areas; however, this was also contradicted in phase three, with ‘allows continuous awareness of learning deficits at ward level’ rated higher (78%, n=98) by nurse educators in a centralised model than by those in a combination model (75%, n=168), as was ‘maintains visibility of nurse educators in clinical areas’, at 88% (n=110) by nurse educators in a centralised model and 80% (n=180) by nurse educators in a combination model (see Figure 5.3).



**Figure 5.3. Strengths of a Combination Nurse Education Service Model**



In phase two, the weaknesses of a combination model raised included being pulled into a clinical role, disconnection from the education service and a lack of consistency. This was supported in phase three, as a significant result was seen with 63% (n=142) of nurse educators in a combination model stating that they were used to fill staffing deficits, which was the highest level of agreement seen in comparing the combination, centralised and decentralised models. Fifty-four per cent (n=121) of nurse educators in the combination model also agreed that they felt isolated, which was higher than the results reported for a centralised model, at 42% (n=52). Finally, 65% (n=147) of nurse educators in a combination model agreed that there was a lack of consistency in training across the organisation, compared to 36% (n=45) from a centralised model (see Figure 5.4). The decentralised nurse education service model was not able to be investigated in phase two as none of the W.A. hospitals included in the study used this education service model type.



**Figure 5.4. Weaknesses of a Combination Nurse Education Service Model**

The main story weaved by the nurse educators in the phase one interviews and focus groups was around the high level of support, clear direction and education opportunities for junior educators that a centralised nurse education service model can offer. This is illustrated throughout phase one by comments such as: ‘We are able to support the SDNs and train them how to teach’ (Phase one, interview two) and ‘I think it’s the supportiveness and the cohesiveness that everyone is singing off the same page, we are all experts in education or at least advancing to that’ (Phase one, interview four).

In phase two this story was further explored with nurse educators from centralised and combination models. Nurse educators from a centralised model confirmed the findings of phase one by also describing the main strength of the model as being support for junior educators. Comments highlighting this included: ‘Having that senior level of support around you is a really positive thing as I said not only for ease of information around you but if you’ve got a problem and need to sound someone out there is someone there’ (Phase two, focus group two). Strengths of the combination model were also uncovered and included the autonomy it afforded nurse educators and their connection to clinical areas. These were identified through comments such as: ‘Gives us autonomy to do training needs analysis and find that gap and fill the gap’ (Phase two, focus group four) and:

Being at the grass root levels we can see where there are deficits, we can see where there are knowledge gaps and it becomes easier for us to say right we need help in this area and we know exactly who to ask. (Phase two, focus group five)

The story is concluded in phase three, with further confirmation of the previous findings regarding the strengths of the centralised model with a significant result seen of only 42% (n=53) of nurse educators in a centralised service model agreeing or strongly agreeing to feeling isolated which was a lower level of agreement that was seen by nurse educators from combination and decentralised models. Many other strengths of the centralised model were also uncovered during phase three. However, the findings in phase two around the strengths of the combination model were contradicted with ‘allows autonomy’ being rated significantly higher by nurse educators within a centralised model (87%, n=109) compared to those working within a combination model (70%, n=179) and ‘allows continuous awareness of learning deficits at ward level’ rated higher (78%, n=98) by nurse educators in a centralised model than by those in a combination model (75%, n=168), as was ‘maintains visibility of nurse educators in clinical areas’, at 88% (n=110) by nurse educators in a centralised model and 80% (n=180) by nurse educators in a combination model.

## **5.2.2 Responsibilities and Functions of Nurse Education Service**

### **Models**

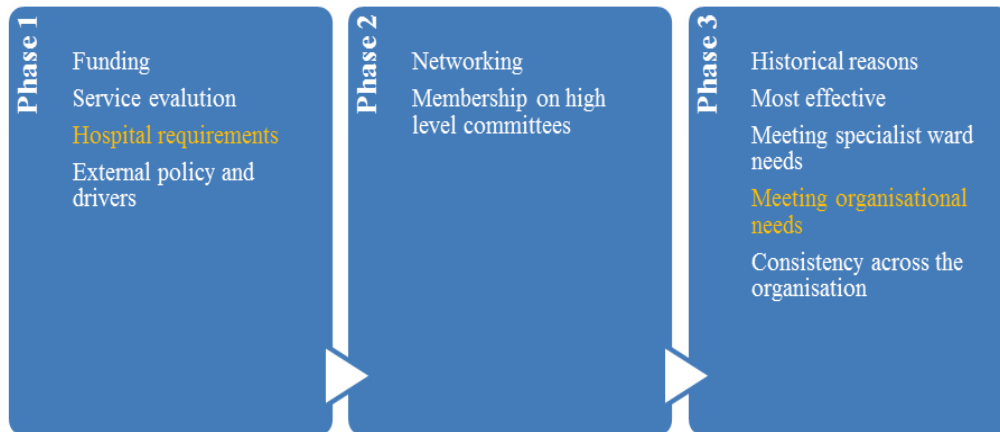
In phases one and two, the functions undertaken by the nurse education services were outlined as delivering mandatory training, staff induction and orientation, support with accreditation, workforce development, informal coaching, delivering the graduate nurse program, coordinating undergraduate nurse placements, area-specific in-service sessions and interprofessional training. These findings were reinforced in phase three, as the functions ranked as undertaken by the majority of nurse education services were ‘orientates and supports new staff’ (98.5%, n=387), followed by ‘undertakes staff mandatory training and competencies’ (98%, n=385) and ‘meets accreditation needs for the hospital’ (96.4%, n=379). Overall, however, nurse educators from a centralised model had the highest level of agreement with the most functions listed, demonstrating that the centralised model undertook more responsibilities and functions than the combination or decentralised nurse education service models.

### **5.2.3 Choice of Nurse Education Service Model**

In this section, the results across the three phases of the study are compared to investigate common findings regarding why the type of nurse education service model in operation was chosen. In phase one, the factors that influenced the service model being used were seen as how the allocation of funding to the nurse education service was administered, evaluation of how well the service was performing, if the needs and requirements of the hospital were being met and external policy such as area health service changes and implementation of the new NSQHSS.

In phase two, the coordinators of nurse education services highlighted networking with key stakeholders within the organisation and membership on high-level committees to influence decisions and raise education issues as how they influenced the nurse education service model. In phase three, nurse educators and coordinators indicated that the nurse education service model being used was the one chosen because of historical reasons, was the most effective, met specialist ward needs, met the needs of the organisation and allowed consistency across the organisation. Thus, the only

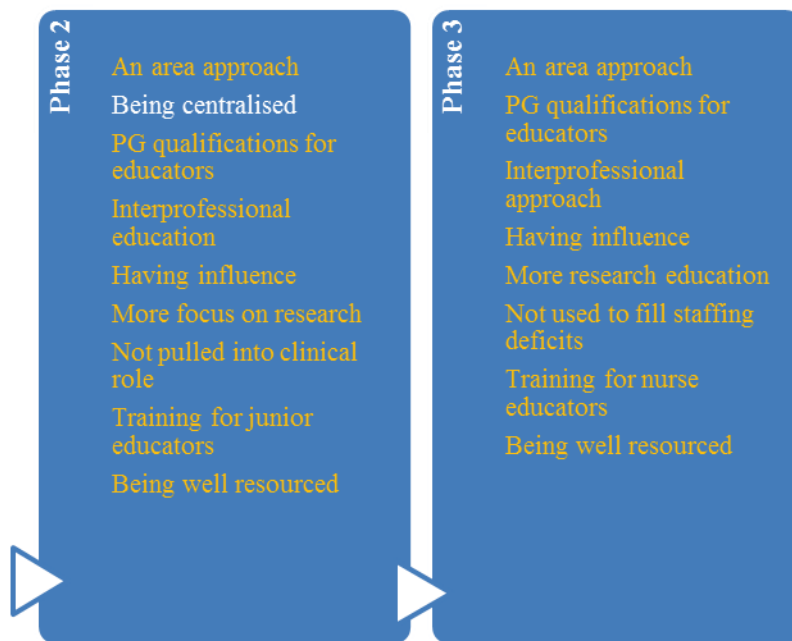
common factor seen as influencing the choice of nurse education service models across all three phases of the study was that it met the needs of the organisation (see Figure 5.5).



**Figure 5.5. Choice of Nurse Education Service Model**

#### **5.2.4 Characteristics of an Ideal Nurse Education Service Model**

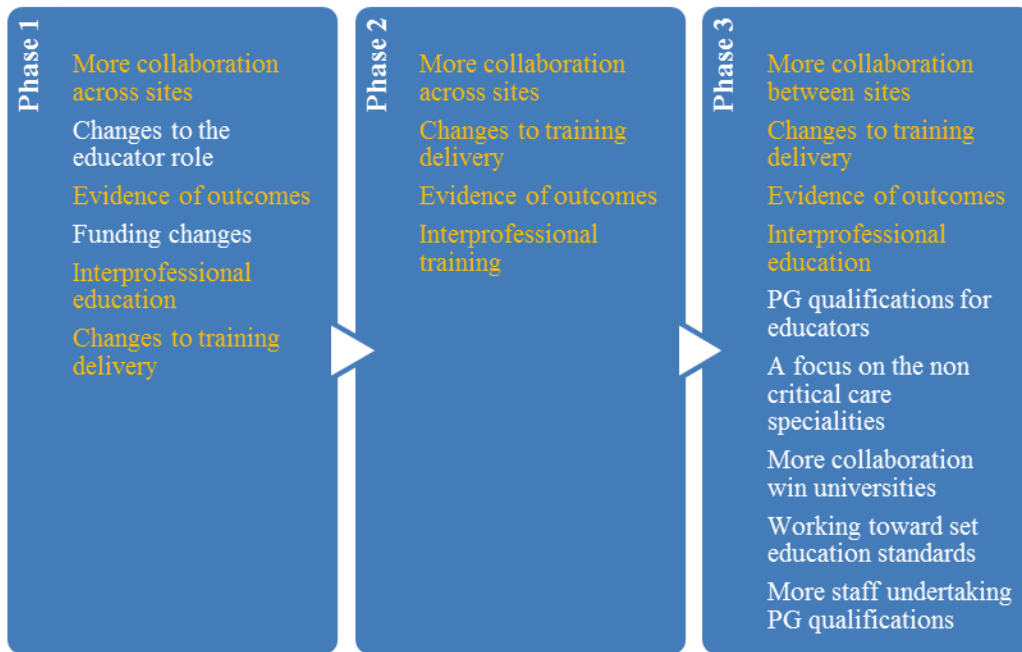
The characteristics of an ideal nurse education service model were not examined in phase one. In phase two, nurse educators identified the characteristics of an ideal nurse education service model as including an area approach, being centralised, nurse educators having postgraduate qualifications, interprofessional education, having influence, more focus on research, educators not pulled into a clinical role, training for junior educators and being well resourced. In phase three, nurse educators agreed that the following were essential characteristics of an ideal nurse education service model: an area/district health service approach (68.4%, n=269), postgraduate education qualifications for nurse educators (86.3%, n=339), an interprofessional approach (93.3%, n=367), having the ability to influence change (95.9%, n=377), includes research education (88%, n=346), nurse educators not filling staffing deficits (91.3%, n=359), training for nurse educators (97.4%, n=383) and being well resourced (97.5%, n=383) (see Figure 5.6).



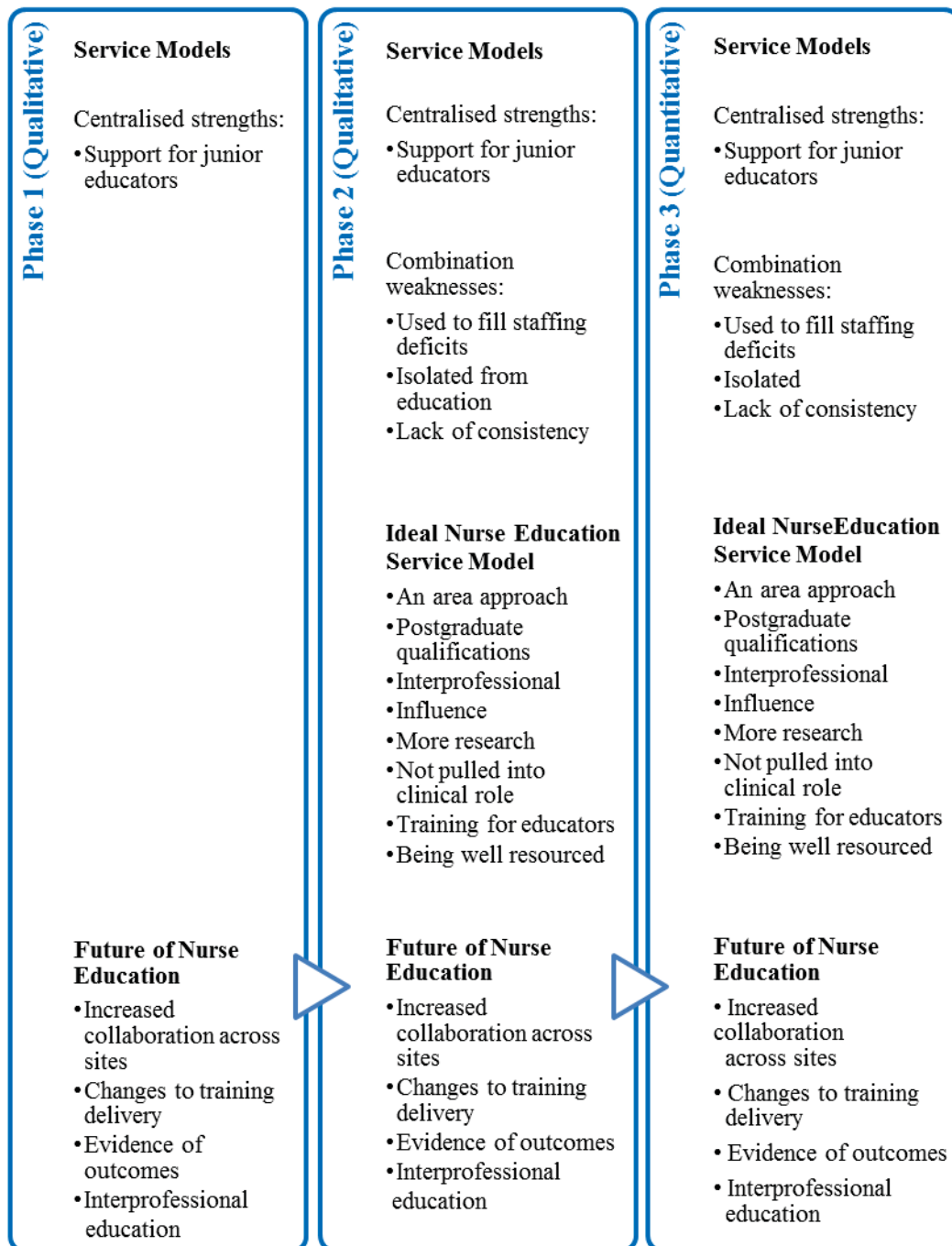
**Figure 5.6. An Ideal Nurse Education Service Model**

### 5.2.5 Future Priorities for Nurse Education Services

In phase one, nurse educators outlined future priorities of nurse education services as including more collaboration across sites, changes to the nurse educator role, evidence of outcomes, funding changes, interprofessional training and changes to training delivery. In phase two, similar priorities for the future were highlighted including more collaboration across sites, changes to training delivery, evidence of outcomes and interprofessional training. In phase three, nurse educators agreed that increased collaboration between hospital sites (86.5%, n=340), strong evidence of education outcomes (92.3%, n=363), changes to training delivery including more flexible teaching modalities (92.6%, n=364), more self-directed education (86.7%, n=341) and interprofessional education (88.8%, n=349) were priorities for the future of nurse education services (see Figure 5.7). The consistent findings across all phases of the study are summarised in Figure 5.8.



### 5.7. Future Priorities for Nurse Education Services



**Figure 5.8. Summary of Consistent Findings across the Phases**

In addition to the findings that were consistent across the three phases of the study, there were findings that were found to be inconsistent across the different phases. These included no clear agreement on the factors affecting the organisations' choice of nurse education service model, and that the weaknesses of the centralised nurse education service model identified in phase one and strengths of the combination model identified in phase two were contradicted by the findings from phase three.

## **5.3 Comparison of Findings to the Literature**

In examining the findings of this study, it is important to review the existing literature in this area to identify similarities and differences between the findings and the literature, to establish how this study fits within the framework of established knowledge and its relationship to accepted theories.

### **5.3.1 Nurse Education Service Models**

As discussed in Chapter 2, there is limited published research that has been undertaken in investigating nurse education service models. The findings of this study are now compared with the discussion papers that have been published on nurse education service models and examined against the findings of the one US and one Canadian study published in this area.

Phelps published a discussion paper in 1990 that described how the author changed the staff development structure from a decentralised function to a centralised one within a major teaching hospital in the US. This was triggered by the need for the service to be able to develop a clear mission, demonstrate results and be responsive to institutional needs (Phelps, 1990). Phelps describes centralising the service to allow orientation and continuing education programs to be developed at different times and in different ways to address the specific needs of part-time and pool staff. Policies were developed around orientation so that a standardised approach could be applied.

Centralisation allowed the development and implementation of programs across multiple areas, reducing repetition and increasing cost-efficiency (Phelps, 1990). The change to a centralised staff development model was also able to address the number of credentialing, licensing and accreditation requirements of the organisation and the individual. The staff development department developed systems to maintain records and monitor the competencies of its practitioners. Finally, the service was able to affect the motivation of staff to learn and develop their practice by the service becoming increasingly visible and sharing its leadership skills and goal development (Phelps, 1990).



The benefits of a centralised model as outlined by Phelps (1990) were also found in this study, with nurse educators in phase one within a centralised model describing its strengths as meeting the needs of the organisation, allowing nurse education service planning and providing administrative and secretarial support. In phase three, there were also significant findings with nurse educators in a centralised model agreeing that the model allowed the educators to obtain an organisational-wide view and maintain their visibility in clinical areas.

In the first of the two studies undertaken specifically focussing on nurse education service models, Blocker (1992) undertook a national survey of staff development departments in the US to determine whether they were using a centralised, decentralised or combination model. The survey asked about department organisation, instructor role, staff title, core responsibilities, percentage of work for various departments, department head and staff educational preparation and demographic data. The main purpose of Blocker's (1992) research was to identify the organisational models employed by staff development departments of similar healthcare facilities. The organisational models were defined within the survey as:

- Centralised—Instructors are generalists who are not assigned to specific units.
- Decentralised—Instructors are specialists who are assigned to and/or are based on specific units.
- Combination—Some instructors may be either generalists or specialists.

These definitions differ from others given in the literature and those used in this study to define the different nurse education service models.

In this study, a centralised nurse education service model is defined as one in which there is an organisational-wide approach to nurse training, where a central authority or department has the responsibility of meeting nurses' training requirements. In a centralised model, all education staff, even those placed within the clinical areas, report centrally to the education department and manager (Cummings & McCaskey, 1992). A decentralised nurse education service model is defined as one in which there is no central training department, as educators within individual clinical areas are responsible for meeting the training needs of staff within their areas and report directly to the nurse unit managers (Cummings & McCaskey, 1992). A combination nurse

education service model is defined as one in which there is a centralised education department delivering education and training across the organisation as well as clinically placed educators who are managed by the nurse unit managers and are independent of the education service. There is no relationship or reporting lines between the education department and the nurse educators employed and managed by the nurse unit managers (Cummings & McCaskey, 1992). Comparing Blocker's (1992) definitions with those used by this study is difficult, as a centralised model can support specialists who are based on specific units but who still report centrally to the coordinator of the education service, and can also consist of both generalists and specialists.

Blocker's (1992) research consisted of a national survey across 45 states of the staff development departments of 117 hospitals, similar to the hospital used in phase one. These hospitals were non-governmental, not-for-profit, general medical-surgical hospitals containing 300–1000 beds. Forty-eight responses (a 41% response rate) were received from healthcare facilities in 30 states. Of the responding staff development departments, 11 (23%) used a centralised model for their staff development service (average bed number was 569), 11 (23%) used a decentralised model (average bed number was 535) and 26 (54%) used a combination model (average bed number was 767). These findings support those of this study, with a combination model being the most commonly used (57%, n=225) except in hospitals with < 100 beds, which used a combination or centralised model in equal numbers.

In Blocker's (1992) study, staff development departments were asked to identify what services they provided from a list of 14 core responsibilities and functions listed in the survey. The researcher did not explain how her list of responsibilities and functions was developed for inclusion in her survey; however, they are similar to those outlined by participants in phases one and two of this study and included in the survey in phase three. Both studies list orientation and mandatory training as the functions most often undertaken by nurse education service models. A point of difference was that Blocker's (1992) study found that a combination model had more functions than a centralised or decentralised model, whereas this study found that a centralised model had more functions. This appears to be because the list of functions in Blocker's study

was more ward-focussed than the list of functions generated by the nurse educators during phases one and two of this study. This list in this study included more organisational-wide functions, such as coordinating the graduate nurse program, which would more likely be supported by a centralised service model.

Other factors that were investigated in Blocker's (1992) study included the nature of the hospital, whether it was a multi-hospital site or single hospital organisation, the placement of the staff development service within or outside the nursing division, the number of staff employed by each service, the education preparation of the department heads and the educational preparation of the instructors. These factors were not examined in this study.

In Blocker's (1992) study, the researcher used the results of her survey to implement a combination nurse education service model at her home organisation, as it was used by the majority of multi-hospital staff development departments (69%, n=8) and the overall majority of respondents (54%, n=26). The data also indicated that the combination model had a greater number of instructors with more varied educational preparation, supported hospitals with more beds and had more diverse functions.

Identified limitations of Blocker's (1992) study were that the data were self-reported and the interpretation of certain questions varied (e.g., FTE versus number of staff). Moreover, no attempt was made to randomise subjects or perform statistical analysis beyond percentages and means. The author concluded by stating the data obtained could be used by staff development departments when choosing an organisational model.

Also published in 1992, Cummings and McCaskey's discussion article outlined the advantages and disadvantages of centralised and decentralised hospital education models and then described the implementation of a combination model for staff development in a large hospital in the US. In describing a centralised model for staff education, the authors' highlighted that this type of model provides for consistent content and teaching methods, effective use of personnel, clear identification of

educators to the department and hospital staff and the control of all functions of the department.

These identified strengths of a centralised model as described by Cummings and McCaskey (1992) were also findings of this study, with areas raised by nurse educators as strengths of a centralised model in phases one and two including:

- a consistent approach by the use of policies and processes
- meeting organisational needs by delivering training across a number of areas
- more comprehensive planning for service delivery
- prioritising allocation of resources to meet the training needs of the hospital
- streamlined support services to control aspects of the service such as maintaining records, purchasing and venue management.

Phase three also supported the findings of Cummings and McCaskey (1992), with only 36% (n=45) of nurse educators in a centralised service model agreeing that there was a lack of consistency in training across the organisation, which was the lowest level of agreement with this statement across the three models.

Cummings and McCaskey (1992) identified the weaknesses of the centralised model as inhibiting the educator's creativity and reducing autonomy, which could lead to dissatisfaction with the role. These weaknesses were contradicted by the significant findings of this study in phase three, which disproved the idea that a centralised model reduces autonomy due to nurse educators working within a centralised model reporting the highest level of agreement with the statement 'allows autonomy', at 87% (n=109).

Cummings and McCaskey (1992) described a decentralised model of education as allowing immediate awareness of education needs at the local level, supporting educational flexibility, allowing educators to maintain specialised expertise and supporting innovation and creativity. One of these identified strengths of a decentralised model was also found in phase three of this study, with nurse educators from a decentralised model rating higher than those working in other models (86%, n=12) the fact that their model allowed continuous awareness of learning deficits at the ward level. However, another of the strengths described by Cummings and McCaskey (1992) was contradicted by the findings in this study, as nurse educators in the

decentralised service model had the lowest level of agreement with the statement 'allows for development of specialist clinical knowledge and skills'.

Cummings and McCaskey (1992) discussed that the disadvantages of a decentralised model might include a lack of unified educational policies and procedures, a lack of communication between educators and the loss of support for the role of the educator in the organisation. This was supported by the findings in phase three of this study, with 100% (n=14) of nurse educators from a decentralised model agreeing that they felt that there was a lack of consistency in training across the organisation and only 50% (n=7) of nurse educators in a decentralised model feeling that junior nurse educators received support from senior nurse educators.

In describing a combination model, Cummings and McCaskey (1992) noted that there was a centralised professional development division at their organisation, with educators responsible for orientation and other generic programs and reporting to the Associate Director of Nursing. They also had decentralised educators in the clinical areas who addressed specialised learning needs and unit-specific orientation and reported directly to the nurse manager of the clinical area. The authors' outlined that they felt their combination model combined the advantages of both a centralised and decentralised model, while also acknowledging that the effectiveness of any department within an organisation depends on more than just the model in use.

In the second of the two studies undertaken specifically looking at nurse education service models, Sheriff and Banks (2001) undertook a qualitative study in an academic health science centre in Southern Ontario, Canada. This was a 1196-bed organisation situated across four hospital sites. Three of the sites provided acute care, with the remaining site providing complex continuing care.

Sheriff and Banks (2001) described their education model as one in which educators were assigned to clinical programs. This meant that they were decentralised into the program but reported centrally to the director of the Education and Development Department. Organisation development specialists and patient education specialists were aligned with clusters of programs and also reported to the director of the

Education and Development Department. Sheriff and Banks (2001) describe this model as a combination model, but with all educators reporting back to the one director of the Education and Development Department, this was actually a centralised model as described in the literature and in this study.

In Sheriff and Banks (2001) study, focus groups were held with educators, clinical managers, senior managers and directors, with a separate focus group held for each cluster of participants and the sessions being led by an experienced external facilitator. In their study, the educators assigned to clinical programs overwhelmingly expressed a desire to retain their matrix model. The clinical manager group also expressed a desire to maintain the education model that was being used. The majority of directors expressed satisfaction with the current model. Several of the senior managers believed they were not in a position to recommend whether educators should report centrally or not. The education, organisation development and patient education specialists expressed the desire to maintain the combination model.

The results of Sheriff and Banks (2001) study recommended that the combination model for education and development be retained at the organisation. It was overwhelmingly the preferred choice of the educators and clinical managers who were closest to the work involved and who identified that this model addressed the issues and concerns they had experienced with previous models. However, some directors thought that educators should be completely decentralised, as they did not have control over the educators' activities. The strengths of the model were identified as enhanced support for education, centralised planning and resource development. The efficiency of developing projects that crossed a number of clinical areas or could be implemented across the whole organisation, reducing the silo effect and improving communication, was also mentioned.

The findings of the Sheriff and Banks (2001) study were supported in this study, with nurse educators in phase one identifying the strengths of a centralised model as allowing for a career pathway within nurse education and supporting the junior nurse educators, meeting the needs of the organisation around comprehensive planning for service delivery and prioritising allocation of resources and supporting clear

communication channels. In phase three, 85% (n=106) of nurse educators in a centralised service model agreed that junior nurse educators received support from senior nurse educators. This was the highest level of agreement across the three service models. They also agreed that a centralised model allowed nurse educators to obtain an organisational-wide view (90%, n=112), again at the highest level of agreement across the three models.

The limitations identified with the Sheriff and Banks (2001) study were that the data might reflect the biases of the organisation and the results might not be generalisable to other hospital settings. Further, the results might only be useful to large, multi-site, academic hospitals with links to a university.

Finally, in 2006, Haggard published a two-part editorial that discussed the different organisational approaches to education and their strengths and weaknesses (Haggard, 2006a; Haggard, 2006b). Haggard outlined the advantages of a centralised staff development service as including strong identification and loyalty of staff, clear lines of communication, common goals and clear expectations of the department's role and objectives. Some of these strengths of a centralised model as identified by Haggard were also found in this study, including the raising by nurse educators in phase one of clear communication channels as a strength of their centralised model and that the model allowed for comprehensive planning for service delivery and allocation of resources.

Haggard (2006a) outlined the disadvantages of a centralised model as including no hospital-wide education as only nursing needs were addressed, limited bedside contact and the perception that educators lacked clinical expertise. These weaknesses of a centralised model were not found in this study. Nurse educators in phase one did raise feeling disconnected from the clinical area as a weakness, but in phase three this was contradicted, with nurse educators from a centralised model agreeing more highly than those working in other models that their model allowed for continuous awareness of learning deficits at ward level (78%, n=98). Nurse educators in a centralised model also had the highest level of agreement that this model allowed for development of specialist clinical knowledge and skills (90%, n=112).



These differences in findings between this study and that of Haggard (2006a) may be due to the fact that, these days, education services within healthcare organisations cater for all staff groups, not just nursing, and so deliver a hospital-wide service. Also in this study, centralised nurse education services base their junior educators within clinical areas. Thus, even though they report to the education service, they are part of the clinical team, making them feel more connected to the clinical areas and able to continue to develop their clinical expertise.

Haggard (2006a) summarised the advantages of a decentralised approach as including closer relationships with nursing units, more patient contact and more awareness of nurses' education needs. However, these findings were contradicted in this study, with nurse educators in a decentralised model demonstrating a lower level of agreement than those in a centralised or combination model that they could maintain the visibility of nurse educators in clinical areas and that they had continuous awareness of learning deficits at ward level. As mentioned above, the findings of this study may differ from Haggard's (2006a) article because both centralised and combination models have their junior educators situated within the clinical areas, which mitigates these perceived advantages of a decentralised service model.

Haggard (2006a) outlined the disadvantages of a decentralised model as including a lack of emphasis on non-nursing departments, job dissatisfaction among educators who enjoyed formal teaching, difficulty communicating within the department and inefficiencies in resource allocation. Some of these disadvantages were also findings of this study, with 86% (n=12) of nurse educators in a decentralised model identifying that they felt isolated, which was the highest level of agreement across the three models, and 100% (n=14) of nurse educators in a decentralised model agreeing that there was a lack of consistency in training across the organisation, which again was the highest level of agreement seen across the three models.

Haggard (2006a) supported a combination model in which some functions were centralised, such as orientation and record keeping, and others were decentralised, such as unit-specific in-service training. She emphasised that the challenge of dealing with any of these models is keeping the department relevant to the organisation and its



strategic direction, adapting to the rapid pace of changing healthcare, juggling multiple priorities and keeping educational practitioners satisfied with their jobs and their service.

This study found that a centralised nurse education service model is able to deliver on the functions outlined by Haggard (2006a) above. A centralised nurse education service model is able to stay relevant in supporting the organisation's strategic direction, adapt to the rapidly changing healthcare environment and support nurse educators in their roles to ensure job satisfaction.

## **5.4 Comparison against Relevant Theories**

In Chapter Two, the most relevant theories affecting nurse education services were discussed including lifelong learning, organisational learning and role theory. This study found that the use of different nurse education service models can affect the delivery of education to staff within the healthcare organisation. The following section compares the findings of this study with the theories outlined in Chapter Two.

An efficient nurse education service that adequately supports the learning needs of the organisation as a whole and of the individual is crucial to develop and support lifelong learning. Nurse education services need to enable practicing nurses to initiate and undertake personal and professional learning opportunities throughout their career (Gopee, 2005). The findings of this study support lifelong learning theory by recommending the centralised nurse education service model as an effective nurse education service model to support the delivery of ongoing education and training for staff.

The results from this study support organisational learning theory, as they demonstrate the advantages of a nurse education service model that delivers learning through all levels of the organisation. The study findings demonstrate the importance of meeting the learning needs of the organisation from the level of the individual to the inter-organisational level. Specifically, individual learning needs are met by delivering

clinical training at the bedside. Team training on the ward is achieved by delivering in-service sessions. Organisational-wide training includes such programs as study days. Finally, inter-organisational training includes supporting postgraduate programs. The centralised nurse education service model was able to demonstrate that it is able to support organisational learning at each of these levels.

In regards to role theory, role conflict was highlighted in the early phases of this study by junior nurse educators identifying this as a potential weakness of a centralised nurse education service model, as they reported to the senior educator but were often tasked to do things outside their role by the nurse unit manager, causing conflict. In phase three of the study 98%, (n=385) of the nurse educators agreed/strongly agreed that clear role definition was an important aspect of an ideal nurse education service model and the centralised model was shown to require educators to undertake less duties outside their role. The findings of this study support role theory through the identification of the importance of the centralised nurse education service model in supporting and training nurse educators and of clearly defining their responsibilities.

## **5.5 Outcomes of this Research**

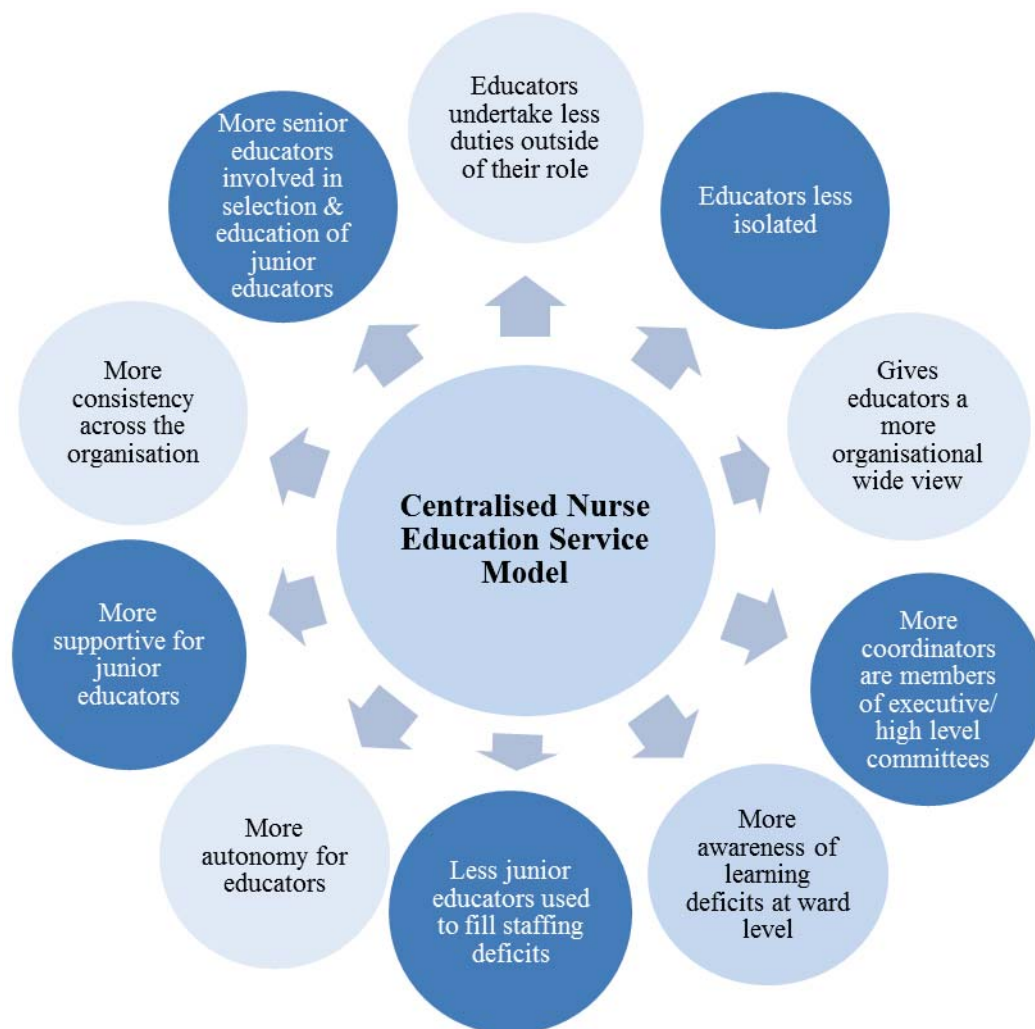
The outcomes of this research study are important as this is the first study that has been undertaken in Australia investigating nurse education service models within healthcare organisations. This study highlighted that nurse educators identified the most important aspects of an ideal nurse education service model as including having a service closely aligned with clinical practice (98.5%, n=387), clear nurse educator role definition (98%, n=385), close links with nurse unit managers (97.7%, n=384), being well resourced (97.5%, n=383) and having a training framework for education service delivery (97.5%, n=383). The study also identified that nurse educators' highest priorities for the future of nurse education were working towards set education quality standards (92.9%, n=365), increased use of technology (92.8%, n=365), more flexible teaching modalities (92.6%, n=364) and strong evidence of education outcomes (92.3%, n=363).

The study findings indicate that the majority of nurse educators in Australia are working within a combination service model (57%, n=225), with 32% (n=125) working within a centralised service model and 4% (n=14) working in a decentralised service model. The findings demonstrated that a centralised nurse education service model undertook more functions than the other models, including supporting formal training programs (e.g., postgraduate courses) (94%, n=118), coordinating the graduate nurse program (91%, n=114), coordinating student nurse placements (89%, n=111), supporting service redesign (87%, n=109) and mentoring staff undertaking new roles (87%, n=195).

In comparing the characteristics of the different nurse education service models, this study found that the type of model in use did not appear to significantly affect the educators' visibility in clinical areas or the development of specialist knowledge and skills. However, it was clear that the majority of responses showed significant results, which indicated that a centralised model was preferred. This is because it:

- Has more senior educators involved in the selection and education of junior educators.
- Requires educators to undertake less duties outside their role.
- Gives educators a more organisational-wide view.
- Makes educators feel less isolated.
- Allows for more continuous awareness of learning deficits at ward level.
- Uses less junior educators to fill staffing deficits.
- Allows more autonomy.
- Is more supportive of junior educators by senior educators.
- Supports more consistency of training across the organisation.
- Has more coordinators as members of the executive/high-level committees.

In this study, no weaknesses of a centralised nurse education service model were identified when comparing it against the decentralised and combination model (see Figure 5.9).



**Figure 5.9. Advantages of a Centralised Nurse Education Service Model**

These findings recommend that when executive teams within healthcare organisations are deciding on a model to use to deliver their nurse education service they consider implementing a centralised service model to take advantage of the benefits of this model over a decentralised or combination model. The findings of this study also indicate that nurse education services currently using a combination or decentralised service model should consider converting their model to a centralised model. One way to achieve this would be to move the reporting lines of all nurse educators within the organisation to report to either senior nurse educators or the coordinator of the education service.

By moving the reporting lines for all nurse educators within an organisation to report to the one centralised education service, the nurse education service model will change

from a combination or decentralised model into a centralised nurse education service model, bringing the advantages identified by this study.

## **5.6 Limitations of this Research**

1. The main limitation of this study is that it only investigated nurse education service models in acute care metropolitan hospitals across Australia. Hospitals included were classified as ‘acute care’ and ‘metropolitan’ using the following inclusion criteria:

- Adult general hospital
- Offer a 24-hour service
- Public and private hospitals
- Have an emergency department and intensive care unit or high dependency unit
- In a capital city or a location with a population of greater than 100,000.

By only including acute care metropolitan hospitals, the findings of this study may not be generalisable to specialist hospitals, non-acute hospitals or those in rural or remote areas.

2. The researcher also acknowledges that the response rate of the survey was low at 26% (n=393), which may have allowed for the potential of non-response bias. As only 393 nurse educators submitted completed surveys from a sample of 1500, there is the possibility that respondents’ answers might differ from the potential answers of those who did not respond, which can lead to distortion of the data and influence the results (Check & Shutt, 2012). This possibility was minimised by using the results of phases one and two to verify the findings in phase three and by calculating Chi-Square cross-tabulations on the demographic information of the 67 participants who only partially completed the survey compared to the 393 who completed the survey to identify any significant differences.

3. The researcher recognises that some interpretation of the terminology used in the survey during phase three may have varied if it was terminology not commonly used across the different Australian states and territories. Example of this may be in the description of the different nurse educator levels in Question 6 of the survey and in the statements under questions nine to 13, as they were generated from phases one and two, which were undertaken in W.A. To minimise the possibility of this, definitions were provided in the preamble and an option of 'other' was included for the survey questions.
4. Finally, the researcher is aware that this study focussed on investigating the views of nurse educators and did not examine the views of other healthcare stakeholders, such as nurses delivering direct patient care, nurse unit managers or nurse directors. This is suggested as an area for further research (see Section 6.5.1).

Overall, the methodological approach of this study was made more sound by the sequential mixed methods design, which allowed for triangulation and the verification of the findings as the study moved through the different phases. The scope of this study, included coordinators, senior and junior nurse educators in public and private hospitals of differing sizes across all states and territories in Australia, allows the findings to be generalisable across different organisations.

## **5.7 Summary**

Chapter 5 provided a comparison of the findings from the qualitative phases of the study (phases one and two) with the findings from the quantitative phase of the study (phase three). The findings of this study were then compared with those from the literature as well as against relevant theories. The findings have answered the research questions of this study, which were aimed at discovering which nurse education service models were in use across Australia, what influenced those models, nurse educators' views on their service models and the future priorities for nurse education within healthcare organisations.

This study has provided findings that add to the current knowledge around nurse education service models and nurse educators' priorities regarding the future of nurse education services. These findings may assist hospital executive teams or coordinators of nurse education services when developing their nurse education service and deciding which nurse education service model to implement. The implications of these findings and recommendations for future practice are discussed in Chapter 6.

## **Chapter 6: Conclusions and Recommendations**

*Train people well enough so they can leave,  
treat them well enough so they don't want to*

-Richard Branson-

### **6.1 Introduction**

This study has produced new and informative knowledge and understanding of nurse education service models in acute care metropolitan hospitals across Australia. The three phases of the study have identified the different types of nurse education service models being used in healthcare organisations across the country and discovering nurse educators' views about these different service models and the future priorities for nurse education services. This final chapter summarises the most significant findings generated and discusses the importance of these findings for clinical practice, education, research and healthcare organisations.

### **6.2 Nurse Education Service Model Findings**

This study has investigated nurse education service models in acute care metropolitan hospitals across Australia. Phase one involved conducting face-to-face interviews with senior nurse educators and focus groups with junior nurse educators at a major teaching hospital in Perth, W.A., to gain baseline qualitative data about the nurse education service model used at that organisation. Phase two of the study consisted of conducting face-to-face interviews with the coordinators of nurse education services at both public and private acute care metropolitan hospitals in W.A. (six hospitals) and focus groups with senior and junior nurse educators to gain rich qualitative data about the nurse education service models used at these organisations. Phase three of the study consisted of a national survey of nurse educators in acute care metropolitan hospitals



across Australia. The survey was generated from the findings from phases one and two. The survey was administered using SurveyMonkey. Sixty-five hospitals, employing 1500 nurse educators, were considered eligible for inclusion in the study. Data were analysed using descriptive statistics. Nurse educators' views regarding the future of nurse education services were also examined throughout the three phases.

Previous to this study, no research on nurse education service models had been conducted within Australia. The little international evidence that was available was dated and lacked methodological rigour, making the findings difficult to generalise. This study has generated new knowledge by identifying the types of nurse education service models currently in use across Australia, with the dominant model being a combination model. This combination nurse education service model was the dominant model used in the majority of states across Australia, across the public healthcare sector and in a variety of hospital sizes. However, the majority of nurse educators in this study reported that the centralised nurse education service model was the best model when compared to the combination and decentralised models and recommended its implementation across the healthcare system.

### **6.2.1 New Knowledge Generated by This Study**

This study has provided new knowledge around the delivery of nurse education services within healthcare organisations. The reasons that nurse educators gave for the adoption of the different types of nurse education service models within hospitals were:

- historical reasons
- their perceived level of effectiveness
- meeting the needs of the individual clinical areas
- meeting the needs of the organisation as a whole.

These factors have not been previously identified.

Nurse educators' views of the different nurse education service models' functions, characteristics and effectiveness across the organisation were also identified, with

nurse educators identifying significant advantages of a centralised model over a decentralised or combination model, even though the predominant model being used in their hospitals was the combination model. The advantages of the centralised model as identified by nurse educators were:

- has more senior educators involved in the selection and education of junior educators
- requires educators to undertake less duties outside their role
- gives educators a more organisational-wide view
- makes educators feel less isolated
- allows for more continuous awareness of learning deficits at ward level
- uses less junior educators to fill staffing deficits
- allows more autonomy
- is more supportive of junior educators by senior educators
- supports more consistency of training across the organisation
- has more coordinators as members of the executive/high-level committees.

Nurse educators viewed that an ideal service model must deliver a service that:

- is closely aligned with clinical practice
- has clear nurse educator role definition
- has close links with unit nurse managers
- is well resourced
- has a training framework for education service delivery.

These features were all found to be present in the centralised nurse education service model.

Nurse educators' views regarding the future priorities for nurse education services were identified, with nurse educators recommending the following future changes to service delivery:

- working towards set education quality standards
- increased use of technology
- more flexible teaching modalities
- strong evidence of education outcomes.

The implications of this new knowledge for clinical practice, education, research and healthcare organisations are described below.

## **6.3 Clinical Practice Implications**

As a result of the new knowledge gained from this study, clinical practice implications have emerged. Supporting clinical staff with an effective nurse education service is essential to support safe patient care. This study has highlighted the importance of:

- clear nurse educator role definition
- close links with unit nurse managers
- junior educators not being used to fill staffing deficits.

The study has found that the above aspects of a nurse education service model are essential to ensure the establishment and maintenance of an effective and responsive education service to support clinicians in their practice.

This study demonstrated that, contrary to current practice, a centralised nurse education service model can maintain the visibility of nurse educators within clinical areas and support the development of specialist knowledge and skills, ensuring that the needs of individual clinical areas are met. It was also found to allow for more continuous awareness of learning deficits at the ward level than a decentralised or combination nurse education service model, enabling greater currency and receptiveness to clinicians' needs.

### **6.3.1 Recommendations for Clinical Practice**

Following the findings of this study, the researcher recommends that nurse education services, irrespective of the service model they are using, ensure that they have a service closely aligned with clinical practice, clear nurse educator role definition, close links with unit nurse managers, adequate resourcing and a training framework for education service delivery.

## **6.4 Education Implications**

The implications of this study for nurse education service providers within healthcare organisations are significant. Education service providers in Australia can now make a more informed decision when considering a model for their nurse education service by being aware of the frequency of models in use across the different states, different hospital sizes and in the private and public sectors.

This study has informed coordinators of nurse education services that a centralised model can deliver significant advantages over a decentralised or combination model in supporting the delivery of an effective nurse education service. For example, a centralised model can:

- Maintain more involvement of senior educators in the selection and education of junior educators.
- Require educators to undertake less duties outside their role.
- Make educators feel less isolated.
- Allow more autonomy.
- Offer more support for junior educators by senior educators.

These findings highlight the support that a centralised nurse education service model gives to nurse education as a speciality within the hospital. For nurses moving from clinical practice into education, it allows a clear career pathway for nurses to progress into this specialty field by providing support from educators and clear reporting lines from junior educators through senior educators to the coordinator of the education service.

### **6.4.1 Recommendations for Education**

The results of this study recommend that, when deciding on a model by which to deliver their nurse education service, nursing executive teams consider implementing a centralised service model to take advantage of the benefits of this model over a decentralised or combination model.

## 6.5 Research Implications

This study has met its aim which was to investigate nurse education service models in acute care metropolitan hospitals across Australia and develop recommendations for future service delivery. The study has addressed the research questions as outlined in Chapter One by:

1. Identifying the nurse education service model used at Hospital One in Perth, W.A.
2. Identifying the nurse education service models used in other acute care metropolitan hospitals across W.A.
3. Identifying the nurse education service models used in acute care metropolitan hospitals across Australia.
4. Identifying the perceived factors that influence which nurse education service model is used at different acute care metropolitan hospital sites.
5. Identifying the views of nurse educators about the different nurse education service models used in acute care metropolitan hospitals across Australia.
6. Identifying the views of nurse educators about future nursing education priorities and services.

This study has investigated the many factors that affect the functioning of nurse education services within healthcare facilities as outlined as a conceptual model in Figure 2.1. These include historical influences, the nurse educator role, financial implications, the organisation and individual registration needs, and the service model in use (Haggard, 2006b). The consistent findings across the phases demonstrated how historical influences have affected the mode in use, the support that the centralised service model offers to clarify and support the nurse educator role. The study findings also demonstrated how the centralised model, in undertaking more responsibilities than the other models, best supports the needs of the organisation and the individual. This study has undertaken a research project into nurse education service models across Australia by capturing the views of nurse educators working within these models, but more research studies in this area are needed

### **6.5.1 Recommendations for Research**

The researcher recommends that further research be undertaken investigating different aspects of nurse education service models. These studies could use the following approaches:

- Examine the views of nurse unit managers, the nursing executive and nurses delivering patient care—Using a qualitative approach to investigate the experiences of other members of the healthcare team who interact with the nurse education service may highlight new aspects of importance not yet uncovered and allow for comparison with the findings from this study.
- Investigate the efficiency and outcomes of the different service models—A mixed methods approach to evaluate the measurable outcomes and calculate the effectiveness of the different service models would provide further qualitative and quantitative data regarding the most effective service model.
- Identify the costs of operating the different service models—A quantitative approach to directly measure the costs associated with the delivery of the nurse education service by the different service models would add valuable findings to this area of research by identifying which model is the most expensive.
- Isolate the effect on patient care and patient outcomes—A mixed methods study evaluating the impact on patient care and outcomes of the nurse education service being delivered by the different service models would supply valuable evidence regarding a preferred model.

## **6.6 Organisational Implications**

The implications of this study for healthcare organisations are significant. In comparing the scope of functions and roles undertaken by nurse education services across Australia, services with a centralised model were found to deliver the most varied functions and roles across the organisation, with many of them supporting the core business of the organisation, such as service redesign.

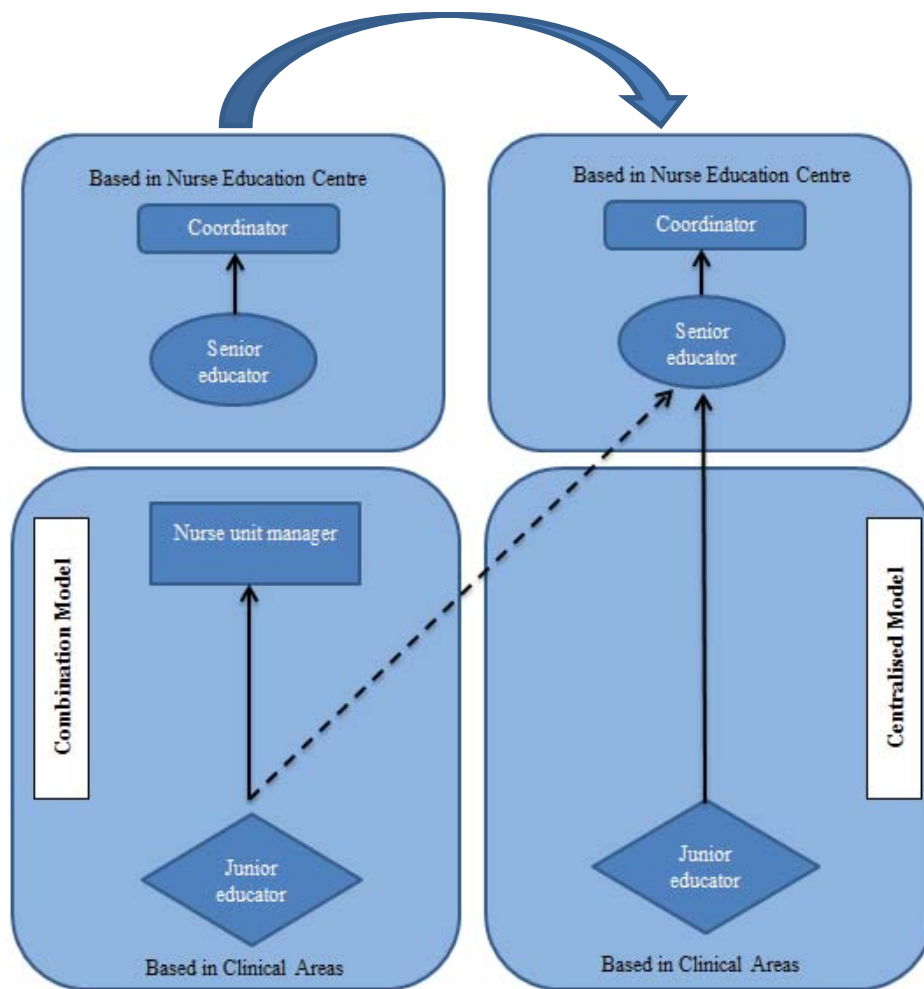
For nursing executive members involved in the development of the organisation's nurse education service model, a centralised nurse education model gives educators a

more organisational-wide view, supports more consistency of training across the organisation and has more coordinators as members of the executive or high-level committees than does a decentralised or combination nurse education service model. Thus, a centralised nursing model, more so than the other model types, enables a comprehensive, consistent approach across the organisation, supporting the organisation's core goals.

This study has highlighted that a centralised nurse education service model is seen as the most advantageous model by nurse educators, but organisations are also obliged to consider the cost implications of employing a centralised model. Hospitals must ensure their nurse education service is working efficiently within its allocated budget. The centralised service model allows for the central purchasing of equipment for use across the site, instead of each area purchasing training equipment individually. In addition, a centralised model supports consistency in training, reducing repetition. It is expected that the centralised nurse education service model would also be the most cost-effective among the three model types; however, this needs to be tested further.

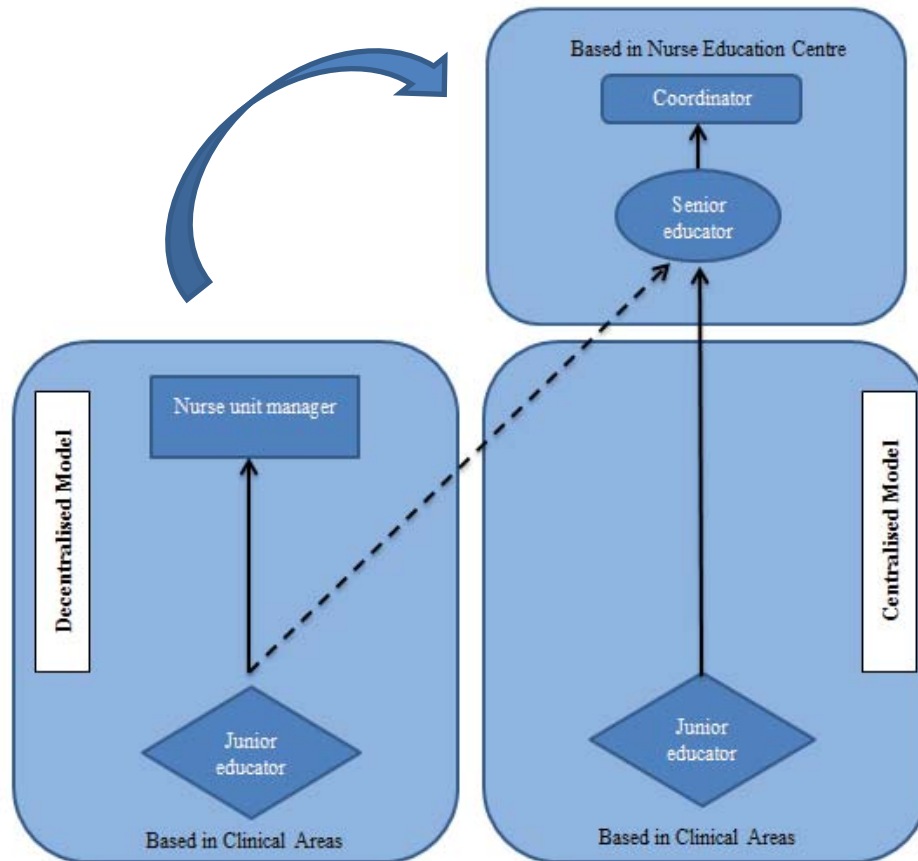
### **6.6.1 Recommendations for Healthcare Organisations**

The researcher recommends that nurse education services that are currently using a decentralised or combination service model consider changing their model to a centralised model. One way this could be done is by moving the reporting lines of all nurse educators within the organisation to report to a central education service, as depicted in Figures 6.1 and 6.2.



**Figure 6.1. Converting a Combination Nurse Education Service Model to a Centralised Model**





**Figure 6.2. Converting a Decentralised Nurse Education Service Model to a Centralised Model**

## 6.7 Summary

This mixed methods research study investigated nurse education service models across Australia. Its findings provided new information on the nurse education service models in use across Australia, their effectiveness and nurse educators' views on future nurse education service priorities. As outlined in the introduction, continuing nurse education is essential to support the delivery of safe patient care and to support the development of specialist clinical knowledge and skills. Further research in this area would be beneficial in verifying the findings of this study and more deeply investigating the different nurse education service models.

*Education is the passport to the future,  
for tomorrow belongs to those who prepare for it today*

-Malcolm X-

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# Appendices

## Appendix 1. National Safety and Quality Health Service Standards

### National Safety and Quality Health Service Standards

-  **1. Governance for Safety and Quality in Health Service Organisations** which describes the quality framework required for health service organisations to implement safe systems.
-  **2. Partnering with Consumers** which describes the systems and strategies to create a consumer-centred health system by including consumers in the development and design of quality health care.
-  **3. Preventing and Controlling Healthcare Associated Infections** which describes the systems and strategies to prevent infection of patients within the healthcare system and to manage infections effectively when they occur to minimise the consequences.
-  **4. Medication Safety** which describes the systems and strategies to ensure clinicians safely prescribe, dispense and administer appropriate medicines to informed patients.
-  **5. Patient Identification and Procedure Matching** which describes the systems and strategies to identify patients and correctly match their identity with the correct treatment.
-  **6. Clinical Handover** which describes the systems and strategies for effective clinical communication whenever accountability and responsibility for a patient's care is transferred.
-  **7. Blood and Blood Products** which describes the systems and strategies for the safe, effective and appropriate management of blood and blood products so the patients receiving blood are safe.
-  **8. Preventing and Managing Pressure Injuries** which describes the systems and strategies to prevent patients developing pressure injuries and best practice management when pressure injuries occur.
-  **9. Recognising and Responding to Clinical Deterioration in Acute Health Care** which describes the systems and processes to be implemented by health service organisations to respond effectively to patients when their clinical condition deteriorates.
-  **10. Preventing Falls and Harm from Falls** which describes the systems and strategies to reduce the incidence of patient falls in health service organisations and best practice management when falls do occur.



## Appendix 2: UNDA Ethics Approval Letter



19 Mouat Street (PO Box 1225)  
Fremantle, Western Australia 6959  
Telephone: +61 8 9433 0555  
Facsimile: +61 8 9433 0544  
Email: enquirics@nd.edu.au  
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ABN: 69 330 643 210  
CRICOS PROVIDER CODE: 01032F

14 January 2014

Professor Selma Allix  
School of Nursing & Midwifery  
The University of Notre Dame Australia  
Fremantle Campus

Dear Selma,

**Reference Number: 014006F**

**Project Title: "An Investigation of Nurse Education Service Models in Acute Care Metropolitan Hospitals across Australia."**

Thank you for submitting the above project for Low Risk ethical review. Your application has been reviewed by a sub-committee of the university's Human Research Ethics Committee in accordance with the *National Statement on Ethical Conduct in Human Research* (2007). I am pleased to advise that ethical clearance has been granted for this proposed study.

***All research projects are approved subject to standard conditions of approval. Please read the attached document for details of these conditions.***

On behalf of the Human Research Ethics Committee, I wish you well with what promises to be a most interesting and valuable study.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'N. Giles'.

Dr Natalie Giles  
Executive Officer, Human Research Ethics Committee  
Research Office

cc: Prof Leanne Monterosso, SRC Chair, School of Nursing & Midwifery.

## Appendix 3: SMHS Nursing Research Review Committee

### Approval Letter



Government of Western Australia  
Department of Health  
Fremantle Hospital and Health Service



3<sup>rd</sup> February 2014

Carolyn Keane  
A/Nursing Director, Corporate Services  
Fremantle Hospital  
Professional Doctorate in Nursing student,  
University of Notre Dame Australia.

Professor Selma Allix  
Dean of the school of nursing  
University of Notre Dame Australia.

Dear Carolyn and Dr Allix  
Project title: An Investigation of Nurse Education Services Models in Acute Care  
Metropolitan Hospitals across Australia.

Thankyou for submitting the above project for review by the South Metro Health Service (SMHS) Nursing Research Review Committee. All research projects are approved by the committee subject to standard conditions of approval in accordance with the SMHS Guidelines for Research Requests in Nursing.

On behalf of the committee I am pleased to advise that your research proposal has been approved.

On behalf of the Nursing Research Review Committee I wish you well with your research and look forward to reading the outcome of your endeavours.

Yours Faithfully  
Pippa

*Philippa Paterson*  
*Chair South Metro Health Service Nursing Research Review Committee*  
*Acting Director Nursing Research and Practice Development*  
*Level 3, B Block*  
*FHHS*  
*ext: 12129*  
*email: [philippapaterson@health.wa.gov.au](mailto:philippapaterson@health.wa.gov.au)*

**Nursing research and practice development**  
Fremantle Hospital & Health Service  
2 Alma Street, Fremantle, W.A. 6160 Postal Address: PO Box 480, Fremantle, W.A. 6959  
Phone: (08) 94313275

## Appendix 4: Participant Information Sheet for Phases One and Two



### PARTICIPANT INFORMATION SHEET – INTERVIEWS/FOCUS GROUPS

#### **An Investigation of Nurse Education Service Models in Acute Care Metropolitan Hospitals across Australia**

Chief Investigator: Professor Selma Allieux  
Student Researcher: Carolyn Keane  
Student's Degree: Professional Doctorate of Nursing

Dear Participant,

You are invited to participate in the research project described below.

#### **What is the project about?**

The aim of my study is to investigate nurse education service models in acute care metropolitan hospitals across Australia. The research questions are:

1. What nurse education service model is utilised at Fremantle Hospital?
2. What nurse education service models are utilised in other acute care metropolitan hospitals across Western Australia?
3. What nurse education service models are utilised in acute care metropolitan hospitals across Australia?
4. What are the perceived factors that influence which nurse education service model is used at acute care metropolitan hospitals across Australia?
5. What are the views of nurse educators about the different nurse education service models utilised in acute care metropolitan hospitals across Australia?
6. What are the views of nurse educators about future nursing education priorities and services?

It is predicted that the Australian nursing workforce will experience a shortage of 109,000 nurses and midwives by 2025 (Health Workforce Australia, 2012). Ongoing education and training for nursing staff is essential to support the delivery of quality patient care. Currently there are a number of different service models of nurse education used in acute care metropolitan hospitals around Australia. Each of these models having advantages and disadvantages that can affect service delivery, quality of service and cost.

There are few studies however that have undertaken research in this area or made any recommendations and in light of the opening of the new Fiona Stanley Hospital in 2014 and the St John of God Hospital in Midland in 2015. It is important to conduct a study into the efficacy of the various models in light of the new sites to ensure they can deliver on organisational outcomes in the most cost effective manner and support the sustainability of the service into the future.

My study will be conducted in three phases. Phase one will involve holding a number of interviews and focus groups with nurse educators at Fremantle Hospital. Phase two will involve holding interviews with the coordinators of nurse education services and focus groups with nurse educators in acute care metropolitan hospitals in Western Australia. Phase three of my study will consist of a quantitative online survey of acute care metropolitan hospitals across Australia. These three phases are vital to allow comparisons to be made between the hospitals and states.

**Who is undertaking the project?**

This project is being conducted by Carolyn Keane and will form the basis for the degree of Professional Doctorate of Nursing at The University of Notre Dame Australia, under the supervision of Professor Selma Allieux.

**What will I be asked to do?**

I would like to invite you to be involved in a (enter interview or focus group here) for phase (enter one or two here) of my study. I will be conducting a number of them to gather information regarding the nursing education service models being used in W.A. These (enter interviews or focus groups here) will consist of being asked four to five questions to promote discussion and the responses audio recorded for transcribing at a later time. It is expected that this (enter interview or focus group here) will be conducted at a convenient venue and last for a maximum of 60 minutes. You will only be required to participate in one session.

**Are there any risks associated with participating in this project?**

There are no foreseeable risks with participating in this study.

**What are the benefits of the research project?**

Your involvement in this study will assist in increasing your understanding of the different nurse education service models within acute care metropolitan hospitals in W.A. It is hoped that this study will investigate the different types of nurse education models across Australia with a view to making recommendations for future service delivery.

**Can I withdraw from the study?**

Participation in this study is completely voluntary. You are not under any obligation to participate. If you agree to participate, you can withdraw from the study at any time without adverse consequences.

**Will anyone else know the results of the project?**

The information gathered about you and data collected from the focus groups will be de-identified and held confidentially. This confidence will only be broken in instances of legal requirements such as court subpoenas, freedom of information requests, or mandated reporting by some professionals. It will be stored securely in the School of Nursing at The University of Notre Dame Australia for a period of five years. It is hoped the findings of this study will be published in a journal specialising in nursing education.

**Will I be able to find out the results of the project?**

Participants will be contacted via email and sent a thank you letter and an outline of the findings of the study.

**Who do I contact if I have questions about the project?**

If you have any queries regarding the study, please contact:

Carolyn Keane  
A/Nursing Director, Corporate Services  
Fremantle Hospital and Health Service  
Phone: (08) 9431 2771  
Email: [Carolyn.keane@health.wa.gov.au](mailto:Carolyn.keane@health.wa.gov.au)

Professor Selma Allieux  
Dean, School of Nursing and Midwifery  
The University of Notre Dame Australia  
Phone: (08) 9433 0215  
Email: [sallieux@nd.edu.au](mailto:sallieux@nd.edu.au)

**What if I have a complaint or any concerns?**

The study has been approved by the Human Research Ethics Committee at The University of Notre Dame Australia. If participants have any complaint regarding the manner in which a research project is conducted, it should be directed to the Executive Officer of the Human Research Ethics Committee, Research Office, The University of Notre Dame Australia, PO Box 1225 Fremantle W.A. 6959, phone (08) 9433 0943, [research@nd.edu.au](mailto:research@nd.edu.au)

Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

**I want to participate! How do I sign up?**

If you are interested in participating in the study please send an email expressing your interest to [Carolyn.keane@health.wa.gov.au](mailto:Carolyn.keane@health.wa.gov.au) who will then contact you to arrange a session at a convenient date, time and venue.

Yours sincerely,



**Carolyn Keane**

**Professor Selma Allieux**

*If participants have any complaint regarding the manner in which a research project is conducted, it should be directed to the Executive Officer of the Human Research Ethics Committee, Research Office, The University of Notre Dame Australia, PO Box 1225 Fremantle W.A. 6959, phone (08) 9433 0943, [research@nd.edu.au](mailto:research@nd.edu.au)*

## **Appendix 5: Phase One Focus Group and Interview Questions**

**Welcome**

**Introduce topic**

**Outline reason for participant selection**

**Discuss guidelines**

<b>Guiding Questions</b>	
1.	Describe the nurse education service model used at your hospital.
2.	What factors do you think have influenced the model used at your hospital?
3.	What is your experience working with this model?
4.	What do you feel nurse education services might look like in the future?
5.	Any further comments?

## Appendix 6: Phases One and Two Consent Form



### An Investigation of Nurse Education Service Models in Acute Care Metropolitan Hospitals across Australia

#### Informed Consent Form

I, *(participant's name)* \_\_\_\_\_ hereby agree to being a participant in the above research project.

- I have read and understood the Information Sheet about this project and any questions have been answered to my satisfaction.
- I understand that I may withdraw from participating in the project at any time without prejudice.
- I understand that all information gathered by the researcher will be treated as strictly confidential, except in instances of legal requirements such as court subpoenas, freedom of information requests, or mandated reporting by some professionals.
- I understand that the protocol adopted by The University of Notre Dame Australia Human Research Ethics Committee for the protection of privacy will be adhered to and relevant sections of the *Privacy Act* are available at <http://www.nhmrc.gov.au/>
- I agree that any research data gathered for the study may be published provided my name or other identifying information is not disclosed.
- I understand that I will be audio-taped.

<b>Participant's signature:</b>		<b>Date:</b>	
---------------------------------	--	--------------	--

<b>Researcher's full name:</b>			
<b>Researcher's signature:</b>		<b>Date:</b>	

*If participants have any complaint regarding the manner in which a research project is conducted, it should be directed to the Executive Officer of the Human Research Ethics Committee, Research Office, The University of Notre Dame Australia, PO Box 1225 Fremantle W.A. 6959, phone (08) 9433 0943, [research@nd.edu.au](mailto:research@nd.edu.au)*

## Appendix 7: W.A. Hospitals Included in Phase Two

South Metropolitan Health Service (SMHS)	
Royal Perth Hospital Public 24-hour service ED & ICU Beds: 450 Staff: 7000 (4700 FTE) Nurse educators: 26 SDEs, 68 SDNs ED attendances: 64, 000 annually	Armadale Hospital Public 24-hour service ED & ICU Beds: 290 Nurse educators: 5 SDEs, 16 SDNs Staff: 1300 ED attendances: 42, 000 annually
Rockingham General Hospital Public 24-hour service ED and ICU Beds: 242 Staff: 1459 Nurse educators: 5 SDEs, 8 SDNs	

North Metropolitan Health Service (NMHS)	
Sir Charles Gardiner Hospital Public 24-hour service ED & ICU Beds: 600 Staff: 5500 Nurse educators: 11 SDEs, 65 SDNs ED attendances: 60,000 annually	Joondalup Health Campus Public & private 24-hour service ED and ICU Beds: 500 Staff: 4200 across 4 sites Nurse educators: 1 (level 3), 24 (level 2) ED attendances: 80,000 annually

PRIVATE	
St John of God Hospital Murdoch Private 24-hour service ED and ICU Beds: 507 Staff: 1400 Nurse educators: 8 SDEs, 11 SDNs	

**Total population:**  
**NMHS 5, SMHS 4, Private 7 = 16**  
**Meet inclusion = 6**



## **Appendix 8: Introduction Email to Coordinators for Phase Two**

**From:** Keane, Carolyn

**Sent:** Friday, March 07, 2014 09:30 AM W. Australia Standard Time

**Subject:** Research Study - Invitation

Hi XXXXX,

I am currently undertaking a research study as part of my Professional Doctorate of Nursing at The University of Notre Dame.

My study is titled **An Investigation of Nurse Education Service Models in Acute Care Metropolitan Hospitals across Australia** and is being conducted in three phases.

Phase two is looking at nurse education services across W.A. and includes holding interviews with the Coordinators of nurse education services and a number of focus groups with junior and senior nurse educators.

I have attached an information sheet that contains some more detail regarding the study and my ethics approval from NDU and SMHS (which I believe is reciprocal across WA).

Can you please let me know if you would be interested in being involved by allowing me to undertake an interview with you around the topic of nurse education.

Cheers.

**Carolyn Keane**

A/Nursing Director - Corporate Services

Fremantle Hospital & Health Service

Tel 9431 2771 | Fax 9431 2443

Email [carolyn.keane@health.wa.gov.au](mailto:carolyn.keane@health.wa.gov.au)

## Appendix 9: Interview/Focus Group Questions for Phase Two

Welcome

Please turn off pages/phones

Introduce topic

Guidelines of session

1. Voluntary
2. Confidential
3. Conflict of interest
4. Personal study, not employer
5. Recording
6. Consent

Guiding Questions	
1.	Describe the nurse education service model used at your hospital.  a) Can you describe the key characteristics of your model?  b) How do you as the coordinator influence how the service functions? <b>(for interviews)</b>  c) What works well in this model? <b>(for focus groups)</b>  d) What doesn't work so well in this model? <b>(focus groups)</b>
2.	Describe the role of your nurse education service within the hospital?
3.	How do you measure the success of your nurse education service model?
4.	What in your opinion are the characteristics of the ideal nurse education model?  a) What is needed to make this possible?
5.	How do you think nurse education will change in the future?
6.	Any further comments?  Any questions?

## Appendix 10: St John of God Ethics Approval Letter



4 February 2014

Ms Carolyn Keane  
10 Foxall Place  
SCOUTH LAKE WA 6164

Dear Ms Keane,

**Re: An Investigation of Nurse Education Service Models in Acute Care Metropolitan Hospitals across Australia** (*Our ref No: 673*)

Thank you for forwarding the above "low risk" project for review by the St John of God Health Care (SJGHC) Ethics Committee ("the Committee").

A sub-group of Committee members has reviewed your project out of session, including your email of 31 January 2014, addressing the queries raised by the sub-group. As there are no identified ethical issues with this project, I am pleased to advise that the project has been granted ethical approval based on an expedited review process, as per section 5.1.7 of the National Health and Medical Research Council's National Statement on Ethical Conduct in Human Research (NHMRC, 2007) ("the National Statement").

This approval is granted for a time frame from the date of this approval letter to 1 November 2015. Should an extension of this timeframe be required, then you must seek continued approval from the Committee *before* the expiry of this time period.

The project will now be tabled for the information of the full Committee, at its next scheduled meeting on 12 February 2014. Please find attached a signed and dated Committee membership list.

**PLEASE NOTE:** You are reminded that this letter constitutes ethical approval only. You must not commence this research study at St John of God Murdoch Hospital ("the participating site") until operational site approval has been confirmed with St John of God Murdoch Hospital. On receipt of the signed Participating Site Operational Approval Form, we will write to you again to advise of final study approval. You will then be able to commence the project.

The Committee is a Human Research Ethics Committee that is constituted and operates in accordance with the National Statement. In line with the National Statement requirements, researchers need to keep the Committee and the institution (specifically, the participating site) promptly and regularly informed on the progress of their approved project including: .../2

12 Salvado Road, Subiaco, WA 6008  
PO Box 14, Subiaco, WA 6904  
T. 08 9382 6111 F. 08 9381 7180 E. [info.subiaco@sjog.org.au](mailto:info.subiaco@sjog.org.au)  
[www.sjog.org.au/subiaco](http://www.sjog.org.au/subiaco)

A division of St John of God Health Care  
ARBN 051960 911 ABN 21 930 207 958  
(Limited Liability) incorporated in  
Western Australia

1. any adverse events or unexpected outcomes that may affect continued ethical approval of the project.
2. any proposed changes in the project protocol.
3. when the project is completed or abandoned.

The Committee would also appreciate receiving *at a minimum* an *annual* project progress report, as well as a final project report and any subsequent publications.

I wish you well with your research.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Mark McKenna', written in a cursive style.

Dr Mark McKenna  
**Chairman, St John of God Health Care Ethics Committee**

**Enc.**

cc. Mr Adam Coleman, DON, SJG Murdoch Hospital (via email)  
cc. Prof. Leanne Monterosso, Chair Nursing Research, SJG Murdoch Hospital (via email)

## Appendix 11: St John of God Site Approval Letter



17 February 2014

Ms Carolyn Keane  
10 Foxall Place  
SOUTH LAKE WA 6164

Dear Ms Keane,

**Re: An Investigation of Nurse Education Service Models in Acute Care  
Metropolitan Hospitals across Australia** (*Our ref No: 673*)

I refer to the letter of 4 February 2014, advising of ethical approval of the above study, as granted by the St John of God Health Care Ethics Committee.

I am in receipt of your email of 17 February 2014, with the attached Participating Site Operational Approval Form from St John of God Murdoch Hospital.

Accordingly, I now confirm final approval for your study to be conducted at St John of God Murdoch Hospital ("the participating site").

I wish you well with your research.

Yours sincerely

A handwritten signature in black ink, appearing to read "Mark Lubliner".

Dr Mark Lubliner  
**Group Director Medical Services & Risk**  
**St John of God Health Care**

cc. Mr Adam Coleman, DON, SJG Murdoch Hospital (via email)  
cc. Prof. Leanne Monterosso, Chair Nursing Research, SJG Murdoch Hospital (via email)

12 Salvado Road, Subiaco, WA 6008  
PO Box 14, Subiaco, WA 6904  
T. 08 9382 6111 F. 08 9381 7180 E. [info.subiaco@sjog.org.au](mailto:info.subiaco@sjog.org.au)  
[www.sjog.org.au/subiaco](http://www.sjog.org.au/subiaco)

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Western Australia

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# Appendix 12: Joondalup Health Campus Ethics Approval Letter

JOONDALUP  
HEALTH CAMPUS

18 March 2014

Ms C Keane  
10 Foxall Place  
SOUTH LAKE WA 6164

Joondalup Hospital Pty Ltd trading as  
Joondalup Health Campus  
ABN 61 106 723 193  
Cnr Grand Blvd & Shenton Ave  
Joondalup WA 6027  
PO Box 242  
Joondalup WA 6919  
Telephone: 08 9400 9400  
Facsimile: 08 9400 9054  
Web: www.ramsayhealth.com.au

Dear Ms Keane

**RE: An investigation of nurse education service models in acute care metropolitan hospitals across Australia (ref 1405)**

The Human Research Ethics Committee of Joondalup Health Campus is pleased to notify you that your proposal to undertake research on this campus has been approved, including endorsement from the Hospital Executive. As the Committee is bound by NHMRC Guidelines, the following conditions apply:

- That the Committee be notified immediately of any substantial changes in the design, methodology, time line or intended subjects of the project,
- That the Committee be notified immediately of any unforeseen complications of the project,
- That the Committee be notified if the project does not commence within six months of approval,
- That the Committee receive annual/final reports on the study (you will receive a pro forma from the Committee in twelve months), and
- That the Committee be informed of any other matters which arise during the course of the project which may have ethical implications.

Your approval is initially for four years; after this period you may be asked to re-apply. You are also required to notify the Committee promptly of any changes in your contact details.

Our best wishes for a successful implementation of your research project.

Yours sincerely



Ann Y Hammer  
Executive Officer, JHC HREC

health.com.au

  
RAMSAY  
HEALTH CARE



# Appendix 13: Sir Charles Gairdner Hospital Ethics Approval Letter



Government of **Western Australia**  
Department of **Health**  
Our Ref: 2014-047 approval HREC

8 May 2014



Sir Charles  
Gairdner Hospital

Ms Carolyn Keane  
10 Foxall Place  
SOUTH LAKEWA6164

Dear Ms Keane

**HREC No: 2014-047**  
**Project Title: An Investigation of Nurse Education Service Models in Acute Care Metropolitan Hospitals across Australia**

The ethics application for the project referenced above was reviewed under the low risk research review stream conducted on behalf of the Sir Charles Gairdner Group (SCGG) Human Research Ethics Committee (HREC). It has been approved and will be tabled for the information of the HREC at the next meeting on 22 May 2014. The following documents have been approved for use in this project.

Document
Research Protocol
Participant Information Sheet - Online Survey, Australian master version 1.0 dated 7 May 2014
Participant Information Sheet - Focus Groups, Australian master version 1.0 dated 7 May 2014
Participant Information Sheet - Interviews, Australian master version 1.0 dated 7 May 2014
Consent Form, Australian master version 1.0 dated 7 May 2014

Approval of this project from the Sir Charles Gairdner Hospital Human Research Ethics Committee EC00271 is valid to 8 May 2017 and on the basis of compliance with the 'Conditions of HREC Approval for a Research Project' (attached).

The nominated participating sites in this project are:

Sir Charles Gairdner Hospital  
Fremantle Hospital  
Royal Perth Hospital  
Armadale Hospital  
Rockingham General Hospital

[Note: If additional sites are recruited prior to the commencement of, or during the research project, the Coordinating Principal Investigator is required to notify the HREC. Notification of withdrawn sites should also be provided to the HREC in a timely fashion.]

A copy of this ethical approval letter must be submitted by all site Principal Investigators to the Research Governance Office or equivalent body or individual at each participating institution in a timely manner to enable the institution to authorise the commencement of the project at its site/s.

Sir Charles Gairdner Group Human Research Ethics Committee, Level 2 A Block, Hospital Ave, Nedlands, WA 6009  
Telephone (08) 9346 2999 Fax (08) 9346 3307 ABN: 13 993 250 709  
email [HREC.SCGH@health.wa.gov.au](mailto:HREC.SCGH@health.wa.gov.au) Website [www.scgh.health.wa.gov.au](http://www.scgh.health.wa.gov.au)

**This letter constitutes ethical approval only.** This project cannot proceed at any site until separate site authorisation has been obtained from the CE, or delegate, of the site under whose auspices the research will be conducted at that site.

The SCGGHREC is registered with the Australian Health Ethics Committee and operates according to the NHMRC National Statement on Ethical Conduct in Human Research and International Conference on Harmonisation – Good Clinical Practice.

Should you have any queries about the HREC's consideration of your project, please contact Sean Howarth. The HREC's Terms of Reference, Standard Operating Procedures, membership and standard forms are available from <http://www.scgh.health.wa.gov.au/Research/AboutUs.html> or from the HREC Office.

Yours sincerely



**Diana Forster**  
**Delegate of the Chair**  
**for**  
**Hal Jackson**  
**Chair**  
**Sir Charles Gairdner Group**  
**Human Research Ethics Committee**



# Appendix 14: Sir Charles Gairdner Hospital Site Approval Letter



15 May 2014

Ms Carolyn Keane  
10 Foxall Place  
SOUTH LAKEWA6164

Dear Ms Keane

**HREC No: 2014-047**  
**Project Title: An Investigation of Nurse Education Service Models in Acute Care Metropolitan Hospitals across Australia**

On behalf of the Sir Charles Gairdner Osborne Park Health Care Group, I give authorisation for your research project to be conducted at the following site:

Sir Charles Gairdner Hospital

This authorisation is based on the approval from the Sir Charles Gairdner Hospital Human Research Ethics Committee and the review from the Research Governance Office. This authorisation is valid subject to the ongoing approval from the HREC, and on the basis of compliance with the 'Conditions of Site Authorisation to Conduct a Research Project' (attached) and with the compliance of all reports as required by the Research Governance Office and approving HREC. Noncompliance with these requirements could result in the authorisation be withdrawn.

The responsibility for the conduct of this project remains with you as the Principal Investigator at the site.

Yours sincerely



**Dr Robyn Lawrence**  
**EXECUTIVE DIRECTOR**  
**SIR CHARLES GAIRDNER AND**  
**OSBORNE PARK HEALTH CARE GROUP**

## Appendix 15: SMHS Ethics Approval Letter



Government of Western Australia  
Department of Health  
South Metropolitan Health Service

cg  
S/14/49  
31 July 2014

Ms Carolyn Keane  
10 Foxall Place  
South Lake WA 6164

Dear Ms Keane

**Project Title: An Investigation of Nurse Education Service Models in Acute Care Metropolitan Hospitals across Australia**  
**HREC Reference: 2014-047(SCGH)**

On behalf of the South Metropolitan Health Service, I give authorisation for your research project to be conducted at the following site(s):

Fremantle Hospital  
Armadale Hospital  
Rockingham General Hospital

The following documents have been approved for this project:

Document
<ul style="list-style-type: none"><li>• <b>Research Protocol</b></li><li>• <b>Participant Information Sheet - Online Survey, Australian master version 1.0 dated 7 May 2014</b></li><li>• <b>Participant Information Sheet - Focus Groups, Australian master version 1.0 dated 7 May 2014</b></li><li>• <b>Participant Information Sheet - Interviews, Australian master version 1.0 dated 7 May 2014</b></li><li>• <b>Consent Form, Australian master version 1.0 dated 7 May 2014</b></li></ul>

This authorisation is based on the approval from the Sir Charles Gairdner Group Human Research Ethics Committee (SCGG HREC) and the review from the Research Governance Office at Fremantle Hospital. This authorisation is valid subject to the ongoing approval from the SCGG HREC.

This authorisation is based on the ethical approval from the Lead HREC, and on the basis of compliance with the 'Conditions of Authorisation to Conduct a Research Project at Site' (attached) and with the compliance of all reports as required by the Research Governance Office and approving HREC. Non-compliance with these requirements could result in the authorisation be withdrawn.

Keane S/14/49 Nurse Edu Service Models

Research Governance & Ethics Office  
Fremantle Hospital  
Demountable 3, G Block  
Postal Address: PO 480 Fremantle WA 6959  
Telephone: (08) 84312929 Facsimile: (08) 8431 3930  
<http://www.smhs.health.wa.gov.au> ABN 13 953 250 709

# Appendix 16: Royal Perth Hospital Ethics Approval Letter



Government of Western Australia  
Department of Health  
South Metropolitan Health Service



9 September 2014

Ms Carolyn Keane  
10 Foxall Place  
SOUTH LAKE WA 6164

Dear Carolyn

Project Title: **An Investigation of Nurse Education Service Models in Acute Care Metropolitan Hospitals across Australia**  
HREC Reference: **2014-047 (SCGG HREC)**

On behalf of the Royal Perth Hospital, I give authorisation for your research project to be conducted at the following site(s):

#### Royal Perth Hospital

This authorisation is based on the approval from the Sir Charles Gairdner Group (SCGG) HREC and the review by the RPH Research Ethics and Governance (REG) Office. **This authorisation is valid subject to the ongoing approval from the HREC.**

This authorisation is based on the ethical approval from the HREC, and on the basis of compliance with the 'Conditions of Authorisation to Conduct a Research Project at Site' (attached) and with the compliance of all reports as required by the Research Governance Office and approving HREC. Non compliance with these requirements could result in the authorisation be withdrawn.

The responsibility for the conduct of this project remains with you as the Principal Investigator at the site.

Yours sincerely

**DR ARESH ANWAR**  
A/Executive Director  
Royal Perth Hospital

Copy: Sean Howarth (SCGG HREC)

## Appendix 17: All Hospitals Included in Phase Three

<b>Western Australia</b>	
<p>Fremantle Hospital Public 24-hour service ED &amp; ICU Beds: 320 <b>Nurse educators: 9 SDEs, 34 SDNs</b> Staff: 4500 ED attendances: 40,000 annually</p>	<p>Armadale Hospital Public 24-hour service ED &amp; ICU Beds: 290 <b>Nurse educators: 5 SDEs, 16 SDNs</b> Staff: 1300 ED attendances: 42,000 annually</p>
<p>Rockingham General Hospital Public 24-hour service ED &amp; ICU Beds: 242 Staff: 1459 <b>Nurse educators: 5 SDEs, 8 SDNs</b></p>	<p>Royal Perth Hospital Public 24-hour service ED &amp; ICU Beds: 450 Staff: 7000 (4700 FTE) <b>Nurse educators: 26 SDEs, 68 SDNs</b> ED attendances: 64,000 annually</p>
<p>Sir Charles Gardiner Hospital Public 24-hour service ED &amp; ICU Beds: 600 Staff: 5500 <b>Nurse educators: 11 SDEs, 65 SDNs</b> ED attendances: 60,000 annually</p>	<p>Joondalup Health Campus Public &amp; private 24-hour service ED &amp; ICU Beds: 500 Staff: 4200 across 4 sites <b>Nurse educators: 1 (level 3), 24 (level 2)</b> ED attendances: 80,000 annually</p>
<p>St John of God Hospital Murdoch Private 24-hour service ED &amp; ICU Beds: 507 Staff: 1400 <b>Nurse educators: 8 SDEs, 11 SDNs</b></p>	
<p><b>Total population:</b> <b>NMHS 5, SMHS 4, Private 7 = 16</b> <b>Meet inclusion = 6</b></p>	

<b>Northern Territory</b>	
<p>Royal Darwin Hospital Public 24-hour service ED &amp; ICU Beds: 363 Staff: 1700 <b>Nurse educators: 28 educators</b> (08) 8922 7693</p>	
<p><b>Total population:</b> <b>Public 5, 1 private = 6</b> <b>Meet inclusion criteria: 1</b></p>	

<b>Tasmania</b>	
<p>Launceston General Hospital Public ED &amp; ICU Beds:300 Staff: 1346 FTE <b>Nurse educators: 15 (level 2)</b> ED attendances: 30,931 annually (03) 6348 7111</p>	<p>Royal Hobart Hospital Public 24-hour service ED &amp; ICU Beds: 550 Staff: 2190 FTE <b>Nurse educators: 39 (level 3)</b> (03) 6222 8308</p>
<p>Hobart Private Hospital Private 24-hour service ED &amp; HDU Beds: 146 <b>Nurse educators: 4</b> (03) 6214 3000</p>	
<p><b>Total population:</b> <b>Public 13, private 8 = 21</b> <b>Meet inclusion criteria: 3</b></p>	

<b>Australian Capital Territory</b>	
<p>Canberra Hospital Public 24-hour service ED &amp; ICU Beds: <b>Nurse educators: 12 (level 3), 36 (level 2), 3(ENs)</b> (02) 6244 2222</p>	<p>Calvary Public Hospital Public 24-hour service ED &amp; ICU Beds: 230 Staff: <b>Nurse educators: 12</b> (02) 6264 7262</p>
<p><b>Total population:</b> <b>Public 2, private 3 = 5</b> <b>Meet inclusion criteria: 2</b></p>	

<b>South Australia</b>	
<p>Flinders Medical Centre Public 24-hour service ED &amp; ICU Beds: 593 Staff: 3500 <b>Nurse educators: 30 (level 3), 4 (level 2)</b> ED attendances: 74,000 annually (08) 8204 5511</p>	<p>Lyell McEwin Hospital Public 24-hour service ED &amp; ICU Beds: 396 Staff: 2200 <b>Nurse educators: 10 (level 3), 2 (level 2)</b> ED attendances: 51,000 annually (08) 8282 0270</p>
<p>Modbury Hospital Public 24-hour service ED &amp; HDU Beds: 174 Staff: 851 <b>Nurse educators: 6 (level 3), 1 (level 2)</b> ED attendances: 32,000 annually (08) 8161 2000</p>	<p>Noarlunga Hospital Public 24-hour service ED &amp; HDU <b>Nurse educators: 0.5 (Level 3), 0.4 (Level 2)</b> ED attendances: 48,000 annually (08) 8384 9222</p>

<b>South Australia cont.</b>	
Royal Adelaide Hospital Public ED & ICU Beds: 650 Staff: 6000 across 2 sites (Hampstead Rehabilitation Centre) <b>Nurse educators: 25 (various levels)</b> ED attendances: 63,000 annually (08) 8222 4000	The Queen Elizabeth Hospital Public 24 hour service ED & ICU Beds: 311 Staff: 2500 <b>Nurse educators: 12 (level 3), 2 (level 2)</b> ED attendances: 42,000 annually (08) 8222 6000
Ashford Hospital Private Private 24-hour service ED & ICU Beds: 239 <b>Nurse educators: 2 (level 3), 1 (level 2)</b> (08) 8375 5222	St Andrew's Hospital Private 24-hour service ED & ICU Beds: 207 Staff: 565 <b>Nurse educators: 3 (level 2)</b> ED attendances: 4257 annually (08) 8408 2111
Calvary Wakefield Hospital Private 24-hour service ED & ICU Beds: 180 <b>Nurse educators: 1 (level 3), 2 (level 2)</b> (08) 8405 3333	
<b>Total population:</b> <b>Public 8, 22 private = 30</b> <b>Meet inclusion criteria: 9</b>	

<b>Queensland</b>	
Royal Brisbane and Women's Hospital Public 24-hour service ED & ICU Beds: 929 Staff: 6721 <b>Nurse educators: 12</b> ED attendances: 70,000 (07) 3646 8111	Princess Alexandra Hospital Public 24-hour service ED & ICU Beds: Staff: 6000 <b>Nurse educators: 37 (grade 7)</b> ED attendances: 46,150 (07) 3176 2111
The Prince Charles Hospital Public 24-hour service ED & ICU <b>Nurse educators: 13 (grade 7), 20 (grade 6)</b> (07) 3139 4643	Redcliffe Hospital Public 24-hour service ED & ICU <b>Nurse educators: 8 (grade 7), 1 (grade 6)</b> (07) 3883 7777
Caboolture Hospital Public 24-hour service ED & ICU <b>Nurse educators: 6</b> (07) 5433 8951	Gold Coast Hospital (across Robina as well) Public 24-hour service ED & ICU Beds: 500 <b>Nurse educators: 43 (grade 7), 23 (grade 6)</b> (07) 5519 8211

<b>Queensland cont.</b>	
Queen Elizabeth II Jubilee Hospital Public 24-hour service ED & ICU Beds: 190 <b>Nurse educators: 5 (grade 7), 5 (grade 6)</b> (07) 3182 6111	Robina Hospital (educators above across both sites) Public 24-hour service ED & ICU Beds: 364 <b>Nurse educators: As above for Gold Coast</b> (07) 5668 6000
Toowoomba Hospital Public 24-hour service ED & ICU Beds: 320 <b>Nurse educators: 5 (grade 7)</b> ED attendances: 42,674 (07) 4699 8312	The Townsville Hospital Public 24-hour service ED & ICU Beds: 473 <b>Nurse educators: 9 (NEs), 10 (CNEs)</b> (07) 4433 1111
St Vincent's Private Hospital Toowoomba Private 24-hour service ED & ICU <b>Nurse educators: 1</b> ED attendances: (07) 4690 4000	Ipswich Hospital Public 24-hour service ED & ICU Beds: 341 <b>Nurse educators: 6 (grade 7) and 7 (grade 6)</b> ED attendances: 46 677 (07) 3810 1111
	Sunshine Coast Private Hospital Private 24-hour service ED & ICU Staff: 500 <b>Nurse educators: 8</b> (07) 5430 3347
<b>Total population:</b> <b>Public 80, private 52 = 132</b> <b>Meet inclusion criteria: 13</b>	

<b>Victoria</b>	
Austin Hospital Public 24-hour service ED & ICU Beds: 400 <b>Nurse educators: 42 (Grade 3, 4 &amp; 5)</b> ED attendances: 70, 000 (03) 9496 5000	The Alfred Public 24-hour service ED & ICU <b>Nurse educators: 4 (Grade 5), 14 (Grade 4B)</b> ED attendances: 57,000 (03) 9076 2000
Box Hill Hospital Public 24-hour service ED & ICU Beds: 421 <b>Nurse educators: 19 (level 4), 5 (level 3)</b> (03) 9895 3333	Maroondah Hospital Public 24-hour service ED & ICU: <b>Nurse educators: 13</b> (03) 9871 3333

<b>Victoria cont.</b>	
<p>The Northern Hospital Public 24-hour service ED &amp; ICU Beds: 300 <b>Nurse educators: 35 (3G5, 6G3B, 26G4B)</b> ED attendances: 70,000 (03) 8405 8000</p>	<p>The Royal Melbourne Hospital Public 24-hour service ED &amp; ICU Beds: 350 <b>Nurse educators: 45</b> ED attendances: 60,000 (03) 9342 4902</p>
<p>St Vincents Hospital Public 24-hour service ED &amp; ICU Beds: 880 Staff: 5000 <b>Nurse educators: 18 (across 5 sites)</b> (03) 9288 2211</p>	<p>Cabrini Hospital Malvern (Private) Private 24-hour service ED &amp; ICU Beds: 508 <b>Nurse educators: 22</b> (03) 9508 1222</p>
<p>John Fawkner Private Hospital Private 24-hour service ED &amp; ICU Beds: 147 <b>Nurse educators: 6</b> (03) 9385 2500</p>	
<p><b>Total population: Public 36, private 48 = 84</b></p>	

<b>New South Wales</b>	
<p>Gosford Hospital Public 24-hour service ED &amp; ICU Beds: 484 <b>Nurse educators:70 (6 NEs, 65 CNEs)</b> ED attendances: 45,748 (02) 4320 2111</p>	<p>Wollongong Hospital Public 24-hour service ED &amp; ICU Beds: 500 <b>Nurse educators:20 (NEs and CNEs)</b> ED attendances: 50,000 (02) 4222 5000</p>
<p>Manly Hospital (same district) Public 24-hour service ED &amp; ICU <b>Nurse educators: Same as Royal North Shore</b> (02) 9976 9611</p>	<p>Royal North Shore Hospital (same district) Public 24-hour service ED &amp; ICU <b>Nurse educators: 11 NEs &amp; 120 CNEs across district</b> (02) 9926 4688</p>
<p>Nepean Hospital Public 24-hour service ED &amp; ICU <b>Nurse educators: 31 (6 NEs, 25 CNEs)</b> (02) 4734 3000</p>	<p>Hornsby Ku-ring-gai Hospital (same district) Public 24-hour service ED &amp; ICU <b>Nurse educators: Same as Royal North Shore</b> (02) 9477 9123</p>
<p>Ryde Hospital Public 24-hour service ED &amp; ICU <b>Nurse educators: Same as Royal North Shore</b> (02) 9858 7888</p>	<p>Mona Vale Hospital (same district) Public 24-hour service ED &amp; ICU <b>Nurse educators: Same as Royal North Shore</b> (02) 9926 46660</p>



<b>New South Wales cont.</b>	
Prince of Wales Hospital Public/Private 24-hour service ED & ICU Beds: 440 <b>Nurse educators: 11</b> (02) 9650 4000	St George Hospital Public 24-hour service ED & ICU Beds: 600 Staff: 2500 <b>Nurse educators: 41 (8 NEs, 33 CNEs)</b> (02) 9113 1111
Campbelltown Hospital * (same district) Public 24-hour service ED & ICU <b>Nurse educators site: 17 CNEs</b> <b>Nurse educators: 20 NEs across district</b> (02) 4634 3000 (site) (02) 4634 4974 (area)	Bankstown Lidcombe Hospital* (same district) Public 24-hour service ED & ICU Beds: 433 <b>Nurse educators site: 14 CNEs</b> (02) 9722 8000
Fairfield Hospital* (same district) Public 24-hour service ED & ICU Beds: 200 <b>Nurse educators site: 9 (3 NEs, 6 CNEs)</b> (02) 9616 8111	Liverpool Hospital* (same district) Public 24-hour service ED & ICU Beds: 900 <b>Nurse educators site: 48 CNEs</b> (02) 87388153 (02) 8738 3000
Westmead Hospital Public 24-hour service ED & ICU <b>Nurse educators: 53 (8 NEs, 45 CNEs)</b> (02) 9845 5555	Royal Prince Alfred Hospital Public 24-hour service ED & ICU <b>Nurse educators: 25 (NEs, CNEs)</b> (02) 9515 6111
Blacktown Mount Druitt Hospital Public 24-hour service ED & ICU <b>Nurse educators: 20 (2 NEs, 18 CNEs)</b> (02) 9881 8000	Auburn Hospital Public 24-hour service ED & ICU <b>Nurse educators: 8 (2 NEs, 6 CNEs)</b> (02) 8759 3000
St Vincents Hospital Public 24-hour service ED & ICU <b>Nurse educators: 25 (5 NEs, 20 CNEs)</b> (02) 8382 1111	John Hunter Hospital Public 24-hour service ED & ICU Beds: 550 <b>Nurse educators: 20 (8 NEs, 12 CNEs)</b> (02) 4921 3000
Norwest Private Hospital Private 24-hour service ED & ICU <b>Nurse educators: 10</b> (02) 8882 8882	Sydney Adventist Hospital's Private 24-hour service ED & ICU Beds: 360 Staff: 2200 <b>Nurse educators: 18</b> ED attendances: 20,000 (02) 9487 9111
<b>Total population:</b> <b>Public 145, private 82 = 227</b> <b>Meet inclusion criteria: 22</b>	

## Appendix 18: Content Validity Expert Feedback

Expert	Feedback
<p><b>Expert 1</b></p>	<p>There are a wide variety of questions to determine a number of characteristics related to the models of education and their benefits and barriers. I believe these will provide you with some interesting material to analyse.</p> <p>In relation to the consent statement, I have only a couple of queries, there is no need to reply to me, I trust that you may have these points addressed already, or you can make any changes if required.</p> <ul style="list-style-type: none"> <li>• I am assuming that there is some type of link to the Information sheet that you refer to?</li> <li>• In point 2, You have stated that they can withdraw, however once the survey is completed they actually cannot, perhaps if you were to add in something like ‘if whilst completing the survey you wish to withdraw, simply close the website, no data will be stored’</li> <li>• In point 5, I would again clarify, and state at the end of the sentence ... not disclosed as surveys are de-identified.</li> </ul>
<p><b>Expert 2</b></p>	<p>Page 1 - second paragraph, second line consider changing 'which model is used' to 'which model is chosen' as this is the language in question 8. Also I just like chosen better :)</p> <p>Page 1 - under sub heading 'Phase three', second sentence starting ‘the statements list...’ reads a bit clumsy; awkward sentence</p> <p>Page 1 - Your sign off should include your designation ie Prof Doc candidate Consent statement</p> <p>Page 2 - first bulleted point; consider including a statement noting that the participant information sheet was included in the email invitation.</p> <p>Page 2 - second bulleted point; consider replacing indentified with identifiable?</p> <p>Page 2 - fourth bulleted point; consider moving statement higher in the rankings as important point</p> <p><b>Demographics</b></p> <p>Page 3 - Question 4 consider changing to On the AHPRA are you registered as?</p> <p>Page 5 - Question 9 ‘problem solves’ - what?</p> <p>Page 6 - Question 10. Do you care/interested in level of evaluation or types?</p> <p>Page 7 - Question 11. Consider including Training is sometimes cancelled due to staffing constraints and Nurse/Midwife Education is valued at your work place</p> <p>Page 8 - Question 12. Eleventh statement ‘NE are employed at a higher level than clinical staff’, Do you mean at Level 3 or clinical staff as in those on the floor (CN/RN). Sorry wasn’t sure what was meant.</p> <p>Page 9 - Typo in first sentence (nuse nurse). Question 13, fourth statement ‘Focus’ should be focus. Fifth statement, consider including VET. Eighth statement consider changing ‘more’ to increased.</p>
<p><b>Expert 3</b></p>	<p>Page 2 - the second dot point needs to be a little clearer. Instead of ‘as the surveys are not identified’, what if I do want to do withdraw. Can you add another statement to substantiate that you can withdraw and if so how?</p> <p>Page 3 - question 6: for the examples, would it be better to use ANF level x and SRN level x? The word ‘Grade’ confused me a little.</p>

<p><b>Expert 3 cont.</b></p>	<p>Page 5 - I am not sure if the first statement under the heading is necessary (i.e., ... 9. In the question above you identified ...). I think it's implied from the previous question and if anything I had to re-read it a couple of time. What about going start to 'Please indicate which of the functions of a nurse education service listed below apply to your health service (add this in) model'.</p> <p>Page 7 - point 5, instead of 'stay aware' can it be 'maintain awareness' or 'keep abreast'? Although I appreciate you probably want to keep in plain language.</p> <p>Page 8 - point 9, typo in spelling 'educator'.</p> <p>Page 8: - point 10, Being influential – can you explain or expand on this. It seems more of a personal reference as opposed to the model which is what you are after.</p> <p>Page 8: - point 15, 'Nurse Ed not filling staffing deficits' – I am not sure if I understand this. Do you mean 'not fulfilling'?</p> <p>Page 8 - is it worth asking a question on quality improvement?</p> <p>Page 8 - point 17, 'Evidence of effectiveness/outcomes of education is available' – how so? What about adding the word 'transparent' instead of 'available'?</p> <p>Page 9 - first sentence after the heading 'The Future', typo in spelling '...related to future nurse education'.</p> <p>Page 9 - point 4, little 'f' instead of capital 'F' for focus.</p>
<p><b>Expert 4</b></p>	<p>What is your perception of why this nurse education service model was chosen? I was wondering what you hoped to achieve from this questions as many of the educators would not have been involved with the decision making around the educational paradigm chosen. What will you do if they don't know?</p> <p>Please indicate which of the functions of a nurse education service listed below apply to your Model. I like this. I think we get some useful trends and variances from this question.</p> <p>10. Which items below does your nurse education service use to measure the effectiveness of its model? I cannot reconcile the question with the solution answers. The model of education ie central/decentralised/mixed... how does one connect the solutions you offer with the hospitals choice of educational model. At this health service educators are constantly reminded that education p[rograms designed are done not on the basis of popularity or someone's good idea ... but on an industrial problem or issue requiring redress. So a plethora of strategies may be deployed when AKMH undergoes the next phase of its development through to 420+ beds. The solutions you offer are more a KPI of the evaluation of individual programs as opposed to a centralized versus decentralised model</p> <p>11. Which of the following statements apply to your nurse education model? Please indicate your level of agreement or disagreement with each statement. The solutions for this are no so much about an educational model but rather a description of the logistical functions of various members within the education staff ... There is a typo in the last solution 'ther'</p> <p>12. The perceived characteristics of an ideal nurse education model include: In your opinion the future of nurse education within your service model will include: Please indicate your level of agreement or disagreement with each statement. The solutions to these questions are somewhat low level and I wonder why you don't take the opportunity for a more strategic set of solutions. There isn't for an example any discussion around integration models with other health professionals, engagement with national standards, a concept of joint appointments and integrated area model etc.</p>

<b>Expert 4 cont.</b>	It doesn't acknowledge the funding components under ABF in the sense that asking should the model will be well funded is unlikely to offer you anything because inevitably the answer will be a resounding YES. The reality should be more how a limited TTR budget can address the priorities arising across the South.
<b>Expert 5</b>	<p>For question 3 I would make the numbers 100–199, 200–499, &gt;500 just to prevent people from providing a response which may not fully reflect their service.</p> <p>I would suggest that the second sentence – i.e., Please outline any reasons you are aware of in the box below – may mislead the respondent a little- the main question asks what are their perception which should be able to provide an answer for – but the second part asking for reasons may throw them a little. It may be just a case of adding something like – In addition please outline any reasons you are aware of...</p> <p>I would specify 'staffing deficits' rather than using the word staff – because they may think that you are asking about staff learning/skills deficits rather than the shortage of staff for the roster</p> <p>Question 13, change the F in focus to lower case</p>

## **Appendix 19: Introduction Email to Coordinators of Nurse Education Services Nationally**

**From:** Keane, Carolyn [mailto:Carolyn.Keane@health.wa.gov.au]

**Sent:** Thursday, 4 September 2014 3:51 PM

**Subject:** Research Study Introduction

Hi xxxxxxxxx,

Thank you for speaking with me on the phone previously regarding your nurse education service and number of nurse educators.

I am a nurse educator working at Fremantle Hospital in W.A. undertaking my Professional Doctorate of Nursing at The University of Notre Dame Australia.

My research study is titled: **An Investigation of Nurse Education Service Models in Acute Care Metropolitan Hospitals Across Australia.**

In the next couple of weeks I will be emailing you a link to my survey to distribute to the nurse educators working in your hospital.

The survey takes approximately 10 minutes to complete.

I have attached the ethics approval and a participant information sheet with further information about the study.

Please get back to me if you have any further queries.

**Carolyn Keane**

A/Nursing Director - Corporate Services

Fremantle Hospital & Health Service

Tel 9431 2771 | Fax 9431 2443

Email [carolyn.keane@health.wa.gov.au](mailto:carolyn.keane@health.wa.gov.au)

## Appendix 20: Participant Information Sheet for Phase Three



PARTICIPANT INFORMATION SHEET – ONLINE SURVEY

### **An Investigation of Nurse Education Service Models in Acute Care Metropolitan Hospitals across Australia**

Chief Investigator: Professor Selma Allix  
Student Researcher: Carolyn Keane  
Student's Degree: Professional Doctorate of Nursing

Dear Participant,

You are invited to participate in the research project described below.

#### **What is the project about?**

The aim of my research study is to investigate nurse education service models in acute care metropolitan hospitals across Australia. The research questions are:

1. What nurse education service model is utilised at Fremantle Hospital?
2. What nurse education service models are utilised in other acute care metropolitan hospitals across Western Australia?
3. What nurse education service models are utilised in acute care metropolitan hospitals across Australia?
4. What are the perceived factors that influence which nurse education service model is used at acute care metropolitan hospitals across Australia?
5. What are the views of nurse educators about the different nurse education service models utilised in acute care metropolitan hospitals across Australia?
6. What are the views of nurse educators about future nursing education priorities and services?

It is predicted that the Australian nursing workforce will experience a shortage of 109,000 nurses and midwives by 2025 (Health Workforce Australia, 2012). Ongoing education and training for nursing staff is essential to support the delivery of quality patient care. Currently there are a number of different service models of nurse education used in acute care metropolitan hospitals around Australia. Each of these models having advantages and disadvantages that can affect service delivery, quality of service and cost.

## PARTICIPANT INFORMATION SHEET – ONLINE SURVEY

There are few studies however that have undertaken research in this area or made any recommendations and in light of the opening of the new Fiona Stanley Hospital in 2014 and the St John of God Hospital in Midland in 2015. It is important to conduct a study into the efficacy of the various models in light of the new sites to ensure they can deliver on organisational outcomes in the most cost effective manner and support the sustainability of the service into the future.

My study will be conducted in three phases. Phase one will involve holding a number of interviews and focus groups with nurse educators at Fremantle Hospital. Phase two will involve holding interviews with the coordinators of nurse education services and focus groups with nurse educators in acute care metropolitan hospitals in Western Australia. Phase three of my study will consist of a quantitative online survey of acute care metropolitan hospitals across Australia. These three phases are vital to allow comparisons to be made between the hospitals and states.

### **Who is undertaking the project?**

This project is being conducted by Carolyn Keane and will form the basis for the degree of Professional Doctorate of Nursing at The University of Notre Dame Australia, under the supervision of Professor Selma Allieux.

### **What will I be asked to do?**

I would like to invite you to be involved in phase three of my study by completing an online survey. I will be sending out an online survey to nurse educators across Australia to gather information regarding the nursing education service models being used across Australia. The survey will consist of a number of quantitative questions and multi-item scales and take approximately 15 minutes to complete. You will only be required to complete the survey once.

### **Are there any risks associated with participating in this project?**

There are no foreseeable risks with participating in this study.

### **What are the benefits of the research project?**

Your involvement in this study will assist in increasing your understanding of the different nurse education service models within acute care metropolitan hospitals in W.A. It is hoped that this study will investigate the different types of nurse education models in use across Australia with a view to making recommendations for future service delivery.

### **Can I withdraw from the study?**

Participation in this study is completely voluntary. You are not under any obligation to participate. If you agree to participate, you can withdraw from the study at any time without adverse consequences.

### **Will anyone else know the results of the project?**

The information gathered about you and data collected from the online survey will be de-identified and held confidentially. This confidence will only be broken in instances of legal requirements such as court subpoenas, freedom of information requests, or mandated reporting by some professionals. It will be stored securely in the School of Nursing at The University of Notre Dame Australia for a period of five years. It is hoped the findings of this study will be published in a journal specialising in nursing education

## PARTICIPANT INFORMATION SHEET – ONLINE SURVEY

### **Will I be able to find out the results of the project?**

Participants will be contacted via email and sent a thank you letter and an outline of the findings of the study.

### **Who do I contact if I have questions about the project?**

If you have any queries regarding the study, please contact:

Carolyn Keane  
A/Nursing Director, Corporate Services  
Fremantle Hospital and Health Service  
Phone: (08) 9431 2771  
Email: [Carolyn.keane@health.wa.gov.au](mailto:Carolyn.keane@health.wa.gov.au)

Professor Selma Allieux  
Dean, School of Nursing and Midwifery  
The University of Notre Dame Australia  
Phone: (08) 9433 0215  
Email: [salliex@nd.edu.au](mailto:salliex@nd.edu.au)

### **What if I have a complaint or any concerns?**

The study has been approved by the Human Research Ethics Committee at The University of Notre Dame Australia. If participants have any complaint regarding the manner in which a research project is conducted, it should be directed to the Executive Officer of the Human Research Ethics Committee, Research Office, The University of Notre Dame Australia, PO Box 1225 Fremantle W.A. 6959, phone (08) 9433 0943, [research@nd.edu.au](mailto:research@nd.edu.au)

Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

### **I want to participate! How do I sign up?**

If you are interested in participating in the study please send an email expressing your interest to [Carolyn.keane@health.wa.gov.au](mailto:Carolyn.keane@health.wa.gov.au) and you will then be send an email with a link to the online survey.

Yours sincerely,



**Carolyn Keane**

*If participants have any complaint regarding the manner in which a research project is conducted, it should be directed to the Executive Officer of the Human Research Ethics Committee, Research Office, The University of Notre Dame Australia, PO Box 1225 Fremantle W.A. 6959, phone (08) 9433 0943, [research@nd.edu.au](mailto:research@nd.edu.au)*



## Appendix 21: Email to Coordinators of Nurse Education Services Nationally

**From:** Keane, Carolyn  
**Sent:**  
**To:**  
**Subject:** An Investigation of Nurse Education Service Models – Research Study Invitation

Dear XXXX,

Following on from my previous correspondence, I am a nurse educator working at Fremantle Hospital in W.A. undertaking my Professional Doctorate of Nursing at The University of Notre Dame Australia.

My research study is titled: **An Investigation of Nurse Education Service Models in Acute Care Metropolitan Hospitals Across Australia.**

Nurse education service models refer to the duties the service undertakes and the reporting structure for nurse educators at the organisation.

I would like to now invite you to participate in my study via the link below.

Please click on the link to complete the survey **and forward this email on to all nurses working in a dedicated education role at your hospital.**

<https://www.surveymonkey.com/s/KC5J2HS>

Please complete the survey by **Monday 27<sup>th</sup> October.**

The survey takes approximately 15 minutes to complete.

I have attached the ethics approvals and a participant information sheet with further information about the study.

Please get back to me if you have any further queries.

**Carolyn Keane**  
A/Nursing Director - Corporate Services  
Fremantle Hospital & Health Service  
Tel 9431 2771 | Fax 9431 2443  
Email [carolyn.keane@health.wa.gov.au](mailto:carolyn.keane@health.wa.gov.au)

## Appendix 22: Phase Three Survey Questionnaire

### An Investigation of Nurse Education Service Models in Acute Care

#### Dear Participant

You are invited to participate in a short survey to investigate nurse education service models in acute care metropolitan hospitals across Australia.

This survey forms part of a Professional Doctorate in Nursing study which is investigating nurse education service models in use across Australia, the perceived factors that influence which model is used and the views of nurse educators about future nursing education priorities and services. This study is being undertaken in three phases.

**Phase one** involved interviews and focus groups with nurse educators at one acute care metropolitan public hospital in Western Australia.

**Phase two** involved interviews and focus groups with nurse educators and the coordinators of nurse education services in acute care metropolitan hospitals in Western Australia.

**Phase three** of this study involves this survey being administered to nurse educators in acute care metropolitan hospitals across Australia.

The answer options under the questions in this survey have been developed from the interviews and focus groups undertaken in phases one and two of the study. The term nurse educator is used throughout this survey and refers to any nurse working in a dedicated education role.

This survey will only take 15 minutes, is anonymous and participation is voluntary.

Thank you for your participation in this study.

**Carolyn Keane**  
Professional Doctorate of Nursing Candidate  
The University of Notre Dame Australia

## An Investigation of Nurse Education Service Models in Acute Care

### Consent Statement

Thank you for considering participating in this research project.

If you continue and respond to the survey questions you are considered to have consented to your involvement in the study and have acknowledged that:

- You have read and understood the Participant Information Sheet (attached to the email with this survey link) about this project and any questions have been answered to your satisfaction.
- You understand that you may withdraw from participating in the project, however once you submit the survey you cannot withdraw your answers as the surveys are not identifiable.
- You understand that all information gathered by the researcher will be treated as confidential.
- You understand that the protocol adopted by the University of Notre Dame Australia Human Research Ethics Committee for the protection of privacy will be adhered to.
- You agree that any research data gathered for the study may be published provided your name or other identifying information is not disclosed.

If you do not consent or would like to withdraw at any time during completing this survey please exit by closing this browser page.

## An Investigation of Nurse Education Service Models in Acute Care

### Demographics

This section includes questions related to your demographic information.  
Please answer by choosing the response that best describes your circumstances.

**\*1. In which Australian state or territory are you currently working?**

**\*2. Are you currently employed in a public or private hospital?**

- Public  
 Private

**\*3. What is the bed number of the hospital?**

- < 100 beds  
 between 100 - 199 beds  
 between 200 - 499 beds  
 500 beds or more

**\*4. At the AHPRA are you registered as a professional?**

- Nurse  
 Midwife  
 Both  
 Other (please specify)

**\*5. How long have you worked in a education role?**

- < 12 months  
 between 1 - 5 years  
 between 6 - 10 years  
 > 10 years

**\*6. At what level are you employed?**

- Junior eg (SDN/Level 2/Grade 6 CNE/Grade 3 CSN)  
 Senior eg (SDE/Level 3/Grade 7 NE/Grade 4 CS&DN or CNE)  
 Coordinator/manager of the service  
 Other (please specify)

## An Investigation of Nurse Education Service Models in Acute Care

### Nurse Education Service Models

This section contains questions about the nurse education service model used in your health service. Please think about your nurse education service model and answer the questions below as accurately as possible.

#### \*7. On which model of nurse education is your service based?

Please tick the answer that describes the model of your nurse education service or tick other and describe the model.

- Centralised**  
There is a hospital wide approach to staff training, all education staff, even those placed within the clinical areas report centrally to the nurse education department and manager.
- Decentralised**  
There is no central training department, educators within individual clinical areas are responsible for meeting the training needs of staff within their areas and report to the clinical unit managers.
- Combination**  
Your hospital has a training department with educators that delivers programs across the hospital such as orientation but there are also educators located in the clinical areas who report to the clinical unit managers and are not connected to the training department.
- Other (please describe)

#### \*8. What is your perception of why this nurse education service model is used?

## An Investigation of Nurse Education Service Models in Acute Care

**\*9. Please indicate which of the functions of a nurse education service listed below apply to your model.**

	Yes	No
Undertakes staff mandatory training and competencies	<input type="radio"/>	<input type="radio"/>
Orientates and supports new staff	<input type="radio"/>	<input type="radio"/>
Implements practice changes	<input type="radio"/>	<input type="radio"/>
Meets accreditation needs for the hospital	<input type="radio"/>	<input type="radio"/>
Supports formal training programs eg postgraduate courses	<input type="radio"/>	<input type="radio"/>
Upskills and trains staff to meet workforce deficits	<input type="radio"/>	<input type="radio"/>
Coordinates the graduate nurse program	<input type="radio"/>	<input type="radio"/>
Mentors staff undertaking new roles	<input type="radio"/>	<input type="radio"/>
Meets nurses clinical skill training needs	<input type="radio"/>	<input type="radio"/>
Coordinates student nurse placements	<input type="radio"/>	<input type="radio"/>
Supports service redesign	<input type="radio"/>	<input type="radio"/>

Other (please specify)

## An Investigation of Nurse Education Service Models in Acute Care

**\*10. Which items below does your nurse education service use to measure the effectiveness of its model?**

	Yes	No
Attendance rates	<input type="radio"/>	<input type="radio"/>
Evaluation forms	<input type="radio"/>	<input type="radio"/>
Number of clinical incidents	<input type="radio"/>	<input type="radio"/>
Maintaining organisation accreditation	<input type="radio"/>	<input type="radio"/>
Winning awards	<input type="radio"/>	<input type="radio"/>
Nurse sensitive indicators	<input type="radio"/>	<input type="radio"/>
Partnerships with universities	<input type="radio"/>	<input type="radio"/>
Staff skill competency levels	<input type="radio"/>	<input type="radio"/>
Staff satisfaction and retention	<input type="radio"/>	<input type="radio"/>
Mandatory competency compliance levels	<input type="radio"/>	<input type="radio"/>

Other (please specify)

## An Investigation of Nurse Education Service Models in Acute Care

### \*11. Which of the following statements apply to your nurse education model?

Please indicate your level of agreement or disagreement with each statement.

	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
The senior educators are involved in selection and performance development of the junior educators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You are required to perform duties outside of the education role	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Allows you to get an organisational wide view	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can be isolating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Allows continuous awareness of learning deficits at ward level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Junior nurse educators are used to fill staffing deficits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Allows autonomy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Maintains visibility of nurse educators in clinical areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Junior nurse educators receive support from senior nurse educators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There can be a lack of consistency in training across the organisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Allows for development of specialist clinical knowledge and skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training is sometimes cancelled due to staffing constraints	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Coordinator/manager of the service is a member of high level committees/nursing executive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



## An Investigation of Nurse Education Service Models in Acute Care

### \*12. In your opinion the characteristics of an ideal nurse education model include:

Please indicate your level of agreement or disagreement with each statement

	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
An area/district health service approach	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clear nurse educator role definition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Close links with unit nurse managers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Junior nurse educators line managed by senior nurse educators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An Interprofessional approach	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nurse educators having post graduate education qualifications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being well resourced	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being focussed on the hospital's vision	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nurse educators being employed full time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having the ability to influence change across the organisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ward based nurse educators employed at a higher level than clinical staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reporting against key performance indicators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Senior nurse educator joint appointments with universities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A service closely aligned with clinical practice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training for nurse educators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A framework for education service delivery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nurse educators not filling staffing deficits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Includes research education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evidence of the effectiveness/outcomes of education is available	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

## An Investigation of Nurse Education Service Models in Acute Care

### The Future

This section is related to future nurse education service priorities and services.  
Please consider the future of your nurse education service and answer the question below.

**\* 13. In your opinion the future of nurse education within your service model will include:**

**Please indicate your level of agreement or disagreement with each statement.**

	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
A focus on simulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interprofessional education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased pay for nurse educators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A focus on education in the non critical care specialties	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More collaboration with universities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased use of technology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Post graduate education qualifications for nurse educators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Raising revenue to maintain operations in an Activity Based Funding (ABF) environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased collaboration between hospital sites	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working toward set education quality standards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An Increase in the number of clinical staff undertaking a post graduate qualification	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More flexible teaching modalities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More self directed education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strong evidence of education outcomes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A move away from theory back to practical hands on training	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

# Appendix 23: The Alfred Hospital Ethics Approval Letter



## ETHICS COMMITTEE CERTIFICATE OF APPROVAL

*This is to certify that*

**Project No:** 478/14

**Project Title:** An Investigation of Nurse Education Service Models in Acute Care Metropolitan Hospital Across Australia

**Principal Researcher:** Professor Selma Allix

*was considered for Low Risk Review and APPROVED on 3 November 2014*

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It is the Principal Researcher's responsibility to ensure that all researchers associated with this project are aware of the conditions of approval and which documents have been approved.

*The Principal Researcher is required to notify the Secretary of the Ethics Committee, via amendment or report, of*

- Any significant change to the project and the reason for that change, including an indication of ethical implications (if any);
- Serious adverse effects on participants and the action taken to address those effects;
- Any other unforeseen events or unexpected developments that merit notification;
- The inability of the Principal Researcher to continue in that role, or any other change in research personnel involved in the project;
- A delay of more than 12 months in the commencement of the project; and,
- Termination or closure of the project.

*Additionally, the Principal Researcher is required to submit*

- A Final Report on completion of the project.

Approval covers the project as described in the application (including any modifications made prior to approval). Low Risk projects are subject to audit and ethical approval may be withdrawn if the project deviates from that proposed and approved.

### SPECIAL CONDITIONS

None

SIGNED:

Professor John J. McNeil  
Chair, Ethics Committee

*Please quote project number and title in all correspondence*

# Appendix 24: North Sydney Local Health District Ethics Approval Letter

**Research Office**  
Kolling Building, Level 13  
Royal North Shore Hospital  
St Leonards NSW 2065  
Tel (02) 9926 4590 Fax (02) 9926 6179



14 January 2015

Ms Carolyn Keane  
Nursing Director – Corporate Services  
Fremantle Hospital and Health Service  
Alma Street  
Fremantle WA 6160

Dear Carolyn

**NSLHD reference: RESP/14/311**  
**Study Title: An Investigation of Nurse Education Service Models in Acute Care Metropolitan Hospitals across Australia**  
**HREC reference: LNR/14/HAWKE/442**

Thank you for submitting a response, dated **6 January 2015**, to the Northern Sydney Local Health District HREC Executive Committee's request for additional information/modification of the above study, which was first considered at a meeting of the HREC Executive held **23 December 2014**. Based on the information you have provided and in accordance with the NHMRC National Statement 2007 and NSW Health Policy Directive PD2010\_055 Ethical and Scientific Review of Human Research in NSW Public Health Organisations, this project has been assessed as low/negligible risk and is therefore exempt from full HREC review.

This HREC has been accredited by NSW Ministry of Health as a Lead HREC under the model for single ethical and scientific review and Certified by the NHMRC under the National model for Harmonisation of Multicentre Ethical Review (HoMER). This lead HREC is constituted and operates in accordance with the National Health and Medical Research Council's *National Statement on Ethical Conduct in Human Research* and the *CPMP/ICH Note for Guidance on Good Clinical Practice*. No HREC members with a conflict of interest were present for review of this project.

I am pleased to advise that the HREC, at a meeting of its Executive Committee held on **12 January 2015** has granted ethical and scientific approval of the above project.

**You are reminded that this letter constitutes *ETHICAL* and *SCIENTIFIC* approval only. Please consult the site Research Governance Officer for guidance regarding site authorisation.**

The project is approved to be conducted at

- **Northern Sydney Local Health District**

If a new site(s) is to be added please inform the HREC in writing and submit a Site Specific Assessment Form (SSA) to the Research Governance Officer at the new site.

The following documents have been approved:

Document	Version	Date
Protocol	1.1	6 January 2015
Master Participant Information Sheet (Online Survey)	1.0	7 May 2014
Survey Questionnaire	--	--

The following documents were noted:

- Appendix 1: List of hospitals meeting inclusion criteria
- Sir Charles Gairdner Group HREC approval letter
- Appendix 5: Updated research timeline

The Low and Negligible Risk Research Form reviewed by the HREC was **LNR AU/6/E04C110**.

Please note the following conditions of approval:

- HREC approval is valid for **5 years** from the date of the HREC Executive Committee meeting and expires on **12 January 2020**. The Co-ordinating Investigator is required to notify the HREC 6 months prior to this date if the project is expected to extend beyond the original approval date at which time the HREC will advise of the requirements for ongoing approval of the study.
- The Co-ordinating Investigator will provide an annual progress report beginning in **August 2015**, to the HREC as well as a final study report at the completion of the project in the specified format. An annual report is due **every year on 30 August**.
- The Coordinating Investigator will immediately report anything which might warrant review of ethical approval of the project in the specified format, including unforeseen events that might affect continued ethical acceptability of the project and any complaints made by participants regarding the conduct of the project.
- Proposed changes to the research protocol, conduct of the research, or length of approval will be provided to the HREC Executive for review, in the specified format.
- The HREC Executive will be notified, giving reasons, if the project is discontinued before the expected date of completion.
- Investigators holding an academic appointment (including conjoint appointments) and students undertaking a project as part of a university course are advised to contact the relevant university HREC regarding any additional requirements for the project.

Should you have any queries about your project please contact the Research Office, ph: 9926 4590, email [NSLHD-Research@health.nsw.gov.au](mailto:NSLHD-Research@health.nsw.gov.au) .

Please quote **NSLHD reference RESP/13/311** in all correspondence.

The HREC wishes you every success in your research.

Yours sincerely



**Ellie Pratt**  
*Research Ethics Manager*  
NORTHERN SYDNEY LOCAL HEALTH DISTRICT

TRIM: RESD/15/130