

**The competency landscape: a critical realist exploration of the  
ways nurses understand and utilise competency standards**

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## **Statement of Original Authorship**

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## Abstract

Controversy surrounds the way in which the ANMC Competency Standards for Registered Nurses (the Standards) are understood and applied in the assessment of nurses' competence for practice. Adopted by the Australian Nursing Regulatory Authority in the early 1990s the Standards provide a description of the registered nurse on entry to practise, and have been used to determine both beginning level and ongoing competence to practise for over two decades. How nurses' interpret and make sense of the Standards particularly when making an assessment of competence is unknown. The study examines the deeper mechanisms which influence nurses' interpretation and application of the Standards in the context of assessment from a critical realist perspective. This perspective, together with a mixed methods methodology, enabled the re-conceptualisation and critique required to enhance understanding of the assessment of competence landscape.

A two-phase exploratory mixed methods sequential design was employed. The questionnaire was used to gain prior insight into the context and to gain a general understanding of nurse's opinions around competence and its assessment in relation to the Standards. These findings were analysed to inform the qualitative phase. Interviews were then conducted with fifteen nurses comprising of; academics, clinical facilitators, preceptors and graduate nurses. Thematic analysis using a continual cross-comparative approach was used to explore how and why nurses operate at the interface between agency and structures in the context of competency assessment. Threads from both phases were drawn together and mixed at the data interpretation stage to achieve a cohesive set of findings.

The thesis offers unique contributions into understanding the ways in which nurses create, negotiate and perpetuate the status quo of the Standards by focusing on the interface of nursing assessment processes and events, and their interactions with mechanisms and structures. Nurses create and operate in a state of tension created by their perception of the Standards as an important professional structure and the difficulty that they experience putting them into action in the context of practice. On the one hand, nurses support the Standards' as a mechanism to promote the collective identity of the nursing profession and accept the Standards as an integral part of the safety and quality agenda. On the other

hand, nurses found the Standards difficult to operationalise for their key function of assessment.

The thesis sheds new light on the way nurses interpret and use the Standards to assess competence; it is these subjectivities that are considered to be a critical new factor in the development of any future assessment framework. This is not only important new knowledge, but given the link between competence and the safety and quality agenda it has implications for the quality of patient care. The implications of the study findings for practice are therefore significant. Research into how competency assessment impacts on the quality of patient care needs to move beyond a quantitative, objective measure, to consider the generative potential of the socio-cultural context of practice.

An urgent critical review of the Standards is needed to determine whether they continue to be a suitable assessment framework. The future success of any framework that assesses competence will be dependent on ensuring that both the structural forces and agentic subjectivities that shape nurses decision making are acknowledged and addressed.

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## Acronyms and terms

AC	Academic
AHPRA	Australian Health Practitioner Regulation Agency
ANCI	Australian Nursing Council Incorporated
ANMC	Australian Nursing and Midwifery Council
ANRAC	Australasian Nurse Regulatory Authorities Conference
CF	Clinical Facilitator and Sessional Teachers
COPA	Competency Outcomes and Performance Assessment
GN	Graduate Nurse
NOOSR	National Office of Skills Recognition
NMBA	Nursing and Midwifery Board of Australia
PR	Preceptor
SNM	School of Nursing and Midwifery
SSI	Semi-structured interview
The Principles	Principles for the Assessment of National Competency Standards for Registered and Enrolled Nurses 2002
The Standards	The Australian Nursing & Midwifery Council Standards for the Registered Nurse 4 <sup>th</sup> Edition January 2006
UTAS	University of Tasmania

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## Conference Presentations and Journal Article

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# Chapter 1 – Background

## Introduction and Overview

For over two decades in Australia, the notion of competence and its assessment have been a fundamental premise underpinning the nursing profession. Currently, the Nursing and Midwifery Board of Australia (NMBA) approve the Australian standards for nursing practice including the competency standards for registered nurses; the *ANMC National Competency Standards for the Registered Nurse (2006)* (the Standards). These Standards are legislated under ‘national law’<sup>1</sup>. The competency standards were designed to assure the profession, employers and the public of the competence of registered (licensed) nurses to provide high quality nursing care through safe and effective work practices (Battersby 1994; Pearson, Fitzgerald et al. 2002). The Standards are embraced by the profession as the quantifiable measure of the standard of nursing care expected of all nurses deemed competent to practise (ANMC 2006). Hence, the Standards can be viewed as both a benchmark and a framework, which promotes consistency in the assessment of an individual’s performance in practice.

Competency standards for nurses were first endorsed by the Australasian Nurse Regulatory Authorities Conference<sup>2</sup> (ANRAC) in 1990. In 1992, the ANRAC competencies became known as the Australian Nursing Council Incorporated (ANCI) competencies with the constitution of the Australian Nursing Council (ANC), which was subsequently re-named the Australian Nursing and Midwifery Council (ANMC). The Standards were last reviewed in 2004 / 2005 and were again endorsed in 2006 by the ANMC. The Standards now fall under the auspices of the newly formed Nursing and Midwifery Board of Australia (NMBA), which is part of the Australian Health Practitioner Regulation Agency (APHRA). The nationally endorsed Standards must be met prior to eligibility for registration and are applied in

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<sup>1</sup> National law refers to the *Health Practitioner Regulation National Law Act*, the object of this Law is to establish a national registration and accreditation scheme for the regulation of health practitioners; and the registration of students undertaking (i) programs of study that provide a qualification for registration in a health profession; or (ii) clinical training in a health profession.

<sup>2</sup> In 1976, Nurse Regulatory Authorities agreed to meet second yearly, with a meeting of Registrars in alternate years, to discuss how challenges faced by tertiary-based nursing courses were being addressed in each jurisdiction. These meetings became known as the Australasian Nurse Regulatory Authorities Conference (ANRAC). For a detailed account see Grealish (2009).

practice by nurse assessors who undertake an assessment of another's practice to make a determination of competence. Further, the regulatory framework is linked to the *ANMC Accreditation Standards and Criteria for the Registered Nurse (2009)*, which stipulates that the Standards must be embedded within schools of nursing curricular. Assessing nurses competence in clinical practice using the Standards is therefore central to making a determination that a nurse has achieved beginning level competence to practise (ANMC 2006).

Nationally and internationally the health professional literature has had a sustained interest in the notion of competence and competency assessment (McAllister 1998; Chapman 1999; Epstein and Hundert 2002; Epstein 2007; ANMC 2009). Successive governments have supported the use of competency standards, including as a means to deal with overseas nurse applications through the National Office of Skills Recognition (NOOSR). From an industrial perspective, support for competence assessment in nursing has also been provided by the Australian Nursing Federation (Chiarella, Thoms et al. 2008). In Australia, the use of competency standards in nursing is positioned as a persistent national agenda item for regulators, the university sector, politicians, safety and quality agenda initiatives, the nursing profession and the public.

The Standards, as part of the Professional Framework<sup>3</sup> for the profession, have a number of specific functions in nursing and were developed to:

- define beginning level competence to obtain and retain a license to practise as a registered nurse in Australia
- assess competence as part of the annual renewal of license process used by the national registering authority
- assess student and new graduate performance
- assess the practice of nurses returning to work after a break in service
- assess the practice of nurses educated overseas seeking to work in Australia
- assess the practice of nurses involved in professional conduct matters

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<sup>3</sup> The Professional Framework includes the Codes, Guidelines and Frameworks and competency standards adopted under legislation see [www.nmba.org.au](http://www.nmba.org.au) for the full list of inclusions.

- allow a nurse to make a self-assessment of their own competence
- set the standard for universities and the higher education sector to develop nursing curricula
- communicate to consumers the standard that they can expect from registered nurses.

Approaches to the development of competency standards have been based on the notion that competence is a legitimate indicator of professional practice (Scott 2008) with competency frameworks being proposed as a way of facilitating the attainment of beginning level competence development (Hendry, Lauder et al. 2007). Competency standards are therefore implemented by individuals, in order to contribute to individual competence to practise and to provide a mechanism that indicates competency at the collective level.

### **The research problem**

Anecdotally, there is an assumption within the nursing profession that nurses understand and mean much the same thing when they talk about competence, its development and its assessment, because they appear to dialogue about it in a similar way. Yet competence as a concept has proven difficult to define (Watson, Stimpson et al. 2002b; Axley 2008), with educators and employers of health care professionals often having dissimilar views of what competency entails (Whittaker, Smolenski et al. 2000). The competency standards contain competency elements which act as the functional part or the 'what' that is attached to competence (Bruno, Bates et al. 2010). Many criticisms centre around the term 'competence' itself, because the concept of competence is not clearly defined or operationalised (Watson, Stimpson et al. 2002b) and there is some debate and disagreement about the nature of competence assessment itself (Baulcomb and Watson 2003; Meretoja, Isoaho et al. 2004). With Klink and van der Boon (2002: 6) over a decade ago having described competency as a 'fuzzy concept', the lack of clarity in the operationalisation of competence continues to impact on competency assessment, particularly in the development of valid and reliable assessment tools (Grealish 2009).



Nevertheless, all nurses in Australia are required to demonstrate competence against the Standards prior to being eligible for registration. Once registered, these nurses are then required to maintain their competence against these same Standards. Since the introduction of competency standards in the 1990s, little research has been undertaken to determine whether nurses have a clear understanding of the ANMC domains,<sup>4</sup> the Standards<sup>5</sup>, or how to use the Standards to undertake an assessment of competence. Instead, the research to date has focused on the place competency standards have in the professions and in higher education (Preston and Walker 1993; Spencer 2005), how competency came to be counted (Grealish 2009), the limitations competency standards place on nursing education (Chapman 1999), and identifying the 'right' tool or 'gold standard' assessment instrument to capture the pre-existing reality of competence (Donoghue and Pelletier 1991; Bradshaw 1997; Fisher and Parolin 2000; Tollefson 2004; Girdley, Johnsen et al. 2009; Grealish 2009; Crookes, Brown et al. 2010; Higgins, Begley et al. 2010).

In Australian nursing, the Standards capture the language of assessment by defining the core competency standards by which performance is assessed to obtain and retain a license to practise as a registered nurse. The Standards define the required entry level of competence that must be reached for the title of Registered Nurse to be awarded (EdCaN 2008). Beginning level competence is an important concept in Australian nursing because it is used to describe the registered nurse on entry to practise and the minimum standard for continued practice. Inferring that competence can be measured using principles that can be replicated, means that a competency framework should not depend on when, where and by

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<sup>4</sup> A domain is an organised cluster of competencies in nursing practice. The four domains of the Standards are (i) Professional Practice, (ii) Critical Thinking and Analysis, (iii) Provision and Coordination of Care and (iv) Collaborative and Therapeutic Practice.

<sup>5</sup> The ten ANMC competency standards consist of competency units and competency elements. The ten competency standards are; (i) Practises in accordance with legislation affecting nursing practice and health care, (ii) Practises within a professional and ethical nursing framework, (iii) Practises within an evidence-based framework, (iv) Participates in ongoing professional development of self and others, (v) Conducts a comprehensive and systematic nursing assessment, (vi) Plans nursing care in consultation with individuals/groups, significant others and the interdisciplinary health care team, (vii) Provides comprehensive, safe and effective evidence-based nursing care to achieve identified individual/group health outcomes, (viii) Evaluates progress towards expected individual/group health outcomes in consultation with individuals/groups, significant others and interdisciplinary health care team, (ix) Establishes, maintains and appropriately concludes therapeutic relationships and (x) Collaborates with the interdisciplinary health care team to provide comprehensive nursing care (ANMC, 2006).

whom the measurement is done (Power 2004). The application of performance measurement however, is complex because of the context of nursing practice and the unpredictability and inconsistency in the structures and mechanisms external to the individual (Bashook 2005). In addition, the literature continues to highlight problems with assessment methods used to determine satisfactory performance and competence (Hamilton, Coates et al. 2007). One such significant and continuing challenge is achieving consistency in how the competency standards are used when assessing student performance (Edwards, Chapman et al. 2001).

Over the decades a body of research has been developed, that examines the broad notion of competence (Bradshaw 1997; Bradshaw 1998; Brooks 2009), and particularly highlights the debate and confusion that exists between competency standards and clinical practice (Cameron 1989; Sutton and Arbon 1994; While 1994; Walker 1995; Spence and El-Ansari 2004). The problem of assessing competence or indicators of competence has been highlighted for many years (Sutton and Arbon 1994; Cheek, Gibson et al. 1995; Goudreau, Pepin et al. 2009). However, the indicators that define competence and the most effective ways to learn and translate an understanding of competency standards into practice are more elusive.

Currently, multiple assessment instruments exist in nursing (Wendt 2004; Cowan, Jenifer Wilson-Barnett et al. 2007; Grealish 2009; London 2009; Crookes, Brown et al. 2010; Thorkildsen and Råholm 2010), which contributes to the complexity and contentious of competence assessment. Whilst there has been significant debate around the appropriateness and quality of existing assessment instruments (Calman, Watson et al. 2002; Norman, Watson et al. 2002; Duffy 2003; Moore 2005), there has been limited exploration or inquiry into how nurses develop a shared understanding of competence, or how nurses articulate how competence can be measured against the Standards.

Thus, for nurses, the Standards are positioned as the 'gate' that must be passed through to gain entry to practise, and the assessors are 'gate keepers' of professional practice who ensure the Standards are met prior to registration. Currently, a tension exists in the profession because there are no set (or best practice) guidelines for assessing competency,

thus any assumptions and conclusions of assessment are based on a blend of objective and subjective information (Rycroft-Malone, Seers et al. 2004). The validity and reliability of assessments is therefore largely dependent on the capability of the assessor and the assessment instrument used (Levett-Jones, Fahy et al. 2006). Summative judgements are in effect, delegated to clinical nurses without a process of assessment moderation which involves a considerable trust in the competency of the assessor (Brackenreg 2004).

Levett-Jones (2006) raises a number of concerns about the quality and effectiveness of students' clinical education experience (Levett-Jones, Fahy et al. 2006). These issues within undergraduate training programs have been linked to role-tension, which relates to the conflict between nurturing (mentoring) and judgemental assessment (assessing) (Calman, Watson et al. 2002 1359; Bennetts 2003). Thus, during undergraduate placements, nurses need to balance their attempts to mentor students with the requirements to assess their performance.

The Standards are used by the nursing profession to validate and quantify the diverse phenomena of competent nursing practice. To achieve this rationalisation the ten competency standards have been grouped into four domains, each comprising of a number of competency elements. This approach has been criticised on two fronts. Firstly, when phenomena are simply counted via a classification system, there is an inherent reductionism in that 'non-essential' differences are ignored, and complexity is not considered (Power 2004). Secondly, skills, knowledge and attitudes that cannot be readily measured may be marginalised and rendered invisible in the assessment of the competency standards (Barnett 1994; McGrath, Anastasi et al. 2006). Thirdly, assessment 'is a complex process, based on direct observations by the preceptor and involves judgment values, which are subjective and can vary from person to person' (Rutkowski 2007: 37).

To summarise, although the introduction of the Standards had a sound evidence-base, there is limited research which describes nurses' perceptions and understandings of the Standards, and more concerning, little that engages with how nurses interpret and use them for the assessment of competence. Further, the nursing literature has not provided an adequate explanation about what actually occurs during competency assessment, and

captures little of the complexities of nurses' interface with the Standards during assessments (for exceptions see Grealish 2009). Given that the Standards were developed as quality and safety measures to protect the public, this represents a serious evidence gap in how the Standards are understood by nurses and how these understandings are translated into practice for the assessment of competence. Understanding the competency landscape and the ways nurses understand and utilise competency standards therefore requires identification of any constraining or enabling factors that impact on nurse's individual actions inclusive of any social, political and historical factors. Therefore, an exploration is warranted of the generative, causal mechanisms that underpin competence decision making, as well as the effect of assessor and assessee agency and interactions.

### **Motivation for the study**

My own experience of using the Standards for competency-assessment was the impetus for this research. In 1992 when the Standards were first adopted I was working as a nurse-educator in a hospital setting, prior to commencing work in nursing regulation in 2003. Working in nursing regulation as the Manager of Registration and Accreditation, I was involved in; assessing applications for registration (national and international), reviewing accreditations submissions from nursing education providers and reviewing competence to practice audit evidence provided by nurses against the Standards as part of the Tasmanian Competence to Practice Audit. It was in this role that I first became aware of the challenges some nurses expressed using the Standards for the assessment of competence.

I observed informal and anecdotal evidence that many of the registered nurses I worked with were not confident of their understanding of how to apply the Standards, or lacked the confidence to provide evidence of their own, or other nurses' competence against the Standards. I later narrowed the research question to focus on the opinions of graduates, preceptors and academics/clinical facilitators. I took this focus as I became aware that both

the preceptor<sup>6</sup> who undertakes the assessment, and the nurse being assessed in practice, faced difficulties in using the Standards. I was interested to discover whether this may also apply to the assessment of undergraduate students. In my role as Manager of Registration and Accreditation I therefore developed an interest in exploring how the Standards are introduced in higher education and also how they are embedded in the Bachelor of Nursing curriculum.

## **Research aim and questions**

As a critical realist study there is recognition that there are multiple factors that shape nurses assessment decision making. The study aims to describe these events as well as identify the influence of structural factors on nurses' agency that act as mechanisms or determinants of good competence assessment. The explanation focuses on how nurses' agency maintains or transforms these structures. The utilisation of a critical perspective can explore and expose the interface of nurses' agency and structures in the context of competency assessment in nursing. The thesis aims to describe the relationship between this interface and the ways in which nurses understand and utilise the Standards. How nurses understand and translate the Standards into their clinical practice is examined via a mixed methods sequential design, which utilises a critical realist perspective. Nurse academics, clinical facilitators, preceptors and graduates form the research participants as they are all involved key stakeholders in the assessment of competence and as such are vital to developing a picture of competency assessment. The research questions were formulated in response to the limited evidence regarding nurses' and nurses' interactions and understandings of the Standards, and to discover why nurses had difficulty using the Standards to determine beginning level competence.

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<sup>6</sup> A preceptor (may also be called a mentor) refers to a registered nurse who is nominated to share their knowledge and experience by enabling and supporting other nurses' learning. Preceptors may have undergone formal training within the organisation or from educational institutions affiliated with the facility. For further reading see Baltimore, J. (2004). "The hospital clinical preceptor: Essential preparation for success." The Journal of Continuing Education in Nursing **35**(3): 133-140. Altman, T. K. (2006). "Preceptor selection, orientation, and evaluation in baccalaureate nursing education." International Journal of Nursing Education Scholarship **3**(1): 1-16. McCarthy, B. (2006). "Translating person-centred care: A case study of preceptor nurses and their teaching practices in acute care areas." Journal of Clinical Nursing **15**: 629-638.

## Research questions

1. How do nurses understand and utilise the Standards?
2. What is the relationship between agency and structure in the context of competency assessment?
3. How does this relationship determine the ways in which nurses understand and utilise the competency standards?
4. How do nurses negotiate the interface of agency and structures when assessing competence?

These questions direct a Tasmanian-based investigation into the complex socio-cultural constructs inherent in the nursing standards and competency assessment landscape.

## Historical evolution of competency standards

The concept of competence can be traced back through the centuries to the mediaeval guilds when apprentices learned skills by working with a master. When the apprentices reached the standard of workmanship set by the trade they were awarded their credentials (Schilling 2010). Before the 19th century, nursing care in most countries was very basic and unstructured (Lyons and Petrucelli 1979). The two world wars during the 19<sup>th</sup> century were each a major force that progressed scientific advances in medicine, and had flow on effects which advanced the development of nursing. Swanson and Wojnar (2004) argue that Florence Nightingale's work in the early 19th century which established nursing as a scientific discipline, whilst at the same time Nightingale recognised the importance of caring and healing in the context of the nurse-patient relationship. It is of interest that at this time Nightingale opposed the notion of regulation as she believed it would interfere with the hospital hierarchy (Crowther 2002). Other opponents of regulation argued that medicine was characterised by science and intellect, whereas in contrast, 'nursing was qualitatively different and "good" nursing could not be tested by examination' (Rathbone 1892; Rafferty 1993: 56). The early 19<sup>th</sup> century was a time of major reform in nursing with Nightingale

recognising the value of scientific training to advance the profession, but at the same time acknowledging that science alone would not produce *good* nurses.

Early reforms in the late nineteenth century were led by British nurse Bedford Fenwick who actively campaigned for; nursing regulation, three year training, a standardised national curriculum and a final examination (Rathbone 1892; Rafferty 1995). The twentieth century saw a number of North American nursing theorists playing a major role in the development of nursing including Isabel Hampton, Lavinia Dock, and Mary Nutting who chose a medical model for professional nursing, which emphasised education in the sciences (Lynaugh 1992). Mid-way through the twentieth century images of nursing were beginning to fragment with social reforms impacting on women's changing roles in society. These social changes, and the historical connection between nursing and medicine, the military and the church have shaped nursing as a discipline. Thus nursing had been defined in various ways including as an apprenticeship, a trade and a calling (Carr-Saunders and Wilson 1964; Kitson 1996). An enduring image of nursing that remained at this time was their subordinate role to medicine, which may have been due to the then unquestioning belief in the power of medical technology (Kitson 1996).

Increasingly, from the late 1980s competency standards were being utilised nationally and internationally, by a number of regulated professions to provide a statement of what was considered competent performance by attempting to capture the complexity of professional work (McClelland 1973; Shulman 1998; Teichler 2003; Bryant 2005). The adoption of competency standards in nursing and medicine was seen as a means to distinguish these professions and their own unique body of knowledge and skills (Morrison, Crawford et al. 2006). Since the 1990s nationally and internationally, competency standards have become entrenched in nursing practice due to a combination of internal and external influences. These influences have converged on the contemporary health environment which resulted in the introduction and continued use of competency standards as a means to assess the competence of nurses. The complex contemporary health environment has been described as a 'form of organisation marked by division of labour, hierarchy, rules and regulations, and impersonal relationships' (Robbins, Bergman et al. 2000). More recently, consumers of health care services, armed with greater access to health information, are

taking a more active role in the decision making regarding their care and demanding the competence of those caring for them (Hughes 2008a).

## **Professionalisation and the adoption of competency standards**

Changes in nursing education impacted on the adoption of competency standards, and these occurred concurrently with the professionalisation of nursing and other disciplines (Adrian 2006). Competency standards development was influenced by a number of areas including commerce, science and economics, that from the mid-thirteenth century sought a means to quantify and measure (Power 2004). Over time, nurses have sought to achieve an occupational identity by upgrading skills, increasing educational credentials, recruiting from the middle class, and establishing licensing requirements to regulate practice (Melosh 1982; Reverby 1987). The development of the Standards was driven by intentions to classify the occupation of nursing as a profession, to provide an assessment framework and to quantify nursing practice (ICN 2001; Chiarella 2006b; Chiarella, Thoms et al. 2008). Traditionally and historically assessment in nursing had comprised of classroom-based displays of practical skills (Schostak, Phillips et al. 1994). The assessment of classroom-based displays of practical skills was increasingly more heavily critiqued because of concerns regarding the transferability of knowledge and skill to nursing practice (Aggleton, Allen et al. 1987). In the 1970s this form of assessment was replaced by the use of behavioural checklists, and by the 1980s continuous clinical assessment became the preferred approach (Windsor and Harvey 2012).

Continuous clinical assessment heralded a major shift in nursing education. The intention was to ensure transferability of skills, rather than focus on task-based skills acquisition (Bradshaw 1997), which had been the case in the past. The move to use competency standards in nursing was a further attempt to move away from assessing individual nurses' mastery of specific skills, towards assessment based on observation, description and analysis of nurses' overall work performance (Redfern, Norman et al. 2002). Additionally, whilst initial registration was previously considered sufficient evidence of competence, these reconceptualisations meant that competence was now perceived as a dynamic, evolving condition that must be achieved and maintained throughout a professional career



(Gray and Pratt 1989; Leach 2002). These new assumptions; that competence is not a static state, and that an individual's competence could change over time, meant that processes needed to be in place to ensure a nurse's continuing competence.

To further develop the area of assessment of competence, nurse leaders - both clinical and academic - sought guidance from education experts to establish a range of systems of accountability. Their collaborative work encompassed assessment technologies that focused on criteria reflective of a profession<sup>7</sup>. In most Australian states the nursing profession was motivated from within to develop competencies for hospital based nursing courses (Cameron 1989). Thus, these nurses recognised the potential value of competency development as a means to self-evaluate, self-regulate and promote increased accountability to the public. The value of competency based approaches had been embraced by some nurses well before the transfer of nursing education to the tertiary sector (Sutton and Arbon 1994). This resulted in competency standards being valued as being an 'industry led' initiative that aimed to ensure a greater alignment with both professional and employer needs (Williams 2005). Alignment with professional needs was highlighted by the ANMC, in that (ANMC 2006), which is consistent with the intent of the overarching intent of regulation to provide for the public's safety (McGrath, Anastasi et al. 2006). Alignment with employer needs is addressed because the Standards provide a mechanism for them to readily identify nurses who are registered and have met a requisite standard.

While the practice of nursing often overlaps and intersects with the practice of other health professionals, particularly in contemporary times, nursing has made and continues to make considerable effort to differentiate itself as a unique practice discipline by becoming self-regulating and autonomous (N3ET 2006; APN 2009). To achieve this nursing has worked towards developing ownership of a distinct body of knowledge (Morrison, Crawford et al. 2006). In terms of the professionalisation of nursing, competency standards are considered important on a number of levels. They provide a professional framework for practice to meet statutory regulatory requirements, set a national standard for entry to practise, guide

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<sup>7</sup> see Gray, Pratt (1989) *Issues in Australian Nursing* for further discussion on assessment technologies that focused on criteria reflective of a profession.

curricular development and are used for the assessment applications for registration from overseas nurses (Adrian 2006; Chiarella, Thoms et al. 2008).

### **Educational agendas converging on the adoption of competency standards**

August 24<sup>th</sup>, 1984 was a significant moment for nursing in Australia with the historic announcement by the federal government giving in-principle support for the full transfer of nurse education into the higher education sector. The transfer of nursing to higher education, initially into Colleges of Advanced Education (CAEs), recognised nursing as a discipline and a profession with a theoretical body of knowledge supporting graduate level education (Swanson and Wojnar 2004). The later absorption of nursing education from CAEs into universities as a result of the Dawkins reforms<sup>8</sup> provided a significant opportunity for Australian nurses to develop the discipline of nursing towards an advanced discipline (Stein-Parbury 2000). That is, the transfer provided nurses with access to education in their own discipline at all levels, from undergraduate to post graduate.

The changes to nurse education coincided with significant changes within the Australian higher education system<sup>9</sup>. However, the transfer to the higher education sector also created a complex environment for nursing education. This complexity was manifested in the differing expectations of universities and employers; differences that have provoked much contention (Edwards, Chapman et al. 2001). For example, it was unclear how the different programs for nursing emerging from within the higher education sector could be regulated; whilst at the same time ensure that graduates of these courses were able to work across the many contexts of nursing practice. From a national perspective, the government supported competency standards as a strategy for producing a 'clever country', but within the higher education sector their introduction was contentious as they were perceived to be more

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<sup>8</sup> The main elements of the Dawkins reform agenda included consolidation of institutions via amalgamation to form larger units; abolition of the binary system and replacement by a unified national system of higher education; more emphasis on fields of importance to economic recovery and growth (i.e. applied and computer science and business); and changes to governing bodies to make them more like boards of companies (see Deem, Eggins, et al. 2003).

<sup>9</sup> For a detailed discussion of these changes see, for example: Lonsdale, 1998; Penington, 1998; Kennedy, 1995.

relevant to the vocational education sector (Walker 1995; Bryant 2005).<sup>10</sup> The continuing debate and confusion around the place of competency in clinical practice, is evident in nursing literature for several decades (Cameron 1989; Sutton and Arbon 1994; While 1994; Walker 1995; Chapman 1999; Spence and El-Ansari 2004). Regardless of this continuing debate, there is support for the idea that nursing is a complex activity requiring contextual understandings (Schön 1983; Benner, Tanner et al. 1992; Redfern, Norman et al. 2002) and thus the move to higher education and the use of competency standards was seen to be justified.

The introduction of the Standards was however perceived by some academics as privileging industry needs over the needs of students studying within the higher education sector. Further, the Standards were believed to sit uncomfortably within nursing, which was aspiring to be a profession as opposed to a vocational occupation (Bartlett 1992; Gonzi 1996; Chapman 1999). Academics claimed that a vocational emphasis was 'technocratic, specific, practical and managerial' and at odds with the principles of higher education (Gonzi 1996: 14). In 1992, the Federal Minister for Higher Education stated that the application of vocational competency standards would not be extended to university-level training in the professions (Matchett 1992), which included nursing. Thus, the implementation of the Standards was primarily driven from within the profession (Cordery 1995). Competence frameworks were attractive because they were thought to offer structure, order, stability and transparency (Fleming 2006). It is therefore significant that the Standards were not imposed, but rather embraced, by nursing leaders. In Australia, what has broadly been described as a 'competency based movement' resulted in statements of competence, which are referred to as competency standards (Bowden and Masters 1993) and these were subsequently adopted by seventy per cent of professions by the end of 1993 (Quartermaine 1994).

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<sup>10</sup> For further background literature see Harris, R., H. Guthrie, et al. (1995). Competency-based training: Between a rock and a whirlpool. Melbourne, Macmillan Education Australia. Hager, P. (2004). "The competence affair: or why vocational education and training urgently need a new understanding of learning." Journal of Vocational Education and Training 56(3): 409-433. DEST (2005). Skilling Australia: New directions for vocational education and training. Canberra Department of Education Science and Training, AGPS. Guthrie, H. (2009). Occasional Paper: Competence and Competency-Based Training: What the literature says. National Centre for Vocational Education Research, Commonwealth of Australia.

The Standards have been used by Australian universities since they were adopted as part of the regulatory framework in 1992. Universities are now required to comply with the *ANMC Accreditation Standards and Criteria for the Registered Nurse 2009*, which assures that students of nursing have successfully completed both the tertiary requirements of the program, as well as having demonstrated competence against the Standards. Whilst the competency standards are embedded in the nursing curricular in Australian nurse preparation programs (ANMC 2006), the quality of student learning outcomes continues to be questioned. The idea that competency frameworks create a clear divide between theoretical and clinical education, is one concern that is supported by those who see university education as superfluous to nursing practice (Chapman 1999; Watson, Stimpson et al. 2002b; Bradshaw and Merriman 2008). Indeed, since the introduction of the Standards, two Australian government inquiries<sup>11</sup> have identified problems with nurse preparation programs.

Significant changes are anticipated to continue in the higher education sector; these mainly emanate from the 2008 Bradley Review<sup>12</sup> commissioned by the Commonwealth Government of Australia (DEEWR 2008). The Bradley Review addressed the question of whether the higher education sector is sufficiently structured, organised and financed to position Australia to compete effectively in the new globalised economy. The outcome of this review culminated in forty- six recommendations to reshape Australia's higher education system. One these recommendations is that 'Australia must enhance its capacity to demonstrate outcomes and standards in higher education if it is to remain internationally competitive and implement a demand-driven funding model' (DEEWR 2008: 218). This provides an example of the government seeking to exercise tighter control over the education sector and graduate outcomes.

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<sup>11</sup> The *Australian Nurse Education National Report* Reid, J. C. (1994). National review of nurse education in the higher education sector, 1994 and beyond. Canberra, Australian Government Publishing Service identified that new graduates lacked competence in their clinical work and expressed concerns that current approaches to nursing education would not adequately prepare nurses for the future and made 36 recommendations for change *The National Review of Nursing Education 2002: Our Duty of Care* Report Heath, P. ( 2002). Our duty of care: national review of nursing education. Canberra, Commonwealth of Australia.

<sup>12</sup> The Australian Government commissioned a review of Australian Higher Education to examine and report on the future direction of the higher education sector, its fitness for purpose in meeting the needs of the Australian community and economy and the options for reform. The review is entitled the Bradley Review of Australian Higher Education, Final Report December 2008.

Health care reforms have continued to demand that nurses be prepared by higher education to meet a level of competence commensurate with regulatory requirements in place for the protection of the public (ANMC 2008). At the same time, nurses are required to accommodate the challenges of rapid advances in knowledge and technology for care delivery (Wakefield 2008; Benner, Sutphen et al. 2010). The competency agenda has been advanced as the means to facilitate this and the notion of competence continues to be pivotal to the discourses around the practise of nursing, with employers, regulators and educationalists as well as governments, the public and individual nurses involved in the ongoing discussion.

### **Political agendas converging on the adoption of competency standards**

The competence of health practitioners has and is intended to have, a public face, which is visible and transparent to outside observers and expert analysis (Power 2004). Broadly, the introduction of competency assessment in Australia was a consequence of neo-liberal reforms similar to those that had occurred in the United Kingdom, as an instrument of micro-economic reform (Wheelahan 2007a) and were also part of a broader government and union work reform agenda (Windsor and Harvey 2012). In health, the government reform agenda aimed to develop a flexible and competent workforce. This acknowledged that the competencies of health care professionals were not fully developed, which had led to challenges with workforce recruitment, retention and re-entry (CoA 2005). These challenges reflect a political imperative within the health sector evidenced by the economy, which drove productivity initiatives (Windsor and Harvey 2012).

A number of reviews have been commissioned by the Australian government over the last decade. The National Nursing and Nursing Education Taskforce (N<sup>3</sup>ET or the Taskforce) was set up in mid-2004 to monitor and implement 22 of 36 recommendations from the *National Review of Nursing Education 2002: Our Duty of Care* Report (National Review of Nursing Education 2002). In 2005, the release of the Productivity Commission's Report on *Australia's Health Workforce* (Productivity Commission 2005) gave further impetus for the adoption of a more uniform approach to the regulation of health professionals. Under the auspices of

<sup>3</sup> N ET, a nursing and midwifery report was written to assist the move to national registration entitled, *Towards Consistent Regulation of Nursing and Midwifery in Australia (Adrian 2006)*. This report provided a detailed snapshot of the similarities and differences in legislation and policy aspects of the professional regulation of nurses in each of the jurisdictions in Australia (Adrian 2006). Further, the report details that there is a clear connection between issues of quality and safety of healthcare for the community by highlighting the importance of a nurse or midwife's competence and suitability to practise.

The Council of Australian Government (COAG) health workforce reforms of 2006 and 2007 were aimed at improving the overall capacity of the health system. They also aimed to improve the coverage and quality of training arrangements to enhance workforce practices, flexibility and quality. Two of the key COAG decisions required the introduction of a national registration and accreditation system of the health professions. The new system aimed to enhance the quality of the workforce by focusing on productivity and economic imperatives. The national approach aimed to provide protection to the public by implementing consistent standards of nursing regulation and accreditation of nursing programs across Australia, which was underpinned by a suite of professional standards, including the Standards. Prior to July 2010<sup>13</sup>, and the introduction of national registration, the state and territory Nursing and Midwifery Acts set the standards for practice and the entry requirements for registration (Chapman 1999). Under this scheme, nurses and midwives were required to apply for separate registration in each state or territory. The introduction of national regulation was therefore seen as a way to decrease the differences between the states and territories and to promote increased productivity by allowing nurses to work across geographical boundaries more easily.

The legislation for the National Scheme was implemented in three stages, with the first stage being achieved through Health Practitioner Regulation National Law Act 2009 (Act A), which established the structures that enabled development of the National Scheme. The second and third stage included the full functions of the National Scheme and the means to

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<sup>13</sup> On July 1<sup>st</sup>, 2010 the Standards were adopted as part of the National Law under the auspices of the newly formed Australian Health Practitioner Regulation Agency (APHRA), with the exception of Western Australia which joined the scheme on 18 October 2010.

fully implement and the repeal of existing legislation respectively. The move to national regulation in 2010 resulted in the establishment of AHPRA<sup>14</sup> and subsequently the establishment of the NMBA, which is responsible for the registration of nurses, midwives and students. The NMBA subsequently adopted the Standards. The notion of competence in relation to the Standards continues to be a key reference point in determining eligibility for both initial and continued registration.

Whilst the regulatory system has been nationalised, the health sector and economic productivity initiatives have resulted in a shift in control; rather than educational institutions directing learning, the needs of institutions which employ nurses are given more consideration (Sawchuk 2008). Further, the political environment in the sector is becoming progressively complex largely due to the drive for nursing competency standards to align with local and national agendas, and to align with supranational objectives aimed at increasing economic growth (Hjort 2008).

The Standards have been informed by the nursing profession and sustained through political, educational and economic agendas. Each of these has independently and collectively exerted considerable influence during the implementation of the Standards in nursing and contributed further layers to the complexity of nursing competency assessment. Added to the influence of these agendas is the continuing confusion and debate concerning the concept of competence.

### **Conceptions of the notion of competence**

The notion of competence has been conceptualised in a number of ways over the last few decades. Flemming describes a narrow conception of competency as the discrete behaviours, associated with the completion of a single task (Fleming 2006). A narrow view of competency positions the 'task' as the competency, and places the emphasis on technical

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<sup>14</sup> AHPRA is the organisation responsible for the implementation of the National Registration and Accreditation Scheme across Australia. AHPRA works with 14 National Health Practitioner Boards in implementing the National Registration and Accreditation Scheme, one of which is the Nursing and Midwifery Board of Australia.

skills rather than on high-level achievement (Gonczi, Hager et al. 1993). Higher level achievement on the other hand includes the importance of understanding, attitudes and personal qualities. Thus, in a narrow conception approach competence becomes limited to that which is observable, with a focus on performance of actions rather than on the understanding and reasoning of the nurse. This interpretation has been criticised because it negates the underlying complexities involved in the performance of professional roles in the 'real world', and ignores group processes and their effect on the performance of individual nurses (Collins 1991; Field 1991; Preston and Walker 1993).

A second more generic interpretation of competency can be found in the management literature (Boyatzis 1982). This interpretation concentrates on skills and attributes that a practitioner demonstrates in performing their role, and the transferability of those skills to other roles (Gonzi 1994). Critics of this approach argue that not only does this ignore the context in which the competency takes place, the approach does not take into account how the expertise of any one health professional is specific to their area of clinical expertise (Benner 1984; McGaw 1993). A third, and currently the preferred perspective of competence in nursing, is an integrated or holistic perspective that combines the above interpretations to include the context in which the professional works. A holistic approach has been adopted by a number of professions<sup>15</sup> including nursing. It incorporates values, ethics and reflective practice and involves the requirement that specific standards of competency be demonstrated during a university education (Piercey 1995; Frisch 2001).

A holistic model of competence is conceptualised in terms of attributes; that is, knowledge, skills and attitudes (Preston and Walker 1993). This model fits with key Australian policy documents that describe competence as a complex combination of attributes that underpin occupational competence (Gonczi, Hager et al. 1990). Further, the development of competency standards using this integrated approach facilitates the implementation of other areas of social and economic policy, such as the recognition of professionals from overseas and the internationalisation of professional services (Gonzi 1996). Furthermore,

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<sup>15</sup> The holistic interpretation of competency has been adopted by a number of the professions including but not limited to, pharmacy, medicine, dentistry, law, podiatry, teaching, engineering, accounting, occupational therapy, speech therapy, architecture and nursing and midwifery.



the definition of competence provided by the Standards, aligns with the holistic approach, in that it recognises competence as (ANMC 2006); 'the combination of skills, knowledge, attitudes, values and abilities that underpin effective and/or superior performance in a profession/occupational area'. Despite this alignment, however, the suitability of these models has been a central point of contention in debates about competency (O'Connora, Fealya et al. 2009).

This thesis extends the debate around definitions of competence, by building upon previous research that focussed on the development of competence, including the studies that distinguish between the ability of 'expert' and 'novice' nurses in relation to assessment and decision-making (Benner 1984; Benner, Tanner et al. 1992). The debate is often confused with the language and terminology, for example the difference between competence and competences (behavioral skills), and competency or competencies (psychomotor skills), (ANF 2005) being often interchanged. Competence and competences are broad capacities and in contrast competency is a narrower concept used to label particular abilities or episodes. For example, a nurse can be competent to practise and demonstrate competency in a particular skill. The use of terms interchangeably has led to what Clarke and Winch (2006:256) calling it a 'conceptual inflation', whereby multiple meanings promote ambiguity and problems with comprehension. Additionally, the lack of clarity in the operationalisation of the definition of competence has impacted on competency assessment particularly in the development of valid and reliable assessment tools (Grealish 2009). Throughout the thesis, the term 'competence' will be used to refer to nurses' alignment with the Standards, in terms of their work as a whole.

## **Outline of the thesis**

My research was situated in Tasmania and took a state-wide approach in order to access the voices of nurses employed across a range of health sectors including; public, private, community and aged care. I adopted a critical realist perspective to explore the socio-cultural factors that shape and position the Standards within the nursing profession. In Chapter 1, I explore how the Standards evolved and became established within the

profession, and highlight some of the economic, political and discipline-specific conditions under which the Standards emerged. I undertook a preliminary review of literature and policy documents to gain a greater understanding of the Standards and their emergence as a tool for assessment and their role in regulation. This work is detailed in the literature review in Chapter 2, where I critically examine the current state of research in the area of competence, in regards to health regulation, competency frameworks and assessment technologies.

In chapter 3, I describe the framework in which the research was addressed. I explain the theoretical approach to the research, outline my philosophical position, and discuss the implications for gathering and interpreting data. In Chapter 4, I cover my research methods and design, and provide a rationale for the research design and the data collection and sampling methods I chose. In articulating the research design, I outline the different components of the research and how they are integrated, in order to make explicit the links to the research questions.

Exploring the research questions in depth required field work with nurses who are working with the Standards in practice. An initial questionnaire phase ascertained registered nurses' opinions of the level of knowledge, regarding competency and the use of the Standards. The semi-structured interview phase was then used to achieve a more in-depth understanding of this knowledge as well as identify any factors that may promote or hinder existing competence assessment practices as described in the two data findings chapters, 5 and 6. The theoretical knowledge from the Literature Review (Chapter 2) and the lessons learnt from the questionnaires and semi structured interviews are synthesised in Chapter 7, with interpretations and opinions to explain the implications of the findings. The significance of the participants' understanding of the Standards and their use in practice and for assessment are detailed in Chapter 8. The research is explained in relation to key groups of nurses working in the particular context of assessment in which these experiences occur. In this way a picture is built up of the general as well as the particular experiences of the individuals involved in the research.

## Conclusion

Chapter 1 has highlighted the current competency landscape in nursing practice as situated within the contemporary political setting. A historical overview and outline of the evolution of competency standards in nursing in Australia in respect to professional, political and economic imperatives has also been provided. The Standards are positioned as a persistent national agenda item for regulators, the university sector, politicians and for safety and quality agenda initiatives, as well as for the nursing profession and the public. That is, for over two decades the Standards have maintained a firm position as the assessment framework infrastructure within the nursing profession. Competency measures continue to be attractive because they provide a form of assessment of practice that verifies an individual's competence (Kaiser and Rudolph 2003; Chiarella, Thoms et al. 2008).

Importantly, the introduction of the Standards was perceived by some academics as privileging industry needs over the needs of students studying within higher education sector. Further, some critics believed the Standards sat uncomfortably with the professionalisation of nursing, as the Standards were seen as more appropriate to the vocational education and training sector. Since the introduction of competency standards in Australia, the Standards have been, and continue to be, a focal point in nursing regulation, education and political agendas. However, the assessment of competence in nursing practice is an invariably complex activity, for which assessors must have adequate contextual understanding (Levett-Jones, Gersbach et al. 2011). This has particular relevance given the complexity and ambiguity accompanying the assessment of competence, which has contributed to the development of multiple tools, which in turn contributes to the complexity. It follows that an increased focus on competence and the competency agenda should also focus attention on the epistemology which guides the assessment of competence. An investigation into current understandings of the Standards and their application in nursing is therefore appropriate.

## Chapter 2 – Literature Review

### Introduction

The position of competency standards as the key means by which nurses are deemed to have attained the requisite level of competence to practise has been driven by a number of agendas; safety and quality agenda, health reform, regulatory and the professionalisation of nursing. These stakeholder-agendas sit alongside the perceived inadequacies of alternative performance measures. Traditional forms of assessment are unable to capture both the technical and non-technical aspects of a health professional's work (Callaghan, Hunt et al. 2007; Higgins, Begley et al. 2010). In Australia, and other developed nations, nursing is not alone in adopting a competency-based approach to assessment, as other professions have embraced this approach as a key policy initiative (McAllister 1998; Epstein and Hundert 2002; Epstein 2007). Within these professions, regulatory frameworks have become increasingly desirable. Thus, the professionalisation of nursing and a regulatory means to ensure the safety of the public have been a further impetus for the adoption of competency standards. However, they are challenges with defining competence and the implementation of a competency assessment framework. Assessment of nursing practice with competency standards can be challenging because of the dynamic nature of nursing practice. Schon (1983) describes nursing practice as messy and indeterminate, while others depict nursing practice as either artistic or scientific (Gobbi 2005). Understanding nurses' interactions with the Standards and competency assessment therefore requires identification of any constraining or enabling factors that impact on nurses' individual actions.

Chapter 2 provides an analysis of the current literature about the evolution and significance of competence and competency-based assessment in nursing. The literature review is divided into two main sections. The first section outlines the search strategy, methods and procedures and sets the parameters for the review. In the second section, the literature is examined to determine what is currently known about the adoption of competency standards by the profession, and to examine nurses' use of competency standards for assessment purposes.

## Literature review process

The literature search was undertaken between 2007 and 2013 using academic journals accessed through e-journals and the online databases ProQuest, CINAHL and Medline. Google Scholar was also utilised to identify and retrieve relevant online publications. Grey literature including historical policy documents, minutes from meetings and drafts of the ANMC Standards were retrieved from the ANMC archives in Canberra to provide background information. Publication reference lists were examined to ascertain additional references. Web sites and PhD repositories from within Australia and internationally were searched to identify background information and additional publications.

The search terms included 'competency', 'competent', 'competence', 'competence-based assessment', 'regulation', 'quality and safety', 'professional guideline', 'standard', 'professional standards', 'professional frameworks', 'context and assessment', 'professional identity', and 'assessment of competence'. Over three hundred publications relating to competence and competence assessment in nursing and in other health fields and professions were identified. Publications were chosen based on their contribution to an understanding of the issue of using competency standards to assess competence. Thus, an overview of opinions and a précis of the literature in this area are provided. This review of the literature primarily focused on nursing, but includes other health professionals because there is a degree of alignment between the performance standards and expectations for all health professionals. While the majority of the literature emanated from the United States, Canada, the United Kingdom, Northern Europe, New Zealand and Australia, a broad review was conducted in order to include research from a range of perspectives, including those not aligned with the central argument of this thesis.

## Current literature

The aim of the literature review is to contextualise the introduction and continued use of the Standards through description and analysis of the major theoretical arguments and influences on the development of the Standards; from pioneers, educationalists and researchers. There are a number of significant developments and debates in the literature

regarding the use of competency standards. The review intends to build upon these to offer a new conceptualisation of competence assessment using the Standards. This re-conceptualisation recognises the role of social structures that operate in the practice settings and can play a part in shaping and informing how the Standards are used. A thematic approach is adopted to formulate a conceptual model, which provides the rationale for the research questions. The literature is presented in the six themes: the safety and quality healthcare agenda, competency standards as a key policy direction, professionalisation with competency standards, regulation of practice with competency standards, the difficulty in defining competence, and the challenges in assessing competence. Beginning with safety and quality agenda, the literature review then moves to address policy directions and to examine the influence of theoretical, nursing and other professional approaches to competence within Australia, New Zealand, the US and Europe. The next section explores the challenges inherent in definitions of competence. The final section describes the tools used for assessment of competence and provides an overview of the various definitions and concepts used to inform the findings of this study.

### **The safety and quality healthcare agenda**

The twenty first century has brought about extraordinary changes in health-care delivery, and safety and quality agendas are a part of this transformation. The rapid proliferation of knowledge, the expanding availability of information and communication technology to support learning, treatment and clinical decision making is unprecedented (Bellack 2005). Increasingly, the national and international spotlight has highlighted safety and quality in health care with a strong focus on those delivering care (Bellack 2005; GoI 2008; Hughes 2008a; Ironside and Sitterding 2009; Safriet 2011). This entails a focus on competence. The main focus of competence in nursing has primarily been in the clinical practice setting. The practice setting is a significant site of 'risk' as the quality of nursing practice is directly linked to patient outcomes (Schroeter 2008). Patient safety is therefore central to clinical education, with the competence of nurses a key tenet of the safety and quality agenda.

An increased focus on safety and quality is evidenced in the health-care literature (Kohn, Corrigan et al. 2000; Adrian 2006; Ferguson, Calvert et al. 2007; ANF 2009; ACSQHC 2011).

Addressing safety and quality in healthcare has drawn attention to adverse events, and led to the publication of two major reports on the issue (Davis, Lay-Yee et al. 2001; AHMC 2004). Each of these reports aims to improve the quality of health care provided to the public and decrease the number of adverse events (Walton and Elliott 2006). In recent decades a number of seminal reports have emanated from the United States (US) including *To Err Is Human* (Kohn, Corrigan et al. 2000), which recommended that the US Congress create a national patient-safety centre to develop tools and systems to address the errors occurring in health care. A second follow-up report, *Crossing the Quality Chasm*, described the use of internal and external approaches to meaningfully improve the quality of health care (IOM 2001). In 2000, Australian Health Ministers established the Australian Council for Safety and Quality in Health Care (the Commission) to lead national efforts to improve the safety and quality of health care provision. The Commission commenced operation in January 2006 and is funded by Australian, state and territory governments to develop a national strategic framework and associated work programs to guide efforts to improve safety and quality across the health care system in Australia. Nationally and internationally significant government initiatives continue to focus on improving the competence and responsiveness of individuals working in health care organisations. The notion of competence is underpinned by patient safety and forms a key safety and quality concept embedded within improvement initiatives.

Concerns related to the competency of health professionals have culminated in an increased focus on the production of skilled graduates (Arbon 2004; Minarik and Lyon 2005: 182). A number of scholars argue that competency assessment and its development is necessary to ensure effective, safe and quality health care (Flanagan, Baldwin et al. 2000; Hughes 2008a; NCNM 2010). This emphasis appears to be in response to concerns about patient safety, the variation in nursing practice across different settings, and the need for increased accountability in both higher education and health care (Tanner 2003; Hughes 2008a; ACSQHC 2011). However, minimal evidence exists that demonstrates that undergraduate programs provide students with the skills necessary to examine patient safety issues as an integral part of their practice (Chenot and Daniel 2010).

In summary, the findings from the safety and quality literature reveal wide support for the adoption of a collaborative, coordinated and comprehensive approach to safety and quality improvement (JCAHO 2006; Whelan 2006). Within the nursing profession, patient safety has emerged as a constant theme. It is this theme that has stimulated the adoption of measures in nursing to enhance the development of students of nursing and the competence of registered nurses (Watkins 2000a). However, there is very little research that demonstrates the effect of competency standards on error-rates and public safety. Higgins, Begley et al. (2010) review of the literature found minimal evidence that competence standards have had any impact on service outcome and established that no studies evaluate the relationship between competence, patient needs and clinical outcomes. Rather, the literature focuses mainly on the increased need for safety and quality initiatives (Kohn, Corrigan et al. 2000; ACSQHC 2011). Conversely, other authors have expressed concerns about whether the current methods of professional registration adequately assess the safety and competence of nurses' practice (Wakefield 2008; Hughes 2008a).

### **Competency based standards as a key policy direction**

The competency-based approach to education, training and assessment has surfaced as a key policy area for industrialised nations (Cowan, Norman et al. 2005a). Successive Australian-government reports have highlighted the importance of a highly skilled and flexible labour force in meeting a more competitive global economy with competency-based training, and have affirmed education advances as a means of achieving this desired outcome (Dawkins 1989; Reid 1994; DEST 2005; DEEWR 2008; Heath 2002). Competency and competency standards began as an idea in nursing in the early 1990s and resulted in a number of professions adopting competency-based curricula and outcomes evaluation in their education programs (Carraccio, Wolfsthal et al. 2002). This adoption of competency standards occurred despite disagreement and debate regarding the nature of competence (Ashworth and Saxton 1990; Hyland 1993; Hyland 1995; Girot 2000; Westera 2001; Jones 2002; Watson 2002a; McMullan, Endacott et al. 2003). Since that time, the adoption of competency standards has gained ground in a variety of spheres, including both the vocational and higher education sector, with practice-based assessment being put forward as having increased prominence in professional education (Govaerts, Cees et al. 2007).



The use of competency standards was largely driven by dissatisfaction with content-focused courses that were believed to have failed to provide an appropriate level of assessment and evaluation to meet various professional goals (Bell and Paterson 1998). Further, the rapid advancements in health-care treatments and technologies was not matched by changes to curricular and teaching and learning practices within the health care sector (Schuwirth and van der Vleuten 2004; Bellack 2005). The competency movement, for all the difficulties it encountered, is argued to have played a vital part in 'bridging the gap' between theory and practice (Cook 1991) and the perceived divide between qualification and performance in the workplace (Klink and van der; Boon 2002; Grealish 2009). This divide prompted many professions to create performance-assessment instruments specifically for their contexts (Wheelahan 2007b). This trend is significant, given the fact that contextual factors are currently poorly understood in the existing literature in relation to competence and its assessment.

The move to the conceptualisation of clinical competence as an assessment strategy within the professional and organisational context signalled a major pedagogical shift away from more traditional methods of education (Fouad, Grus et al. 2009). Traditional assessment procedures emanated from the scientific measurement paradigm, and were abandoned because they typically sampled a far narrower range of contexts than the practising professional is likely to encounter (Hager and Butler 1994). Quantitative approaches such as checklists were criticised as too reductionist and task-orientated (Bartlett, Simonite et al. 2000) with aspects such as interpersonal interactions and decision making not easily assessed (Girot 1993). Qualitative measures were also criticised for lacking definition because they may not be easily transferable to different practice settings (Bartlett, Simonite et al. 2000). The nursing profession was seeking a balance between performance and competence that reflected the art and science of nursing.

These tensions are not new to nursing, with Benner's (1984) seminal work *From Novice to Expert* identifying nursing practice as an integrated art and science. Benner described competence as existing along a continuum, and argued that competence was developed in practice and by learning from constructive experiences over time (Benner 1984). Benner

(1984) further stated that nursing practice is far more than performing skills or understanding and applying nursing content or theories. Benner's work was based on the Dreyfus Model of Skill Acquisition (Dreyfus and Dreyfus 1986) which positioned the acquisition and development of a student's skill as developing through five levels of proficiency; novice, advanced beginner, competent, proficient and expert (Benner 1984). Commentators on Benner's work believed this experience-continuum approach to competency was valid and ennobled the profession as it was derived from an analysis of actual nursing performance, rather than the views of 'armchair experts' (Gonzi 1996).

Competency standards development occurred in several stages in relation to the development of the initial *ANCI Competency Standards for the Registered and Enrolled Nurse* (ANCI 1994). The initial stages included a literature review, an observational study of nurses in practice at over twenty different sites across Australia and a subsequent document analysis of assessment instruments (Butler 1990). The project used an interpretive ethnographic methodology, which was monitored and ratified by a project-management team of nurses (Butler 1990). An interpretive ethnography approach advocated by Benner (1982, 1984) was considered a suitable model as it relied upon expert consensus to validate the instrument. However, Grealish (2009) in her PhD thesis argued that it was in fact 'armchair experts' - those who were not practising in clinical nursing, who met around a table to brainstorm, discuss and debate the merits of particular aspects of practice. It was the opinions of these experts that drove the competency agenda that developed the first stage of the *ANRAC Competencies* (ANRAC 1988; ANRAC 1990). The outcome of the consultation process was that the final list of competencies was a summary of a series of compromises and negotiations between these same experts (Grealish 2009). This same process has been replicated in subsequent reviews of the Standards, which raises questions about the influence of these stakeholders, versus the influence of nurses using the Standards in practice.

Benner's (1984) framework was introduced to nursing in the mid-1980s, but was subsequently discarded because it was lengthy, cumbersome and difficult to understand, particularly for clinical nurses, most of whom had no educational grounding in Benner's theory (Calman, Watson et al. 2002). Sharp, Wilcock et al. (1995) maintained that Benner's

approach was difficult for teachers in nursing to use, because a knowledge-based curriculum cannot easily be assessed with a skills-based competence-assessment method. Benner's approach however was accepted without critical evaluation in the United Kingdom in the late 1980s as the framework for diploma courses (English 1993).

Several authors have conducted studies into the relationship between competence experience, with mixed results, even though the research was based on the premise that escalation of competence correlated with length of experience (Greenwood and King 1995; Adamsen and Tewes 2000; Gerdtz and Bucknall 2001; Manais and Street 2001; Frank-Stromborg, Ward et al. 2002; Hoffman, Donohue et al. 2004). Rischel (2008) and Larsen et al (2008) conducted observational studies and found that each nurse had unique patterns of practice that did not correspond to the expected level of competence. Instead, a nurses' competence was situational, rather than related to particular levels of the developmental model. For example, in some situations inexperienced nurses acted as experts while experienced nurses acted as advanced beginners (Rischel, Larsen et al. 2008). That is, some nurses continued building on their knowledge, but not all nurses automatically became expert in their field of nursing. This highlighted that factors, other than experience, are involved in the development of expertise and competence.

Critiques of the Standards have been evident in the literature since their release in 1990. Walker (1995), Chapman (1999) and more recently Grealish (Grealish 2009; Grealish 2012) and Levett-Jones (2011) argue that competency frameworks and guidelines are inadequate. These authors question whether the nature of competence is visible, and whether competence is objectively observable and measurable using standardised competency-based assessment tools. They also raise concerns about the selection of appropriate assessors, guardians or gatekeepers of the professional standards, and whether a separate approach to student assessment is required (McGrath, Anastasi et al. 2006). This is significant for nursing and this study because there is little empirical evidence that the operationalisation of the Standards that occurs in education and practice has been fully integrated nor clearly articulated by clinicians and educators. Indeed, Khomeiran, Yekta et al. (2006) indicated that they had been unable to locate any literature regarding how nurses experience the process of their own competence development. Thus, while the literature

shows that the competence of registered nurses is critical for public safety; this research is timely in light of the recent move to national registration and the imminent review of the Standards.

In summary, key policy drivers have given support to the widespread uptake of competency-based education for health professionals, and demanded greater accountability in all aspects of professional performance (Frank and Danoff 2007). Added to this, are the longstanding federal and local-government agendas for Australia to have a highly skilled and more flexible labour force supported by competency-based training and education (Curtain 1994; N3ET 2006; Brownie, Bahnisch et al. 2011b). How competency assessment can meet this objective is therefore a challenge, as there is little scientific or any other evidence evaluating the outcomes of a competency-based education paradigm (Carraccio, Wolfsthal et al. 2002). However, while there has been more support for a competency-based education than for a structure and process-based model<sup>16</sup>, there remains a lack of shared understanding of what a competency is, and how it can be demonstrated (Carraccio, Wolfsthal et al. 2002). Therefore, whilst competency standards have been widely adopted by nursing and other health professions, their adoption has not been matched with evidence of their effectiveness.

### **Professionalisation with competency standards**

This section of the literature highlights how nursing is enhanced by the use of the Standards. Competence has been promoted as a way of advancing the professional nature of nursing practice and of preventing erosion of the registered nurse role, with competence used to as a means to promote social and political interests (Grealish 2009). Competency based standards were implemented as a means to understand, articulate and gain legitimacy for the nursing profession (Bowden and Masters 1994). Competency-based standards have also been used to expand nurses' scope of practice (Brownie, Bahnisch et al. 2011b) as they provide the language to articulate the practice-knowledge of clinicians (Zerwekh 1990;

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<sup>16</sup> A structure and process-based model refers to an educational program focused on acquisition of knowledge, a final summative assessment with the program outcomes achieved within a pre-determined time frame.

Chiarella, Thoms et al. 2008). Apprenticeship models used in nurse training in the past were believed to have failed to assure the competence of nurses, and there was much concern as to whether this model could meet the needs of a changing work force (Glen 2009). The transfer of nursing education into universities created an alternative to the hospital-based education of the past and a means to protect and define the status of nursing. National and international registration authorities adopted competency standards to define the role of the nurse (Bryant 2005). Gonzi et al (1990) proposed that the development of clear standards for the professions would clarify what was, or was not, encompassed within a particular profession. The competency standards have subsequently been used to enable dialogue between professional organisations and the tertiary sector to further develop relationships between workplace performance and discipline based knowledge (Adrian 2006).

Health professionals and professional bodies regard competencies and standards have been a positive development for nurses (Chiarella 2006), and have been accepted as a process which supports the integrity and control of their respective professions (Wells 2003). Perspectives on professional competence have changed over time<sup>17</sup>; however the primary objective of the current education and clinical training models are to develop professional competence whilst also ensuring graduate learning outcomes are met (Falender, Cornish et al. 2004). This is premised on the employer expectation that each employee performs his or her role competently and the public expectation that there is proof available of all employees competence (Johnson et al, 2000).

The introduction of competency standards to the nursing profession resulted in a re-prioritising of assessment. Historically, the technical aspects of nursing were prioritised over

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<sup>17</sup> Traditionally perspectives were influenced by theoretical knowledge, and the ideals of positivism. Their point of departure was whether knowledge as a product was transferable from research, through education into professional practice (Rolfe, et al, 1993). In this framework, scientific theories around competence are applied to defined problems in professional practice. According to Sandberg (1994) this scientification of professional practice reflects a dualistic positivistic ontology in which the phenomenon of competence is divided into two separate entities; the worker's competence and competent work. This paradigm led to descriptions of work activities that were separate from the worker who accomplished them. Rationalistic approaches however, identify and describe human competence as constituted by two independent but related entities; a list of attributes possessed by the worker which is separate to a list of work activities (Sanberg, 1994).

the non-technical aspects of nursing care (Axley 2008). Nevertheless, nursing is more than technical ability and the capacity to demonstrate competency is of significance to nursing education because graduates are required to demonstrate critical thinking and problem solving skills (Wendt 2004). A learning-outcomes and competence approach aims to place the student at the centre of the education process and to justify the practical and vocational relevance of the curricular to the profession and the community (Heathcote, Kempa et al. 1991; Boud and Edwards 1998). However, Pearson argues that nursing has achieved a good balance between developing explicit competencies and valuing the role of independent creative decision making in professional practice (Pearson 2002). Further, whilst assessment of competencies captures such notions as appraisal, calculation, estimation, evaluation, rating and judgement various critiques have argued that those being assessed deserve more than the counting and measuring of those easily-defined abilities that are more readily quantified (Power 2004; London 2009).

A key area of debate for theorists and researchers nationally and internationally for over two decades has been competency-based education and the use of competency assessment (Rethans, Van Leeuwen et al. 1990; Girot 1993; Gonczi, Hager et al. 1993; While 1994; Harris, Guthrie et al. 1995; Benor and Leviyof 1997; Bradshaw 1997; Bradshaw 1998; Chapman 1999; Goldsmith 1999; Fitzgerald, Walsh et al. 2001; Roberts -Davis and Read 2001; Meretoja, Eriksson et al. 2002; Watson 2002a; Smith 2003; Tsuzuki 2004; Cowan, Norman et al. 2005a; Chiarella 2006; Grainger 2006; McGrath, Anastasi et al. 2006; Scott Tilley 2008). A UK comprehensive systematic review of the literature focused on concept clarification, methodologies for assessment of competence and the tension between competence and other educational approaches (Watson, Stimpson et al. 2002b). This review concluded that there was friction between competency based and educational-based approaches to training, because competence had been consistently poorly defined with assessment instruments and methods lacking rigour (Watson, Stimpson et al. 2002b).

A number of studies have investigated the adoption of standards as a means for advancing the profession. A small Australian phenomenographic study undertaken by Ramritu and Barnard (2001) explored nurse graduates' experiences of competence assessment. Graduate nurses worked with their assessors through complex elements of practice to make

decisions about competence. The study found that graduates lacked not only expertise, but sufficient knowledge of the Standards to demonstrate beginning level competence to practise. In another Australian study, Brammer (2006) sought to identify the different ways registered nurses experience and understand their 'buddy' role with undergraduate students during clinical placements, and the implications of this on student learning. Brammer demonstrated that registered nurses' understanding of their role promoted or impeded the quality of student learning and development (towards professional competency standards), but did not make any direct links to the registered nurses' understanding of the Standards (Brammer 2006). Thus, for graduates, a buddy (or preceptor) can play a key role in the achievement of competence. More recently, Grealish's PhD study found that competence in nursing did not exist as a singular definable reality but instead found that inventive assessors worked to create competence, rather than assess competence (Grealish 2009). That is, instead of assessing competence, assessors work at *producing* competence (Grealish 2009: ii). Grealish (2009) advanced that whilst competence can exist in multiple ways, it was the nurse assessors that crafted competence into a singular representation to align with competency standards.

The literature reveals that the Standards have been rated by health professionals as important means of advancing the nursing profession (Wells 2003; Chiarella 2006; Grealish 2012), but the demonstration of the Standards might require expertise greater than that possessed by new graduates (Ramritu and Barnard 2001). The literature also highlights concern with the degree of consistency in the application of the competency standards within the practice setting for entry-level practitioners (Grealish 2009; Crookes, Brown et al. 2010). From the perspective of nursing education, reservations continue regarding how regulator outcomes are translated into the curriculum and the assessment schemes used in practice (Brownie, Bahnisch et al. 2011b). The higher education literature also continues to raise concerns regarding the use of narrowly drawn competencies, which may compromise the capacity to educate and develop higher-order clinical reasoning skills necessary for expert practice (AMC 2010). Research findings continue to provide examples that competency standards are too reductive and prescriptive because they are believed to reduce complex forms of behaviour in artificial ways and are aimed at basic rather than

excellence in practice (Walker 1995; McGrath, Anastasi et al. 2006; Windsor and Harvey 2012).

## **Regulation of practice with competency standards**

The Standards are endorsed by a national nursing and midwifery regulatory authority (NMBA) to regulate practice and provide proof of an individual's competence. The regulation of practice situates health care within an environment of increasing clinical governance and accountability (Savage and Moore 2004). Given the increase in regulation, it is inevitable that social and institutional practice (standards and policy statements) and governmental regimes would require evidence of readiness for professional practice (Adrian 2006; Porter 2006; White 2012). Competency standards provide this framework by acting as a tool for regulation (ANF 2005; McGrath, Anastasi et al. 2006; EdCaN 2008; ANMC 2009; CNO 2009; Crookes, Brown et al. 2010).

Regulation is seen as a safeguard for the public restricting access to practise to those who meet the minimum requirements (Bradshaw and Merriman 2008). However, the key issue emerging from the literature is that self-regulation is common in nursing. This is problematic as little analytical attention has been paid to how nurses interpret competence or assess others, whether competence can be quantified and nurses' ability to self-regulate through competence assessment (Cowin, Hengstberger-Sims et al. 2008). Due to this self-regulation by nurses the competency landscape is difficult territory to investigate (Wynd 2003).

Regulation is profession specific, with each profession developing a unique set of competency standards. More recently, stakeholders have proposed a common competency framework to cover both allied health and health professionals (NHWT 2008/2009; Brownie, Bahnisch et al. 2011a; Brownie, Bahnisch et al. 2011b). Further, competency standards have been developed to promote inter-professional collaborative practice, in order to promote safe, high quality, accessible and patient-centred care (IECEP 2011; Brownie, Bahnisch et al. 2011b). Collaborative work of this nature would require the professions to contribute to, and negotiate, a shared set of expectations that would meet the needs of each discipline (IECEP 2011; Verma, Broers et al. 2009). Additionally, proposals for a global nursing



competency framework to facilitate the achievement of health service delivery that meets health needs in any given country and context have been mooted (Kaslow, Borden et al. 2004; Bruno, Bates et al. 2010). Given these proposals for a global nursing competency framework the outcomes of this thesis are significant in that they can provide a current understanding of how nurses understand and interpret competence in relation to the competency standards to ensure any identified challenges nurses' have faced are addressed within the framework.

A major weakness of competency standards highlighted by critics has been the scope for variation associated with translation of regulator outcomes into the local curriculum and assessment schemes (Moore 2005). There has been a continuing assertion over a number of decades that an over reliance on competencies can lead to a stunting of a professions' development, because competencies and competency assessment isolates components of performance and thereby ignoring the complexity of work (Bowden 1997; McAllister 1998; Leung and Diwakar 2002; Hughes, Shrimpton et al. 2011). Whilst the development of explicit, measurable or observable competency statements appears to be a reasonable expectation, questions remain regarding the development of competency standards that can capture the critical role of independent and creative decision-making in professional practice. Further, there has been continuing debate as to whether competency standards are even appropriate in nursing education and regulation (Pearson 2002; McGrath, Anastasi et al. 2006; Grealish 2012). This debate is significant given that competency standards continue to be the organising framework for classifying nurse performance and dominate performance classification in the Australian healthcare system.

In summary, competency standards are a strongly entrenched means to regulate practice (ANF, 2005). While investigations are underway to establish inter-professional and global nursing competency standards; there is little evidence to suggest that regulatory reforms have resulted in improved outcomes (Short 2011). Competency standards are also firmly established as the primary means for categorising nurse performance, however the literature highlights that there is a lack of a clear definition of what competence means.

## The difficulty in defining competence

Since the introduction of the term competency, there has been diverging conceptions of what competence means. Ashworth acknowledges that competence can refer to a 'personal attribute, an act, or an outcome of action' and it is this uncertainty that is under critique (Ashworth and Saxton 1990: 3). Confusion has arisen around the terminology and has been directed towards the various interpretations of the language used to describe types of competency, with the terms competence and competency sometimes used interchangeably (Delamare Le Deist and Winterton 2005).

In Australia the ANMC National Competency Standards for the Registered Nurse (2006)

define competence as:

The combination of skills, knowledge, attitudes, values and abilities that underpin effective and/or superior performance in a profession/occupational area.

Gibson and Heartfield (2005:17) also provide a number of useful definitions as follows:

Competency (also competence) - the ability to perform tasks and duties to the standard expected in employment.

Competency standard - an industry-determined specification of performance which sets out the skills, knowledge and attitudes required to operate effectively in employment. Competency Standards used by the nursing profession comprise a domain which is the overarching title for a cluster of competency units with a similar theme and the units of competency or competency standard.

Unit of competency - a component of a competency standard. A unit of competency is a statement of a key function or role in a particular job or occupation.

Whilst the ANMC (2006) defined what competence means, in general as a term, or as a process, there has been no consensus within the literature to its definition. The difficulty with defining competence exists at both a practical and theoretical level. As argued by Norris (1991: 332):

As tacit understandings of the word [competence] have been overtaken by the need to define precisely and [to] operationalise concepts, the practical has become

shrouded in theoretical confusion and the apparently simple has become profoundly complicated.

Indeed, over two decades ago the nature of the competency standards was questioned by some employers in regards to what they actually mean, what students should know, and what and how these standards might be implemented and measured (Bowden and Masters 1993). A systematic literature review by Watson (2002) concluded that there was no single generally accepted definition of competence in nursing (Girot 2000; McMullan, Endacott et al. 2003; Grealish 2009; Levett-Jones, Gersbach et al. 2011). This is true in other health professions, for example a controversy exists in psychology over core competencies and definitions of performance criteria (Kaslow, Borden et al. 2004; McGrath, Anastasi et al. 2006). However, meaning is also determined by usage in specific contexts, thus it may be unreasonable to expect the meaning of competence will remain consistent over time (Fleming 2006). Nevertheless, the operational definition of nurse competence remains a fundamental element for competence assessment (Meretoja, Isoaho et al. 2004).

The introduction of competency standards has raised many criticisms from nursing academics and practising nurses. Nurse academics have analysed, theorised and debated the position competency standards within nursing since their development (Walker 1995; Pearson 2002; Adrian 2006; McGrath, Anastasi et al. 2006; Levett-Jones, Gersbach et al. 2011). Some of the criticisms directed at the use of competencies in educational contexts highlighted they are too reductive and prescriptive, focus on skills rather than understanding, and atomise complex forms of behaviour in artificial ways (While 1994; Walker 1995; Chapman 1999; Cowin, Hengstberger-Sims et al. 2008). The introduction of competency standards also raised questions regarding the rationale and implications of the competency standards approach for the professions, and in particular for nurses who move in and out of the culture of health care (Gonczy, Hager et al. 1990; Walker 1995; McGrath, Anastasi et al. 2006). Within the profession, some nurses have continued to be sceptical of the use of competency standards. Questions have arisen to whether nurses are; clinically and culturally competent and possess the high levels of sophisticated decision making skills across diverse practice settings inclusive of quality improvement, systems thinking, research and team leadership (Bowden and Masters 1993; Walker 1995; Watkins 2000a; Pearson

2002; Watson, Stimpson et al. 2002b; McGrath, Anastasi et al. 2006; Thorkildsen and Råholm 2010). This highlights a tension between the atomistic and holistic view of competence, particularly relevant in the context of nursing, where boundaries and definitions tend to be more fluid.

The Standards were written to be broad and principle based to encompass the numerous contexts of nursing practice. The language the Standards' are expressed in allows individual interpretation by both assessors and those being assessed. Cheek, Gibson and Gilbertson (1995) however argued that there are different interpretations of competency standards and confusion arises from the different interpretations of them (CS&HITB, 2005). A number of writers have acknowledged varied understandings of workplace learning through or as competence development (Watkins 2000b; Garavan and McGuire 2001; Hager 2004; Nash and Scammell 2010).

The confusion around competence, its definition and operationalisation has had a specific impact on beginning level expectations. The concept of competence plays a key role in defining the outcomes of nursing curricula and importantly what is to be assessed in practice. Almost four decades ago, Wandelt and Slater (1975) based their assessment schema on the premise that all nurses held a common expectation around the level of performance required from a competent graduate nurse, but they did not provide specific details of what this standard was, or how it was assessed. Beginning level competence is taken to mean entry-level competence for professional practice (Pearson, Fitzgerald et al. 2000). However, this has been a contentious issue in terms of the level of performance that is indicative of competence and consequently at what level a student can be deemed incompetent (Watson, Stimpson et al. 2002b). Some commentators argue that incompetence is easier to identify than competence (Lankshear 1990; Eraut 1998; Duffy 2003; Levett-Jones, Gersbach et al. 2011). A number of nurse academics argue that it is imperative that nurses in practice understand the expectations of graduates at the completion of their education (Heslop, McIntyre et al. 2001; Robert 2003; Blackman, Hall et al. 2007). In an Australian descriptive study, Robert and Farrell (2003) found that graduates expected to be functioning at a higher level of performance at the beginning of their graduate year, than did their preceptors and clinical nurse consultants. That is, the nurses

working together in a particular setting did not have a consensual definition of what constituted beginning level competence. Further discrepancies can arise when nurses and students of nursing demonstrate their competence in different contexts of practice (Schuwirth, Southgate et al. 2002). Therefore, differences in opinions and interpretation of beginning level competence continue to be a point of confusion and an area of tension within nursing.

In summary, the literature highlights the inconsistency in the definition of concepts of competency and competence with a significant divergence of views. While nursing professional bodies have adopted national competency standards, the nurses in practice translating the competencies have been provided with a multitude of definitions and descriptors. The standards of competency are not clearly defined and this highlights the need for performance criteria that operationalise nurse competence against the Standards to be clearly defined if rigour in competence assessment is to be achieved. This is particularly important given that the conceptualisation of competence currently occurs across a wide continuum from a list of tasks to be undertaken, to the more complex and abstract abilities required by professional practice and this brings challenges for those using competency standards to make a determination of competence. For students of nursing, who work across a wide range of contexts, and are assessed by numerous nurses in practice, this has particular significance given they must be deemed competent against the Standards prior to eligibility for registration.

### **Challenges in assessing competence**

Four subthemes address the major challenges documented in the literature regarding the assessment of competence. The challenges faced in assessing competence include the relationship between performance and competence, the interpersonal and power dynamics of assessment, the contextual nature of assessment and the tools used for assessment of competence.

## **Relationship between performance and competence**

The professional placement experience is acknowledged within the profession internationally as an essential element of nurse education (Dickson, Lock et al. 2007). In nursing, this is significant because there is little evidence regarding how the Standards are actually used for assessments that take place under examination-like settings (competence-based simulations), assessments that take place in actual practice (performance-based assessments), and the uniqueness and dynamics of each of these settings. In Australia, the performance of students of nursing must be assessed to meet the required level of competence in practice, prior to them being eligible for registration (ANMC 2006).

The confusion in the profession between performance and competence has been criticised by a number of reviewers (Messick 1994; While 1994; Ramritu and Barnard 2001). The confusion emanates from misinterpretation of performance, which is directly measurable, and competence, which is an inferred quality (Epstein and Hundert 2002). This is significant because both competence and performance are integral parts of the assessment framework. Historically, the majority of the literature on competence has considered the effect of competence on performance (behaviour), while neglecting the improvement of competence via performance (Sophian 1997; Winterton, Delamare - Le Deist et al. 2005). This omission underestimates how the availability and uptake of practice opportunities impact on learning (Sophian 1997; Winterton, Delamare - Le Deist et al. 2005; Levett-Jones, Gersbach et al. 2011). Competence however, is both a concept (embedded in the competent worker) and a set of features (specific knowledge, skills and attitudes embedded in performance), which describe the attributes of a competent individual (Sandberg 1994; Sandberg 2000). A nurses' competence therefore results from the successful blending of both this concept and this specific set of features. The relationship between performance and competence is important because nursing involves a complex set of nursing skills and nurse-patient interactions. Therefore, a competent nurse shifts from being a person who can competently perform a range of individual tasks, to an individual who is able to integrate a range of holistic skills, knowledge and attitudes to perform a technical role. A competent nurse must therefore be able to blend the art and acts of nursing (both the art and science of nursing) into a coherent whole (Chinn 2001).

As health care education is concerned with producing practitioners who consistently provide high-quality care, a greater emphasis should be placed upon performance in the real-life clinical setting, rather than upon competence (While 1994; Fernandez, Dory et al. 2012). This argument is based on the notion that competence is linked to performance and therefore acquisition and development of performance should be undertaken in a clinical context. To ensure the competence of students of nursing, the NMBA recommend a number of diverse assessment methodologies to measure a nurse's competence (including self-assessment by the student), with the former requiring assessment of performance by a registered nurse (ANMC 2006). The NMBA also requires the assessment is undertaken in real life, using authentic situations that focus on how students combine knowledge and skills, judgments and attitudes in dealing with actual problems of professional practice (ANMC 2006; Govaerts, van der Vleuten et al. 2007).

Across the multitude of clinical settings, there are likely to be multiple understandings of what constitutes 'student competence' and 'student performance' (Blackman, Hall et al. 2007). However, in practice the identification of students' clinical competence remains problematic (Blackman, Hall et al. 2007). Invariably, this is because performance and competence measures are influenced by diverse interpretations of the Standards among students and assessors (Norman, Neufeld et al. 1985; Watson, Stimpson et al. 2002b; Grealish 2009). Further, as described in the literature students' understanding of the nursing curriculum is not easily assessed using a skills-based competence assessment method (McGrath, Anastasi et al. 2006; EdCaN 2008; Schroeter 2008; Levett-Jones, Gersbach et al. 2011). Assessments undertaken by registered nurses using the Standards may be challenged in various ways by arguing that the evidence provided omits some important or relevant competency element. The key argument here is that if competence consists of a series of observable behaviours, then the same series of observable behaviours will be displayed by anyone competent in a given field. However, this is complicated by the difficulty in defining competence (Gillespie and Paterson 2009) and the many challenges of assessment (Levett-Jones, Gersbach et al. 2011), which include how the relationship between assessor and the nurse being assessed is operationalised.

The way competence is currently assessed has been criticised for over-simplifying professional competency and the dynamic inter-relationship between technical and non-technical skills (Callaghan, Hunt et al. 2007). Talbot argues that this places those using competency standards in danger of providing 'a limited professional education. . .based upon an inappropriate epistemology of competency [which] has a tendency to limit the reflection, intuition, experience. . .necessary for expert, holistic or well developed practice' (Talbot 2004:587). Many similar arguments point out the merits of interpersonal or 'soft' skills, which often go unrecognised and unrewarded in nursing contexts (Warhurst and Nickson 2007; Findlay, Findlay et al. 2009; Grugulis and Vincent 2009; Williams and Connell 2010). These soft skills, however, are difficult to measure and identify. Making assessments for technical skills more readily achieved (McGrath, Anastasi et al. 2006), while skills such as attitudes and ethical care are more difficult to identify (Kass 2011; Fernandez, Dory et al. 2012). Therefore competency may not capture and reflect the richness and complexity of practice (Kuchinke and Hee-Young 2005). This highlights a continuing issue for nursing regarding how competence assessment technologies or instruments can reflect both the need for technical competence as well as caring qualities (McIlfatrick 2004).

The complex environment of understanding competence and competency assessment lends itself to the adoption of mixed methodologies for future research such as this study, which aims to address a complex phenomenon in nursing. Further, the current measures fail to encompass the richness and complexity of practice, and to adequately assess student competence. Gaps remain regarding what level of competence is required to ascertain whether a nurse can perform competently and how this can be measured in practice using the Standards.

### **The interpersonal and power dynamics of assessment**

An essential element of assessment involves the relationship between the assessor and the assessee, and this relationship is particularly important for the student of nursing. While the nature of experience can enhance knowledge and skills, the act of competence development is complex (Khomeiran, Yekta et al. 2006) with importance placed on the assessors role to gather sufficient assessment evidence to justify the inference of the



assessee's competence (Hager 1993; Govaerts, van der Vleuten et al. 2007; EdCaN 2008). Many professional placements provide high quality experiences, but there is considerable variation in the skills and interest of the assessor, thus the range of available learning opportunities available to the student (Owen and Stupans 2007). Assessors of competence include clinical educators and preceptors from diverse clinical and educational backgrounds who have different levels of teaching ability. Assessors are charged with the responsibility to use the Standards as a basis upon which to judge (infer) whether those who they assess are competent. Nurse assessors have been considered by some as interchangeable 'measurement instruments', while the abilities of nurses being assessed is assumed to be fixed and permanent regardless of the context (Govaerts, Cees et al. 2007). Assessor effects can change in different context and interactions between assessee's and tasks or contexts can introduce potential sources of variation or bias, which can potentially compromise the assessment outcome (Govaerts, Cees et al. 2007). This highlights a perennial problem for nursing education; that of inter-rater reliability (Asadoorian and Batty 2005). Therefore, whilst assessment is a highly subjective act, Huddle (2007) argued that assessment may be reproducible if assessors are trained, and if the 'sampling' of performance is sufficiently extensive.

The assessment process can be further complicated if there is a shortage of mentors for students of nursing or if the mentors are inadequately prepared for their role (Moore 2005). This is important because well prepared assessors contribute positively to the assessment process (Calman, Watson et al. 2002). The actual skill of the assessor to make determinations of competence against competency standards and the importance of adequately selecting and preparing preceptors for their role in undergraduate nursing education has been a major area of concern that continues to be raised by the tertiary sector (Duffy 2003; Altman 2006; McCarthy and Murphy 2008). This concern is founded on the principle that the development of competence is linked to the effectiveness of the support provided to students during their course (Laude et al. 2007). Callaghan et al (2007) assert that the acquisition of competency is predicated on 'competent' trainers and assessors undertaking assessment in the time frame required. Further, Leung (2002) argued that the meaning of 'competence' is influenced by the assessor and is therefore not value

free. The literature raises questions regarding the complexities of interpretation and understanding of the competency standards and the importance of the assessor.

The subjectivity of the assessment process is believed to affect the relationship between the assessor and assessee, which in turn can impact on the assessment outcome. This has been debated through highlighting the dynamics of the assessor- assessee relationship and the need for rigor, consistency and objectivity in the assessment process. The accuracy of assessment is assumed to be directly related to the accuracy of observation and the recall of behaviour (Govaerts, Cees et al. 2007) and this is underpinned by the belief that competence assessment measures need to be valid, reliable and transparent (Race 2003; Austin, Marini et al. 2004; Edwards and Nicoll 2006; Cowin, Hengstberger-Sims et al. 2008). Further, at the same time, the process for the assessment of competence is also argued to require consistency and objectivity (Johnson, Opfer et al 2000). This is premised on the belief that subjectivity is synonymous with unreliability, and objectivity is synonymous with reliability (Schuwirth, Southgate et al. 2002). That is, some have argued that in order to increase the objectivity of clinical assessment, an assessor should be trained to measure standard criteria that have been established before the assessment is undertaken (Lankshear and Nicklin, 2000). Yet inherently assessment of clinical performance concerns the subjectivity of the assessor because assessments are believed to have a subjective nature (Meretoja and Leino-Kilpi 2003). Assessors of competence are also inescapably *subjective* as they are inevitably located within the ethics, culture and behavioural norms of their profession (Williams 2005).

Subjectivity is central to the assessment process (Bradshaw 1997; Bradshaw 1998). Bradshaw undertook a competency policy review, which highlighted that assessment of competency is a subjective interpretation (Bradshaw 1997). Bradshaw found that the assessment of student practice was problematic because the assessment instruments were ambiguous and open to considerable subjective variation (Bradshaw 1997; Bradshaw 1998). Several other authors have made similar critiques of assessment instruments (Meretoja and Leino-Kilpi 2001; Tollefson 2004; Crookes, Brown et al. 2010; Levett-Jones, Gersbach et al. 2011).

Ethical value systems can impact upon individual decision-making processes during competence assessment (Berggren and Severinsson 2003 1637; Begat and Severinsson 2005 1638). The assessor's experience and training shapes individual judgments of real life performance in a social context, as these inevitably involve *subjective* interpretation of *objective* information when making a judgment of performance (Govaerts, van der Vleuten et al. 2007). Further, some elements of clinical behaviour are more subjective than others (for example, attitude) and cannot be assessed objectively in an assessment method, or are frequently under-assessed. Cusack (2001: 243) reported in her Australian PhD study of the competency based model in nursing that, 'clinical skills and knowledge were valued over the holistic approach to nursing care which includes broader attributes such as communication skills, attitudes and flexibility to think laterally when needed'. Assessment that continues to be based on objectivity will prove challenging for nurse-assessors (Schuwirth, Southgate et al. 2002).

Research shows nurses who are being assessed feel that their performance is impacted on by the complexity of the interrelationships between assessee, patient, environment and assessor (Becker 2000). Nurses' performance is affected by self-esteem and confidence, which means that during assessment their level of self-esteem and confidence will contribute to the assessment outcome. An example of the interrelationship between assessee confidence and assessment outcome was highlighted in an American mixed methods PhD study undertaken by Wathen (2005). Wathen (2005) examined the effects of confidence-building techniques on nurses' competence to test whether students perceived their level of confidence affected their competence (Wathen 2005). This study identified nurses with lower levels of self-confidence do not perform at the same level they would normally in clinical situations and there are certain teaching techniques and characteristics that nurses felt increased their self-esteem and confidence (Wathen 2005). Further, as previously discussed outcomes from assessment of practice are further complicated by more quantifiable components of nursing practice being privileged over others during assessment (Levett-Jones, Gersbach et al. 2011).

The one-to-one relationship between assessor and assessee is an important component of the assessment process and there is increasing evidence that this relationship plays a pivotal

role to student learning and professional development in clinical practice (Campbell, Larrivee et al. 1994; Crawford, Dresen et al. 2000; Allan, Smith et al. 2008). To act as an assessor, the assessor must position themselves within the regime of dominant cultural norms which defines competency standards and informs the assessment process (Williams 2005). The discursive formation of an *'ideal type'* of *'competent worker'* and the setting of competency standards is necessarily an attempt at normalisation to the values, beliefs and expectations of the dominant culture, which defines them (Williams 2005: 45). However, where registered nurse assessors in practice assess the skills of their assessees, inevitably these assessors have other responsibilities in the practice setting and therefore their assessment may use indirect, vicarious and unstructured methods.

The training and supervision provided by nurse assessors in practice is an integral part of the assessment framework. Supervision by assessors in practice is vital for the credibility of the assessment system, but currently in Australia there are no standards of training in place for the supervisors or assessors. Supervision itself is viewed as a core competence in nursing and one could argue supervisors have an ethical responsibility to acquire competence in supervision (Falender, Cornish et al. 2004). However, the literature provides examples of where assessors are undertaking supervision and assessment without any training (Levett-Jones, Gersbach et al. 2011). In an Australian study, Blackman, Hall et al. (2007) hypothesised a path model for predicting nursing students' achievement and clinical competence by exploring factors that influenced academic and clinical achievement for undergraduate nursing students. They found that registered nurses who were the assessors of students, did not undergo formal training in assessment, nor was the assessment of the competence processes moderated, and there was no mechanism established for providing feedback to the registered nurse assessors on their judgement about the students they assessed (Blackman, Hall et al. 2007).

The preceptor and assessor role is advanced as being crucial to practice-based learning and assessment (Flanagan, Baldwin et al. 2000), however interpersonal and subjective factors have an influence on assessment. A number of studies highlight challenges faced by students during their practice placements and with their assessor. Students in a Scottish study conducted by Calman et al (2002) believed their clinical competence assessment was

open to bias and dependent on the assessor's personality and knowledge of them, with students highlighting a lack of consistency between assessors. Further, workplace assessors were uncertain about their role and what constituted an appropriate level of practice (Calman, Watson et al. 2002). This highlights assessor's values and expectations of clinical education and the student-teacher role may be vastly different and these differences may affect the outcome of the student competency assessment. Student criticisms have highlighted inadequacies of placement arrangements and the critical influence of the assessor (Sharif and Masoumi 2005; Okuyama, Martowirono et al. 2011; Wilkinson 2013). The significance of assessor training is embedded in the assessors' self-understanding of what constitutes; evidence, awareness of the effects of context, observational skills, interviewing skills, the scope and level to be assessed and, skills in interpreting evidence with the level and scope of practice to be assessed (Levett-Jones, Gersbach et al. 2011).

The literature also highlighted nurse assessor's reluctance to fail students of nursing. Concerns about the validity and reliability of current clinical assessment tools have been linked as a contributing factor of 'failures to fail' (Duffy 2003). Duffy's research found that mentors were reluctant to fail student nurses even when their fitness to practise was questionable (Duffy 2003). The importance of preparation of assessors for their role in a fail scenario, alongside their responsibilities and abilities in assessment were advanced as significant to the quality of the assessment process (Duffy 2003). This study highlighted that there was very little research in the complex and difficult area of 'failed assessments' (Duffy 2003). A number of examples are provided in the literature that assessors are not always adequately prepared for their role in the assessment of skills, are sometime biased in their judgements and often reluctant to fail a student (Judge and Ferris 1993; Watkins 2000b; McCormack, Kitson et al. 2002 ; Duffy 2003; Hawe 2003; Williams, Klamen et al. 2003a; Baume, Yorke et al. 2004; Moore 2005; Sharples, Kelly et al. 2007; Nettleton and Bray 2008; Kendall-Raynor 2009; Wolff, Pesut et al. 2010).

The issue of assessor preparation was explored during a pilot study in America undertaken by Walsh (2008). Walsh developed a tool for preceptors to evaluate undergraduates' clinical performance over two years (Walsh, Seldomridge et al. 2008). The results of this study indicated that preceptor's ratings of undergraduate nurses were significantly higher than

faculty ratings. This study also noted that although the preceptors were experienced clinicians, they were not experienced assessors and they had been provided with little information to support them in their role (Walsh, Seldomridge et al. 2008). For the assessor, who may not be certain of their role and responsibilities in assessment, the initial, ongoing training and monitoring of their performance is believed to be vital (Finucane, Barron et al. 2002).

Concern about reliability of assessors led to many education institutions in the United Kingdom to use their own teaching staff for clinical assessment of students, though this was often undertaken jointly with the workplace assessor (Calman, Watson et al. 2002). In Australia, many universities have adopted a clinical supervision model<sup>18</sup> utilising nurses already in clinical practice who are seconded or have co-joint positions as clinical facilitators<sup>19</sup> to support preceptors and therefore students of nursing during their required clinical experience (McKenna and Wellard 2004).

The literature is replete with examples regarding inconsistencies and weaknesses in assessor preparation and support, as well as the difficulty in ensuring sufficient preceptors for the increasing number of students (Duffy 2003; Moore 2005). Further, students themselves have reported various levels of commitment by assessors and suggested that assessor resources were not adequate given the complexity of the assessment tools used (Finucane, Barron et al. 2002). Key challenges in the competency debate regarding the relationship between the assessor and the assessee are highlighted in the literature (Sharif and Masoumi 2005; Okuyama, Martowirono et al. 2011; Grealish 2012; Wilkinson 2013). The selection and training of the assessors is therefore advanced as pivotal with challenges involving inferences made by assessors highlighting perceived bias or indifference in the assessment process. This is particularly relevant when assessments are undertaken without having adequately addressed assessor training and may result in a lack of confidence in the inferences made by assessors (Downing and Haladyna 2006).

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<sup>18</sup> Sometimes named clinical partnership, joint appointment or an industry collaboration.

<sup>19</sup> The clinical facilitators in this research project held co-joint positions with SNM UTAS.

The assessee has an equally important part to play in the assessor and assessee relationship with the literature providing examples of students of nursing dissatisfaction with their professional experience placements (Hutchings, Williamson et al. 2005; Levett-Jones, Fahy et al. 2006; Myall, Levett-Jones et al. 2008). Whilst the assessor may have more influence on the outcome of the assessment process, the relationship is complicated if the competency standards being assessed are not clear to either the assessor or assessee (Cusack and Smith 2010). It has been well established that there is a large knowledge and skill gap for students of nursing to overcome the transition to practise (McCaugherty 1991; Hodges 1997; Maben, Latter et al. 2006; Baxter 2007). Students are able to settle into 'placements more quickly and demonstrate greater confidence as a result of good mentoring and preceptorship' (Zilembo and Monterosso 2008: 92), which can be further supported by matching student and preceptor learning styles. Graduate nurses have also reported that the role of preceptors contributed greatly to their job satisfaction and competency development (Sandau and Halm 2011). Ultimately, the assessment process can act as a motivator that encourages students to critically reflect on their practice and thereby increasing their capacity for independent learning and promoting their readiness for professional practice (Levett-Jones, Gersbach et al. 2011).

It is of note that the self-assessment by students of nursing is not viewed by the some of the profession as a credible, reliable and a realistic assessment method with most nurses preferring to rely on traditional assessment methods (Blackman, Hall et al. 2007). Others believe self-assessment of clinical competence should form an important element in the overall assessment process (Watson 2002a) with some viewing it as no less valid than other methods (Norman, Watson et al. 2002). However, ensuring nurses have skills in self-assessment of their own competence has long be advanced as a defining attribute of being a professional and an important part of nurses' continued professional development (Heron 1988). Meretoja, Isoaho et al. (2004) in a Finish study suggested that self-assessment using a standardised test instrument allows nurses to enhance their practice and can subsequently positively impact on quality of care through identification of individual strengths and weaknesses. Cowan, Jenifer Wilson-Barnett et al. (2007) suggested that a self-assessment tool developed for European general nurses proved to be a non-threatening and accurate means of competency assessment, the results of which were transferable across the European Union. Used effectively, self-assessment is believed to be a means to complement traditional clinical assessment methods that can quickly highlight to clinical or teaching staff, which aspects of clinical practice, the students themselves believe they need more assistance to become clinically competent (Fitzgerald, White et al. 2003; Fereday and Muir-Cochrane 2006; Cato, Lasater et al. 2009; Dellia, Mortari et al. 2009). However, self-

assessment is advanced as a skill that must be learned and should be developed during the students' nursing education (Redfern, Norman et al. 2002)

### **The contextual nature of assessment using the Standards**

Nurses are employed in diverse practice environments including hospitals, aged care facilities, the community, homes, clinics, schools, residential and correctional facilities that range from large to small urban settings as well as remote rural settings (Hughes 2008a). Context is the general and continuing multilayered and interwoven set of material realities, social structures, patterns of social relations, and shared belief systems that surround any given situation (Ashmore, Deaux et al. 2004). While contexts are not static, the constituent things such as people, relations among people, social structure, are relatively enduring (Ashmore, Deaux et al. 2004). When applied to the practice setting, the perspective of context is argued to be influenced assessors' behaviour and the quality of their ratings (Judge and Ferris 1993; McCormack, Kitson et al. 2002 ; Williams, Klamen et al. 2003a; Wolff, Pesut et al. 2010). The complexity of assessment in different contexts also requires that students being assessed to prove their competence whilst succumbing to pressures of complying with the specific idiosyncrasies of the particular context they are assigned to (Myrick and Barrett 1994; Myrick and Yonge 2004). The practice environment is therefore a critical component that influences the consolidation of beginning level practice and the development of safe, competent and ethical nursing care in situations of increasing complexity.

The contextual nature of competence and the use of competency standards has been explored by researchers and scholars who have argued that professional competence is developmental, impermanent and context-dependent (Epstein and Hundert 2002; McCormack, Kitson et al. 2002 ; Henderson, Fox et al. 2008; Wolff, Pesut et al. 2010). Assessment practices lack clarity because of the many issues that impact on the way it is characterised, such as context (McCormack, Kitson et al. 2002 ). Primarily, this is because competence is played out in many social and physical environments and is influenced by the individual's particular situational context (Salganik 2006). Further, while competence is argued as being context dependent, the competencies that people display and value can vary in different contexts (NCVER, 2009). Added to this, as previously discussed, the



competency standards were written in very general language in order for them to be widely contextually applicable, which has led to problems with their interpretation (McGrath, Anastasi et al. 2006). A key element in developing and the assessment of competencies is a theoretical perspective, which recognises that meaning is embedded in content and context and cannot be easily conceptualised on the basis of form or structure (Fleming 2006). Context is therefore situated as an important part of assessment practices that needs to ensure a relationship between the professional practice context and assessment technologies adopted (ANMC 2006).

Results from numerous studies have concluded that the clinical environment is crucial for the educational experience of the nursing student (Callaghan and McLafferty 1997; Seigel and Lucey 1998; Lofmark and Wikblad 2001; Drennan 2002; Foley, Kee et al. 2002; Lo 2002; Chan 2003; Corbin and Morse 2003; Kevin 2006; Levett-Jones, Fahy et al. 2006; Midgley 2006; Barry 2011; Levett-Jones, Gersbach et al. 2011). This is important because it is in the clinical practice environment where a student of nursing's competence is assessed. Some have argued assessment methods involve context-dependent compromises and advanced the notion that assessment is not a measurement problem but an instructional design problem, comprising of educational and implementation resources (Van der Vleuten and Schuwirth 2005). Others have placed the focus of assessment methods on the final outcomes with the process to achieve these outcomes encompassing many varied learning paths (Lenburg 1999). Lenburg (1999) developed a Competency Outcomes and Performance Assessment (COPA) Model based on extensive research, which was a holistic focused model requiring integration of practice-based outcomes, interactive learning methods and performance competencies (Lenburg 1999).

The COPA Model provides an example of a holistic, integrated, and flexible system to promote competent practice that is applicable to education purposes and diverse settings (Lenburg, Abdur-Rahman et al. 2011). However, this model requires a serious commitment of both time and resources with Lenburg and others contributing to its success in a United States University by accepting a two-year consultation contract that included on-campus interactive workshops twice a year and frequent phone and electronic revisions and assistance (Lenburg, Abdur-Rahman et al. 2011). Inevitably, the different cultural contexts

students and nurses find themselves within; can influence their understanding of competence (Cseh 2003; Caffrey, Neander et al. 2005; Sargent, Sedlak et al. 2005; Escallier, Fullerton et al. 2011).

Hager (1993) believed that competency standards determined how they should be assessed because they are based on the idea of competence as a construct that is not directly observable, but rather is inferred from successful performance. Competency assessment therefore relies on an individual registered nurse opinion or on multiple assessments by a range of nurse assessor's. This raises issues of transparency, validity and reliability regarding the individual and general understanding of the competency standards. The issue of contextualisation is considered an important quality or validity indicator promoted by ensuring assessment design respects the authenticity of nursing practice (Van der Vleuten and Schuwirth 2005). Consideration of the complexity of relationships between the expected output (a competent beginning level practitioner), the organisational setting and the social context in which the assessment is undertaken is therefore essential. Further, the contextual nature of assessment using the Standards may also be influenced by a multitude of cultural, economic and socio-political factors.

### **Tools used for assessment of competence**

Whilst nursing has sought valid, reliable and objective competence assessment tools; assessment of competence in nursing remains inherently subjective and therefore open to interpretation from both the assessor and the person being assessed (Fereday and Muir-Cochrane 2004). Debate has surrounded the tools used for assessing competence for nearly three decades evidenced by widespread dissatisfaction with the professional assessment procedures (Dawkins 1989; McGaghie 1989; Gonczi, Hager et al. 1990; Masters and McCurry 1990; Crookes, Brown et al. 2010). A two year Scottish study of nursing and midwifery students compared selected assessment tools with statutory competencies with the findings confirming no single method of assessment is appropriate for assessing clinical competence but rather a multi-method strategy should be used (Norman, Watson et al. 2002). A policy paper by Vanderwater (2004) revealed the unlikelihood of developing and adopting a single, all-encompassing competence assessment tool. Suggestions have been made that '... a multi-method approach enhances validity and ensures comprehensive assessment ...'

(Calman, Watson et al. 2002: 51). McGrath & Anastasi et al. (2006) critiqued the adoption of a standardised assessment tool and suggested that while this could theoretically produce reliable results it may potentially be a constraining factor in competence assessment. This view was supported by Whelan (2006), who suggests that the assessment of competence should be an ongoing process to optimise quality of care and outcomes. A professional portfolio of evidence was also suggested as the ideal means to communicate competency in those areas that are not easily measured or observed (Andre and Heartfield 2007).

The intangible nature of competence has presented a number of challenges with one of the most significant being its assessment. Competence will inevitably present challenges related to securing reliable evidence that supports the competence of an individual's practice (Redfern, Norman et al. 2002). Whilst some may assume assessment methods are objective; it is difficult to define professional skills in a precise and unambiguous way (Masters and McCurry 1990; Ashworth, Gerrish et al. 1999; McMullan, Endacott et al. 2003).

. Many studies have provided tangible evidence of the complexity of measuring competence and its relationship to day-to-day practice (Fielding, Rogers et al. 2001; Tamblyn, Abrahamowicz et al. 2002; Fitzgerald, White et al. 2003; Austin, Marini et al. 2004). These studies focus has been on the perceived experiences and that which is directly observable, rather than on what is the underlying cause causation.

For a number of decades the national and international literature has highlighted that using tools for the assessment of competence has, and continues to be, a challenge. Reports emanating from the United Kingdom in the 1990's including the United Kingdom Central Council (UKCC) Commission for Nursing and Midwifery Education reported that despite a large number of assessment tools being available in practice, assessment strategies were not effective in identifying poor performance in practice, learning outcomes were vague, assessment documents lacked clarity and assessors were often ill-prepared to assess and provide feedback (Giot 1993; Fitzpatrick, While. et al. 1994). Few assessment tools were believed to allow the diversity and constraints of the work environment to be articulated in relation to the expected learning outcomes of the program to ensure the criteria of success in education or training accreditation processes are aligned with those in the practice setting (Giot 2000). This paradigm was termed the judgment paradigm (Hager, Gonczi et al.

1994) indicating that when highly trained and expert practitioners assess their peers in the practice setting they do not perceive the performance in the terms of the knowledge and skills model. Rather, expert practitioners grasp the general level of competence displayed in total practice (Maatsch, Huang et al. 1987). Capturing this general level of competence in assessment procedures has long been the focus of competencies schemes (Boyatzis 1982; Benner 1984; Burke 1989; Crookes, Brown et al. 2010; Lenburg, Abdur-Rahman et al. 2011)

One of the challenges in using the Standards has been that they were not written in terms, which allowed direct observation, without the application of a process of judgement (EdCaN 2008). This was premised on the belief that direct observation allowed for the collection of knowledge of what actually occurs in practice (Gonczi, Hager et al 1993). When the Standards were introduced there was little supporting documentation available for those being assessed and those undertaking assessment, and using the then ANCI<sup>20</sup> assessment instruments relied heavily on the work of an American nurse academic Bondy<sup>21</sup> (1983). These early competency standards were not subjected to rigorous statistical testing by the Australian developing authorities. However, in 2000 Fisher and Parolin developed an instrument to test the 1990 competency statements. The instrument was found to have internal consistency and face validity but had poor inter-rater reliability (Fisher and Parolin 2000). In her PhD thesis Wells (2003) also found that there was a high level of internal consistency in the then ANCI 2000 competency statements.

From an international perspective issues regarding the reliability and validity of assessment methods were highlighted in a systematic review of the literature undertaken in the United Kingdom by Watson, Stimpson et al. (2002b). They found that the reliability and validity was rarely addressed, which resulted in most instruments not being specific or sensitive enough and information regarding the theoretical frameworks used was rarely reported (Watson,

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<sup>20</sup> The earlier versions of the Standards were named the Australian Nursing Council Incorporated, 1994. *ANCI competency Standards for the registered and enrolled nurse in the recommended domains*. Canberra: ANCI, Australian Nursing Council Incorporated, 1998. *ANCI Competency Standards for the Registered Nurse 2<sup>nd</sup> ed*. Canberra: ANCI, Australian Nursing Council Incorporated, 2000. *ANCI Competency Standards for the Registered Nurse 3<sup>rd</sup> ed*. Canberra: ANCI.

<sup>21</sup> Bondy (1983) developed a theoretical framework for assessing students, which identified five levels of competency, descriptively labelled: Dependent; Marginal; Assisted; Supervised and Independent. This criterion-based system for assessing the clinical competence of trainee nurses has particular emphasis upon the amount of supervision the trainees required to perform their tasks.

Stimpson et al. 2002b). Other scholars also suggested that the relationship between the assessor and the student was problematic with respect to assessment validity and reliability (Kevin 2006; Blackman, Hall et al. 2007; Levett-Jones, Gersbach et al. 2011; Wilkinson 2013).

The issue of validity and reliability related to practice assessment tools was the focus of a study commissioned by the National Board for Nursing, Midwifery and Health Visiting for Scotland (Watson, Stimpson et al. 2002b). This study examined the reliability and validity of practice assessment procedures for student of nursing and midwifery. Seven institutions offering pre-registration nursing programs were surveyed to investigate how clinical competence was assessed. A major finding of the study was that the assessment tools used were unreliable and that no single method was believed to be appropriate for assessing clinical competence (Norman, Watson et al. 2002). This same view was also reflected in a Finnish study, which found that reliability was potentially affected by the subjectivity of the assessment (Meretoja and Leino-Kilpi 2003). Further, the effect of being observed potentially changed behaviour and the potential for cultural and environmental differences were a limitation to the assessment process (Meretoja and Leino-Kilpi 2003). The issue of validity in assessing competence, using the Standards, is also perceived as problematic because of the tendency of the assessor to break down the competency into smaller parts (Van der Vleuten and Schuwirth 2005).

Regardless of these debates, competence involves more than knowledge and skills and it is these other elements, which include critical thinking, insight and caring that are difficult to quantify (McGrath, Anastasi et al. 2006). For some, the value of competencies is thought to lie in the objectivity and transparency they bring to the assessment of learning outcomes (Fleming 2006). For others, assessment of competence is problematic because it is not performed in an objective, valid and rigorous manner (Darzi 1999). The best measure of a nurse's performance is their impact on health outcomes. That is, the ultimate validation of any measure of skill should be its correlation with clinical outcomes (Grober, Hamstra et al. 2004). However, to date there is limited evidence that supports that the adoption of competency standards has resulted more positive clinical outcomes (Carraccio, Wolfsthal et al. 2002; Higgins, Begley et al. 2010).

Internationally, the competency agenda has been an area that has received significant and ongoing attention. In the United Kingdom in 1997, the issue how competence could be assured through assessment was recognised as needing attention with arguments highlighting standardisation was the opposite of professional standards (Bedford, Phillips et al. 1993). Two papers written in 1997 & 1998 argued nurses were not being prepared to be competent in the UK (Bradshaw 1997; Bradshaw 1998). Whist a United Kingdom comprehensive systematic review of the literature had concluded that there was almost universal acceptance of the need for assessment of clinical nursing competence (Watson, Stimpson et al. 2002b). Almost ten years later little had changed when Bradshaw revisited this issue and found that UK nurse 'training' still had no uniform or mandatory system in place to ensure that all registered nurses are clinically competent and safe to practise (Bradshaw and Merriman 2008). Further there had still been no agreement regarding how competence should be assessed or what tools should be used in the United Kingdom.

A substantial body of literature exists on the measurement of nursing competence (Redfern, Norman et al. 2002). The literature has highlighted the controversy regarding the type of instrument best suited to assess competence or performance (Levett-Jones, Gersbach et al. 2011). There is also a longstanding parallel debate surrounding whether trait based, qualitative or quantitative based behaviour instruments should be used (JBI 2001; Watson, Stimpson et al. 2002b; McMullan, Endacott et al. 2003; Crookes, Brown et al. 2010). Questions have also been raised regarding how a single instrument can address all these issues which continue to challenge researchers (Cowan, Norman et al. 2005a). The findings from these studies make it highly unlikely that one superior assessment instrument will be developed for practice, given that assessment aims to capture the whole picture of a practitioner's performance (Schuwirth, Southgate et al. 2002). It is more likely that a palette of methods will be necessary to reach this goal (Southgate et al. 2001a, Southgate et al. 2001b).

### **Recent positioning of competence assessment tools in Australia**

To address the ongoing issues related to competency assessment tools in Australia, a recently completed Australian Learning and Teaching Council (ALTC) funded project

developed pilot guidelines and a national competency assessment tool for preregistration of bachelor of nursing students to be used across Australian universities (Crookes, Brown et al. 2010). This project highlighted that the existing thirty nine bachelor of nursing programs in Australia each used their own clinical assessment tool or tools. Crookes, Brown et.al. (2011) emphasised that this lack of parity creates the potential for different outcomes for newly registered nurses within and between programs. The project team is currently trialling a national competency assessment tool across a range of different Australian nursing programs as a means to develop a nationally-agreed competency assessment tool for nursing.

Another recent Australian study also aimed to develop an analysis of competency based clinical assessments of nursing students across bachelor of nursing degree courses (Windsor and Harvey 2012). The research revealed three key findings, the existence of a hierarchy of competencies that prioritised soft skills over intellectual and technical skills; the appearance of skills as personal qualities or individual attributes, and the absence of context in assessment (Windsor and Harvey 2012). The researchers argued that the convergence in nursing of soft skills and the professionalisation project reform has seen the former given legitimacy to the enduring invisibility and devaluation of nursing work (Windsor and Harvey 2012).

## **Conclusion**

The literature review provided an examination of the historical, economic, political and professional factors that led to the adoption of competency standards by the profession, as well as an examination of nurses' use of competency standards for assessment purposes. Critique was also provided on issues raised regarding the difficulty in defining and assessing competence. The literature review leads to five major conclusions. Firstly, the safety and quality agenda has had a significant influence on the continued use of competency standards in nursing. Secondly, as a result of the above issues the competency-based approach to education, training and assessment has surfaced as a key policy direction in industrialised nations. Thirdly, the Standards are a tool of regulation used to ensure nurses are competent to practise whilst also ensuring protection of the public. Fourthly, the

Standards adoption was supported by nurses as a means to advance the profession. Finally, there is a lack of clarity in the operationalisation of the definition of competence, which has impacted on how competency is understood, assessed and resulted in the development of a multiple assessment tools.

The review of the literature reveals that although there is a plethora of research on competence, there is a paucity of research on how nurses understand the Standards and how competence itself is understood. Knowledge of competence is based on research that does not fully capture the interaction processes that occur between the nurse, the Standards and their educational setting. The complex social realities and contexts of nursing practice, alongside the impact of historical relations that continue to define the structure of the Standards are also not captured in the literature. Understanding the Standards is currently divorced from the reasons why the Standards are necessary and whose interests they serve. This situation lends itself to the adoption of mixed methodologies to address this complex phenomenon in nursing, inclusive of historical factors and the broader social contexts nursing is situated within. Further, the current measures fail to encompass the richness and complexity of practice, to adequately assess student competence. Gaps remain in understanding how nurses' perceive or understand the Standards and how nurses interpret and use them when making an assessment of competence. The study aims to describe these events as well as identify the influence of structural factors on nurses' agency that act as mechanisms or determinants of good competence assessment. The utilisation of a critical perspective can explore and expose the interface of nurses' agency and structures in the context of competency assessment in nursing.



## Chapter 3 – Research Approach

### Introduction

The assessment of a nurse's competence is first and foremost a social practice because it is both constrained and enabled by the social, political and historical context. The assessment process is also characterised by the interplay of two factors; the interactions of assessment dynamics between nurses, and the different interpretations and use of the Standards. Assessment is also influenced by subjective, objective and contextual factors that originate primarily from the assessor - assessee relationship, the Standards and the context of practice. In my review of the literature I established that competence in nursing is a complex concept that is difficult to define and measure. The literature review exposed a significant gap; specifically that current knowledge is based on research that does not fully capture the interaction processes between the nurse and the Standards. Gaining an understanding of how nurses understand and translate the Standards into their clinical practice can be effectively addressed with a critical realist approach.

As detailed in Chapter 1 and 2, whilst the translation of competency frameworks into the tertiary sector has been embedded within the nursing curriculum<sup>22</sup>, questions remain regarding whether nurses in practice have developed an understanding of the Standards that enables them to understand their own competence and assess others competence (Lofmark, Smide et al. 2006; Cato, Lasater et al. 2009). Using a critical realist perspective places the focus on the interactions between nurses and the Standards', and on an explanation of factors that promote or constrain individual's decision-making processes, whilst acknowledging the decision-making context. From a critical realist perspective, when events occur in the context of practice, it is presumed that several structures have generated powers that give rise to the event. Critical exploration of these events will uncover the mechanisms that shape the use and interpretation of the Standards to reveal the mechanisms that allow the Standards to exist in the way that they do. An exploration of nurse's opinions about their interactions with the Standards will be achieved by using Archer's (1995 ; 1996; 2000a) critical realist framework . In this study, I aim to more comprehensively describe the socio-cultural influences that determine nurse's interactions

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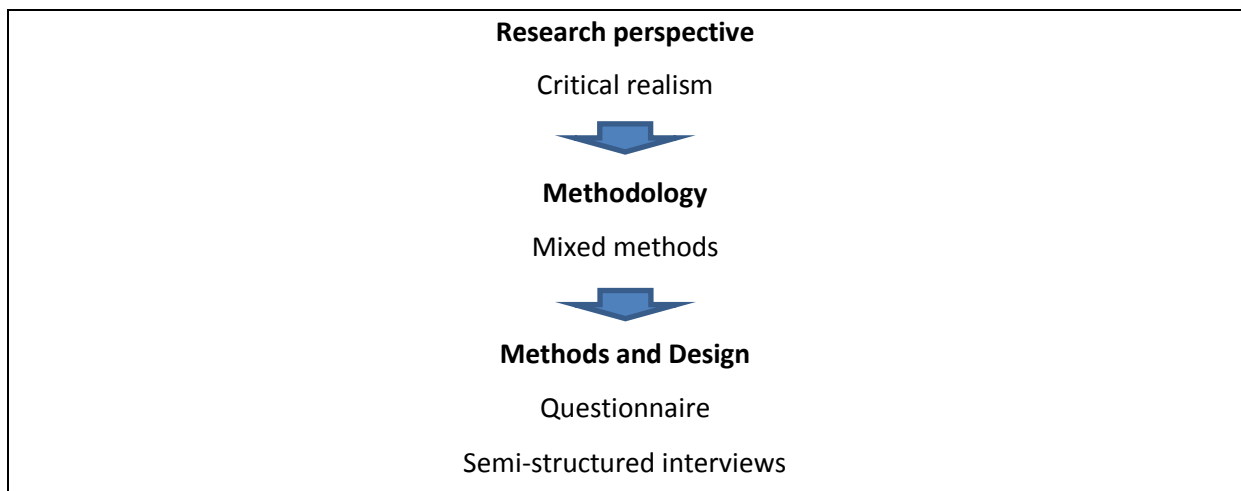
<sup>22</sup> A requirement to gain accreditation with the National Nursing and Midwifery Regulatory Authority.

with the Standards to provide greater descriptions to what is already known, which to date has been poorly theorised.

In this chapter, I outline my paradigmatic and methodological approach. I firstly discuss how a critical realist perspective provides a useful means for understanding the socio-cultural context of assessment of competence in nursing. I then describe the four specific tenets of the critical realist approach, which include; structure and agency, a stratified reality, causal mechanisms and Archer's Morphogenetic Approach. I then explain the use of a mixed methods approach that combines quantitative and qualitative methods. Combining methods in this way is a useful means to capture data about complex social phenomena. With this approach I aim to generate explanations, rather than make predictions, by providing a means for studying complex social phenomena and for capturing the interplay between structure and agency (McEvoy and Richards 2006; Clark, Lissel et al. 2008b). I then explain how the critical realist perspective, together with a mixed-method approach allows for a more holistic investigation (Bisman 2010). To conclude this section, I explain the importance of reflexivity to a critical realist study.

The following figure highlights the construction of the theoretical framework under the three elements of research perspective, methodology and methods and design. The first two elements of the theoretical framework are dealt with sequentially in this chapter with the methods and design addressed in the following chapter.

**Figure 1 The theoretical framework**



## Historical background to critical realism

The perspective of key critical realists has gained prominence as a research framework, since the 1970s, particularly in the social sciences but also in nursing. Bhaskar (1975) is seen as a founding father of critical realism and his point of entry to this philosophy was in providing a critique of both positivism and phenomenology. Since that time critical realism has been critiqued and further developed by many theorists including Margaret Archer (1982, 1995, 1996, 1998, 2000, 2003, 2010), Andrew Collier (1994) and Andrew Sayer (1992, 2000, 2007).

Critical realism is a philosophical framework that is interpretive and critical, that aims to identify and expose the power of underlying structures and mechanisms which may constrain individual choices and actions. A critical realist perspective views physical and social entities as having an independent existence regardless of human knowledge or understanding (Clark, Lissel et al. 2008b). Critical realism is increasingly being used as a useful theoretical framework in research, to interpret what is seen in practice as events that are the dependent on outcomes of the interaction processes, that we cannot see (Sayer 1992). Numerous examples of the use of a critical realist framework are evident in the social sciences (Cruickshank 2003) including economics (Yates, Evans et al. 2007), social work (Houston 2010), education (Livock 2009), management (Fleetwood and Ackroyd 2004), volunteering (Stirling 2007) and nursing (Nairn 2011). Initially, critical realism's influence was limited to theoretical debates, but researchers increasingly focused on 'the empirical application of critical realism' (Cruickshank 2011: 4).

Nursing research has used critical realism as an alternative philosophical underpinning for research for some decades (Ryan and Porter 1996; Wainwright 1997). An increasing number of studies identify critical realist approaches as a good fit with the practice of nursing (a practice-based epistemology), and useful to problem-solve issues in nursing practice (Wainwright 1997; Lipscomb 2008; Clark, Lissel et al. 2008b; Wand, White et al. 2010; Harwood and Clark 2011; Angus and Clark 2012; O'Brien and Ackroyd 2012). Critical realism has been successfully applied to the study of racism between nurses and doctors (Porter 1993), treatment delays in breast cancer (Angus, Miller et al. 2006), understanding home-

dialysis decision-making during chronic kidney disease (Harwood and Clark 2011), understanding the recruitment and retention of overseas nurses (O'Brien and Ackroyd 2012) and implications for evidence-based practice in and beyond nursing (Nairn 2011).

Bhaskar (1975) and Archer (2000) considered reality as constructed by a complex intersection of structure (structural constraints) and agency (the choices and interpretations, or meaning people give to aspects of their world). Structure and agency are considered as interrelated but nevertheless 'different kinds of things', irreducible to each other, and possessing distinct causal powers (Bhaskar, 1979: 33). In light of this, Bhaskar (1975) argued that social science research needed to include the study of interactions between agents, and between structures and agents. A critical realist focus on interactions can then be used to explain how structures constrain or enable (reinforce, challenge, or transform) individual choices and actions (Archer 2000a). In this research, nurse academics, clinical facilitators, preceptors and graduates are social agents. Social structures include social institutions such as health care organisations, schools of nursing and midwifery, social facts such as values and norms and social objects such as the Standards. A critical realist perspective focuses on meaning-making, in that it is not the actual words of the Standards that are important but what they *mean* to nurses and how these meanings are translated into practice and shape the assessment of competence. How nurses interact with the Standards to assess competence – their meaning-making around competence - is therefore the central focus of this research. Taking a critical realist approach requires the researcher to focus on the social setting, in order to identify whose interests are served, and which agendas are endorsed (Archer 1995; Bhaskar 1998). Using a critical realist framework allows a conceptualisation of the interactions between nurses and the Standards within this context by examining whether specific groups of nurses beliefs, and assessment practices may be intertwined and influence their decision-making.

### **Construction of a critical realist research framework**

The following section sets out the framework I have constructed in order to apply Archer's (1995, 2000), critical realist theory. As a meta-theoretical framework, Archer's work provides a way of thinking about particular social phenomena to gain knowledge about it.

As a meta-theory, critical realism is underpinned by a general systems theory that provides a broad way of thinking and understanding, but allows the construction of specific theories to emerge from the research topic (see Cruickshank 2007, Danermark et al., 2002: 162).

Therefore, a meta-theory can be defined as what lies beyond or outside any substantive theory (Fleetwood and Ackroyd 2004). A critical realist approach therefore has implications for how ideas about social structures, agencies and processes are observable in the social setting (Vincent 2008). In particular, the researcher is guided to observe for any interconnected sequences of action and interactions found during the research to develop an account of the more general processes that may be identifiable. My research was consequently influenced by critical realist ideas in two main ways. Firstly, in my approach to thinking about the nurses and their interpretations of reality, and secondly in the research design I adopted.

Critical realism offers an integrated approach to the natural and social sciences that recognises the structures and processes in the physical, biological and social worlds (Sayer 2000). The critical realist approach is that the biological world evolves from the physical world, and the social world evolves from the physical and biological world. A critical realist integrated approach is useful to examine the ways in which social institutions (e.g. nursing regulation, universities, hospitals and practice settings) facilitate or undermine the interactions between nurses and the Standards and between others to promote competent practice. The combination of a social science with natural science facilitates an understanding of how nursing practice is embedded in nature, while natural science needs to be combined with social science to understand the forms that nature takes in specific social (historical and contextual) circumstances. Critical realism offers a unified approach, in that it combines those different methods from the natural and social sciences, which focuses on different aspects of a particular social phenomena (Syed, Mingers et al. 2010), in order to provide a broader picture.

A critical realist approach to exploring competence assessment practices seeks to overcome the epistemic fallacy that suggests that reality is simply what is experienced or what an experiment tells us it is (Bhaskar 1978). This means perceiving reality and knowledge about reality as two dimensions. In this critical realist study, the focus is on what lies beneath what

is said or signified by nurses to build knowledge about how useful the current competency standards are for making assessment of competence. This is significant because a critical realist approach maintains that the world cannot be changed in a logical way unless it is interpreted adequately (Sayer 2000). Such interpretation requires the researcher to probe experience, expose knowledge of deeper realities (structures, processes and events), reveal those structures and processes that produce and reproduce powerful interests that prevent or constrain particular social action, and even particular interpretations. Further, the research seeks to expose the ideologies that sustain these interests, and explore alternative structures, processes and knowledge that allow for open discussion and change.

### **Elements of a Critical Realist Theory**

Prior to describing the elements of a critical realist research approach it is appropriate to briefly (re)consider how nursing practice and competence assessment has challenged educationalists for a number of decades (Giot 1993; Giot 2000). Challenges exist with the assessment of competence because nurse academics are charged with a dual responsibility in the education of students of nursing. Firstly, they are responsible for ensuring graduates meet the higher education graduate outcomes. Secondly, and essential for eligibility for registration, educationalists are responsible for producing competent and safe practitioners that meet the legislated Standards (Edwards, Chapman et al. 2001). Notably, within the nursing context the registering authority recognises the value of the competency standards as providing the basis for accreditation of nursing programs (ANMC 2009). This leads to a complex landscape within nursing education that creates a number of tensions. On the one hand, university regulations require formative and summative evaluation with grades being awarded. On the other hand, entitlement to registration requires successful completion of an accredited Bachelor of Nursing program and the demonstration of the student's capacity to meet Standards. In addition, nursing as a discipline draws upon the biological sciences, social sciences and the arts to teach within the higher education setting with nursing practice knowledge and skills promoted through experiential learning.

## **Application of critical realist theory to the nursing environment**

Research that takes a critical realist approach endeavours to develop a number of answers, which take into account a range of contexts and participant perspectives (Pawson and Tilley 1997), whilst also recognising that 'social phenomena by their nature are fragile, so that causal impacts are not fixed but contingent upon their environment' (Healy and Perry (2000:12)). To answer the research questions five elements of a critical realist framework were applied. These are primarily drawn from the work of Archer (1995, 1996, 1998, 2000, and 2003) and include structure and agency, stratified reality, causal mechanisms, primary and corporate agency and Archer's Morphogenetic Approach. Critical realism therefore provides the opportunity to undertake a comprehensive and multi-level analysis that can discern between various theoretical explanations, while privileging none (Howlett, Seini et al. 2011).

### **Structure and agency**

In a critical realist sense, structure and agency are given equal weight; individual agents have the power or agency to make decisions and effect change, but these decisions may be constrained by structural factors (Wainwright and Forbes 2000). For nurses in practice, this means their agency will be influenced by their socialisation and broader structural constraints, such as organisational norms and values, nursing regulations and power relationships.

Social phenomena often involve both agency, at the individual or collective level, and structure at the social level, with the role of agency paramount in the process of any social change (Archer 1995). A key tenet of critical realism is therefore that while social structures are constructed and reproduced through human agency, individuals themselves are born into contexts made up of pre-existing structures, which they did not produce (Archer 2003). Archer accepts that social structures exist and are relatively enduring but independent from the people operating within them (Archer 1995). That is, structures are real, structures pre-exist agency and are independent from agency. Structure and agency are therefore ontologically interdependent (Birkett 2011).

To understand assessment practices using a critical realist perspective requires that the interaction between underlying agential and structural factors be understood. Some structures, for example, a lack of physical resources for preceptors can directly influence the interpretation of competency standards and impact on the quality of assessment activities. This conceptualisation of the agent–structure relationship can assist in developing an understanding of how individual nurses interact when experiencing assessment (either being assessed or doing the assessment). Structure refers to the patterned arrangements, which influence assessor and assessee choices. A structure cannot ‘act’, only an agent can. However, structures can direct the action of agents and thus there is always a relationship between structure and agency (Archer, Bhaskar et al. 1998). Agency refers to the capacity of an individual to act independently, and an agent is someone who can set goals and try to achieve them (Danermark, Ekstrom et al. 2002). That is, a nurse as an agent is someone who has intentions to act or not to act.

A critical realist perspective therefore acknowledges that the world is not constructed in a social vacuum, but has a suite of structures; practices and conventions surrounded its meaning-construction (Leca and Naccache 2008). Nurses do not construct an objective social reality out of their existing knowledge. Rather, nurses construct knowledge through their understanding and the actions they reproduce or transform in their social practices within structural constraints. Understanding the relationship between human agency, the capacity of an individual to act independently and to exercise choice, and the influence of structure, which includes the patterned arrangements in practice such as norms and institutions, is the central debate of social theory (Archer 2003). The reference to structure in this study recognises both structures (e.g. organisations, legislation and policies) and agents (e.g. academics, clinical facilitators, preceptors and graduate nurses). In this sense, nurses are seen as agents who interact with structure(s) and this highlights that nurses and social structures have a degree of interdependence.

Nurses have agency and can therefore choose to actively use or engage with structures, or not. Their choices are influenced by structural constraints; so structures exist and impinge on practice choices and their individual interpretation. However, within this space there is room for personal perspectives and action (agency). From a critical realist perspective then,



the nurse has control over their own subjectivity, and through their own attitude and commitment toward their own practice and professional development. This means the nurse has the capacity to control how they construct themselves within the available discourse of competence. This research seeks to uncover these mechanisms, and the related structures or powers which produce the particular outcomes and assessment practices evidenced when nurses use the Standards. Adoption of a critical realist framework accounts for nurses actions and interpretations by recognising both the structural constraints inherent in their role, education and practice-norms, and by acknowledging how the choices they make and the perspectives they have are an active re-negotiation of competence.

### **Stratified reality**

Critical realists propose that reality is ontologically stratified into the three layers; the empirical, the actual and the real (Archer 2000a). The empirical is the layer of perceived experiences and is directly observable (Sayer 2000). The actual is where events or outcomes occur (whether perceived or not), and the real is where underlying structures and powers reside and these mechanisms can cause changes in events or outcomes (Bhaskar 1975). The actual emerges through the activation of causal powers at the level of the real, which consists of 'objects, their structures or natures and their causal powers and liabilities' (Fairclough, Jessop et al. 2002: 3). Nurses practice positions, assessment tools, organisational setting and governance mechanisms all have causal powers that interact and, depending on their combination, can simultaneously and selectively influence social action and agency in specific the organisational context. Therefore, since causal powers reside within the domain of the real, their activation or constraint can provide a causal explanation of the phenomena in question.

Whilst the liabilities and properties of the social position 'assessor' may not be directly observed or realised in the practice experience; nevertheless, they exist, and are causal and productive. For example, the assessor encourages the student to act in particular ways, such as conforming to the dominant norms and values of practice. The resultant behaviours of these nurses emerge from patterns of interaction between social structures and their mechanisms on one hand, and individuals and their own causal powers on the other.

Identifying the stratified social reality is fundamental to critical realism to enable the study of the deeper level structures and mechanisms of things (Archer 2000a). A key assumption of critical realism is therefore 'that the activities of social agents relate not to one particular structure, but to a range of inter-related structures and practices (depth ontology)' (Crinson 2007: 34).

The result of the activation of causal powers when undertaking assessment of competence will depend on other conditions, such as context and the assessment tools available. By giving pre-eminence to ontology rather than epistemology, critical realism raises important questions for both thought and practice regarding the use of the Standards in nursing. A critical realist perspective can capture social reality in this research by recognising that at one level, the Standards are manifestly *empirical* objects (composed of paper and ink). At the level of the *actual*, the Standards application in practice continues to be governed primarily by individual agents (such as academics, clinical facilitators and preceptors). At the level of the *real*, the power of organisational policies, procedures and nursing regulation can cause changes to how competence is assessed in practice. Hence, the outcomes of assessment practices can be influenced by various underlying factors and powers in the domain of the *real*. It is the activation of mechanisms at the level of the *real* that causes social phenomena (Houston 2010), which are of particular interest in this research.

A stratified view of reality places the focus on the mechanisms that generate or cause events relevant to the phenomenon of interest (Miller and Tsang 2010). As described above in relation to structure and agency, mechanisms in the social world can exert an influence on nurse's behaviours irrespective of whether this is recognised by them, or whether other nurses see or experience this (in the domain of the *empirical*). The existence and influence of these underlying factors does not disappear simply because those affected do not perceive them (Williams 2003b). The following example shows how a critical realist perspective can increase an understanding of how nurses view the role of the Standards in the assessment of competence. The degree to which the Standards are understood by nurses may not be identical. Rather, individual understanding of the Standards is likely to be influenced by the nurse's role in the profession, time spent in the profession, use of the Standards in practice and their perspective on the Standards position in practice. This

example shows that there are a range of mechanisms operating and potentially interacting in different ways, with each capable at any one time of influencing nurses' interactions with the Standards.

This research acknowledges a real, complex and invisible stratified world where human accounts are always potentially fallible representations of what is occurring in the *actual* and *real* domains (Archer 2000a). This understanding of the actions of nurses and the nursing profession is informed by the notion of stratification, which denotes the existence of a multiplicity of below the surface generative social mechanisms (rather than entities such as institutions). Nurses themselves are viewed as robust and stratified beings. Hence, rather than a 'flat' or 'compacted' social ontology, a critical realist position provides a 'layered' or 'stratified' social ontology on which a more structurally robust and inclusive theoretical approach and explanation can be constructed (Reed 1997). This critical realist study therefore seeks to explore and expose the gap between what nurses experience and understand (the actual domain), to what is really happening (the real domain), alongside identifying what mechanisms (activated in the real domain) influence the way they undertake or experience subjectively an assessment of competence.

The structured ontology of critical realism helps to relate the phenomena under study to the social context of practice, with the stratified conceptualisation providing the researcher with a multi-layered lens. This stratified reality is a key benefit of critical realism because most current academic research operates at the level of the empirical, which only gives a partial representation of what is actually happening (Birkett 2011). The goal of this research is therefore different from traditional social science in that the researcher seeks to uncover the nature of mechanisms generating empirical events by focusing on individual agents, groups and their actions, on social relations and on situated practices within the wider context (Sayer 2000). The appeal of critical realism therefore resides in its recognition of the multiple structural and social impingements that can impact on assesses and assessors assessment activities. In other words, critical realism stratified approach draws attention to the generative, causal mechanisms that underpin competence decision making around evidence and assessment, as well as assessor and assessee agency and interactions. The study seeks to discover how the Standards are continually shaped by the interactions

between nurses and how they are reproduced or transformed through interactions over time.

### **Causal mechanisms**

The concept of causal mechanisms in critical realism is a means for encouraging the exploration of the underlying cause of observed events to explain their emergence (Bhaskar 1978). Critical realism interprets the world as composed of numerous entities and events (Bhaskar 1975; Archer 2000a). Events result when the powers of entities (such as the Standards) are activated, or when entities' liabilities are impeded. That is, events depend on the presence or absence of other entities and/or the activation or obstruction of their own powers and liabilities (Bhaskar 1975; Sayer 1984; Sayer 2000). For example, the Standards exhibit unique structures and sets of interrelated properties, which make them the kind of entities they are and not anything else. The Standards and their inherent structures possess, but may not exercise, certain causal powers and liabilities. Hence, the Standards are both capable of doing some things and incapable of doing others. A critical realist perspective recognises that neither individuals nor social structures exist alone, as causal mechanisms or cannot be reduced to the other, with both being real in their own right and hence the effects of both individual and social mechanisms are both important (Bhaskar 1989; Fleetwood 2005). Fundamentally, the mix of conditions and events that can impact on nurses, the Standards, and their interactions within the practice environment, and whose interactions can selectively activate (promote, constrain or modify) the causal powers (mechanisms) in a chain of events, may result in very different outcomes depending on the dynamic interplay of conditions and mechanisms at any one time.

Causality is therefore positioned at the centre of this social inquiry and is conceptualised in terms of emergent properties that may be structural or agential. Properties are emergent in that properties may or may not result in particular outcomes, as this is dependent upon the right conditions (Pawson and Tilley 1997). For example, structural emergent properties do not possess an intrinsic capacity for constraint or enablement (Archer 2003). It is essential for an adequate understanding of the social world that it is recognised, for example, that structural emergent properties (such as the nursing educational system or the division of

nursing roles in practice) pre-exist any given case of social action and exert an influence on it, while being reproduced (or transformed), as a consequence of these social actions (Archer 1995, 1996). Instead, structural emergent properties depend primarily on material resources, which may include for example, nurses who work at different levels in practice and the interactions between other nurses in the practice setting. However, it is not easy to isolate or identify the effects of the different potential causal mechanisms. It is challenging to identify structural powers (values, norms of practice, policy and procedures) and their impact upon agents (nurses), and how agents (nurses) use their personal powers to reinforce, challenge, or transform structural impingements (Archer 2003). From a critical realist perspective the focus on causal interactions allows the researcher to examine and explore what mechanisms promote or constrain assessments of competence when using the Standards.

### **Primary and Corporate Agency**

Primary and Corporate Agents and Primary and Cooperate Agency are key concepts in critical realism. While all people have agency in their actions, they may or may not have enough agency to effect change (Archer 2000a). Archer defines Primary Agents as 'collectivities sharing the same life-chances' (Archer 2000a: 263). Primary Agents are individuals with properties and powers of a position but are unable to use these powers to articulate their needs and to organise themselves in order to gain further interests (Archer 1996). At birth, for example, each individual is assigned to a position within society and as such become members of *collectivities* who share the same life-chances (Archer 1996). This assignment of their position as Primary Agents in society is influenced by their involuntary social placement at birth. Therefore, Primary Agents position in society could result from their demographic profile in that they do not have the material or other kind of resources to change their social position. In the context of this research the importance of nurses' individual agency, professional agency and how social structures are contextualised becomes an area of attention and focus.

Transformation of Primary Agents position to another type of agent (e.g. a Corporate Agent) depends partly upon the reflexivity of them as a Primary Agent (in deciding to engage in

collective action to re-shape society). That is, Primary Agents may have powers to influence if they are part of a big enough group to have an impact on social structures (Archer 1996). On the other hand, if people are able to articulate and organise themselves around their needs they can then become Corporate Agents. As Corporate Agents they are in a position to advance transformation through their bargaining power, which is vested in, for example, their material interests or their social power (Archer 2000a). Corporate Agents membership of particular groups enables them to develop or gain the capacity to fight to gain a particular position, acquire material resources or the bargaining power to be able to take a position and fight for that position within a particular social context (Archer 1995: 260). Whilst all nurses are agents, the utilisation of a critical realist perspective seeks to identify whether nurses operate as primary agents or corporate agents with reference to the organisational structures of assessment practices.

To summarise, Primary Agents are part of social groups who are unable to articulate or act on their needs. Primary Agents are distinguished from Corporate Agents because they lack a 'say in structural or cultural modelling' (Archer 2000a: 265). Primary Agents remain in this role while Corporate Agents have the dominant cultural discourse at their disposal (Archer 1995). This research aims to provide an explanation of the research participants in terms of whether they are acting with Primary Agency or Corporate Agency. Achieving clarity will require an exploration of the complexities of Primary and Corporate Agency within nursing assessment practices. Gaining and understanding of nurses' agency can identify how nurses' assessment practices are enabled or constrained by their assessment interactions and social realities.

### **Archer's Morphogenetic Approach**

Archer's (1995) objective in developing a Morphogenetic Approach was to develop a methodology that could be utilised for research. This is articulated by Archer as follows:

the morphogenetic/morphostatic framework is put forward as the practical complement of social realism because it supplies a genuine method of conceptualizing how the interplay between structure and agency can actually be analyzed over space and time (1995: 15).

Archer developed her morphogenetic cycle to demonstrate the stratified nature of social reality and to demonstrate how causal mechanisms may operate on various levels of reality (Thursfield and Hamblett 2004). Hence, Archer's Morphogenetic Approach is viewed as a practical complement to social realism that facilitates the exploration and explanation of what is happening in society and can be utilised to analyse the relationship between structure and agency in context (Archer 1995). The application of Archer's (1995) Morphogenetic Approach to this research enables insights to be gained from analysing nurses assessment practices in the context of practice. Archer's morphogenetic approach is conceptualised as a cycle consisting of three basic phases: structural conditioning, social interaction and social elaboration. This approach is underpinned by two basic propositions about the way in which each phase leads to another in a particular chronological order. Firstly, that structure necessarily pre-dates the action(s) leading to its reproduction or transformation with structural conditioning coming before social interaction. Secondly, that structural elaboration necessarily post-dates the action sequences, which gave rise to it and therefore social elaboration comes after social interaction (Archer 1995: 15).

The contextual fabric of nursing practice, when viewed through a morphogenetic lens, is shaped by a variety of co-emergent properties (structural, cultural and agentic), which are irreducible to a single property. In a morphogenetic approach, while the middle phase of socio-cultural interaction appears to be where human agency has its greatest role, this is not the case, as human agency is implicated in and embedded within all phases of the cycle (Archer 1995). The structural conditioning phase incorporates the critical realist assumption that people (nurse's) act in already pre-defined circumstances (within the practice environment). However, the structures (e.g. protocols, guidelines and the Standards), which represent this pre-defined context (nursing practice environments) are the result of human agency, being (re)produced by people (academics, preceptors and graduates) at a time prior to the particular subjects under investigation. The social elaboration phase of the model, which flows out of the socio-cultural interactions in phase two, can have one of two characteristics: social elaboration/morphogenesis where nurses and structures are transformed; or structural reproduction/morphostasis where nurses and structures are

largely reproduced. Both nurses' social roles and the structures within practice work to influence nurses' identity through their socio-cultural interactions.

### **Nurse identity(s): the context for critical realist exploration**

This section provides a brief background to those elements of regulation and education that shape professional identity, and then moves to consider the three different types of identity that nurses experience. The creation of a professional identity is an important part of the socialisation process of health professionals, a process which begins in undergraduate education (Harter and Krone 2001; Serra 2008) and continues in the workplace. These issues of identity become particularly complex for student nurses. The professional identity of a student of nursing is founded on their understanding of the relationship between the curriculum and its application in the context of practice (Reid, Dahlgren et al. 2008). Once in practice however, students must navigate between theory and practice to develop a sense of their professional identity through the embodiment of practice work and the process of becoming a nurse (Grealish and Trevitt 2005). One way a professional identity is said to develop is through 'occupational rhetoric', 'whereby workers justify and explain to themselves and the public why what they do is admirable and or necessary' (Fine 1996: 90). The construction of personal identity is therefore shaped by the professional socialisation process and the merging of the individual's characteristics with their nursing role, which may be in contradiction with the externally defined competency standards. Students must navigate among the different images of professional identity offered by their education program and the practitioners in practice (Britzman 1990; Cole and Knowles 1993).

Students of nursing undergo a process of socialisation into their professional identity as they internalise new knowledge, skills, attitudes, behaviours, values and ethical standards and make them part of their own professional identity (Chitty 2005). Professional identity is positioned as an essential part of a successful profession (Reid, Dahlgren et al. 2008; Remley and Herlihy 2010). Professional identity refers to an individual's self-concept in terms of their professional or job-related membership (Miller and Garran 2008). Thus professional identity differs from collective identity. A collective identity is formed when the members of a group accept the common, collective norms and demands as the historical and cultural frame of reference, which determines their place in a community (Golubovi 2009).



According to Erikson (1980: 109) collective identity is achieved through a conscious sense of individual identity, as well as maintaining solidarity with a group's ideals and identity. Nurses through their socialisation into the profession develop a professional identity with most nurses adhering to the collective identity of the nursing profession. Collective identity has also been described as comprising of three related processes: demarcation of group boundaries, construction of interpretive framework for understanding the world in a political light, and politicisation of everyday life (Taylor and Whittier 1992). The Standards act to promote a collective identity for nurses in that they; define the profession and affirm individuals as competent nurse professionals, provide the description of the registered nurse on entry to practise framework and assure the public of nurses' competence to practise.

Social roles have structured powers and consequences, particularly if they are 'necessarily and internally related' to other roles (Archer 1995: 186). A corporate agent is structurally located with the material, cultural and symbolic resources needed to represent their interests. On the other hand, primary agents are identifiable groups with specific interests, such as clinical nursing practice, but do not have the requisite resources in sufficient quantities to mobilise assertive social action and change their structural conditions (Vincent 2005). Particular roles have certain properties and powers inherent in them (e.g. vested interests of academics, clinical facilitators, preceptors or graduates). Nevertheless, nurses have the ability to occupy roles in unique ways based on their own characteristics, skills and knowledge. For example, there are structured powers between the role relationships between academics and students, and preceptors and students, and each of these is unique. Roles belong to the level of the structural, while their occupants are part of the level of the social, and therefore roles need to be viewed as distinct from those who occupy them (e.g. the role of nurse may be enduring but the particular occupant of a role may not).

Regulatory, professional and personal interests converge to influence the way nurses interact with the Standards. Regulatory interests connect registered nurses' practice (as professional agents) to the regulatory authority (governmental agency). From a social-identity theory perspective, nurses may attempt to use their group membership to promote their personal identity, as well as shape their professional identity through their group

membership (Van Dick, Wagner et al. 2005). Professional identity is a learned condition, and individuals often judge and examine this for personal fit (Henderson, Cook et al. 2007). This is significant because in order to keep their collective identity intact, individuals must have resolved any perceived influence or risk to their own personal sense of self (Reid, Dahlgren et al. 2008).

Nursing can be described as having a collective identity when nurses share or are believed to have some characteristic(s) in common. A collective identity is activated when it is personally acknowledged as self-defining in some respect (Ashmore, Deaux et al. 2004). Collective identity has been described as a concept used by a group as a way of organising experience, which can be a mutual relationship between individual identity and collective identity (Erikson 1980). The collective identity can influence individual identity and is therefore achieved through having a conscious sense of individual identity, as well as maintaining an inner solidarity with a group's ideals and identity (Erikson 1980).

### **Benefits of using a critical realist approach**

There are a number of benefits for using a critical realist approach. This approach allows the researcher to better understand the link between the objective and the subjective dimensions of social life (Mingers 2001). Specifically, this is achieved by taking into account both the subjectivity of the nurses social world (to add to understandings of the complexities of assessing competence), alongside the objective information nurses use to inform their decisions. A critical realist perspective using a practice-based approach to how a nurse comes to know and understand the Standards enables the development of a richer account of the nature of nurse's interactions with the Standards. A richer account is achieved through focusing on how the structural and cultural context within which action takes place and shapes how nurses behave and think. Understanding the depth of the social reality for the participants includes recognising that the actual phenomena of understanding the operationalisation of the Standards by nurses may have produced by *empirical* views, which can be further explained in relation to relevant social structural or *real* underpinning factors.

Importantly, critical realism is a perspective that invokes the complexity of the 'messy' interrelationship between agentic and structural factors allowing both causal mechanisms and their contingency in competence assessment to be captured. The focus on mechanisms and understanding what produces the messy outcomes is at the level of direct experiences in the everyday world of the empirical (Archer 1995). Archer suggests that all 'micro-level' interactions between people are enmeshed in, and shaped by, broader socio-cultural relations (1995: 10). A critical realist perspective therefore makes it possible to contemplate nurse's interactions with the Standards as ontologically real entities, which can have emergent powers to cause events under certain conditions.

Critical realism provides a valuable approach to engage with how nurses intervene in a world of practical and real problems (Nairn 2011). Critical realism addresses epistemology by taking into consideration what we can know about the world (Bhaskar 1989). The critical realist framework acknowledges that the social world is fallible and theory-laden, that knowledge cannot be constructed from scratch, and that scientific knowledge is a product of the socio-historical conditions in which it functions (Bhaskar 1998). This research project is therefore grounded within an epistemology that acknowledges the complexity of assessing competence using the Standards and the 'messy' world in which nurse's practice. Accordingly, nursing knowledge is a practical product of how nurses interact with the practice world rather than an abstract product of human thought.

At an epistemological level, a critical realist perspective acknowledges that any reflective process is always mediated by our pre-existing conceptual resources (these can be discursive<sup>23</sup>), which are used to interpret the situation (Fleetwood 2005:199). This epistemological position of critical realism differs from positivism, which understands that the world is a closed stable system with fixed qualities, and more radical forms of constructivism, which assume that the world exists through the meaning that we individually and collectively give to it (Birkett 2011). As such, critical realism makes strong ontological claims, but it is more flexible in terms of epistemology, which makes a wide range of methods compatible with critical realism (Mutch, Delbridge et al. 2006: 618).

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<sup>23</sup> Discursive refers to knowledge based on the discursive rules of a particular community (e.g. a nursing community) and as such is ideological.

Epistemologically, critical realism aims to explain the relationship between nurse's experiences, assessment events and the influence effect of causal mechanisms. This is achieved through gathering data to answer the research questions concerned with the assessment of competence, how the Standards are understood and the way nurses use this knowledge when undertaking assessments of competence using the Standards.

As discussed in the Chapter 2, this is significant because this research focuses on how nurses understand and utilise the Standards, whereas most research has emphasised the notions underpinning assessment of competence, rather than an understanding of competence assessment practices themselves (Watson, Stimpson et al. 2002b; McCready 2007; Murrells, Robinson et al. 2009; Griffiths and Murrells 2010). Context is an important element to any research, but within critical realist ontology it is an integral part of the conceptual framework of the research epistemology and the process of collecting and analysing data (Bhaskar 1975). Hence, conceptualising the interactions between individual nurses and the Standards serves to bring us closer to developing an account of individuals understanding and experiences with the Standards alongside identification of any enabling or constraining social structures. Therefore, the reality studied is socially produced and is an interpretation of the social world (Danermark, Ekstrom et al. 2002). Hence, the findings are 'created' and 'truth' is relative to individuals and communities, and mainly involves using qualitative methodologies (Danermark, Ekstrom et al. 2002).

For this research, answering the research questions supported a greater dominance of a qualitative methodology than a quantitative methodology. While positivistic scientific approaches can be used to generate knowledge and inform nursing practice, it is not a suitable approach for answering all research questions (Burke Johnson and Onwuegbuzie 2004). The questions in this research relate more to the social aspects of life which could have been addressed solely by the qualitative paradigm (Clarke 2009)(Clarke 2009). However, answering the research questions seeking to address the complexity nurses face when undertaking assessments of competence using the Standards lent itself to be suitably addressed by employing a number of methods to investigate the problem (Bryman 2006). This was premised on the researchers particular interest in the why and how questions regarding the mechanisms promoting or inhibiting nurses interactions with the Standards.

In summary, a critical realist perspective promotes the multi-dimensionality of objects within the social sciences (fundamental to nursing practice) by enabling the researcher to assess different components within a whole, rather than isolating them into separate components (Sayer 2003; Layder 1993, 2006; Bhaskar 2008). A critical realist perspective also addresses the multi-dimensionality of nurse's social context by highlighting the irreducibility of competence either to the regulatory regime that influences the assessment of competence or to the experience, knowledge, and reflective deliberations of preceptors, clinical facilitators or academics that supervise students of nursing.

### **Limitations of critical realism**

Critical realism is however, not without limitations. Research based on critical realism cannot provide generalisable answers as conclusions reached are always provisional, fallible and incomplete (Archer 2000a). This is because what actually exists is stratified, so what is experienced isn't the whole story, and the reader is relied upon to draw conclusions about transferability and applicability (Archer 2000a). The picture of 'reality' taken by the research at a particular point in time is of immense value to capturing the competency landscape. The captured picture maybe transferable to other contexts, however, this relies on the reader to draw their own conclusions about how transferable the outcomes of research are to other contexts. Critical realism also recognises a priori structures and mechanisms, which are outside of the experience of individuals. A critical realist study recognises that social systems contain real structures that exists within an open-ended system and are informed by individual agency, which are in turn dependent on their own unique situation (Dobson, Myles et al. 2007). Nevertheless, the development of an explanatory theory increases our knowledge of nurse's interactions with the Standards and provides a position for others to examine these premises and undertake further research.

A further limitation of using a critical realist framework is that mobilising this position is not an easy task, particularly in relation to the opacity of the language and the concepts of critical realism (Ryan, Tähtinen et al. 2012). Added to this, critical realism as a meta-theory

does not offer a specific research method and nor does it support any particular style of analysis (Marsden 2005: 136-137), which may be seen as a limitation to its adoption.

## Summary

To summarise, the complexity of nurse identity, the diverse of perspectives and the different practices of individual agents was well suited to the adoption of a critical realist orientation towards social reality. Examining the complex socio-technical phenomenon of assessing competence using the Standards with a critical realist perspective seeks to understand the complexity and multidimensionality of what is happening in practice for these nurses'. That is, to expose the very nature of nurse's interactions with the Standards, their causal powers (ability to influence change), liabilities (susceptibility to change) and the mechanisms by which the nature of the interactions are brought contingently into being. This recognises that ontological assumptions about the nature of the world inevitably shape both the methodologies adopted to investigate social phenomenon and the types of social theory developed (Fleetwood 2005). This critical realist project therefore focuses on explaining nurses practice world and how the agency of nurses is embedded in institutional structures (the Standards), regulation and the broader health care policy). Fundamentally, a critical realist perspective allows an explanation of why the relationship between agency and structure assumes the form it does (Mingers 2000).

## Mixed methods methodology

Chapter 2 highlighted that while there has been substantial research undertaken around competence and competency assessment, minimal research evidence was found that addresses how useful the Standards are in practice for the assessment of competence. A critical realist approach encourages the adoption of mixed method designs to manage the complexity of the phenomena being researched because aspects of the phenomena may go undetected if a single research approach is used (Mingers 2001). This research project is typical of research that demonstrates the creative use of mixed methods and the benefits of integrating different types of data. A mixed methods design was chosen in line with recent developments in realist method methodological thinking (McEvoy and Richards 2006;

Zachariadis, Scott et al. 2010; Greenwood and Terry 2012). Critical realists support that a variety of methods may be required to capture the social events and experiences under investigation (Danermark, Ekstrom et al. 2002) with their selection having a firm theoretical basis (Mingers 2001; Lipscomb 2008; Zachariadis, Scott et al. 2010).

Critical realism however does not prescribe the use of specific methodological tools (Healy and Perry 2000). The decision to mix specific quantitative and qualitative methodological tools allows the research to be more flexible, integrative, and holistic in the investigative techniques when addressing complex research questions (Leech, Dellinger et al. 2010). That is, combining two data collection methods aimed to create a whole more than the sum of the parts (Bazeley 2010), by the thoughtful integration of data and findings with a critical realist perspective. Consequently, whilst the quantitative and qualitative questions asked could exist independently, in this research they were both considered necessary and interconnected in the contribution they made in addressing the research aim and questions. The use of two data collection methods (questionnaire and semi-structured interviews) therefore aimed at allowing the social phenomena of competence assessment to be explained, described and theorised about. Greene (2006) provided a description of what this research strategy aimed to achieve.

The methodology aimed to ensure the separate parts fit together and work together to enable - from the perspective of a given inquiry approach—defensible data gathering, analysis and interpretation (Greene 2006: 93).

The mixed methods approach aimed at ensuring the research focus is firmly situated on the research problem with the methods and data collection deemed necessary to answer the research questions, rather than limiting it to a more traditional methodology such as positivist or an interpretative approach. The value of mixed methods rests with its ability to mutually inform data analysis by highlighting relationships between local practices and changes (Zachariadis, Scott et al. 2010).

## Historical background to mixed methods

Historically, qualitative and quantitative methods were regarded as mutually exclusive, however this view was increasingly recognised as counterproductive and inappropriate (Ragin 1999; Sofaer 1999; Cresswell 2003; Skocpol 2003). Fundamentally, the methodological separation of quantitative and qualitative strategies emanated from the belief that each of these methods adheres to different ontological and epistemological paradigms (Bryman 1984; Howe 1985; Haase 1988; Guba and Lincoln 1989; Sale, Lohfeld et al. 2002). However, the stand-off between positivism and interpretivism has been replaced by an increasing acceptance of the validity of different paradigms (Burke Johnson and Onwuegbuzie 2004; Mingers 2004) and by an increasing support for the use of a combination of research approaches (Tashakkori and Teddlie 1998; Goles and Hirschheim 2000; Mingers 2001). Indeed, contemporary mixed-methods researchers maintain that the worldviews that motivate qualitative and quantitative research are not an 'either-or' proposition, rather that the careful combination of approaches may prove to be far more successful than either methodological approach alone (Robins, Ware et al. 2008).

The 1960s was a time where researchers increasingly challenged the dominance of the mono method era, which is referred to in the literature as the 'paradigm wars' (Burke Johnson and Onwuegbuzie 2004). The outcome of this challenge was the emergence of mixed methods as a third paradigm for social research (quantitative and qualitative being the first two) (Tashakkori and Teddlie 1998). Much of the initial work to lay the foundation for mixed methods occurred in the late 1980s. Since then, mixed methods have continued to evolve and develop as a platform of ideas and practices credible as a viable alternative to quantitative and qualitative paradigms (Denscombe 2008). The evolution of mixed methods research has not been without controversy and debate. It is important to have highlighted some of the debate that has situated this particular study in the dimension of mixed methodology and the discipline of nursing (Greenwood and Terry 2012).

Essentially the centre of the quantitative-qualitative debate focused on philosophical rather than methodological issues. Debate regarding the use of the quantitative and qualitative paradigms also centred on their application and ability to generate understanding of the



social systems (Bryman 1984; Tashakkori and Teddlie 1998; Cresswell 2003; Tashakkori and Teddlie 2003; Brannen 2005; Mackenzie and Knipe 2006; Brown and Brignall 2007; Giddings and Grant 2007; Greene 2008; Greenwood and Terry 2012). However, by focusing on the phenomenon under examination, rather than the methodology, researchers can select appropriate methodologies for their enquiries (Falconer and Mackay 1999). In this research, methods usually kept separate within interpretive and positivist approaches were mixed by using the distinct underlying philosophical approach offered by critical realism.

Seeking agreement between researchers of how mixed methods should be defined and what it encompasses has been an area of considerable debate. Mixed methods have been defined by numerous researchers to encompass broadly the collection and analyses of quantitative and qualitative data with numerous definitions arising but there is no current consensus between researchers (Cresswell and Plano Clark 2007). Fundamentally, mixed methods research collects more than both quantitative and qualitative data and as its title indicates the data is; integrated, related, or mixed at some stage of the research process (Cresswell, Fetters et al. 2004).

Increasingly, definitions of mixed methods have shifted the emphasis of mixing to be included in all phases with mixed methods being described as a methodology (Tashakkori and Teddlie 1998; Cresswell and Plano Clark 2007; Bryman 2008; Cresswell and Plano Clark 2011; Greenwood and Terry 2012). Further movement toward new thinking in mixed methods has been made by Greene (2007) who connects this way of doing research with '*seeing*' the aspects of social life (Cresswell, Klassen et al. 2011). Cresswell and Plano Clark (2007) also advanced that it opens up broader applications beyond using it as only a research method. Greene (2007) defines mixed methods as a way ...'that actively invites us to participate in dialogue about multiple ways of seeing and hearing, and multiple ways of making sense of the social world, and multiple standpoints on what is important and to be valued and cherished' (Greene 2007: 20). This definition aligns well with how this mixed methods research has been conceptualised to address the complex problems of nursing practice, with its attention on nurses social interactions and all their complexities because it allows 'The essence of scholarship to be creative, ethical and critically contest boundaries that put a ceiling on ideas and possibilities' (Syed, Mingers et al. 2010: 79).

In nursing research, there has been a growing trend towards the use of mixed or multiple method research designs (Morse 2003; Twinn 2003; Andrew and Halcomb 2006; Andrew and Halcomb 2009; Pluye, Gagnon et al. 2009). Mixed methods research has increasingly been used to maximise ways of knowing to stimulate different ideas or approaches (Burke Johnson, Onwuegbuzie et al. 2007) by combining different methods to enhance the understanding of the world we live in (Haase 1988). There is a growing body of knowledge regarding mixed methods research, discussing why this approach is used, how it can be used, and highlighting the challenges of using it in theory and in practice (Bryman 1988; Brannen 1992; Tashakkori and Teddlie 1998; Cresswell 2003; Burke Johnson and Onwuegbuzie 2004; Greene 2006; Burke Johnson, Onwuegbuzie et al. 2007; Cresswell and Plano Clark 2007; Greene 2007; Greene 2008; Onwuegbuzie, Burke Johnson et al. 2011; Greenwood and Terry 2012). The case for mixed methods stands well established, with Morse, Barrett, et al. (2002) arguing for a move beyond single methods towards multi methods that allow phenomena to be more comprehensively considered. Additionally, Tashakkori and Teddlie (2003) argued that for complex research questions, mixed methods may emerge as a principal tradition in social science in years to come.

For this research that explores the interactions nurses have with the Standards, adopting a research approach that collects different forms of data enables the complexity of this phenomenon to be considered. A mixed method project in combination with a critical realist perspective provides the flexibility to probe different levels of reality while taking into consideration the historic nature of the phenomenon (Bhaskar 1991). In practice, an explanation of social phenomena of competence assessment using the Standards necessitates a search of the underlying layers of reality for specific mechanisms that generate the particular events actually taking place and which, in turn, to a greater or lesser extent, may be experienced through the senses. A mixed methods project is also ideal because it allows the researcher to employ a number of methods to investigate the research problem (Denzin 1989). That is, a mixed methods approach allows a broad view of professional nursing practice and the assessment of competence, which are both complex.

The choice of the specific analytical tools, which are described in the next chapter, were based on their utility and power to illuminate aspects of the realities of social practice, as opposed to there being only one correct choice. There has been a long and often passionate debate regarding the *correct* research method that takes into consideration what produces the most accurate picture of reality inclusive of ongoing debate regarding what reality might be (Burke Johnson and Onwuegbuzie 2004). Philosophically, mixed methods offers the 'third wave' or third research movement, a movement that moves past the paradigm wars by offering a logical and practical alternative (Collins, Onwuegbuzie et al. 2006).

## Reflexivity

Reflexivity has been termed the 'critical gaze turned toward the self' (Koch 1998: 1184) and a critical gaze allows careful analysis of personal and professional assumptions to ensure the research questions were addressed. As a registered nurse, this role and identity is subject to the norms and values of this social context, particularly in relation to competency and assessment. Importantly, omissions of reflexivity in mixed methods research may lead to the suspicion of mixed methods research as a 'trojan horse for positivism' (Giddings and Grant 2006; Andrew and Halcomb 2009). That is, unless mixed methods is undertaken reflexively to breach the divide between qualitative and quantitative research some would argue that such research strives to establish 'truth', in line with positivistic endeavours. Further, as a critical realist study there is a need to address ethics and how as a researcher one should think and act in the world. The specific ethical considerations of this research are detailed in Chapter 4.

Reflexivity is considered an important part of this research because it places the focus on understanding the *empirical* experiences of the participants and *actual* patterns of their current practice (Bhaskar 1998). This is achieved by taking account how nurses negotiate, unwittingly reinforce, or selectively resist the effects and influences in their practice context and the micro-social context of structural and peer relations. Further, during the research I adopted a reflexive approach to account for the interplay between myself, the participants, the research project aims and line of inquiry taken. In this way I recognise I occupy a powerful position as researcher, yet have assumptions due to my nursing background.

Reflexivity can be understood as a casual power that allows individuals to monitor themselves in relation to the circumstances they find themselves in (Archer 2003: 9). As a registered nurse and researcher, there was recognition that the orientations and values brought to the research were shaped by a range of social and historical factors (Hammersley and Atkinson 1995), as iterated in the preceding chapters.

To ensure reflexivity within the research I maintained a continual focus on the research questions and the methodology used, with particular attention given to any interaction between myself and the research participants. I kept a journal to capture this, and was particularly mindful of my personal values and beliefs. These values and beliefs included supporting the notion protection of the public through the use of nursing regulation aimed at ensuring every nurse's is competent to practise. To mitigate any personal biases, the professions views from the literature were presented, as well as the independent data provided by participants views. I maintained these reflexive practices during data collection to avoid a reliance on personal interpretations. During the interviews I asked participants to clarify their comments to ensure that their views and perspectives were reflected accurately in the data.

I implemented several strategies to minimise researcher influence. For example, during the interview stage, I worked to establish rapport with participants (Grbich 1999; Minichiello, Aroni et al. 2000; Liamputtong and Ezzy 2005; Dickson-Swift, James et al. 2007). Establishing a rapport promoted a positive relationship and aimed to build trust within the interview relationship. I also maintained an 'open' approach to issues when interviewing participants in order to minimise response bias and encourage participants to share their opinions and assessment stories. This included a focus on open-ended and probing questions. Further, I also used a standard opening<sup>24</sup> in the interview and a standard approach to the recruitment of participants. I used these strategies in order to hear the participants' voices, rather than impose my views or an external framework upon their experiences and understandings.

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<sup>24</sup> Opening SSI question asked 'Just as a starting point can you tell me a story about your interactions with assessment and the assessment of competence?' See Appendix 6: Semi-structured interview guide question guide.

Reflexive practices allow new insights and learning to be integrated into the research rather than ignored (Lamb and Huttlinger 1989). Recognition of this co-creation of meaning was important to my research because the qualitative researcher takes on the role of both an investigator and an object of study. These roles are interactively intertwined in such a way that discoveries are created mutually within the context of the situation that moulds the investigation (Hacking 1999). As the researcher I am actively involved in the process of meaning-making, as discoveries are actively created (negotiated, arrived at) by both myself-researcher and nurse-participant during the interview process.

## Conclusion

An explanation has been provided of critical realism and its usefulness as an approach for an exploration of the complex socio-cultural interactions between nurses and competency standards. The usefulness of this approach is that it is not confined to any one particular methodological principle and thus reflects the complexity of the interpretation and use of the Standards. Critical realism offers several advantages to my research; it is ontological, it focuses on causality; it is inclusive and comprehensive; it provides a clear guide to the position of the researcher; it has implications for analysis and it provides insights into the nature of knowledge and language.

A critical realist perspective has been established as a readily able to traverses philosophical, theoretical and empirical realms to generate rich conceptualisations and deeper understandings of complexity for the development of more sophisticated explanations and more effective solutions (Angus and Clark 2012). The tenets of critical realism offer a strong platform for mixed method research. Critical realism is the philosophical approach to social life which has directed my methodology. Adopting a critical realist perspective allowed an exploration of the research questions that aligned with the researcher's world view that acknowledges the world as structured, differentiated and changing. A world view that sees assessment of competence with the Standards as complex, multi-dimensional and embracing both art and science. Combining a critical realist perspective with a mixed methods design is seen as a means to advance understanding of this complex phenomenon. Accordingly, to facilitate advancement of knowledge and understanding required looking

beyond traditional dichotomies and allowing the research to be research question-driven. The researcher's theoretical lens plays an important role in the choice of methods because the underlying belief system of the researcher (ontological assumptions) largely defines the choice of method (methodology) (Dobson 2002).

The methodological approach has been described and outlines how the research questions align with the philosophical tenets of critical realism (Teddlie and Tashakkori 2010). Mixed methods are justified as a new and emerging paradigm within which research questions can be framed. Framing the research questions from a critical realist perspective encouraged the adoption of both the qualitative and quantitative traditions. Relying solely on qualitative accounts runs the risk of subscribing greater importance to subjective accounts, whereas relying solely on quantitative accounts may result in the omission of significant non quantifiable or unexpected mechanisms. The essential aim of doing this was to provide a space to identify what lies behind the surface of social reality to understand the interaction between nurses, and between nurses and the Standards.

The socio-cultural setting for this research presented a methodological challenge, in that competence is socially constructed and assessment is influenced by subjective, objective and contextual factors. This led to the adoption of a research design and methods that provided a suitable means to answer the questions. Importantly, this study is an inquiry into the dynamic, complex, the subjective social world and the objective aspects of the use of the Standards in assessment of nurses' competency. I utilise critical realism and mixed methods to present an alternative way to explore this socio-cultural landscape (Sayer 2000; Greene 2006; Bisman 2010). Essentially, the capturing of the voices of participants in a number of different ways is important to delve deeply and to answer the research questions, whilst accounting for the researcher's subjectivity. As a reflexive research project this entailed the clear identification, articulation and accounting for the range of influences that shaped the research data analysis.

This critical realist study takes into account both the process and context of the interface of agency and structures in the context of competency assessment in nursing. This entails an exploration of outcomes. Qualitative and quantitative data collection can inform our

understandings of what is or what is not happening within an assessment of competence, and which structural and agential factors influence (constrain or promote) the assessment experience or outcome. Thus, in addition to answering the research questions, a critical realist perspective facilitates an understanding of what is working, for whom, and in what circumstances.

## Chapter 4 – Research Design and Methods

### Introduction

In this chapter I describe the research design and the methods used to address the research questions and achieve the study aims. The research design was founded on the premise that research questions ‘dictate the type of research design used ... the type of instruments administered as well as the data analysis techniques’ (Onwuegbuzie and Leech 2006: 475). The research questions focus on a multidimensional social phenomenon and relate to interpretations and understandings around the use of the Standards by nurses. As such a critical realist perspective utilising mixed methods is appropriate. The research was designed to ensure clear alignment between the research problem and design, which is a key aspect of rigorous research (Liamputtong and Ezzy 2005). The purpose of this design was to enable an in-depth exploration of the socio-cultural factors that position the Standards within the nursing profession.

I adopted a two-phased sequential mixed methods approach for this study. I compared and expanded on the initial quantitative phase findings with the findings from the second, qualitative phase. The research design was both fixed and emergent; fixed in terms of the methods being predetermined at the start of the research process and emergent in that the details of the design of the second qualitative phase emerged from the results of the quantitative phase (Cresswell and Plano Clark 2007). An emergent research design is particularly useful as multiple realities can be represented (Eloff, Engelbrecht et al. 2002; Kimble and Bourdon 2008).

The mixed methods research process included a preliminary phase to review the literature, policy and gain ethics approval. Phase 1 included the development, piloting and distribution of the questionnaire and the analysis of the data. The questionnaire included both qualitative and quantitative questions. Phase 2 involved the development, piloting and undertaking the semi-structured interviews, analysis of the data and generation of themes. The data was then combined and interpreted, the findings were presented and a discussion and explanation of the meaning provided. Finally, I make recommendations for future studies.



Table 11 provides as an overview of the implementation of the quantitative and qualitative components of the research this two-phased mixed methods research process.

**Table 1 - The mixed methods research process adapted from (Creswell, Clark et al. 2003)**

Phase	Procedure	Product
<b>Preliminary Phase</b>	Literature review Policy review Ethics approval submission	Attendance at industry seminars and conferences Ethics approval
<b>Phase 1 Questionnaire</b>	<b>Year 1 – 2</b>	
1. Instrument Development	Develop questionnaire	Questionnaire with 49 item including questions on demographics, understandings around competence, assessment practices and the Standards
	Pilot test	Questionnaire administered to an expert panel; a peer-evaluation statistician, an English language expert and key informants
2. Distribute survey	Administer survey to key informant groups	Purposively selected key informants: practising nursing in Tasmania (n=103)
3. Data analysis	Data screening Statistical analysis using SPSS (Version 18) Review opened-ended responses	Descriptive statistics Cross comparative analysis Thematic analysis
<b>Phase 2 Semi-structured Interviews</b>	<b>Year 3-5</b>	
	<b>Phase 1 informs Phase 2</b>	
1. Instrument development	Develop semi-structured interview questions	
	Pilot test questions	Semi-structured interview questions tested on the key target groups
1. Data collection	Semi-structured interviews	Purposively selected key informants practising nursing in Tasmania (n=15)
	Transcription of interviews	
2. Data analysis	Coding and thematic analysis Within case and across case theme development Text analysis NVivo (QSR 8)	Coding of data Thematic analysis Cross comparative analysis
3. Findings	Development of themes from data	Writing findings Discussion
<b>Combined data interpretation</b> Corroboration of significant questionnaire findings with themes identified from interviews Combined analysis Discussion and explanation of meaning Recommendations for future studies		

## Data selection

Two data sources were used in the research; a questionnaire and a semi-structured interview. The first data source included quantitative and qualitative data from the one hundred and three participants (n=103) who completed the questionnaire. The second data source was a semi-structured interview with fifteen individuals (n=15), five from within each target group. Target group one comprised of academics and clinical facilitators, target group two comprised of preceptors and target group three comprised of nurse graduates. Three key issues were considered in the design of this mixed methods study: priority, implementation and integration (Creswell, Clark et al. 2003). Priority or emphasis of approach<sup>25</sup>, equal versus dominant status, refers to whether one component has significantly higher priority than does the other phase, as well as referring to whether both qualitative and quantitative phases of the study have approximately equal emphasis (i.e. equal status) with respect to addressing the research question(s). Using Leech and Onwuegbuzie's (2009) typology this research can be described as a fully mixed sequential design that has a dominant qualitative status. Morgan, Morse, Wolfe, et al. (2006) argues that the theoretical perspective<sup>26</sup> of the dominant method drives the secondary component of the mixed methods project. The qualitative phase was dominant in line with the critical realist paradigm that informs the inductive and exploratory approach of this study. Morse (1991) developed a notation system, which when applied to this research design defines it as quan+qual → QUAL<sup>27</sup> (questionnaire → semi-structured interview) with an inductive theoretical drive, seeking discovery, even though the first phase was primarily deductive and quantitative.

I used implementation strategies to execute my mixed methods research. In this study, implementation refers to the sequential collection of data; Phase 1 questionnaire results

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<sup>25</sup> Emphasis of approach pertains to whether both qualitative and quantitative phases of the study have approximately equal emphasis (i.e. equal status) with respect to addressing the research question(s), or whether one component has significantly higher priority than does the other phase (i.e. dominant status).

<sup>26</sup> In mixed methods design the overall inductive or deductive direction of the inquiry is referred to as the theoretical drive, and this encompasses both the core and supplementary components with the data findings of the supplementary component contributing to the findings of the core component (Morse, 2003, Morse, Wolfe and Niehaus, 2005). Further, the theoretical drive of the core component overrides the drive of the supplemental component.

<sup>27</sup> Morse's is credited as being the first researcher to develop a notation system in 1991 for mixed research (Leech and Onwuegbuzie 2009). Note: "qual" stands for qualitative, "quan" stands for quantitative, "+" stands for concurrent, "→" stands for sequential, capital letters denote high priority or weight, and lower case letters denote lower priority or weight.

were used to develop the semi-structured interview questions and this data builds onto the data collected in Phase 2. Implementation refers to the planned procedures for connecting the results of one phase to the collection of data in a subsequent phase (Cresswell, Klassen et al. 2011). Implementation also refers to the time orientation<sup>28</sup> of either collecting data concurrently or sequentially. In this study, the time orientation was sequential with the semi-structured interviews occurring after the completion of the questionnaire distribution and data analysis. The questionnaire findings were analysed and the results were then used to develop the interview questions. Integration mixed methods designs refers to those designs in which 'methods intentionally interact with one another during the course of the study [and as a result] offer more varied and differentiated design possibilities' (Greene 2007: 125).

Data integration is fundamental to a mixed methods design and occurs when the researcher mixes or integrates the quantitative and qualitative data collection and analysis (Tashakkori and Teddlie 1998). My research study is described as fully mixed because the data from the Phase 1 questionnaire was analysed prior to the commencement of the Phase 2 two semi-structured interviews. Further, on completion of Phase 2, data threads from both strands were drawn together and mixed at the data interpretation stage to achieve a cohesive set of findings. Therefore, although data were collected in separate phases the findings were analysed together. In this way, information from a variety of sources was merged together to enrich the data and to create a detailed portrayal of the social setting (Bazeley 2009a).

A key advantage of starting with a primarily quantitative study was that the quantitative study can lend support to findings from subsequent qualitative data, with the possibility of transferring these findings to other contexts (Cresswell, Feters et al. 2004). The results from qualitative research can also facilitate the interpretation of statistical findings (Cresswell, Feters et al. 2004). Authors who take a critical realist approach tend to use this mixed methods approach, and typically rely on quantitative data and statistical analysis to determine patterns or regularities in empirical phenomena, then use qualitative inquiry to

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<sup>28</sup> Time orientation refers to whether the quantitative and qualitative phases of the research study occur at approximately the same point in time (i.e. concurrent) or whether these two components occur one after the other (i.e. sequential).

probe for deeper explanations (Kazi 2003). Thus, the quantitative method can gather broad understandings from a larger numbers of nurses, whereas the qualitative interviews with a smaller number of nurses provides information about possible reasons for their understanding and actions in practice. The quantitative phase is therefore preliminary and provides data that directs the qualitative phase. The design helped to extend and elucidate the initial quantitative findings (Sale, Lohfeld et al. 2002). This was evidenced in this research in that the findings from the questionnaire, on the whole, provided clarification to the semi-structured interviews findings.

### **Phase one questionnaire**

Phase 1 of my research comprised of administering a quantitative/qualitative questionnaire to registered nurses (n = 103). I distributed the questionnaire to nurse academics, sessional teachers, clinical facilitators, preceptors and graduate nurses. The questionnaire was designed to collect demographic information and asked the participants about their opinions of competence and its assessment in relation to the Standards.

### **Study setting**

My research was undertaken in Tasmania, and I accessed participants from within the public and private sectors of acute care, primary health and mental health. Tasmania is a small island state of Australia with a population of 510,200 as at March 2011. As the only Tasmanian based University, the University of Tasmania (UTAS) School of Nursing and Midwifery (SNM) offers a Bachelor of Nursing Program at its northern and southern campuses, with students able to gain clinical experience across the entire state. There are three major public teaching hospitals in Tasmania: the Royal Hobart Hospital (RHH), which incorporates the Repatriation General Hospital (RGH), the Launceston General Hospital (LGH) and the North West Regional Hospital (NWRH) and a further eleven private hospitals. A network of smaller district public hospitals and three Multi-Purpose Service centres (health care organisations that incorporate emergency, acute and aged care facilities) are also scattered across the state.

## Sampling

The research sample was sourced from three groups of registered nurses. Group 1 comprise of academics, clinical facilitators and graduate nurse program coordinators – which included some sessional teachers and will be referred to as the higher education group. The higher education group have a direct link with the tertiary sector. Academics and sessional teachers are employed by the university, clinical facilitators hold co-joint positions between the university, and graduate nurse program coordinators facilitate the graduate nurse program programs. Group 2 comprise of preceptors<sup>29</sup> and will be referred to as the clinical-practice group. Preceptors are registered nurses who are responsible for supporting and assessing undergraduates or graduates in the clinical setting. Group 3 comprise of first year graduate nurses<sup>30</sup>, that is, the graduate group. The graduate group in this research refers to a person who has completed their bachelor program, gained registration and has been registered for less than twelve months. In Tasmania, newly registered nurses often complete a transition to practise program in which they are required to complete a number of mandatory competency assessments. These assessments are primarily undertaken by registered nurse preceptors. At present there are no regulatory standards that identify when or if the graduates are entitled to undertake assessments of others competence, which is often addressed at the individual organisational level.

Participants were purposively sampled from within these three groups of nurses as they were identified as fundamental to the exploration of the research questions. The sample was accessed through UTAS School of Nursing and Midwifery, the Royal Hobart Hospital, Launceston General Hospital, North West Regional Hospital, Mersey General Hospital, state-wide Community and Health Services and Calvary Health Care Tasmania's state-wide campuses.

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<sup>29</sup> Preceptors are registered nurses engaged in teaching and assessing undergraduates in the clinical setting.

<sup>30</sup> In Australia, nurses in their first year of registration are often referred to as graduate nurses. These nurses, often complete a Transition to Practice Program. These programs aim to provide a range of clinical experiences to equip newly graduated registered nurse with the necessary skills and confidence to practice as a registered nurse. There is a strong focus on the special skills required to enhance and consolidate their nursing knowledge and on successfully completing a number of competency assessments. Programs vary in length and are not a compulsory part of the first year of registration.

## Purposive research sample

As a critical realist exploratory study, sampling was focused on using key groups to access the phenomenon under investigation (Clark 2008a). A purposive sampling strategy was chosen to promote a balance of group sizes between the groups selected to represent the target population. The sample size was based on the research objectives, and the resources and time available (Mack, Woodsong et al. 2005). The questionnaire sample size of one hundred and three was not a powerful enough to detect small differences in any outcome measures. This sample size limited the statistical procedures and therefore the generalisability of the results (Denscombe 2007). The sampling strategy for this research however, was appropriate as generalisations and theory generation beyond the sample were not intended. In a sequential research design, sample size relates to the utilisation of reasonable sample sizes for both phases to enable the interpretation of the results from both phases (Cresswell, Klassen et al. 2011).

Whilst quantitative research has traditionally relied on large, random samples (Bazeley 2002), exploratory mixed methods research on the other hand supports a small purposive sample size informed by the research objective, research question(s) and the research design (Onwuegbuzie and Collins 2007). The choice of sample size is in line with previous research which used sequential mixed methods. Maeda (2006) undertook an exploratory study in which 80 Brazilian immigrants completed quantitative surveys followed by face-to-face interviews with 8 Brazilian sample members. A further mixed-methods study explored educators views on the use of educational games in the health profession and included a survey completed by 97 health educators and semi-structured interviews with 13 health educators (Blakely, Skirton et al. 2010).

The questionnaire provided contextual information for the study and the interviews provided a greater understanding of nurse's opinions and experiences of using the Standards for assessment of competence. A more comprehensive understanding is gained by combining the questionnaire and semi-structured interview data. As a study set in Tasmania, the research does not claim to be representative or have statistical generalisability. However, given that the research has resulted in a rigorously designed

questionnaire tool which can direct future studies, this can enable future access to a formerly underexplored and critical area of nursing practice. Representation will be specifically addressed in the section in this chapter on mixed methods quality.

## Recruitment

Potential questionnaire participants were recruited by a third party. Third parties were employed at UTAS School of Nursing and Midwifery, the Royal Hobart Hospital, Launceston General Hospital, North West Regional Hospital, Mersey General Hospital, state-wide Community and Health Services and Calvary Health Care Tasmania's state-wide campuses. I made a formal request to the university and each of the above named health care organisations seeking permission to participate in the research project and seeking a third party contact to recruit on my behalf (Appendix 1). The Information Sheet (Appendix 2) described the aim, purpose of the research project, its benefits, inclusion and exclusion criteria, statements about the anonymity and confidentiality maintenance and that there were no known or anticipated risks to participation in the study. The Information Sheets and the questionnaire were distributed to participants across these organisations, via email or paper copies. Participation in the research was voluntary. I nominated a third party in order to minimise the potential for coercion to the participant, as I was known to many potential participants due to my role in nursing regulation. Recruitment was conducted in two, two-month stages, with a second recruitment drive necessary to obtain sufficient participation. No financial or other incentive was offered to participants to complete the questionnaire. Completion of the questionnaire indicated consent (see Appendix 3 and 4).

The higher-education group recruitment strategy was based on there being 102.25 full time equivalent staff teaching into the Bachelor of Nursing program in 2008. I recruited 21 individuals to the higher-education group, which represents twenty one per cent of the estimated available sample. The clinical practice group recruitment strategy was based on the understanding that 120 nursing graduates known to have been employed in 2007 and each graduate would be allocated one preceptor. I recruited 33 preceptors for the clinical practice group, which represents twenty eight per cent of the estimated available sample. I recruited forty seven recent graduates of nursing. This sample was based on the 120

graduates known to have been employed in Tasmania 2007. I recruited forty seven graduate participants, which represents thirty nine per cent of the estimated available sample. Further, the recruitment strategy aimed to have a balance of participants from within the higher-education and clinical practice group and from the recent graduates group to give a balance between the assessors and assessees. The participants were relatively evenly balanced, with 54% from the higher education and clinical practice group, while 46% were recruited from the graduate nurse group.

### **Inclusion and exclusion criteria**

The inclusion criteria included female or male academics/clinical facilitators, preceptors and first year graduate nurses in full-time, part-time or casual employment who were engaged in teaching and /or theoretically assessing undergraduates of nursing, preceptors of undergraduates of nursing. Graduates were nurses who had not been registered for more than one year. The age range was set as being greater than twenty two and less than seventy years. The exclusion criteria included any registered nurse engaged in teaching and assessing undergraduates of nursing that were directly involved with the research study.

### **Profile of participants**

Two hundred and fifteen (215) questionnaires were distributed to third parties across Tasmania, one hundred and fifty (150) in the initial round, and a further sixty five (65) in the second recruitment drive. I regularly followed up with the third parties to ensure they had sufficient questionnaires, to answer any questions and encourage their continued opportunistic recruitment of participants. To increase the response rate from the higher education group, a further twenty (20) questionnaires were distributed within the School of Nursing and Midwifery. To increase the returns for graduate nurse sample in February 2009, once the new graduate programs had commenced, a further fifteen (15) questionnaires were distributed. To increase the returns for the clinical-practice group, thirty (30) questionnaires were distributed at a state-wide preceptor day in April 2009. No further questionnaires were distributed after 30th April 2009. One hundred and five questionnaires (105) were returned equating to a response rate of 49%. Two incomplete questionnaires were removed from the sample.



There are several factors which affect return rates for questionnaires. Andrew, Nonnecke et al. (2003) noted that perceptions of the effort required to complete a questionnaire may affect return rates. For my research, this included participants working in an environment where they are constantly requested to complete questionnaires (research fatigue), and experience competing practice demands. Distribution of questionnaire at the end and beginning of the academic year, the length of the questionnaire, and the limited financial and human resources of the PhD project also impacted on nurse participation in this first phase. Recruitment of academics and clinical facilitators was below expectations and required a second recruitment drive, which may be attributed to competing time demands (end and beginning of semester), my position at the time as a past nurse-regulator and my PhD supervisors' position as Head of the School of Nursing and Midwifery. These factors may have impacted on response rate despite the assurance of anonymity. The questionnaire was completed by a total of 103 participants from the three identified target groups; 47 graduates (45%), 35 preceptors/other<sup>31</sup> (33%) and 21 (22%) Clinical Teachers/ Academics/Graduate Nurses Coordinator between November 2008 and April 2009.

### Questionnaire development

The primary technique for collecting data in phase 1 was a questionnaire specifically designed for this study. The questionnaire contained a series of questions designed to assess the knowledge of nurses. The questionnaire included dichotomous and open ended questions as a structured technique for collecting data about nurses. It is acknowledged that dichotomous questions cannot analyse the answers between yes and no, as there is no scope for a middle perspective. Dichotomous questions were used because I wanted the participants to express their attitude or opinions in yes/no terms. This invites the participant to choose the alternative closest to their viewpoint. Dichotomous questions also provides for comparison of answers. The goal of the questionnaire was to gather background knowledge from nurses about competency assessment and the Standards so that the semi-structured interviews in the second phase of the research could ask targeted questions to gain a deeper understanding and enable the research questions to be answered. Whilst

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<sup>31</sup> Other included Nurse Managers or specialist nurses who from time to time acted as a preceptor.

nursing research commonly uses Likert scales (Rattray and Jones 2007 ), dichotomous questions were chosen because these questions enabled the calculation of statistical data and percentages. The dichotomous questions were used in order to gather data about issues of importance to the participants (Morse 1995; Creswell 2003; Punch 2003). It was my intention that the issues raised in the questionnaire could be followed up during interviews.

To guide the questionnaire development a questionnaire quality checklist was used (Appendix 5). Questionnaire development incorporated a multistage process which involved a literature review, question generation, and then validity and reliability testing. My review of the literature did not reveal any validated or published questionnaires relating to this topic area. Such a tool would have saved time and resources and enabled the findings to be compared with those from other studies. Items on the questionnaire were carefully devised after the literature search was completed to capture the key issues. Items were phrased to avoid ambiguity and biased language, double negatives and double-barrelled questions. Similar constructs were grouped together into three sections. Section One comprised of questions seeking demographic details, Section Two comprised of questions on background knowledge on competence assessment, Section Three included questions on undertaking an assessment of competence. The final section was used to draw the participant's attention to their own practice and understanding of the Standards and assessment of competence.

Whilst the first section gathered demographic data, the following three sections each related to a specific area of the research inquiry. Each question was mapped back to the overall research questions to identify the information sought, why it was important to ask that question and its contribution to the research. The questionnaire consisted of 49 items, mostly dichotomous (yes or no answer) questions, with some questions having space provided for open-ended responses. The open-ended questions provided participants with an opportunity to respond in a qualitative way, to add rich textual data to the study (Morse, 1995; Creswell, 2003; Punch, 2003).

The questionnaire was presented to the participants under three discrete headings entitled 'General demographic data' (9 items including 3 open-ended), 'Background knowledge on

competence assessment' (15 items including two open-ended) and 'Undertaking an assessment of competence' (16 items including 1 open-ended) and the final section (9 items all open-ended) to reflect on their understanding of competence assessment issues. In the first section, demographic items included measures of age, gender, highest educational qualification, where qualified and their current area of nursing practice. Demographic responses were then used to compare subgroups of participants and to direct subsequent interpretation of the data. The second section, on background knowledge, contained questions about knowledge of the Standards including; nurses sense of confidence, their formal training on the use of the Standards and on assessment skills, and their understanding of assessment of competence. Section three consisted of open-ended questions about undertaking competence assessment.

The questionnaire development was conducted over a six month period with progressive refinement of the questionnaire instrument. The reliability and validity requirements were more basic than if the results were to be used in an inferential way because the questionnaire sought to gather practical information to assist with the interview development. In quantitative research there are two contexts in which validity and reliability are considered (Cresswell and Plano Clark 2007). The first pertains to scores from the past use of instruments and assessing whether the scores generated were valid and reliable, but as there was no pre-existing tool this aspect of reliability is not relevant to this study. The second context relates to an assessment of the validity and reliability of the data collected in a specific study (Cresswell and Plano Clark 2007) which is discussed in the following sections.

### **Validity**

Questionnaires require pilot testing to make certain that participants interpret questions and response categories as intended (Bourque and Fielder 2003; Desimone and LaFloche 2004). Several steps were taken to establish the content validity of the instrument including review by content experts and pilot testing. Face validity is largely a common-sense assessment to determine, whether at face value, the questions appear to be measuring the construct (Richardson 2010). To appraise the content validity the first draft of the

questionnaire was submitted to a number of colleagues and experts<sup>32</sup> (n=5) who reviewed items for potential ambiguity of the wording. Their feedback was incorporated and subsequently reviewed by a university statistician. Piloting on potential users was then undertaken (nurse academics, clinicians and a graduate), alongside an English language expert. The expert comments promoted content validity by assessing appropriateness and completeness in relation to the subject domain and purpose. The experts agreed most questions were fit for purpose; the five questions not fit for purpose were removed.

As the questionnaire was designed for a specific group it was important to test it on them (Kelley, Clark et al. 2003). The second round of piloting aimed to remove any outstanding ambiguous or confusing questions. In addition to completing the questionnaire nurses from the three target groups were asked to comment on the clarity, format and ordering of questions as suggested by Coughlin, Cronin et al. (2009). Independent reviews and piloting the questionnaire aimed at improving the quality of the results by identifying any unnoticed flaws in an item and ensuring the questionnaire possessed face validity (Downing and Haladyna 2006). The pilot testing also screened for missing data, response bias and response validity (Peat, Mellis et al. 2001).

### **Reliability**

Kuder Richardson (KR)<sup>33</sup> was used to test inter-item internal consistency reliability; a test for dichotomous data, and a Phi Coefficient to determine level of relationships of the dichotomous data. The KR was used to test for internal consistency and whether the constructs fitted together (Kuder and Richardson 1937). As a number of constructs were being tested in the questionnaire questions relating to formal training on the Standards and formal training on assessment skills, the KR was applied to each item separately as the underlying assumption of a Kuder Richardson is that the items included are testing one construct (Kuder and Richardson 1937). The Kuder Richardson obtained was >0.90 indicating inter-item internal consistency reliability. Test reliability measures were not appropriate for

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<sup>32</sup> Content validity was reviewed by senior nurse academics, nurse regulators and a PHD supervisor.

<sup>33</sup> A Kuder Richardson test for reliability and is the same as a Cronbach Alpha, except a Kuder Richardson is reported when items are dichotomous. Higher inter-item scores fall within the .80 to .85 range; a KR of >0.90 indicates a homogeneous test Kuder, G. F. and M. W. Richardson (1937). "The theory of the estimation of test reliability." *Psychometrika* 2: 151-160.

measuring the reliability of constructs that may change over time, as it would be impossible to determine if variations in response are due to a non-reliable instrument, or due to a change in attitudes (Wikman and Wärneryd 1990).

### **Generalisability**

The questionnaire results were not intended to be generalisable; however thoughtful reflection about the setting, the participants, and the data was undertaken to foster insights that would contribute to the development of the semi structured interview questions. The focus was on obtaining insights into particular educational, social, and political processes and practices that existed for nurses within their specific location and context. Further, through the direct collection and analysis of the data, as opposed to using research assistants, the Researcher improved her capacity for insightful interpretation and generalisation by remaining close to the data (Polit and Beck 2010). To illuminate what was going on; the data was reviewed for extreme cases, typical cases and exemplary cases.

## **Data analysis methods**

### **Data coding and checking**

The questionnaire collected quantitative and qualitative data with each questionnaire assigned a code and a sequential number, regardless of the group. Before analysis the data was screened for coding errors, missing data, response bias and response validity (Bowling 2005). The first step towards data validation included checking for missing data, ambiguous or unclear responses and any errors with data entry. Responses from the open ended questions were used to provide clearer meaning to the statistical findings from the quantitative responses.

### **Data analysis**

The questionnaire collected participant's demographic information and data on their understandings of competence and its assessment in relation the Standards. Data analysis begins with the calculation of descriptive statistics for the research population. Descriptive statistics were used to organise and summarise the questionnaire results. These statistics

summarise various aspects about the data, give details about the sample and provide information about the population from which the sample was drawn. The quantitative data questionnaire was analysed with descriptive statistics which was supported by SPSS version 18. Percentages were then used to display the frequency distributions of the identified area within the questionnaire population. Percentages provide an important tool to illustrate nurses' opinions of the set of pre-determined questions. The questionnaire analysis used descriptive statistics to describe frequencies and patterns in the data set by seeking incidence and frequency of social phenomena for a given population (Greene 2008).

### **Open ended questions from the questionnaire**

Free-text comments were transcribed verbatim into Excel and analysis included reading of comments and identification of themes. The qualitative dimension of the transcribed responses was then analysed using thematic analysis that was informed by a critical realist stance (Bhaskar 1989). A critical realist perspective offers 'the possibility of accounting for the ways in which the social world is constructed through language, whilst simultaneously recognising the existence of an external-to-discourse reality' (Barnett, Vasileiou et al. 2011: 342). An inductive approach with a full presentation of themes was selected and the data were analysed semantically, emphasising the explicit meaning of the themes. Thematic analysis aimed to elucidate common patterns emanating from the data (Bazeley 2009b). The data was singled out for description according to principles of selectivity. While initial categorisations of the data were shaped by the research questions, openness to inducing new meanings from the data was maintained during the qualitative analysis phase of descriptive and thematic text analysis. The qualitative data generated from the questionnaire was not quantified to avoid rendering the data as single dimensional and immutable (Driscoll, Appiah-Yeboah et al. 2007).

The thematic analysis emanating from the questionnaire provided a contextualised personal perspective of nurses' opinions of the current use of the Standards in practice.

## Phase two semi-structured interviews

The findings from the Phase One questionnaire showed some 'patterns', but it was not designed to identify underlying causes. To address causal mechanisms a second stage qualitative phase was required. As a critical realist research project, lay knowledge (recent graduates) is seen as being equally important, although not superior, to expert knowledge (academics, clinical facilitators, preceptors). A critical realist perspective allows for the voice and views of nurses assessors and nurse assessees to be a legitimate part of the research agenda by explicitly acknowledging their subjectivity. Theorists have noted the importance of acknowledging the subjectivity of research participants (Bhaskar 1989; Pilgrim and Rogers 1997; Archer 2000a). The semi-structured interviews main role was to focus on areas of interest generated from the questionnaire responses and explore any relevant issues raised during the interview and generate new information or confirm or deny any known information. After analysing the qualitative and quantitative questionnaire data separately, the results were integrated and used to develop the semi-structured interview questions.

The semi-structured interviews provided a collection of quotes that through analysis and discussion were able to 'bring in the voice of participants in the study' (Creswell 1998: 170). Capturing nurses' voices was central to Phase Two because of their usefulness in explaining the complexity of competence in relation to the Standards and grounding the research more in the real world. Thus, whilst semi-structured interview data are not treated as literal descriptions of social reality, they were used as a resource to know about it (Silverman 1985; Atkinson and Silverman 1997; Hammersley and Gomm 2004). This is advantageous because the semi-structured interview focus on the individuals' experiences can provide rich and detailed descriptions of previous unexplored phenomena (Morse 1991; DiCicco-Bloom and Crabtree 2004).

## Target population

The target population for Phase Two was the same as for Phase One with potential participants for the semi-structured interviews were recruited through the same process as for Phase One. There is specific relevant information regarding the semi-structured interview target population. Firstly, due to the anonymity of Phase One it is not known

whether there were any participants who were involved in both phases. Further, due to the time between Phase One and Phase Two it would be unlikely that any graduates completed both the questionnaire and the semi-structured interviews.

### **Inclusion and exclusion criteria**

The inclusion and exclusion criteria were the same in both Phase One and Two.

### **Purposive research sample**

As discussed in regard to the Phase One questionnaire, a purposive sample was used so that participants could be intentionally selected for their experience with the central phenomenon and key concepts being explored (Cresswell and Plano Clark 2007). Purposive sampling for the semi-structured interview was chosen because it 'leads to greater depth of information from a smaller number of carefully selected cases' (Teddlie and Yu 2007: 83). For critical realists, the rich description that can emerge from purposive sampling provides a good reason for non-random sampling as it allows sampling focused on key groups that can assist in addressing the research question (Clark 2008a). The semi-structured interviews yielded very similar themes after twelve interviews but three more interviews were undertaken to confirm this; one semi-structured interview from each participant group.

### **Rationale for sample size**

The sample size in this qualitative research was based on the concept of data saturation whereby the interviews were continued until the researcher was no longer hearing new information (Mack, Woodsong et al. 2005). Data saturation refers to when information occurs so repeatedly that the researcher can anticipate it and further collection of more data does not add to interpretive worth (Curry, Nembhard et al. 2009). As a critical realist study the sampling was focused on data saturation, purposive sampling and using key groups to assist in explaining the phenomena under investigation (Clark 2008a). The interview process yielded very similar themes from the interviewees after twelve interviews, with three more interviews (one from each target group) undertaken to verify and confirm this.



## Recruitment of participants

The recruitment strategy for Phase Two included accessing individuals from the three participant groups as described in Phase One. The aim was to identify 'information-rich' participants with certain characteristics, detailed knowledge, or direct experience relevant to the phenomenon of interest (Pope and Mays 1995). In qualitative research the central idea for a purposive sample is to group participants according to preselected criteria relevant to a particular research question (Mack, Woodsong et al. 2005). A purposive sample allows the researcher to discover and describe in detail characteristics that are similar or different across the strata or subgroups (Teddlie and Yu 2007). The research sample in Phase Two included females (n=13) and two males (n=2) (five from each of the participant groups). This representation of females and males is similar to the representation within the nursing population. Third party recruitment was utilised for the semi-structured interviews which were undertaken from June and September 2010.

## Data Collection Method Phase Two

The purpose of Phase Two was to collect data from the research participants using semi-structured interviews until data saturation was reached. While questionnaires can provide evidence of patterns, interviews can gather more in-depth insights into participants attitudes, thoughts and actions (Kendall 2008 ). Semi-structured interview were chosen due to the exploratory nature of the research and because they are a powerful data gathering technique. A set of predetermined open-ended questions were used to guide the semi-structured interviews (Appendix 6), with other questions emerging spontaneously from the conversation between interviewer and interviewee as discussed by DiCicco-Bloom (2004). It was anticipated that by recording and analysing the participant's perceptions and experiences of using the Standards, insights would be gained into how nurses understand and utilise the Standards and the relationship between agency and structure in the context of competency assessment. Attention was also paid in the qualitative interviews to identify new insights and explore the processes underlying the understanding of the Standards that were not evident from Phase One. The key purpose of the qualitative data was to identify any underlying mechanisms promoting or hindering nurses interactions with the Standards.

The interviews were designed in accordance with rigorous and widely accepted techniques for research strategy, sampling, data collection and analysis to improve the quality of the research study (Curry, Nembhard et al. 2009). The interviews were conducted in a critical realist framework aiming to elucidate underlying structures and causal mechanisms. The semi-structured interview development was conducted over a nine month period from October 2009 to May 2010. Considerable time was taken to draft the semi-structured interview questions post the completion of the data analysis in Phase One. The questions were carefully considered so the participants felt comfortable with the interview process and to uphold the principle of beneficence. Beneficence refers to a moral obligation to act for the benefit of others, helping them to further their important and legitimate interests, often by preventing or removing possible harms.

Phase One of the research identified some potential relevant structures and mechanisms which were then included in the semi-structured interviews conceptual framework. The interviews in Phase Two began with an open question to uncover any other structures and mechanisms missing from the initial conceptual framework.

### **Semi structured interview development**

The semi-structured interview format was pilot tested with individuals from the three target populations and researchers with expertise in the development of semi-structured interviews. An Interview Guide was developed that included questions to elicit information to answer the research question as well as address questions raised in literature, questions raised post questionnaire data analysis. The pilot testing sought to identify any flaws, limitations, or other weaknesses within the interview design so that revisions could be made prior to the implementation of this part of the study (Kvale 2007). Changes were made to how the questions were worded and the order of the questions to promote a better flow of the conversation and linking of the constructs under investigation.

## Completion of the semi-structured interview

The fifteen semi-structured interviews were completed between June 2010 and October 2010 and took between 41 minutes and 66 minutes. The interviews were undertaken at a venue chosen by the participants with low environmental noise level and minimum likelihood of interruptions. The semi-structured interviews were conducted with a fairly open framework to allow for focused, conversational, two-way communication to receive information (Brannen 2005). Developing a rapport with the participants was believed to be central to the quality of information gained. The development of rapport facilitated a more complete and accurate account of the phenomena under investigation by allowing direct contact with the target population (Yoshikawa, Weisner et al. 2008).

Participants were given the opportunity to cancel or stop the interview at any stage. In the semi-structured interview the Researcher acted as the data gathering instrument. Each semi-structured interview commenced with a general question asked to gain a general view of the participants' opinion of the Standards. The Interview Guide contained broad questions that were followed up with clarifying and probing questions. Throughout the interview open questions were used to encourage participants to expand on their own experiences and it was assumed the information given as a form of self-report was accurate (Burns and Grove 1987). As the questions were not all designed and phrased ahead of time, this allowed the interviewer to probe as necessary to gain a more holistic picture of the individuals' understanding (Brannen 2005). The Interview Guide was re-visited after the first few interviews to look at ease of flow between topic areas and the order was adjusted slightly. Ultimately, all questions were asked but the order was adjusted to avoid interruption to the flow of the participants' responses.

Data collection processes were designed to capture the observable experiences of the participants (in the empirical domain) so that patterns of events could be isolated (in the actual domain) to assist with the identification of generative mechanism (in the real domain). The Researcher was the sole interviewer to promote consistency in elicitation and evaluation techniques across all the interviews. This also allowed more carry over from one interview to the next to gain a more 'organic' understanding of the issues. With the

participant's permission each interview was recorded, and then transcribed verbatim and the transcripts imported into NVivo (QSR 8). Prior to the close of each interview the Researcher asked whether there was anything else the participant wished to add or clarify. This achieved two purposes; it indicates closure of the interview and it provides the participant with a final opportunity to provide comments relating to the interview topic. This is important in a critical realist study as it gives the participants the opportunity to add any extra information they believed was significant (Oliver 2011).

### **Data analysis method**

The initial data analysis consisted of reading and re-reading the transcripts. The accuracy of the transcription was assessed by listening to the recording and comparing it to the transcript. The analytic phase began as soon as the first data are collected because the findings were then used to direct the subsequent interviews (Strauss and Corbin 1990). This iterative process allowed familiarisation with interviews as well as providing an opportunity to note points of interest and followed a 15-point checklist of criteria for good thematic analysis by Braun and Clarke (2006: 96) (Appendix 7). The transcripts were reviewed line by line in detail and when a concept became apparent a code was assigned. To ascertain whether a code was assigned appropriately, segments assigned with the same code were compared to decide whether they reflected the same concept. Sentences and phrases that seemed to be most representative of the experience that is being explored were divided them into themes (nodes). The data reduction process moved progressively from simple descriptive coding (participant key words or phrases), to topic coding (key themes emerging from the interview process), to analytical coding (coding that resulted from interpretation and reflection on meaning) as recommended by Richards (2005). Data reduction was therefore achieved by reducing the dimensionality of the qualitative data via exploratory thematic analysis (Onwuegbuzie and Teddlie 2003).

Thematic analysis was the means by which the semi-structured interview data was organised and described. Thematic analysis was used to identify, analyse and report the themes within data. Whilst a 15-point checklist of criteria was adopted to ensure good thematic analysis of the qualitative data, the six phases of thematic analysis were the

specific steps followed when analysing the qualitative data. The following table provides an overview of the six phases of thematic analysis utilised to clearly provide the reader with the process undertaken, which can act as a point of comparison with other research studies.

**Table 2 - Six phases of thematic analysis**

Phase	Description of the process
1. Familiarising yourself with your data	Transcribing data, reading and re-reading the data, noting down initial ideas.
2. Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes	Collating codes into potential themes, gathering relevant data under each theme.
4. Reviewing themes	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the data.
5. Defining and naming themes	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report	The final opportunity for analysis. Selection of vivid, compelling and representative extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

Six phases of thematic analysis adopted from Braun and Clarke (Braun and Clarke 2006: 87).

The following account provides the detail of how the available data was sampled to determine which quotes to use. The themes evolved through an inductive process to ensure that thematic analysis and codes emanated from the data itself. Thematic analysis situates the emphasis to a certain extent on 'what' is said rather than 'how' it is said (Bryman 2004). This process included documenting a description of the potential themes characteristics and boundaries; identifying how many nurses talked about a particular aspect, from within which group they came from, and whether there were any differences in the characteristics and boundaries for a theme across contrasting demographic groups. These steps were then repeated for each theme and I noted which themes occurred more or less frequently for different groups, and whether they were expressed differently by different groups.

After analysing the questionnaire and semi-structured interview data separately, the results were merged and connected to answer the research questions. The final step, once the

themes had emerged from the data, involved identification of phrases or quotations that most accurately illustrated these themes (Morse, Barrett et al. 2002; Richards 2005). Thematic analysis revealed eight themes within the semi-structured interviews.

**Table 3 - Model of Qualitative Data Analysis**

<b>Initially reading through text data</b>	<b>Dividing text into segments of information</b>	<b>Labelling segments with codes</b>	<b>Creating a tree display using NVivo</b>	<b>Collapsing codes into themes</b>
pages of text	segments of text	45 codes	26-branch tree display	8 themes

Model of Qualitative Data Analysis adapted from Creswell, 2002 and Lu, 2003.

The inductive analysis merged the results from Phase 1 and 2 resulted in a number of themes with many sub-classifications emerging from the questionnaire and semi-structured interviews. The initial categories were grounded in the data, and devised, in part, by a growing familiarity with the data. Two sets of analytical categories helped to make sense of the data: descriptive and conceptual. A list of descriptive categories defined the key substantive topics raised by the participants. Two conceptual categories then formed the major themes of the findings chapters; Nurses perspectives on the use of the Standards and Structural factors that shape nurses collective identity.

The following table provides an example of how the data was extracted from both the questionnaire and semi-structured interviews were given a descriptive and conceptual category.

**Table 4- Data extract with code applied from questionnaire and SSI data**

<b>Data extract</b>	<b>Descriptive category</b>	<b>Conceptual category</b>
<p>'The standards exist because, me as a practitioner, in nursing, I'm registered as a nurse to work within a defined scope of practice, and I am -- I need to be governed by something' Ruth PR</p> <p>'So they're the guidelines of which I need to make sure that I'm reaching in order to be a professional, competent nurse' Gail AC</p>	<b>Professional governance</b>	<b>Structural factors that shape nurses collective identity</b>

<p>'It's [the Standards] to give us a standard to work, at least base level, recognition of what we're doing, how we're doing it, our legal and ethical responsibilities' Margaret PR  'Makes the nursing profession to have same standards/level anywhere in Australia' GD10</p>		
<p>'Allows nurses to be identified as professionals. To be held accountable for practice ' GN85  'Industry [nursing] is now more professional and accountable' PR 09  'I think they [the Standards] exist too basically to set a benchmark on what is good practice ' Roberta AC  'The competency standards make the nursing profession accountable for nurse's accountability to practise' PR102</p>	<p><b>Professional accountability</b></p>	<p><b>Structural factors that shape nurses collective identity</b></p>
<p>'Context may make assessment more difficult but competency should be demonstrated at all times' PR00  'As most assessment are being done on a clinical basis then clinical context is important' CT56  'The only context is nursing, in a clinical setting' GN05</p>	<p><b>The contextual nature of the Standards</b></p>	<p><b>Nurses perspectives on the use of the Standards</b></p>

The data analysis process has been explained in some depth in this section to help the reader to understand the rigorous analysis that was applied to the text in the findings chapters.

### Mixed methods quality

Prior to 2004 there were no criteria for appraising mixed methods research (Sale and Brazil 2004). Since that time a number of criteria have emerged including those developed by Sale and Brazil (2004), Teddlie and Tashakkori (2009), O'Cathain et al (2008), Bryman et al. (2008) and O'Cathain (2010). The literature however highlights a lack of transparency regarding the individual components of mixed methods studies with the qualitative components more likely to be poorly described than the quantitative ones (O'Cathain, Murphy et al. 2008).

Teddlie and Tashakkori (2009) have emphasised to promote quality in mixed methods requires both design quality and interpretive rigour. To provide transparency around the quality of this mixed methods study O'Cathain, Murphy and others (2008) devised a six-item framework referred to as *Good Reporting of a Mixed Methods Study* (GRAMMS) and this was applied to this research. Throughout the research design and methods chapter a

description of each of the components of GRAMMS has been provided to justify the use of a mixed methods approach to the research question, the design in terms of the purpose, priority and sequence of methods, each method in terms of sampling, data collection and analysis, where integration has occurred, how it has occurred and who has participated in it, any limitation of one method associated with the presence of the other method and any insights gained from mixing or integrating methods.

Table 5 summarises the addressing of quantitative and qualitative phase quality issues.

**Table 5 - Quality issues in the mixed method research project**

Questionnaire Quantitative Quality Criteria	Strategies used	Semi-structured Interviews Qualitative Criteria	Strategies used	Overall quality of mixed research - Good Reporting of a Mixed Methods Study (GRAMMS) (O'Cathain, Murphy, et al. 2008)
<b>Validity</b>	Face and content validity Piloting of instrument on representative group Expert content review	<b>Credibility</b>	Use of multiple methods and data sources in the study of phenomena. Assumptions outlined. Neutral stance taken by Researcher. Researcher perspective articulated. Rigorous coding of data. Segments of the raw data made available for others to analyse. Utilisation of peer debriefer's to provide a fresh perspective for analysis and critique. Member check participants to corroborate findings. Record analytical decisions. Professional transcription. Use of data quotes to support findings.	Justification for mixed methods use provided



<b>Reliability</b>	Statistician review Kuder Richardson for dichotomous data	<b>Transferability</b>	Collection of rich and detailed accounts. Purposive sampling.	Explanation of design purpose, priority and sequence of methods
<b>Replicability</b>		<b>Dependability</b>	Triangulation of methods Description of process for undertaken data analysis. Audit trail.	Description of sampling methods, data collection and analysis
<b>Generalisability</b>	Researcher undertook data collection and analysis. Generalisability was not an intended outcome	<b>Confirmability</b>	Audit trail. Description of evidence and thought processes leading to findings. Reflexive examination of Researcher background. Identification of researcher assumptions and biases. Accurate transcription process. Verification from key stakeholder group.	Audit trail, original data (transcripts) Description of integration process. Research limitation addressed. Description of insights from mixing and integrating methods

Further, to promote the quality of this mixed methods study a key area of attention aimed at ensuring the data was integrated or mixed (merged, embedded, or connected) so that the two sources of data were combined in such a way as to provide a better understanding of the research problem, than one source or the other. This was achieved by presenting the qualitative and quantitative findings within the one paragraph, as opposed to separating them into different chapters or to stand- alone as individual excerpts within the findings chapters.

## **Ethical Conduct**

This research involved human subjects which entailed addressing four main ethical considerations. The rights of those participating included; the right not to be harmed; the right of full disclosure; the right of self-determination and the right of privacy, anonymity and confidentiality (Parahoo 2006). In terms of an ethical critical realist study, this involved adopting an ethical stance which allowed the identification of any constraining, asymmetrical or domineering social relations (Iosifides 2011). During the course of the research all these issues were addressed and no adverse participant's events arose. The rigour and the suitability of the research methods used is also viewed as an ethical issues (Neuman 1994: 427) requiring the researcher to avoid collecting unnecessary information, misusing results, or using biased recruitment practices. In terms of ethical consideration within the mixed methods research process, Bryman's (2004) traditional areas of ethical principles were adopted to ensure; any power relations were addressed, no harm occurred to the participants, all participants made an informed consent, there was no invasion of privacy and no participant was deceived.

In the unlikely event of participation causing any stressful reaction, the project lead and co-facilitator were available to take the necessary action to debrief these individuals. The participants were informed they could withdraw their responses from the semi-structured interviews at any time. One participant asked that one of their responses not be used, but no other participants chose to withdraw their responses. No participant declined to be interviewed or sought support after the interview.

## **Representation**

As a critical realist study, representation of the participants is acknowledged through highlighting the interplay between agency, culture and structure and through the accurate representation of the voice of the participants, without excluding the role of position or resources. In mixed methods studies, the challenge of representation refers to the difficulty in capturing the lived experience using text in general and words and numbers in particular (Onwuegbuzie and Collins 2007). This refers to the fact that sampling problems characterise both quantitative and qualitative research and there are difficulties in capturing (i.e.,

representing) the lived experience. These issues were addressed through the utilisation of semi-structured interviews seeking to capture and reflect the narrative accounts of the participants' experiences and provoke reflection on their understandings of the Standards. To promote the authenticity and credibility of the interviews careful consideration was given to ensure the voices of the participants were not impeded in terms of power or control during the interview process. Understanding representation also means considering how the Standards are made visible or invisible in practice from the participant perspective.

### Confidentiality

Confidentiality is typically a requirement of social research, whether it is qualitative or quantitative (Hansen 2006). The participants were informed that their responses would be treated confidentially and they would not be identifiable in the research. The anonymity of participants was protected by numerically coding each returned questionnaire and keeping the responses confidential. Confidentiality was addressed in the interviews by providing a non-gender matched pseudonym to participants in the semi-structure interview.

**Table 6 - Coding scheme for nurses' quotations**

The following table identifies coding scheme used in the findings chapters.

<b>Position</b>	<b>Questionnaire ordered numerically 00-102</b>	<b>Semi-structured interview</b>
<b>Academic</b>	AC00	Pseudonym + AC
<b>Clinical teacher</b>	CT01	Pseudonym + CT
<b>Preceptor</b>	PR02	Pseudonym + PR
<b>Graduate</b>	GN03	Pseudonym + GN

### Data storage

In line with NHMRC Guidelines, all raw data will be held by UTAS SNM for a period of at least five years from the date of the first publication and will then be destroyed by shredding and deleting. Data will be stored in a locked filing cabinet at the Hobart UTAS SNM and in password-protected computer files.

## Conclusion

This chapter has provided a detailed explanation of the mixed method research design using a critical realist perspective by detailing the methods employed to enable data collection and analysis capable of answering the research questions. A mixed method study is a particularly useful means to investigate the complex and qualitative constructs of competence assessment and nurses interactions when using the Standards. A sequential mixed method design enabled the integration of quantitative and qualitative data to allow for a multi-dimensional and synergistic understanding of this phenomenon (Cresswell, Klassen et al. 2011). The design and research methods chosen were congruent with the methodological underpinnings of a critical realist study. Hence, this mixed methods research design that uses an initial questionnaire followed by semi-structured interviews was used to uncover and explore from a critical perspective the interface of agency and structures in the context of competency assessment in nursing. This data was then used to determine and describe the relationship between this interface and the ways in which nurses understand and utilise the Standards.

## Chapter 5 - Nurse perspectives on the use of the Standards

### Introduction

This chapter is the first of two findings chapters that present the results from my analysis of the data. As a sequential mixed methods study, I conducted a questionnaire followed by semi-structured interviews. By using the questionnaire, I sought to obtain a 'general picture' of nurses understanding of competence and assessment using the Standards. I then used these results to develop the questions for the semi-structured interview. The results are presented using a critical realist perspective with this first findings chapter concentrating on nurse's individual perspectives on the use of Standards in practice. The major finding presented in this first findings chapter is that there are diverse interpretations of the Standards reached through a negotiated process of meaning-making. The second findings chapter emphasises the power and influence of the Standards as a social structure. This first findings chapter begins with the results of the questionnaire, to provide a summary of the demographic data and the descriptive statistics by participant group.

### Questionnaire demographic information

The demographic details of the study population are provided in Table 7, below.

**Table 7: Demographic details of the study population**

Question	Category	Count n =	%
<b>Employment area</b>	Graduate	47	46%
	Preceptor	32	31%
	Academic /Clinical Teacher	24	23%
<b>Age range</b>	20 – 30	50	49%
	31 – 40	29	28%
	41 – 50	16	16%
	51 -60	4	4%
	61- 65	2	2%
	Other	2	2%

<b>Qualification year range</b>	Qualified before 1979	10	10%
	Qualified between 1980 and 1989	20	19%
	Qualified between 1990 and 1999	14	14%
	Qualified between 2000 and 2009	59	57%
<b>Country qualified</b>	Australia	101	98%
	New Zealand	1	1%
	UK	1	1%
	USA	0	0
	Other	0	0

**Note: Percentages in this table may not sum to 100 due to rounding**

The first item on the questionnaire presented five choices of current employment, graduate, preceptor, clinical teacher, academic, graduate nurse coordinator or other. Using the answers to this question, I allocated participants to one of three groups. Graduates to the graduate group, preceptors or clinical nurse managers to the clinical-practice group, and clinical teachers, academics and graduate-nurse coordinators were allocated to the higher education group.

Fifty four per cent of the participants' were academics, clinical facilitators, or preceptors responsible for undertaking assessments and the remaining 46% of the participants were nurses who had recently graduated with a bachelor of nursing. This mix provided a balance between the assessee and the assessor view. The participants' age ranged between 20 and over 65 years of age, with the majority of participants under 40 years of age, and two participants aged over 65 years. Forty nine per cent of participants were aged between 20 and 30, 43% were aged between 31 and 50, and 8% were over 50. Whilst the average age of a nurse in Australia is 49 years, this population's age group is skewed by the proportion of recent graduates in the sample.

The following table details the questionnaire participant's first nursing qualification and highest qualification of questionnaire.

**Table 8: First nursing qualification and highest qualification attained**

Question	Category	Count n =	%
<b>First nursing qualification</b>	VET sector	2	2%
	Hospital	37	36%
	College	2	2%
	University	62	60%
	Other	0	0
<b>Highest qualification</b>	Hospital certificate	9	9%
	Associate degree	0	0
	Bachelor degree	60	58%
	Graduate certificate	9	9%
	Graduate diploma	14	14%
	Masters	10	10%
	PhD	0	0

**Note: Percentages in this table may not sum to 100 due to rounding**

Fifty seven per cent of the participants gained their first nursing qualification between 2000 and 2009, with 33% qualifying between 1980 and 1999 and the remaining 10% qualifying before 1979. This indicates the majority of participants had ten or less years practice experience, which reflects the high proportion of recent<sup>34</sup> graduates in the study. The majority of participants obtained their first nursing qualification in Australia (98%); with one nurse educated in the UK and one in New Zealand. The results of this research therefore primarily reflect the views of Australian educated nurses. Thirty six per cent of participants were initially trained in the hospital-based apprentice system. The majority of participants (60%) had completed a bachelor degree. The remaining participants were College (2%) or VET (vocational education and training) sector (2%) trained. It is assumed that the participants from the VET sector undertook further education to upgrade from an enrolled nurse to registered nurse.

<sup>34</sup> In this research, a recent graduate refers to a person who has completed their bachelor program, gained registration and has been registered for less than twelve months.

The highest nursing qualification levels varied with 9% of participants holding a hospital certificate, 58% holding a bachelor degree, 9% holding a graduate certificate, 14% holding a graduate diploma and 10% holding a masters qualification. Seventy five per cent of nurses who were initially hospital trained had gone on to complete some form of further education. No participants had completed a PhD. The qualifications held above bachelor degree were divided between the higher education group and the clinical-practice group of participants; because new graduates could not have held a post graduate nursing qualification due to their limited time within the profession. Twenty nine per cent of preceptors held a graduate diploma and 11%, held a master’s degree. Of the clinical teachers, 20% held a graduate diploma and 30% held a master’s degree. All of the academics had attained a master’s degree. Comparisons to other states or to national figures are not possible because it is not currently collected as part of the Australian Institute of Health and Welfare (AIHW).

**Table 9: Practice area and when study sample learnt about the standards**

Question	Category	Count n =	%
<b>Practice area</b>	Clinical	73	71%
	Management	3	3%
	Education	27	26%
	Research	0	0
<b>Learnt about the Standards</b>	In the higher education sector	73	71%
	In the practice setting	20	19%
	In the hospital setting	9	9%

**Note: Percentages in this table may not sum to 100 due to rounding**

The majority of questionnaire participants were currently practising nursing practice the clinical area (71%), followed by education (26%) and management (3%). The research population of clinicians is similar to the Australian workforce, which identified 79% of nurses employed were clinicians (AIHW 2012). Seventy one per cent of participants indicated that they learnt about the Standards whilst gaining an education in the higher education sector, 19% of participants learnt about them whilst working in the practice setting and the remaining 9% of participants learnt about them whilst gaining an education in the hospital



setting. Therefore, most nurses were first introduced to the Standards whilst completing their bachelor of nursing program.

## Descriptive statistics by participant group

Table 10 provides an overview of the opinions by participant group regarding their confidence, knowledge and understanding of assessment of competence using the Standards.

**Table 10: Descriptive statistics by participant group of opinions regarding assessment of competence using the Standards.**

Questionnaire Question		Current employment area					
		Academic/Clinical				Preceptor Teacher	
		Count	%	Count	%	Count	%
I have sound knowledge of the Standards	Yes	32	68%	28	88%	24	100%
	No	15	32%	4	13%	0	0
I am confident I have the required expertise to make an assessment of competence using the Standards?	Yes	35	75%	30	94%	24	100%
	No	12	26%	2	6%	0	0
I feel confident making an assessment of my own competence against the Standards?	Yes	39	83%	31	97%	24	100%
	No	8	17%	1	3	0	0
I am aware of the ANMC Principles for the Assessment of National Competency Standards for Registered Nurses?	Yes	34	72%	29%	91%	18	75%
	No	13	28%	3	9%	6	25%
I understand the ANMC Principles for the Assessment of Competency Standards for the Registered Nurse	Yes	35	76%	25	78%	20	83%
	No	11	24%	7	22%	4	17%
I find using the Standards cues useful when making an assessment of competence?	Yes	41	87%	29	91%	22	92%
	No	6	13%	3	9%	2	8%
I believe the Standards are relevant to contemporary nursing practice?	Yes	43	92%	32	100%	21	88%
	No	4	9%	0	0	3	13%
In my experience I believe the 'Standards' are understood by the nursing profession?	Yes	22	48%	14	44%	3	13%
	No	24	52%	18	56%	21	88%
I feel confident using the Standards to assess a nurse as competent to practise?	Yes	28	60%	30	94%	22	92%
	No	19	40%	2	6%	2	8%

<b>I feel confident using the Standards to assess a nurse as not competent to practise?</b>	Yes	27	57%	30	94%	23	96%
	No	20	43%	2	6%	1	4%
<b>I believe all nurses have a shared understanding of the level of performance expected of a competent beginning level RN?</b>	Yes	23	49%	18	56%	6	25%
	No	24	51%	14	44%	18	75%
<b>I believe an individual's attainment of competence is an important part of professional identity?</b>	Yes	46	98%	30	94%	22	92%
	No	1	2%	2	6%	2	8%

**Note: Percentages in this table may not sum to 100 due to rounding**

One hundred per cent of the higher education participants indicated they had a sound knowledge of the Standards followed by 88% of the clinical-practice group and 68% the graduate group. One hundred per cent of the higher education participants and 94% of the clinical-practice group indicated they were confident to make an assessment using the Standards, whereas only 75% of graduates reported they were confident to do so. Academics/clinical teachers were 100% confident of undertaking an assessment of their own competence using the Standards; with the preceptors and graduate having less confidence at 97% and 83% respectively. The higher education participants indicated they had more knowledge of the Standards and more confidence to undertake an assessment of their own and others competence than the clinical-practice and graduate group respectively. The clinical-practice and graduate groups had more confidence in undertaking an assessment of their own competence using the Standards than undertaking an assessment of another nurse. These results draw attention to the different knowledge and confidence levels the different participant groups had of the Standards and with undertaking assessment of their own or others competence.

In 2002, the then ANC produced a document entitled *Principles for the Assessment of National Competency Standards for Registered and Enrolled Nurses* (the Principles) to assist and guide nurses with assessment of competence. Participants were asked if they were aware of these principles. Seventy five per cent of the higher education, 91% of the clinical-practice and 72% of the graduate group answered in the affirmative. Participants were then asked if they understood these principles and 83% of higher education participants, 78% of the clinical-practice group and 76% of the graduate group and answered affirmatively. These results draw attention to the percentage of participants across all groups who were not aware of the Principles and did not understand them. Of interest was that in the higher education and preceptor groups, some participants who answered they were not aware of

the Principles also answered they understood them. As a part of the Standards, the ANMC document provides 'cues' for assessors, in the form of example activities that constitute competence in the various areas of practice, which were developed to guide assessment. Nurse-participants across the groups found these cues helpful when performing assessment with the Standards, with over around 80% of all participants groups across indicating they found the cues helpful.

The majority of participants indicated they believed the Standards were relevant to contemporary practice (88% of the higher education group, all the clinical practice group and 92% of the graduate group), however less than 38% of all participants believed the Standards were understood by the nursing profession (13% the higher education group, 44% the clinical practice group and 48% of the graduate group). This may indicate that nurses may not understand the language of the Standards, how the Standards can be used as a framework for assessing competence or how to interpret the Standards for assessment purposes. The majority of participants did not believe there was a shared understanding of the performance-expectations for beginning-level competence (51% of the graduate group, 44% of the clinical practice group and 75% of the higher education group). As beginning-level competence refers to a description of the registered nurse on entry to practice and the minimum standard for continued practice this may indicate that nurses do not understand this concept in relation to the Standards. This indicates an area which could be explored more fully during the semi-structured interviews.

The higher education and clinical practice group participants indicated that they had a similar level of confidence to undertake an assessment using the Standards to assess another as 'competent', but the graduate group level of confidence was lower (92% of the higher education group, 94% of the clinical practice group and 60% of the graduate group) or to assess another as 'not competent' (96% of the higher education group, 94% of the clinical practice group and 58% of the graduate group). These responses indicated an area where further investigation was warranted, and the qualitative stage of the research could allow a more in-depth exploration of graduates' confidence to assess.

When asked if an individual's attainment of competence is an important part of professional identity, over 90% of all participants answered in the affirmative (92% of the higher education group, 94% of the clinical practice group and 98% of the graduate group). This suggests that professional identity had particular significance for the majority of participants, but does not identify how or why competence has such significance. This finding also indicated an important area for further exploration in the qualitative phase.

The following table details, by participant group, a statistical overview of nurse's opinions regarding undertaking an assessment of competence.

**Table 11: Descriptive statistics by participant group of opinions regarding undertaking an assessment of competence.**

Questionnaire Question		Current employment area					
		Graduate		Preceptor		Academic/Clinical Teacher	
		Count	%	Count	%	Count	%
I believe my peers have the professional knowledge to undertake assessments of competence assess	Yes	30	67%	23	72%	7	30%
	No	15	33%	9	28%	17	71%
I believe my peers have the professional skills to undertake assessments of competence assess	Yes	36	80%	27	84%	14	58%
	No	9	20%	5	16%	10	42%
I believe my peers have the professional attitude to undertake assessments of competence assess	Yes	34	76%	27	84%	13	54%
	No	11	24%	5	16%	11	46%
I believe subjectivity plays a role in the assessment of competence	Yes	42	91%	22	69%	20	83%
	No	2	9%	10	31%	4	17%
I believe clinical context has an impact on an assessment of competence	Yes	43	98%	29	94%	23	100%
	No	1	2	2	7%	0	
I believe all nurse assessor's should complete specific educational preparation prior to undertaking assessments of competence	Yes	45	100%	30	94%	19	83%
	No	0		2	6%	4	17%
I use my own assessment tool(s) to undertake assessments of competence	Yes	25	56%	14	90%	20	42%
	No	20	44%	17	10%	4	58%
I use organisational tool(s) to undertake assessments of competence	Yes	29	63%	28	90%	20	83%
	No	17	37%	3	10%	4	17%

**Note: Percentages in this table may not sum to 100 due to rounding**

In response to questions about assessors attributes, participants were more likely to agree that their peers had the appropriate skills and attitude to undertake an assessment of competence than professional knowledge. This was particularly highlighted by the higher education group, as only 30% of this group agreed with this statement. There was a difference in opinion as to whether subjectivity plays a role in competence assessment, as higher education group and the graduate group largely agreed (83% and 91% respectively), but a lesser per cent than the clinical practice group (69%). The majority of participants believed clinical context had an impact on an assessment of competence with this statement supported by 100% of the higher education group, 94% of the clinical practice group preceptors and 98% of the graduate group. Eighty three per cent of the higher education group, 94% of the clinical practice group and 100% of the graduate group supported the statement that nurse assessors should be required to complete specific educational preparation prior to undertaking assessments of competence. In practice nurses use a variety of assessment tools. More participants identified they used the tools provided by their organisation (83% of the higher education group, 90% of the clinical practice group and 63% of the graduate group) compared to using their own assessment tools (42% of academics/clinical teachers, 90% preceptors and 56% graduates). This indicates that there were a number of different assessment tools used by nurses. These responses indicate an area where further investigation is warranted to identify clarify the tools used by nurses.

The following table details, by participant group, the areas of formal training on the Standards the participant identified they had undertaken.

**Table 12: Formal training on the Standards**

Question	Current employment area						
		Graduate		Preceptor		Academic Clinical Teacher	
<b>Formal training on the Standards included:</b>		<b>Count</b>	<b>%</b>	<b>Count</b>	<b>%</b>	<b>Count</b>	<b>%</b>
<b>Purpose of the Standards</b>	Yes	33	70%	24	75%	22	92%
	No	14	30%	8	25%	2	8%
<b>Description of the Registered Nurse on entry to practice</b>	Yes	38	81%	22	69%	22	92%
	No	9	20%	10	31%	2	8%
<b>Domains of practice</b>	Yes	35	75%	28	88%	21	88%
	No	12	25%	4	13%	3	13%
<b>Individual competency standards</b>	Yes	35	75%	27	84%	22	92%
	No	12	25%	5	26%	2	8%

<b>Elements of competence</b>	Yes	30	64%	27	78%	20	83%
	No	17	36%	5	22%	4	17%
<b>Assessing competence</b>	Yes	21	45%	23	72%	20	83%
	No	26	55%	9	28%	4	17%
<b>Principles for the assessment of National Competency Standards for the Registered Nurse</b>	Yes	30	64%	24	75%	19	79%
	No	17	36%	8	25%	5	21%
<b>Using the Standards for assessment</b>	Yes	17	36%	21	66%	21	88%
	No	30	64%	11	34%	3	13%

**Note: Percentages in this table may not sum to 100 due to rounding**

The participants indicated that they received varying levels of formal training in relation to assessment skills. The results indicate that the higher education group academics/clinical teachers received the most formal training on the Standards, followed by the clinical practice groups. Graduates were the least likely to indicate they had received formal training on the Standards. One exception was that graduates received more formal training than preceptors regarding the Standards in relation to the description of the Registered Nurse on entry to practice. Over 25% of the graduate group indicated that they had received no formal training in any of the areas addressed by the questions. The higher education group used the Standards the most (88%), followed by the clinical practice groups (66%) and the graduates group used the Standards the least for assessment (36%). This finding suggests that there may be an inconsistency in the content of the formal training provided to nurses at different levels and that the majority of formal training on the Standards is undertaken post-graduation.

The following table details, by participant group, the areas of formal training on assessment skills the participant identified they had undertaken.

**Table 13: Formal training on assessment skills**

Question	Current employment area						
		Graduate		Preceptor		Academic/ Clinical Teacher	
Formal training on the Standards included:		Count	%	Count	%	Count	%
Adult learning principles	Yes	18	38%	29	91%	23	96%
	No	26	55%	3	9%	1	4%
	Missing	3	6%	0	0	0	0
Identifying learning needs	Yes	22	47%	27	84%	21	88%
	No	22	47%	5	16%	3	13%
	Missing	3	6%	0	0	0	0
Effects of context on assessment	Yes	14	30%	18	56%	19	80%
	No	30	64%	14	44%	5	21%
	Missing	3	6%	0	0	0	0
Using observational skills	Yes	26	55%	27	84%	23	96%
	No	18	38%	5	16%	1	4%
	Missing	3	6%	0	0	0	0
Using interviewing skills	Yes	15	32%	24	75%	19	80%
	No	29	62%	8	25%	5	21%
	Missing	3	6%	0	0	0	0
Skills to interpret evidence	Yes	17	36%	23	72%	19	80%
	No	27	57%	9	28%	5	21%
	Missing	3	6%	0	0	0	0
Promoting validity and reliability in assessment	Yes	17	36%	21	66%	21	88%
	No	27	57%	11	34%	3	13%
	Missing	3	6%	0	0	0	0
Scope and level of practice to be assessed	Yes	23	48%	24	75%	21	88%
	No	21	45%	8	25%	3	13%
	Missing	3	6%	0	0	0	0
Providing positive and constructive feedback	Yes	25	53%	27	87%	21	88%
	No	9	40%	4	13%	3	13%
	Missing	3	6%	0	0	0	0
Procedure for assessment	Yes	24	52%	22	71%	21	88%
	No	18	39%	9	29%	3	13%
	Missing	4	9%	0	0	0	0
Pitfalls of assessment	Yes	12	26%	15	47%	19	80%
	No	31	66%	17	53%	5	21%
	Missing	4	9%	0	0	0	0

**Note: Percentages in this table may not sum to 100 due to rounding**

The participants completed a tick list to indicate what formal training they had undertaken on assessment skills. The list was generated from my own experience and from a systematic review of assessment guidelines. No participants indicated that their formal training on assessment skills addressed all elements included in the list. This may indicate that either

the training was not provided or that it was not meaningful or retained by the nurses. Thirty eight per cent of graduates indicated their training included adult learning principles, whilst 91% of the clinical practice group and 96% of the higher education group indicated their training included these. Forty seven per cent of graduates had learnt skills around how to identify their own learning needs, compared with 84% and 88% of the clinical practice group respectively. Formal training on the effects of context varied with 55% of graduates receiving training and 84% and 88% of the clinical practice group and the higher education group respectively. The higher education group reported greater formal training, followed by the clinical practice group. The graduate group received less formal training than the higher education group and the clinical practice group respectively.

In this section, a number of graduate participants did not provide a response to any of the questions and commented that the 'questions were not applicable to them'. This indicates an area where future investigation could be undertaken. The higher education group received more formal training on observational skills, interviewing skills, promoting validity and reliability in assessment, the scope and level of practice to be assessed, providing positive and constructive feedback, the procedure for assessment, identifying learning needs and the pitfalls of assessment. Seventy nine per cent of the higher education group had received formal training on the pitfalls of assessment, with only 47% of clinical practice group and 26% of the graduate group indicating they had received formal training in this area. The results indicate there was varying levels of assessment training content provided to the participants within the higher education group than the clinical-practice group and the graduate group respectively.

### **Open-ended questionnaire responses**

All of the participants provided answers to the open-ended questions in section one and two of the questionnaire which covered general demographic information and background knowledge on competence assessment. Ninety three per cent of participants provided answers to the open ended questions in section three, which asked for responses about how they would undertake an assessment of competence, and whether clinical context had an impact on this assessment. The graduate nurses provided fewer responses to these questions.



Section Four of the questionnaire had nine open ended questions asking how students of nursing are assisted to assess and develop their own competence, prepare other nurses to make assessments of competence, as well as how they promote a valid, reliable, transparent, and fair assessment of competence. Whilst there is no standard or guidelines regarding whether graduate nurses should assess or assist with the development of competence in others. The questionnaire provided an opportunity to identify whether this was occurring and to capture their responses. The participants were asked to describe the evidence they collected when making an assessment of competence against the Standards. The final question left space for any further comments. This question had the lowest response rate with 36% of participants providing an answer in this section. Twenty five per cent of the higher education group did not provide further comments in this section, 21% of the clinical practice group and 52% of the graduate group. This indicates an area where further, qualitative investigation is highly desirable.

The open ended comments were categorised into major themes and minor themes. Other comments mentioned by participants were captured under the heading of ‘other’. The following table provides an example of how the open ended questions were thematically analysed into major, minor and other themes.

The following table provides an example of how the qualitative data from the questionnaire was thematically analysed into major themes, supportive minor themes and what was classified into ‘other’ less significant themes.

**Table 14: Example categorisation of open ended questionnaire responses.**

<b>MAJOR THEMES (participant number)</b>	<b>SUPPORTIVE MINOR THEMES</b>	<b>OTHER</b>
The Standards as a guideline (33)	Legislative or governing role of the Standards (15)	Curriculum development (1)
The Standards as a framework (26)	Standards as an important part of nursing (19)	Learning contracts. case studies, and coaching (1)
The Standards as a benchmark framework (22)	Standards as an essential part of nursing (14)	
Minimum standards or baseline (30)		

On completion of the semi-structured interviews, these themes were then re-visited to identify if they were evident in both the questionnaire and interview, and whether there were any contradictory findings between the questionnaire and interview responses.

## Conclusion

This section has given details about the quantitative data from the questionnaire used in the first phase of the research. The major findings of the questionnaire are that the majority of the participants believed the Standards are relevant to contemporary practice, are an important part of professional identity and the participants believed that they had a sound knowledge of them. All higher education participants felt confident to make an assessment of other nurses' practice, using the Standards, but this was not the same for the clinical practice and graduate groups who indicated they were not as confident. The majority of nurses believed the cues provided by the ANMC assisted them in making an assessment of competence. The results also revealed that the majority of participants believed that subjectivity plays a role in assessment and that the clinical context has an impact on assessment. However, a significant proportion of participants; did not believe there was a shared understanding of performance-expectations for a beginning-level registered nurse, did not believe the Standards were understood by the nursing profession and were not aware of or did not understand the Principles.

The role of the nurse participants (either as an academic/clinical facilitator, preceptor or graduate) had an impact on individual feelings of confidence to provide education to other nurses about the Standards. Whilst all graduate nurses indicated that nurse assessors should complete formal training on assessment, this was not the opinion of all from the clinical practice group and there was even less support for this from the higher education group. The results revealed that the higher education group had received more formal training on assessment skills than the clinical practice group, with less than half of the graduates having received any form of training on assessment skills. The results also showed there was a difference in the assessment tools participants used to assess the competence of nurses. The majority of participants indicated they used an organisational assessment tool and almost half of the participants used their own assessment tool in addition to this.

The research aims to explore the interface of agency and structures in the context of competency assessment in nursing to describe the relationship between this interface and the ways in which nurses understand and utilise the Standards. The questionnaire results highlighted a number of areas where further exploration was indicated. Specifically, to determine how nurses make meaning of competence assessment in relation to the Standards, the impact of the socio-cultural contexts of practice and how assessment dynamics could impact on nurses' assessments of competence using the Standards. The semi-structured interviews would allow such an exploration behind the reasons of whether or not nurses were aware of the Principles and what their understanding of them was, why and how nurses found the 'cues' useful when undertaking assessment, why individual attainment of competence is an important part of professional identity, why the Standards were not understood by the nursing profession, and why there was not a shared understanding of performance expected of a competent beginning-level registered nurse.

This chapter now moves to present the findings from the questionnaire and the semi-structured interviews, which are combined, and presented as a series of key themes.

### **The contextual nature of the Standards**

Nurses highlighted the impact of the practice context and how it can assist or constrain their engagement, application and connection to the Standards. The context of practice is complex and typified by competing demands and interactions with other health professional contexts across practice specialities, patient acuities, disease co-morbidities, financial and human-resource constraints. These demands also include caring for patients whilst supporting students' learning needs and maintaining personal competence (Harwood, Reimer-Kirkham et al. 2009). It is within this environment that nurses must operationalise the Standards and navigate the complexities of nursing practice and competence assessment.

### **The relevance of context to competence in practice**

The participants recognised that the assessment of competence is sensitive to the context nurses find themselves in, as described by a preceptor in the following questionnaire

excerpt, 'Context may make assessment more difficult, but competency should be demonstrated at all times' (PR00). The participants' understanding of how context influenced assessment was an area explored in both phases of the research. In the questionnaire participants were asked whether they believed clinical context has an impact on an assessment of competence, with 92% of participants supporting this statement (100% academics/clinical facilitators, 93% preceptors and 97% of graduates). Further, the participants written questionnaire comments on the impact of competence included; 'clinical context is very relevant' (PR08); clinical context can influence/impact on assessment of competence' (PR12), 'clinical contexts go hand in hand with assessment of competence'(PR102), 'depending on the circumstances of the assessment process, where, when, how, why, all can impact on a situation and can affect the outcome' (PR55) and 'clinical context has an impact as the nurse needs to recognise the individuality of the situation' (PR13). The context of competence assessment is also perceived as comprising of a relational relationship between context and the assessor-assessee relationship as a preceptor explained; 'I believe the clinical context affects the assessment process, both for the assessor and the assessee' (PR00). This finding highlights the relational aspects of assessment between context(s) and the assessor and assessee and the importance of considering how these interact together in the context of practice.

The *ANMC Principles of Assessment* (the Principles) state that the demonstration of competence must be undertaken in the practice setting by a registered nurse (ANMC 2002). There are numerous practice contexts in nursing, which include the settings of acute care settings (e.g. surgical, medical and theatres), community, mental health, aged care and schools of nursing. In practice, assessments of competence are made by an assessor (registered nurse) who makes a judgment of performance and undertakes a decision making process, which is influenced by the individuals interactions and the social context of assessment. The participants supported assessments taking place in the context of clinical practice as the following questionnaire excerpt indicates, 'The only context is nursing, is a clinical setting' (GD05). The participants highlighted that the notion of context was linked to the clinical practice setting with the actual 'practice' context raised as impacting on their assessment experience, as opposed to raising a multitude of other contextual differences

(e.g. time of day, gender, age of client). A typical example when participants were asked whether they believed clinical context has an impact on an assessment of competence was, 'As most assessments are being done on a clinical basis then clinical context is important' (CT56). Competency assessment was considered by the participants to be an in-context assessment. That is, competence was seen to be akin to being competent for my age, for my level of training, and as a surgical nurse, and as a nurse at a certain hospital.

The notion of the relevance of the clinical context on the interpretation of the Standards in practice was discussed by Roberta, an academic:

... for that person who's working in a particular area, they want to know "What does that [competency] mean for me? How can I demonstrate in my clinical area, with my patients, with these staff I work with, that I am performing against this competency satisfactorily? ... It comes back to that question again of "What does competence look like when you're trying to actually apply it to an incident or to a person? What do they have to demonstrate to meet or not meet that?"

Roberta AC

This excerpt from Roberta highlights that assessment is essentially an interpretive process. An interpretive approach has been supported in nursing because it relies on the experience and expertise of the assessor in making judgements on the practice of another person (Butler 1990; Schostak, Phillips et al. 1994; Redfern, Norman et al. 2002; ANF 2005). Interpretive assessment methods rely more on the context than the assessment instrument and have persisted for a number of decades (Benner 1984; Butler 1990; Bradshaw 1997; Chambers 1998; ANMC 2006; Govaerts, Cees et al. 2007; Bradshaw and Merriman 2008; ANMC 2009). However, all assessment processes are complex, incremental, and, above all, judgmental. Each assessment of competence is unique because it is intrinsically and necessarily variable. Significantly, an interpretation of competence involves a consideration of the pre-existing structures (e.g. policies, procedures, assessment tools) within the practice setting. That is, assessment of competence is constrained or enabled by these structures. The Standards are also interpreted in relation to an individual's competence, by both the assessee and assessor, and the reproduction of these ideas allows the Standards use to be perpetuated.

### **Macro, meso and micro contextual factors**

Context comprises of the macro, meso and micro contextual factors. The deep and surface structure of the macro level both drives and constrains the developmental and experimental micro level processes and meso levels (Kirst -Ashman and Grafton 2009). The participants highlighted how a range of policy, organisational and personal factors influenced their clinical decision-making. These factors can be described through the multidimensional concept of macro, meso and micro levels of context<sup>35</sup>. From a top-down perspective the macro level includes government and professional regulation, legislation, historical and socio-political and demographic factors which can make an impact on assessment and influence nurses' actions in relation to the Standards. The meso level includes the nursing unit or department, health care agency or institution and is where policy begins and takes shape and the micro level includes the forces that address the internal practice environment, inclusive of the nurse-patient and nurse-nurse relationship(s).

The participants provided examples of all three contextual levels when they spoke about competence. Firstly, the participants recognised the significance of the macro environment with the Standards providing the overarching regulation of the nursing profession. A graduate nurse commented that the Standards operate to provide a 'national standard' (CT56), 'set a standard for nursing; provide the community with a level of expectation' (GN 60), and 'they govern how we practice' (PR05). This establishes a link between the role of the Standards as a tool to regulate individual practice and as a protector of the public. This highlights that from a macro perspective the Standards, as a tool of nursing regulation affects the practice of the large population of nurses.

Secondly, at the meso level the participants noted that departmental culture and features could also affect the assessment process; 'depends how busy the unit is and how people manage [their] time' (CT02). This provides an example of how nurses are required to negotiate the context of practice and influences related to practice environment with its

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<sup>35</sup> The terms macro, meso and micro levels are terms used across a number of areas including studies of organisation behaviour and management studies (see for example House, R., D. Rousseau, et al. (1995). The Meso paradigm: A framework for the integration of micro and macro organizational behavior. *In Research in Organizational Behavior.* (eds.). L. L. Cumings and B. Staw: 71-114.

physical infrastructure and competing social structures. The meso level deals with the cultures and structures within organisations, as Tracey explains in the following excerpt, 'As a grad I needed to learn the environment and to learn [about] the different areas' (Tracey CT). The meso level also deals with the divisions within nursing practice, and the power positioning among groups of nurses (e.g. assessors and assessees) that take place. Céline a graduate provides an example, 'We [students] have competencies that need to be satisfied on each ward, unit specific competencies' (Céline GN). At the level of the meso, all nurses must navigate the practice structures of nursing and meet the competencies set for that area.

Thirdly, the micro level deals with the daily actions and interactions of nurses in practice, with nurses acting as the individual carriers of rules and the systems they organise and work within. The participants provided examples of the micro contextual factors which included individual attributes and subjectivities. A preceptor highlighted the forces acting at the micro level, 'Each patient is individual and their response, attitude, etcetera, and has an impact on care, thus altering the care given. So, the individual clinical context has an impact as the nurse needs to recognise the individuality of the situation' (PR14), and further 'If the assessor is busy, the assessment is sometimes rushed and not accurate or objective. The same with assessee, if pressured may respond in a different way' (OT00). These examples highlight the way experiences, such as patient needs and the business of the workplace, can impact and influence clinical decision-making at the level of the nurse-patient and assessor- assessee interactions. The participants, therefore, described the practice setting as characterised by networks. That is, the structures and relationships that exist within the practice setting that are an inherent part of the assessment process. These findings indicate that the nurses' ability to develop an understanding of the Standards can be promoted or hindered by the contextual factors emanating from the macro, meso and micro levels.

### **The interaction between practice context and the achievement of competence**

Participants were aware of the potential impact of context on assessment. A graduate noted; 'It depends on which context you are involved in as to how competency can be assessed' (GN68). The different nursing contexts were believed to influence (particularly in

a negative way) the outcome of assessment. Participants gave the following examples; 'Sometimes the clinical context is too advanced for the person being assessed ...so they can be set up to fail, also that user may not have ... developed learning related to that clinical context (PR02) and 'The complexity of the context can alter performance' (AC02). These examples highlight that assessment is impacted on by the assessment context, with different contexts having different levels of complexity which can impact on an individual's actual performance at any given time.

The participants focussed on the complex relationship that exists between how the Standards act as a social norm that shapes nurses' behaviour and interpretation of the Standards in practice. The significance of assessment activities interactions was considered by the participants to involve connections between learning and the social contexts of practice. The participants experienced the Standards as context-bound, and some found it difficult to interpret or apply them to their practice or assessments of competence. Tracey provided an example of the challenges she faced in applying the Standards to her practice '...relating it [practice] back to the competencies, that was hard' (Tracey GN). The unpredictable, ever-changing and dynamic contexts of practice required the participants to adapt, if they were to develop and maintain their competence. From a graduates perspective 'context is variable (daily) and can alter the way you practice to provide competent care' (GN81). These findings are consistent with the literature that demonstrates how context can impact on the assessment of competence process (Giroit 1993; Thornhill and Wafer 1997; Chambers 1998; Spratley, Johnson et al. 2000; Dolan 2003; Hendry, Lauder et al. 2007; Grealish 2009; Levett-Jones, Gersbach et al. 2011).

### **Summary: the contextual nature of competency assessments**

This section has described the importance of context in relation to the assessment of competence with the Standards. The contextual nature of the Standards includes; the distribution of resources, the availability of the assessor, the time available and assessment tools used. It also includes the pattern of normative expectations; the understanding of beginning level competence and the interpersonal interactions of what is happening in the practice between the assessor-assessee in their given social context. The participants



acknowledged that assessment of competence in the practice environment is impacted by a variety of contextually important interpersonal interactions; what was happening in the practice environment, how busy the assessor was, the competing practice demands, which can all influence the outcome of their competence assessment. The application of the Standards are both reproduced and transformed over time by nurses' interactions in the context of practice. These nurses described challenges in relation to understanding the Standards and in matching these sophisticated standards to nursing practice. This indicates a potential gap in the way nurses are introduced to and taught about the Standards.

### **The disconnect between the function and the application of the Standards**

The findings highlighted that the participants found the process of connecting the Standards to practice and assessment to be problematic. Statements of competence have been criticised as vague and open to interpretation (Bradshaw and Merriman 2008). The participant's responses reflect this criticism, and identified how the language of the Standards affected their relevance, functionality and applicability. As Gail a clinical facilitator commented; '[the Standards are] probably a little too complex for simple application' (Gail CF). This sense of disconnection exposes a gap between the stated purposes and the practical application of the Standards. Gail went on to say; 'there's still a strong element, in that there has been a huge amount of time and effort put into drawing them up, and there's a disassociation I think for me between what they are and what I do' (Gail CF).

Another area where the function of the Standards sat in contrast to their application was in the tension inherent in distinctions between a novice and an expert nurse. As one preceptor explains; 'I do think a lot of RN's struggle with this concept of Beginning Level Practitioner - Expert Practitioner because there is no obvious delineation in the competency standards' (PR08). The questionnaire results supported that the majority of nurses did not believe there was a shared understanding of the level of performance expected of a competent beginning level RN (75% of academics/clinical teachers, 44% preceptors and 51 graduates).

Graduates expressed confusion when they were required to provide evidence of the Standards in their practice, particularly in relation to the identified the relationship between the Standards and their elements as explained by graduate Tracey:

You just went through the whole thing [the Standards], every [one] and it kind of felt tedious and often I think because of that, the relationship between what they actually were and what I was doing was kind of lost, because to students sometimes it is 'another number we have to write down' and things like that. Tracey GN

The theme of disconnection is also illustrated by the following excerpts provided by Maria, a clinical facilitator. She speaks about how clinical nurses may not apply the Standards, and the reasons behind this:

[The Standards are] quite comprehensive, which is a good thing and I guess in my position I think that they're useful and that they're relevant and they make sense. But I think it's that gap between what they're actually being used for; a nurse who's on a ward working shift work, whether they actually are understood and whether they're being used or not. Martia CF

This excerpt implies that for some participants the link between the Standards and practise was not immediately obvious, highlighting a theory-practice gap. Thus, the Standards were perceived as theoretically relevant, but their practical relevance was questioned, a notion which has been addressed in the literature for some decades (Walker 1995; Rolfe 1998; Chapman 1999; Grealish and Ranse 2009; Levett-Jones, Gersbach et al. 2011). Gail, a clinical facilitator, further explores the value of the Standards in certain circumstances, and yet their irrelevance to day-to-day practice:

For me it is - I don't think there's a specific purpose in day-to-day practice, in clinical practice. In terms of looking at things like setting the bar for the educational programs, definitely there's a role there. For looking at things like nurses who may require some kind of review or assessment of their Standards of care whether they've been reported. The Standards in that situation give us some kind of equity for assessment so that we're actually assessing people using the same foundation principles and for me that's what I think it's about. Gail CF

Gail acknowledges the Standards usefulness to guide curriculum development, as a benchmarking tool, but questions their applicability for determining day-to-day competence in practice. Thus, a contradiction exists between what is expected regarding assessment

with the Standards from a regulatory perspective, and the reality of what is actually happening with the Standards in practice. Underpinning nurses disconnect between the function and the application of the Standards is the finding that much work is required by the academics to unpack the Standards into the curriculum prior to educating students of nursing about them.

The perceived usefulness and connection with practice of the Standards was variable. For example one graduate believed 'In terms of policy and procedure references, they are useful; however they are impractical as a resource in the everyday setting' (GN08). This further exposes that the Standards are not seen as useful by all nurses. As discussed earlier, the assessor and the assessee would negotiate which competency elements were evident in practice during assessment. However, as the following excerpt illustrates, this negotiation can be related to the perceived differences in the understandings of the Standards:

I think some individual nurses have a very sound understanding of the Standards required for nurses in practice. At the same time I believe there are just as many nurses who wouldn't know what the Standards were, or how to locate them. ....I feel 'standards' are well utilised in undergraduate assessment, however I don't believe the use of 'standards' is strong in clinical practice, or assessment of existing nursing staff - despite annual registration requirements.

PR03

The challenges around the application of the Standards were explained more specifically in the following excerpts from Margaret a preceptor:

'I just find that sometimes there are a lot of the guidelines...all of the guidelines there I find can be just a bit either repetitive or not necessarily fitting in what we're actually doing at the time.' And when first year students came on board and we found then that that it was more difficult trying to fit them in with the competencies [the Standards] because of their level of experience at the time.'

Margaret PR

This excerpt highlights how, in practice settings, the assessor must navigate a number of different guidelines and the needs of students on multiple levels of learning. Céline GN, a graduate, felt that the lack of understanding of the Standards came about as a result of the disconnection between the Standards and practice. 'They're probably not understood because people [nurses in practice] aren't that familiar with them on an on-going basis'

(Céline GN). This excerpt highlights that understanding the Standards was related to their continued use in practice.

### **The interpretive processes in the use of Standards for competency assessment**

Translating and interpreting the context-dependent statements of the Standards was seen as a challenging and necessary, or in some cases an unnecessary task, that was not straightforward. Factors which influenced participants' engagement with the Standards included how they were introduced to them (training approaches), the language of them, and how they made meaning of them.

The level of understanding of the Standards was linked to an individual's practice role and their level of exposure to the Standards as explained by Martia, a clinical facilitator:

I think it depends what your role is within nursing. So if you're a student nurse, you've got a great understanding because you're using them all the time as part of your studies. If you're in education or an academic person, then you know you're currently always referring to them. Whereas if you're a day to day nurse I think it's something that, sometimes is seen as just something that you tick off against because that's what you need to do in order to become registered and I think people don't actually go much further than that to see if they are actually meeting them.

Martia CF

Martia (CF) believed students, academics and clinical facilitators have a greater understanding of the Standards because of their continued exposure to them. However, from a graduate's perspective, learning the Standards outside of the practice context renders them uninteresting and uninspiring. Lucy (GN) provides an example of how students she experienced the Standards as a student:

When something's dry and it's a bit boring to read and you can't, because you haven't been in practise, you can't really see how that relates it can be overwhelming and just like well don't really want to make the effort to read through it and try and understand it because you're just overcome I guess when you're working as a nurse.

Lucy GN

As a graduate, Lucy's experience suggests that the way in which the Standards are explained and demonstrated to students can be improved. Increased exposure to the Standards as a student, academic or preceptor culminated in the participants 'acceptance' of the

Standards. Gail (CF) explains her early experience with the Standards, saying that 'initially the framework was really confronting' (Gail CF). Gail went on to say that with repeated use of the Standards as a part of her clinical facilitator role, that 'I'm more accepting of the way that [ANMC has] structured the framework of them [the Standards] (Gail CF). This suggests that a tolerance or acceptance of the Standards becomes easier with time. A graduate confirms their unease with the Standards, explaining that 'as a novice nurse it is all a bit confusing' (GN59).

In terms of nurses' opinions of the language of the Standards, the participants indicated the Standards may be easier to use if they 'just [used] straight talking language. I think nurses would relate a lot more to that than, sometimes, as I said before, they are very convoluted, so therefore sometimes people don't relate to them very well' (Natalie PR). The adoption of broad language, which aimed to make the standards applicable across a number of contexts, acts as an interpretive barrier (McGrath, Anastasi et al. 2006). Making meaning of the Standards was considered challenging for a number of reasons. This was particularly highlighted by graduates as explained by Tracey, 'I think the thing with the competency standards and assessment was that, sure we wrote down what we thought what numbers matched those competencies, but we were never given any feedback on maybe that number doesn't match that skill that you have done' (Tracey GN). The Standards by themselves do not describe how to assess competence, rather the operationalisation of the Standards require educationalists to develop assessment tools for nurses to use in practice. The literature has provided much critique on the quality and lack of consistency of such tools, most recently highlighted by Crookes, Brown et al. (2010). Indeed, the *ANMC Accreditation Standards and Criteria for the Registered Nurse* (ANMC 2009) require the higher education sector map where the competencies are contained in the curriculum and assessed throughout the program, which requires a sophisticated understanding of how the curriculum matches a specific area of competency.

All participant groups highlighted the Standards language was a particular challenge. An academic provides a reflection on her student experience prior to completing her final practical placement, by saying 'I found it very difficult to work out what they [the Standards] actually meant' (Roberta AC). From a graduate's perspective, 'You have to be constantly

looking at the ANMC competencies; because part of that is to say what competencies you've achieved' (Céline GN). Further, Lucy also highlighted a dissonance between practice and the Standards, 'I think people know why they're there, but as to how they fit into practice can sometimes be a bit blurry I guess. I don't know' (Lucy GN). This finding is consistent with the literature that identifies there remains a lack of shared understanding of what competency is and how it can be demonstrated or measured (Carraccio, Wolfsthal et al. 2002).

The participants indicated that interpreting the Standards was problematic because it was not a straightforward process to make connections between the Standards and nursing practice. The following examples were provided by preceptors and academics, 'It's [the Standards] not very clear I'm afraid. I just think they take a bit of studying, it's not just pick it [the Standards] up read it through and say right okay' (Margaret PR), 'Not everybody's going to understand that [the Standards]. They have to read it six times before they can [get] it into their head or ask somebody, can you tell me what this means?' (Ruth PR) and Roberta provides further support of this in the following excerpt. 'Because I don't think they [the Standards] are clear to people. They're very broad and generic so they can apply to everyone's area of practice' (Roberta AC). These findings highlight that the Standards language is perceived as being broad and inaccessible, which is further impacted on by the social process of interpretation in that the language of the Standards needs interpretation.

When asked at interview how the Standards could be improved in future iterations Roberta, an academic replied:

I don't really know what else would make it better but there's a lot of words and I don't know whether it is easier to look at the domains and draw from the – looking at things under domains rather than each individual little thing? ...  
Roberta AC

### **Interpreting the Standards in relation to nursing practice**

The issue of interpretation of the Standards was raised by all the participant groups. A graduate commented that '[the Standards] can be interpreted to many things' (GN 77) and an academic said, 'it depends on individual perception as to interpretation' (AC00). An

academic commented that interpreting the Standards can be best explained on a continuum, with the novice interpretation at one end and the expert interpretation at the other end:

That's where I think the competencies to me are .... that's where I think the interpretation of them can actually be a problem. It's because the issue of the novice interpretation of them versus the expert interpretation of them. Tonia AC

Tonia (AC) believed that novice nurses would interpret the Standards differently to more experienced nurses. Further, a graduate recognises there will be inherent differences between how any individual interprets a text document as explained in the following example, 'Everyone thinks differently. Someone might read something differently to as I would read it or something like that, and it might not make sense to them or might not make sense to me or something like that' (Laura GN10).

The interpretation of the Standards by students, in particular, was believed to be complicated by a lack of feedback, or ambiguous feedback from preceptors. This was seen as directly related to how 'numbers' rather than consultation or constructive feedback was used in the assessment of competence. A graduate explains:

I think the thing with the competency standards in that assessment was that we wrote down what we thought what numbers matched those competencies, but we were never given any feedback on maybe that number doesn't match that skill that you have done. Tracey GN

Certain aspects of nursing were believed to be easier to assess than others leading to the privileging of the more 'quantifiable' parts of competence. The following excerpt from a graduate explains this:

Some of them [the elements of the Standards] are pretty obvious. I feel like I need them in front of me to talk about them, but I know there's ones that actually relate to practical skills like medication management and stuff like that. They're pretty self-explanatory, but some of the ones in the less quantifiable categories like ethics and all that stuff, some of them were a bit vague. That's how I felt then. I don't know if I read them now whether I would understand it differently. Elizabeth GN

Elizabeth explained she believed there were different levels of understanding between the more quantifiable dimensions of practice and the less measurable, intangible aspects of practice. In keeping with the above finding, a clinical facilitator commented, 'it is much easier to assess competence with clinical skills that can be seen and talked about' (CT10). These findings indicate that the participants found certain areas of practice less visible or discernible and therefore harder to 'assess'.

To further assist with the interpretation of competence when making an assessment, the ANMC developed 'cues' which are listed beneath each of the competency elements. The cues are selected examples of activities illustrative of the competency standard (ANC 2002). When asked whether they found the cues useful when making an assessment of competence, over 80% of all participants indicated they assessed using the cues (academics/clinical teachers 92%, 91% preceptors and 87% of graduates). When the participants were asked during interview about the usefulness of the cues their responses indicated that they either added to their confusion and for the graduates particularly so as they had no awareness of the cues. For example, Gail a clinical nurse educator, indicated that 'I think the cues - there's just so much of it to read through' (Gail CF), 'I think sometimes like if you just have the particular tool that we have that you could, they're a bit ambiguous, so what we actually want from them may not be very clear from just the cues' (Martia CF). Responses from graduates were particularly telling: 'Cues. What cues? Is that terrible? Sorry' (Lucy Grad), 'What cues? For what' (Elizabeth GN), 'The cues, what cues?' (Céline GN).

Whilst the questionnaire results indicate that the participants found using the Standards cues useful when making an assessment of competence, the interview findings suggest that the cues did not meaningfully assist users with the interpretation of the Standards. The implication of this is that the cues may have become buried in something that is already perceived as too difficult to understand.

### **Principles for assessment of competence**



The ANMC developed a document entitled the Principles of Assessment for the ANMC National Competency Standards for the Registered and Enrolled Nurse 2002<sup>36</sup>. The majority of questionnaire participants indicated they were both aware of (72.2% of graduates, 90.6% of preceptors and 75% of academics/clinical teachers) and understood (76.1% of graduates, 78.1% of preceptors and 83.3% of academics/clinical teachers) the Principles which include accountability, performance-based assessment, contextual relevance, evidence-based assessment, validity and reliability in assessment and participation and collaboration (ANC 2002). However, there was no reference to the Principles made by any nurse during the interviews. The consequences of this finding suggests that the implementation plan for the Standards needs to be ongoing and there may not been an adequate maintenance plan that ensures adequate education and training is provided for the new generations of nurses.

The broad language of the Standards impacted on nurse's engagement with them. To use the Standards all nurses need to make sense of them so that they could *connect* or *relate* them to the context of their practice situation. The participants highlighted that they were unable to identify an alternative, including mobilising assertive social action that would bring about change to enable the language of the Standards to be operationalised more readily.

When Natalie (PR) was asked how the Standards could be improved her response was *'just straight talking language*. I think nurses would relate a lot more to that than - sometimes, as I said before, they are very convoluted so therefore sometimes people don't relate to them very well' (Natalie PR). When asked how the Standards could be improved Margaret, a preceptor, issued a challenge to those who wrote the Standards, 'I guess it's just the language of them. I just would like people to try and use them. Well, the people [nurse regulators] who are writing them' (Margaret PR). These responses provide examples of participants' frustrations about the inaccessible language of the Standards, and the difficulties this presented to their practical application.

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<sup>36</sup> Principles of assessment of the ANMC National Competency Standards for the Registered and Enrolled Nurse were first published in 2002. No further review has been undertaken since their initial development.

When asked at interview what feedback they would give those who wrote the Standards the following response was given, 'don't have so many, make them simpler....Are they nurses that review them? Practising nurses? Do they have input from lots of other people?' (Therese PR). For these preceptors, the volume of information contained in the Standards was an issue alongside highlighting that they were unaware of whether nurses were involved in the review process of the Standards.

The preparation and skill of the preceptor was also perceived as a critical factor in the assessment process and impacted directly on the quality and level of engagement of the assessor. This findings highlight that a status quo has been maintained in regard to current interactions with the Standards because both preceptors and graduates hold a subordinate position that allows the current misunderstandings of the Standards to be perpetuated and academics and clinical facilitators have been unable to identify or progress a way forward.

The findings call to attention several aspects of interpretation of the Standards including; the perceived quantitative bias in interpretation, the greater ease of interpretation of the Standards as you progress in your career (i.e. the difficulty for students to interpret), the individual differences of interpretation related to the subjective nature assessments and the lack of feedback assesseees received from others regarding their interpretation of the Standards.

### **The issue of language use in the Standards**

The tensions of how they the Standards could 'fit' or 'apply' to practise was raised by the participants. The participants provided numerous examples of the difficulty they had applying the Standards; saying 'maybe it's just that there's a lot of stuff to read through, a lot to take on board (Margaret PR). The participants had several issues with the language of the Standards, particularly in relation to the number of elements that were covered by the Standards, and the broadness of the competency elements. Participants felt that this lack of transparency prevented them from being confident in their understanding use of the Standards. This was summarised by Therese, a preceptor who has been nursing since the introduction of the Standards into practice:

'Because they're [the Standards] not really specific. Well that's how we, well they do mean something, every single one of them. You have to comply with (pause), well they're all about (pause), this one's all about the legal requirements and I guess they have to mention them all with legislation and common law. Yeah, but it's just so many dot points to each of them'

Therese PR.

This excerpt reveals that the competencies are considered to be too broad and vague with too many elements. This excerpt also provides a good example of how difficult it is for some nurses to discuss the Standards or explain their understanding of them. When the participants spoke about applying the Standards to practice, they felt that the language created mis-understandings, as one graduate commented, 'some of them are worded a little bit tricky. You really need to sit and think. A couple of them you think what does that really apply to? What are they actually really saying there?' (Laura GN). Laura was not alone as the majority of the participants drew attention to the ambiguity of the language of the Standards which directly affects how nurses relate to them.

The language of the Standards was advanced as the language of practice and the language of assessment as explained by a preceptor, 'they [the Standards] provide the guidelines which outline our nursing practice and guide our performance and also provide a framework for assessment of practice' (PR00). However, the language of the Standards hindered the participants from connecting the Standards to practice. The graduate participants in the questionnaire and interview made broad references to this issue as follows, 'As a novice nurse it [the Standards] is all a bit confusing and daunting' (GN58). From graduate Elizabeth's perspective, 'It can be overwhelming and, just like well [you] don't really want to make the effort to read through it [the Standards] and try and understand it [the Standards] because you're just overcome I guess when you're working as a nurse' (Elizabeth GN).

The findings highlight different levels of understanding of the Standards between the different groups of nurses. Nurse academics and clinical facilitators supported the Standards role in guiding curricular development and as a benchmarking tool but questioned their applicability for determining day-to-day competence in practice. They also highlighted that the more exposure nurses had to the Standards the greater their

understanding and ease of interpretation of them with students, academics and clinical facilitators having a greater understanding of the Standards which they related to their level of exposure. The preceptors highlighted challenges with interpretation of the Standards and suggested this was impacted on by students' trajectory through their program (the further through the easier it was for them to use the Standards). Graduates also indicated that they had challenges in understanding and interpreting the Standards. Whilst all participants indicated there was a disconnection between the function and the application of the Standards this was probably the greatest for them during their student training.

### **Student introduction to the Standards**

The issue of how the Standards were introduced to the students was explored during interview. Successful dissemination and uptake of standards is argued by Grimshaw (2004) to depend on careful consideration of the choice of subject and analysis of the situation into which they are going to be introduced, with steps taken to actively implement them, rather than just disseminating information. In the following excerpt, Harriett, an academic, explains the process of teaching nursing students about the Standards as similar to the process of 'imbibing':

I guess it's about imbibing. They get to hear about them [the Standards] in first year, not necessarily me but they get to know that these competencies. They're going to hear a lot more about them in the next two to three years - the ANMC competencies. We talk about them - and at first I talk about them in terms of being a set of standards that they must demonstrate to be a registered nurse. A set of rules, a set of standards, a set of standards against which they will be assessed individually. And then we start talking in terms of the domains, because they involve domains, they're broken down into manageable chunks if you like, ...chunks so that we're able to identify areas. Harriett AC

This process commences when the students are first introduced to the notion of the Standards, and are subsequently introduced to smaller parts (domains). The reference to 'imbibing' implies that the introduction of Standards is seen as a process that evolves the absorption of the Standards naturally and incrementally over the course of the Bachelor of Nursing program. This quote also evidences how nurse academics perceive the initial dissemination of the Standards as a process that occurs through absorption.

During interview, Céline a graduate emphasised her introduction to the Standards was confusing because she was unclear about the relationship between her practice and the Standards:

Probably confusion because we learnt about them in Uni and when they [nurse academics] started talking about these competency standards and 6.6 and 6.million it was quite overwhelming. You didn't really relate it to nursing practice I guess. So I remember when they talked about it and I really didn't have any idea what they were talking about. Céline GN

This implies that when nurses are taught about the Standards they are expected to try to commit them to memory and recall them as numbers. The graduates when asked about their recollection of when they were first introduced to the Standards explained that 'I think I actually found it really confusing'... where it [the Standards] all fits in, and what they actually relate to and where the ANMC comes in to regulate practice' (Tracey GN), because 'when they [nurse academics first] talked about it [the Standards] I really didn't have any idea what they were talking about' (Céline GN). The lack of connection of the Standards was put forward as a reason why nurses did not understand them, 'you don't know what they mean or anything because you don't really do any practical stuff in first year' (Elizabeth GN). These findings suggest that the Standards become easier to interpret as students' progress through their education and career, because as students they experienced difficulty interpreting the Standards.

It would seem unreasonable to expect someone to remember all of the Standards given that there are ninety seven elements within the ten competency standards and four overarching domains (ANMC 2006). Further, to undertake an assessment of competence nurses must inevitably negotiate structures and constraints to identify where a competency element 'belongs' or how an element may 'belong' across a number of the competency elements. This resulted in the students of nursing feeling overwhelmed by the number of competency elements within the Standards and for preceptors there were challenges when determining what competency standards were evident. 'It's hard sometimes to say this part of what you're doing belongs there and this part belongs somewhere else and this part belongs somewhere else when you're doing them' (Margaret PR). Making a connection between the

Standards and the elements of competence contained within their practice was raised as problematic.

The participants highlighted that the sheer number of elements impeded them from being able to identify where an element fits within the Standards and how particular elements relate to their practice. This is supported in the following two excerpts from graduates. 'My first year of nursing I was like, what is this [the Standards]? This is so overwhelming!' (Laura GN), similarly 'Competency Standards are a very dry topic and not assessed in an interesting way at Uni i.e. listing 1.1, 2.2, 5.2, etc. etc. Many graduates may not want to look at them again' (GN9). These graduates have experienced problems, which appear to be linked to a deficit with how the Standards are introduced and used for assessment of competence. These graduate nurses described their experience with the Standards as 'overwhelming' and 'dry', which resulted in not promoting their understanding of them. It appears that nursing has developed the Standards, but that they have not been explicitly accounted for in the curricula or unpacked by the academy in a way that allows students (and others) to understand and engage and interact effectively with them.

The large number of elements within the Standards was an area of major concern for academics charged with introducing the Standards to students the participants. A typical example of this concern is provided by Tonia (AC). 'I just don't know whether the actual level of understanding is there because they probably see it as too confusing and too many. So in each domain, there's quite a few, and I think they're [the students] not at the point where that really goes in' (Tonia AC). Tonia provided further explanation:

I think because there are so many elements of competence within all the domains that what they think is one element in one domain is actually probably better described in another one. That's usually where I think people will get confused....and that some of the competencies overlap, and the students find that sometimes a bit hard because they say, "Why is it in this one? Why isn't it in that one?"  
Tonia AC

Tonia (AC) believes that the number of elements of the Standards and the overlap between the elements adds to the confusion. From the perspective of a preceptor, they too found the number of elements of the Standards added to the confusion surrounding them as demonstrated in the following excerpts, 'I think they're [the Standards are] confusing

because, just because there are so many' (Margaret PR). This highlights the challenge for the participants in having to navigate the large number of competency elements contained within the Standards.

The findings have highlighted continuing tensions regarding understanding the language used to express and apply them to practice. Perhaps too much has been taken-for-granted regarding how students come to understand the Standards because the graduates emphasised that the way the Standards were introduced did not promote an understanding of them. Of more concern was that nurses could not understand how the Standards were linked to nursing practice or how they were used to make an assessment of competence. The findings outlined above clearly demonstrate that the language of the Standards is problematic and this translates into frustration for nurse preceptors and students of nursing who are required to apply them to practise. Nurses' frustrations with the Standards have not resulted in call to action by nurses and as such their concerns remain unheard. A major function of the Standards is to enable assessment of beginning-level competence to be made and it is this function that requires a re-evaluation. The continued support of the Standards by nurse regulators and academics makes it difficult for students or assessors to say they don't understand the Standards. Instead, these nurses have become complicit and have continued to 'play along' and maintain the status quo of the position of the Standards.

Nurses use of the language of competence, the Standards, as a mechanism which identifies and defines them as part of the nursing profession and thereby promotes the power and authority of the Standards through their continued communication. The Standards are used to; transfer ideas of competent practice, represent nurses as a competent group and to inform nurses of the standard required to deliver safe and competent care. Whilst the Standards as a regulatory tool have the power and authority to include and exclude nurses from practice, it appears that nurses across all participant groups who had challenges with the Standards had minimal power and authority to articulate any dissident views that could stimulate open critique and debate of the Standards.

## Impact of roles when operationalising the Standards

A critical factor in the assessment process is the competence of the assessor, which has consistently been raised in the literature (Neary 1999; Lofmark and Wikblad 2001; Kevin 2006; Levett-Jones, Fahy et al. 2006; Ranse and Grealish 2007). Nursing as a practice based discipline acknowledges that practical experience is a vital part of gaining competence (Benner 1984), with the clinical learning experience seen as the single most important element (Warnea, Johanssonb et al. 2010). However, the graduate-participants believed that their relationship with their preceptor or assessor was pivotal to them gaining an understanding of the Standards. 'You want your preceptor to be able to assess your practice and give [you] positive feedback and constructive criticism' (Lucy GN). There is considerable evidence in the literature that a one-to-one relationship is of prime importance to the students learning and professional development in clinical practice (Campbell, Larrivee et al. 1994; Crawford, Dresen et al. 2000; Fereday and Muir-Cochrane 2006; Nicol and Macfarlane-Dick 2006; Allan, Smith et al. 2008). The following graduate excerpt emphasises the importance of the preceptor-assessor role in making the Standards more explicit to students:

They [good preceptors or clinical facilitators] just said this would apply here, or what do you think would apply there ... but I want you to go back and see if there's more that you can add, because there would be plenty more there. So that kind of put the onus back on to myself to go through them [the Standards] and find them and things like that. Laura GN

Both graduates Lucy and Laura highlighted how a reciprocal responsibility exists between the assessor and assessee, with the assessee challenged to review their practice to ensure they were able to identify and provide evidence of the Standards within their practice. The quality of the assessor's decision-making and evidence of the assessee's competence was a contentious area for the students because the assessment decision could negatively affect their assessment outcome. If the assessor could not attest to the students' competence it was unlikely that the student would progress in their program. The assessor therefore has a vital role to play, not only in undertaking assessments of competence, but also in providing constructive feedback, educating the student regarding how their practice is meeting the requisite standards and providing an assurance of their competence.



The student participants indicated that the competence of the assessor was critical because the assessor's knowledge and skill impacted directly on the quality of assessment. The students believed that specialist preparation to become a preceptor<sup>37</sup> increased an assessor awareness of the Standards and their ability to make connections between the Standards and nursing practice. The nurses who had not had this training or education were described as having little connection with the Standards, as Tracey a graduate explains:

I wasn't really assessed by a hospital trained preceptor, who [I believe] would be more aware of the ANMC competencies because they are constantly assessing students against them. I don't think, as a student, there was much connection with the nurses [non hospital trained preceptors and the ANMC competencies]. It was like 'well what's this and why', and almost too much work for them to go through each domain and relate it back to this skill and to them we were like 'Oh you are obviously competent, you did it and it was fine', but relating it back to the competencies, that was hard. Tracey GN

This indicates that from the perspective of graduates, assessor ability was positively influenced by successfully completing a preceptor program<sup>38</sup>. The participants also indicated that University educated<sup>39</sup> nurses were better able to provide them with support than others as evidenced by the following graduate excerpts. 'Where there are a lot of hospital trained nurses there is a lack of experience using competencies' (GN58) and another graduate similarly noted that, 'I have found most nurses know of the Standards, although not all fully understand them in relation to assessment, university-trained nurses have best understanding due to constant exposure' (GN61). To further support this point a clinical facilitator provides the following response; 'I find some staff still do not have a full understanding/knowledge of them [the Standards] unless they are involved with grads and students as a preceptor and have undertaken a preceptor program. I do however feel this is more so with RN's who have trained in the 70s, 80s and early 90s' (CT12). This issue has been previously raised in the literature, which highlights that although preceptors are experienced clinicians, they are usually not experienced assessors (Walsh, Seldomridge et al.

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<sup>37</sup> Hospital trained preceptors refers to registered nurses who had undergone Preceptorship program (usually 2-3 days), which addresses teaching and learning strategies including assessment and the Standards.

<sup>38</sup> A preceptor program is a model of transition support for nursing staff and refers to the relationship between a less experienced (e.g. a student nurse) and a more experienced nurse who acts as a preceptor and provides individual attention to the students (preceptees) learning needs and provides feedback on their performance.

<sup>39</sup> University educated nurses refers to the move from hospital based training to tertiary institutions. Nursing education had moved to Australian Universities by 1992 and the Standards were first regulated in 1990.

2008). Further, graduates believed preceptors had greater knowledge of the Standards if they had completed a preceptor program.

A clinical facilitator reported that when she first undertook assessments using the Standards it was a testing time, 'I think initially I did find that quite challenging because I felt I didn't actually know what I was doing myself' (Yolanda CF). This example reveals how poorly the Standards were introduced and understood by a clinical facilitator when she commenced in her role. Whilst the literature reflects the importance of adequately selecting and preparing preceptors for their important role in undergraduate nursing education (Yonge and Trojan 1992; Altman 2006), the findings from this research indicate that there was considerable difference between preceptors. Other participants were critical of how preceptors used the Standards:

Unfortunately in the clinical area, not everyone assesses using assessment guidelines. Feedback varies from excellent to none. [Some assessors are] not taught very well in first place by unqualified instructors and standards [are] not adhered to. (CT06)

The following excerpts highlight how graduate nurses felt there were inconsistencies and shortcomings with how individual assessors approached the assessment process, 'Sometimes they [assessor's] wouldn't look at it [the Standards] but just sign it anyway' (Céline GN), 'they don't have the time to sit down and go through each one and discuss how you did it, how you can prove it, how you showed it' (Lucy GN) and 'I believe that the majority of people responsible for assessing my competencies were too busy to actually do them properly (GN88). These graduate nurses advanced that their assessors displayed a lack of connection with the Standards, which they believed was related to workload pressures.

Nurses had varying degrees of confidence with the level of knowledge and commitment their assessors had regarding the Standards as graduate Tracey explains that her assessors would say to her; 'you [a student] would know more about this [the Standards] because you are being assessed, so you probably should write the competencies out because you know what competencies you need to complete, or I don't have time to do that right now but I will sign you off as competent' (Tracey GN). Tracey further explained that to facilitate the assessment process she would 'write-down' the competencies herself because assessors

would ask 'why do you [students] have do this type of thing' (Tracey GN). Here Tracey is left feeling the responsibility of providing evidence has shifted entirely to her, and her assessor is not supporting her in the assessment process, or increasing her understanding of the Standards. There are a number of reasons that may contribute to this including; a lack of importance placed on the Standards, or assessment process used or level of assessment training provided to the assessors. This finding is consistent with research undertaken by Calman, Watson et al. (2002) who found students reported various levels of commitment by assessors. The importance of adequately selecting and preparing preceptors for their important role in undergraduate nursing education is also noted by (Yonge and Trojan 1992; Altman 2006; Wolff, Pesut et al. 2010; Myrick, Luhanga et al. 2012). Importantly, from a regulatory perspective, the assessors' understanding of the expected standards and their knowledge and skill is believed to be the most crucial elements to enhance the reliability of the assessment process (ANMC 2006).

The understanding of the Standards varied between nurses; from a very good understanding, to a very limited understanding, or no understanding at all. The utilisation of the Standards was also described as variable. The Standards were frequently used for undergraduate assessment and less frequently used in everyday clinical practice or when assessing registered nurses in practice. That is, interpretation differs due to different roles or expertise and the frequency of use.

The participants positioned the Standards as separate from practice and as a document of many words that were thought to be unrelated to practice. The following excerpt from Roberta an academic reflects on her student interaction with the Standards:

I found it very difficult to work out what they [the Standards] actually meant and I also, at the time, looking at them thought "Oh, this is a lot of stuff here that I have to demonstrate in this last practice unit", so I found at that point, because I didn't understand it [the Standards] very well or what they were about. I knew they were meant to go in our practice, but I didn't actually know what it meant for me and whether am I supposed to be doing all these things in order to pass.

Roberta AC

Roberta was challenged by finding a way to connect the Standards to her practice. While the findings acknowledge the issue of the language of the Standards; what the Standards mean and how nurses understand them is something that is unique to the individual.

The participants have highlighted that there is no fixed or static definition of the Standards, but rather there are multiple interpretations of their meaning. Communication through language forms an integral part of conveying meaning and understanding for nurses. Having a common language around competence reinforces expectations that the language of competence (the Standards) is understood by those using the Standards. However, language must be interpreted and interpretation occurs at a personal level, with an individual defining the Standards as they see appropriate. Understanding is determined by their own understanding of practice boundaries and the professional framework, inclusive of the Standards. The issue of the meaning of the Standards for the participant's remains intertwined with how an individual personally comes to understand competency and the Standards. The importance of language cannot be underestimated because how the Standards are communicated to individuals will influence what they come to mean and how they are understood by the different groups of nurses.

## Conclusion

The qualitative and quantitative findings highlight that how the nurse participants use the Standards to make a determination of beginning-level competence was problematic, and often disconnected from practice. Specifically, a gap exists between the broad intentions of the Standards as a tool for the assessment of beginning level competence and the individual approaches taken by the assessors and assessees using the Standards. That is, the function of the Standards is determined by their application in the setting. This section has revealed several major findings including; the contextual nature of the Standards, the disconnect between the function and the application of the Standards, student introduction to the Standards and impact of roles when operationalising the Standards. Each of these has a direct impact on how nurses interpret, negotiate and highlight their individual meaning-making regarding the use and value of the Standards. The result of this is that there are

diverse interpretations of the Standards reached through negotiated meaning and a process of meaning-making.

The language of the Standards is not always understood or interpreted by nurses in a consistent manner. The findings have highlighted that this is because the language of the Standards is ambiguous and there is overlap between these and individual competency standards. Furthermore, there are a large number of competency elements within the Standards and it is difficult to integrate the parts (competency elements) into a coherent whole (demonstration of the Standards). Despite this, participants only gave voice to limited solutions to these challenges, and did not propose any alternative language for the Standards.

Further, it has been highlighted that nurses find the application of the Standards to assessment of competence a challenge. This is because the assessment of competence in practice is impacted upon by a variety of contextual factors, with the qualitative and intangible aspects of practice being more challenging to assess, the Standards are not easily applied across the different contexts and roles in nursing, the Standards are not readily connected to practice, and there are varying levels of assessor skill and ability, which impacts directly on competence-assessment outcomes. These findings regarding the challenges nurses face in using the Standards in the assessment of competence add new knowledge to research in these areas.

The findings suggest that the phenomenon of using the Standards in practice and for assessment of competence is complex. This complexity is affected by the interplay between nurses as individuals, the structures and the context of practice. The participant's responses have provided an insight into what is happening in practice and identified barriers to using the Standards for assessment of competence. That is, there are several mechanisms that operate to reinforce, constrain or enable nurse's understanding of the Standards in terms of both the process and context of assessment. These mechanisms will be detailed fully in the Discussion chapter.

## Chapter 6 - Structural factors which shape nurses' collective identity

### Introduction

This second findings chapter focuses on several structural factors which influence the collective identity of nurses. From a critical realist perspective the focus is on the cultural and structural context of practice to allow the complexity of the nurse-Standards interface to be explored. This chapter describes how nurses' collective identity is influenced by four factors; professional governance, professional accountability, beginning-level competence and the safety and quality agenda. Each of these influences will be considered in turn.

### Professional governance

Professional governance refers to the way in which a nursing and midwifery regulatory authority has the power to regulate and therefore control nursing practice. The role of professional governance was a key theme raised by participants in both their questionnaire and interview responses. All of the participant groups supported professional governance, as they described how shared and reciprocal obligations were an accepted part of any profession. Most (93%) of respondents agreed that the Standards were relevant to contemporary nursing practice (comprising of 88% academic/clinical teachers, 100 % preceptors and 92% of graduates). This finding correlates with the literature which highlights that in nursing, traditional hierarchical models remain a dominant concept whose primary emphasis is on command and control mechanisms which operate through the adoption of regulations, policies, audits and accreditation processes (Bryant 2005).

Strong connections were made by all of the participants between the Standards and their governance functions. For example Lucy, a graduate, stated in her interview, 'I think it's [the Standards are] also for regulation of a profession' (Lucy GN). Another graduate questionnaire response stated that the Standards 'regulate the nursing profession' (GN00). For preceptor Henry, governance and its association to nursing practice seemed to be inevitable; 'everything's guided by laws and legal and ethical issues' (Henry PR). The notion of governance was embedded in how the participants understood the idea of professional

regulation and the adoption of the Standards as summarised by preceptor Ruth in the following excerpt:

The standards exist because, me as a practitioner, in nursing, I'm registered as a nurse to work within a defined scope of practice, and I am -- I need to be governed by something, so I know what my scope of practice are, my realms or domains, whatever you want to call them. So the ANMCs exist for that reason for me..... And I need to demonstrate that I can practice within those standards, so it's keeping us focused so we don't get out in left field.  
Ruth PR

Ruth's response positions nurses as agents to regulation under the auspices of a governmental agency (the regulatory authority) that governs practice in the public interest to ensure those licensed have a professional responsibility to comply with the Standards. Further, the '*I am*', '*I need to*' provides an example of a collective self-definition inferring membership to the social category of registered nurse, which embodies support for particular traits, attitudes and practises. This indicates that regulation provides a welcome framework for practice; it was experienced as providing reassuring limits, rather than a constraint. As such, the discourse of professionalism and use of the Standards promoted nurses' collective identity through the Standards being recognised as the shared interpretive framework for understanding the minimum requirement for demonstration of competence to practise.

The power of the Standards was understood as originating through the governing body whose hierarchical power structures and relationships are coordinated through regulation. 'For nurses to be registered they have to meet the competencies' (CT02). The participants recognised that the Standards have legitimate power that allows nurses to practise through the granting of their license. However, they also recognised that having a licence incurs certain accountabilities, rights and responsibilities. 'Basically a set of rules that if are not followed may lead to de-registration' (GN88).

All participant groups provided examples of their individual sense of belonging to the group of registered nurses by voicing their connection to the professional governance of nursing. The participant's responses indicate that their sense of belonging to the profession is strongly aligned to notions that support the importance of being competent. The following

interview excerpt from nurse academic Gail provided an example of this, '[the Standards are] the guidelines of which I need to make sure that I'm reaching in order to be a professional, competent nurse' (Gail AC). Gail recognises that to fulfil her individual identity as a 'competent nurse' she must be able to demonstrate the Standards. It is by these means that nurses also have a collective identity, that is, they see themselves as part of a professional group.

The participants linked the Standards to factors that are fundamental to professional identity. The concepts of identity and collective identity inherently draws attention to the ways in which nurses fit within the profession and the social world. When responding to the questionnaire questions asking what contribution the Standards make to the nursing profession typical responses included, 'increased professionalism and accountability' (GN62), 'baseline understanding - a point from which to work, clinically and theoretically' (PRO2) and also 'categorise what we do in a structured manner' (GN09). These participants have developed a sense of professional identity that engages with issues of professionalism in the context of their nursing practice. Nurse's acceptance of the need to be competent to practise was supported by the findings in a systematic review of clinical competence assessment by Watson, Stimpson et al (2002b). The notion of meeting the Standards was raised by the participants as being important to them as a nurse. This is an important finding important because self-identification or categorisation is a basic element of collective identity whereby an individual identifies themselves as a member of, or categorising their self, in terms of a particular social grouping (Stets and Burke 2000; Roccas and Brewer 2002).

Participants conceptualised the Standards as a tool that offered them a sense of security by providing them with a means to make a determination of competence. Lucy exemplifies this in the following excerpt, 'If we didn't have the ANMC competencies there, then we wouldn't have a model off to which to base what we found was competent or not' (Lucy GN). A key finding of this research was that the Standards were perceived as a structure, a practical device that describes the limits of practice and guides the assessment of competence and are underpinned by legislated powers to ensure the competent practice of all nurses holding a license. Graduates provided examples of how the Standards provide boundaries, as they



define, 'What you can and can't do, what's within their [others nurses] scope of practice and within my scope of practice' (Tracey GN) and to provide 'Safe guidelines to practice within [a nurses] scope of practice' (GN69). These nurses have connected the Standards to what limits and places boundaries on their practice. The concept of boundary can be understood as operating in two directions; affecting both incoming and outgoing interactions between nurses. Boundary is also what separates the competent from the not competent, and helps to differentiate the outsiders (non- nurses) from the insiders (nurses). As a structure, the Standards governance role focuses on defining the boundaries of competence.

The participants viewed the Standards as a means to both control and normalise their practice. Control refers to nursing practice being structured within an imposed set of rules (Hess 2004) and normalisation refers the underlying processes by which practices become routinely embedded in everyday life (May and Finch 2009). This emphasises the way in which an understanding of the Standards defines nursing boundaries and competency. The participants positioned the Standards functions as being closely intertwined with that which must be learnt, understood and complied with by all nurses. A nurse academic provides an example of this. 'It's [the Standards are] like the road rules. You know, you take your driving test; you have to know the rules of the road '(Harriett AC). By describing the Standards as 'road rules' Harriett recognises them as a device to constrain or promote certain behaviours of practice.

### **Control and normalisation of practice as a component of nurse's collective identity**

Standards are often taken for granted as the infrastructure of everyday life (CoA 2011). Standardisation of practice has been explained as being promoted through the adoption of standards to provide a mechanism to support social norms and conventions (Brunsson and Jacobsson 2000). All participants advanced the notion of the Standards as a norm of practice, in that they were described as formalised rules and regulations. For example, 'Without having anything else to look at and compare against then I don't know what else you'd use' (Gail CT). For Gail the Standards appear to have become a normalised part of her practice in that they appear unquestioned and have become part of the social

and professional fabric of practice. The participants drew attention to the regulatory role of the Standards when asked to explain the purpose of the Standards:

I guess to make things standardised, to give a measuring tool by what every nurse and midwife or whatever in Australia has to do as a minimum. They have to meet each of these competencies to be registered because if they didn't, then how would you regulate nursing practice?  
Elizabeth GN

For graduate Elizabeth, the Standards appear to be a normalised part of her practice and provide her with the framework by which competence can be measured against. The Better Regulation Commission (2006) argues that regulation is a traditional attempt by the State to change behaviour; often in light of a need to address a problem (e.g. such as risk to the public). Essentially, developing competency-based standards provides professionals with a means to understand and articulate their own profession (Bowden and Masters 1994; Wells 2003; Chiarella 2006). In nursing the articulation of competency standards are seen as a valid way of conceptualising nursing practice (Gibson, Fletcher et al. 2003). This was supported by the participants in the following examples: 'It's [the Standards] to give us a standard to work, at least base level, recognition of what we're doing, how we're doing it, our legal and ethical responsibilities' (Margaret PR). Graduate Laura provided another example:

We [nurses] need some form of standard across the board that we all live up to and we all reach, whether or not they're the ANC [ANMC] competencies, .... but I believe we do need something that governs what we can and can't do and what is best practice and things like that.  
Laura GN

A further example is provided by Roberta, a nurse academic who accepts the Standards role in providing the rules of practice and as a regulative mechanism, as well as a normative function that acknowledges nurse's social obligation to provide competent practice:

I think they [the Standards] exist too basically to set a benchmark on what is 'good practice'. If I was to summarise it, I think that they are generic in some way so that they can apply to every area of nursing, and that practitioner, in whatever area or context they work in. You can apply them somehow to their practice to help them develop their practice and to make sure they maintain their duty of care and those sort of things.  
Roberta AC

These excerpts imply that registered nurses support the Standards as a means for defining competent practice for themselves and for the public at large. In positioning the Standards as a benchmark, Roberta (AC) acknowledges that they apply across the multiple contexts of practice and have a standardising function. The above excerpts reflect how the Standards are positioned from both a broader professional perspective, whilst also aligning with the key interests of nurses in practice. Laura (GN) supports the Standards because she believes their existence is fundamental to the regulation of nursing practice. Laura's response also connects the Standards to being a means of normalising nursing practice because the Standards form part of a regulatory system that set the boundaries for practice. When Roberta refers to the Standards role in setting 'good practice' she implies that by being generic they are applicable to nurses across multiple contexts, and at the same time act as a tool to develop individual practice and nurses responsibility to the profession.

The participants made connections regarding the Standards role in clarifying professional boundaries and as a standardised system for identifying a nurse professional. This was understood in two main ways; more formally by describing the structural force of the Standards as a determinant of who can be registered, and more informally in relation to the norms and informal structures including the application and allegiance to the Standards. The interplay between the formal and informal structures of the Standards that function as a normalising tool is exemplified in the following examples from a preceptor and a graduate. 'We know we're not to practice without...[the Standards]. We have to practice within those guidelines' (Therese PR) and 'They [the Standards] have the ability to set minimum thresholds for competency with all staff - not just new [staff]. Without them there are no broad guidelines' (GD10). The participants describe the Standards as a formal structure that provides all nurses with the rules, boundaries and the benchmark of practice.

The Standards were also understood as '*A framework to develop assessment tools*' (CT01) and as such may be regarded as having coercive power<sup>40</sup>. The Standards coercive power is

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<sup>40</sup> Coercive power was coined by Durkheim (1951) and used by Bhaskar [1979] 1998 in relation to the coercive power of society to demonstrate its *sui generis* reality, or a reality unique to itself and irreducible to its composing parts (Benton, 1998 in Archer, Bhaskar et al., 1998). *Sui generis* reality is created when individual consciences interact and fuse together to create a synthetic reality that is completely new and greater than the sum of its parts.

derived from them providing a framework for the development of assessment tools that are underpinned by the laws and informal rules (norms) developed over time to facilitate competent practice. Further, there are serious consequences if the Standards are not met, ranging from corrective action through to removal from the register as preceptor Natalie explains:

The Australian Nursing and Midwifery Council put together some competencies that we, as nurses, have to abide by and are governed by and if we're not assessed and if we're not good enough, then we aren't able to be registered nurses. Natalie PR

Natalie's description of the governance and functional aspects of the Standards was consistent with the literature regarding what a consumer of healthcare would generally expect to hear about standards in our everyday world (Brand, Ibrahim et al. 2008). Natalie's response suggests she understands that the Standards both control her practice and have become a normalised part of her practice. This identifies that the Standards have the power to direct and control the practice of individual nurses, whilst at the same time can hold nurse's to account for their practice.

Whilst the Standards role in governing practice was acknowledged by the participants, there was also a degree of confusion as to whether the Standards are a legislated document or a flexible guideline as described in the following interview excerpts:

I don't know if you call it legislation but a set of rules per se that govern what you can and can't do in practice and within the registered nurses' scope of practice ... these are like a guideline or a set of rules that you have to follow per se. Laura GN

Laura (GN) was unsure of whether the Standards were legislated when she describes the Standards as a set of rules. Rules, standards and codes of practice are terms that are often used interchangeably in nursing. In this sense, as a set of rules, the Standards are a non-discretionary part of practice that define what nurses can or cannot undertake. Henry provided another example highlighting that for him the Standards were perceived to be interchangeable with guidelines in the practice setting:

Basically I use them [the Standards] as a standard to fulfil my duties at the moment. And we also use that as a guideline, because that's a standard. But we use it as a guideline to actually help us to practise and precept in a way.

Henry PR

Henry (PR) suggests that by using the Standards he meets his responsibilities or obligations, but at the same time Henry also views the Standards as a guideline that assists preceptors to support other nurses (their preceptees). The final example is provided by Harriett a senior academic, 'They're a set of guidelines. They're not legislated, as far as I'm aware .... , but they are the standard to which a registered nurse must reach to be registered (Harriett AC). This account demonstrates that Harriett is also unsure of whether the Standards are a legislated document.

This is an important finding given that one would expect that nurses were, at the very least clear about where the Standards fit within the regulatory framework. This finding is concerning across all levels of nurses, but it is particularly concerning when there is confusion in the higher education sector. Nurse academics in the higher education sector have a significant role in educating students regarding where the Standards fit within the regulatory framework because they are responsible for the introducing the Standards to students of nursing, explaining their meaning and their relationship to nursing practice.

### **Summary: professional governance**

Professional governance was perceived by the participants in a number of ways. Primarily the Standards were perceived as a means to regulate the nursing profession. As such, regulation was supported as providing reassurance to them as nurses as opposed to being a constraint. The data explains how nurses use the regulatory frameworks to form, inform and confirm their professional identity and position them as a distinct social group. That is, the Standards provided the boundary between those eligible to be in the profession as well as a way to separate the competent nurse from the not competent nurse.

### **Professional accountability**

The role of professional accountability was a key theme that emerged from the analysis of both the questionnaire and interview data. Accountability is one of the cornerstones of

good governance and was raised by the participants in relation to the oversight and requirement to provide information and justification of their competence to others. Whilst nurses have long been held accountable for their individual practice (ANRAC 1990), nursing as a profession is also accountable to the communities they serve (ANMC 2006). The Standards adoption in the 1990s by the nursing regulatory authority mandates nurses' accountability to the public, to provide high quality nursing care through safe and effective work practices (Battersby 1994). Discourse in health care for a number of decades has included discussions around accountability (Emanuel and Emanuel 1996; Kohn, Corrigan et al. 2000; Brinkerhoff 2004), with accountability being an influence to shape organisations behaviours. At its simplest, accountability involves being called to account to some authority for one's actions (Jones 1992). In nursing, accountability and competent performance operate as connected concepts, in the sense that accountability is embedded within the Standards to form part of regulated nurse's professional practice.

In line with the literature the participants in this study acknowledged the importance of accountability and the influence the Standards played in promoting accountability (Savage and Moore 2004; Iliadi 2010). Typical responses was provided by participants when asked what contribution do you think the Standards make to the nursing profession included, 'industry [nursing] is now more professional and accountable' (PR09), 'sets a standard for nursing and provides community with level of expectation' (GN60), and '[the Standards] ensure safe and competent nursing is obtained, not only for nurses but benefit patients as well' (GN68). Professional accountability refers to the political and social value of competence to practise and recognises the establishment of a social contract emphasising the concepts of responsibility to the public, the nursing profession and the individuals practising within the profession.

All participants groups supported the Standards were a significant part of professional accountability for both individual nurses and the nursing profession, which was fundamentally perceived as providing a two-way benefit; to nurses and to the public. The Standards were described as a tool that 'allows nurses to be identified as professionals. To be held accountable for practice' (GN85). Nurses' uphold accountability and responsibility for their practice, which means following the accepted standard of care that would be

provided by a competent nurse. This suggests accountability is fundamental to nurses' professional identity and contributes to a common nursing identity. In this sense, individual identity is the product of (nursing) discourse, beliefs, values and established practices (Danaher, Schirato et al. 2000).

Participants responded that an individual's attainment of competence is an important part of professional identity. When asked this question in the questionnaire eighty five per cent (85%) of the responses were in the affirmative (80% of academics/clinical facilitators, 76% preceptors, 98% of graduate responses). The participants associated demonstration of the Standards with being a professional with the Standards purpose described as a means for 'being competent and professional' (PR06). That is, the Standards were seen as a means to promote one's own professional identity and the identity of the nursing profession. Professional accountability and constructing a collective identity is promoted by the Standards being a means for nurses to establish and connect with other nurses as a professional.

### **Accountability in three directions**

This section describes how the participants perceived nurses as being *outwardly* accountable to the public, *upwardly* accountable through the hierarchical chain of organisational command and nursing regulation and *inwardly* accountable to themselves for their individual decisions and actions are discussed. The Standards are a means by which nurses are held to account by the profession. Together these elements of accountability contribute to nurses' sense of collective identity.

### **Being outwardly accountable**

All participant groups acknowledged that as registered nurses they were outwardly accountable to the public for their nursing care. When responding to a question regarding the contribution the Standards make to the profession a typical response was that the Standards 'ensure nursing competence keeping the community/patients safe and nurses up skilled' (CT04), 'continuity and safety of care given to patient's' (PR66) and the Standards are

the 'benchmark for safe, acceptable practice for the safety of health care consumers' (PR00). These responses recognise nurses' accountability is interconnected with the Standards fundamental role of ensuring protection of the public. The participants understood accountability was linked to the expectations of their clients as explained in the following excerpts, 'I evidence assessments to the Standards and [in doing so I] promote the professional responsibility to the public and fellow peers demonstrating competence ... They [the Standards] clearly identify ethical/professional standards and give direction around safe, culturally appropriate practice at beginning-level' (PR55). The Standards were a way of ensuring that the nursing profession is '...more professional and accountable' (PR09). Further, the participants highlighted the profession as a whole has a role in ensuring the accountability of all nurses as the Standards are 'An important part of nursing' (GN82) and 'the competency standards make the nursing profession accountable for nurse's accountability to practise' (PR102). In this way participants echo the purpose of the competency based approaches to foster accountability and effective practice (Wright, Rowitz et al. 2000; Epstein and Hundert 2002) with the Standards providing the measure to demonstrate this.

This concept of accountability was found in the participant's responses which positioned the Standards as a means to provide the public with a safeguard. The following example of accountability was provided by a clinical teacher in responses to the question asking what contribution the Standards make to the nursing profession. 'By providing a benchmark for RN's to work at [and] a level of expectation that RN's are competent to care for certain individuals. [The Standards] provides a baseline for assessment' (CT02). From an academics perspective there was recognition of the dualistic nature of accountability to themselves and to the profession by 'remembering everything that you've got to do and sign, and be accountable for and responsible for – it is quite daunting' (Harriett AC).

### **Being upwardly accountable**

The participants made few references to being upwardly accountable to their supervisor employer or to nursing regulators. Rather they made more general comments with regard to the applicability of the Standards across Australia, highlighting accountability as a national concept. This questionnaire excerpt provides an example '... a bench against which



you can be assessed, therefore accountability is transparent in all states' (PR04), and 'industry [nursing] is now more professional and accountable' (PR09). The participants believed they were accountable to the Standards because a relationship existed between them as individual nurses and the regulation body, the public, and other nurses. This finding suggests that the participants inherently recognise or 'take for granted' the regulation as standard-setting and compliance being achieved through the development of guidelines, tools and frameworks.

### **Being inwardly accountable**

On a personal level the participants described themselves as being *inwardly* accountable through descriptions of the social nature of regulation and their role in the self-regulation of their own practice. This was understood by the participants to include certain professional responsibilities whilst recognising the Standards as an inherent part of the nursing profession when providing nursing care as described in the following excerpt, ... 'well, as a registered nurse, a professional registered nurse we have standards to adhere to' (Therese PR). The participants acknowledgement of their professional accountability is consistent with other findings where accountability was seen as a professional quality, linked to standards and quality and aligned with reforms aimed at improving quality and efficiency in health care (Grealish 2009). That is, the Standards were an accountability mechanism for every nurse, 'It's that every nurse has to prove that they are capable and professional in their approach to nursing and ... they have been accountable for their practice' (Roberta AC).

In connecting the Standards to regulation the participants highlight the explicit and implicit formal contract existing between them as an individual nurse and the profession of nursing as indicated in the following example by Tracey a graduate, 'the ANMC standards, it's something to prove myself against' (Tracey GN). Being deemed or proved to be competent was a significant issue raised by the participants. A major function of the Standards supported by the participants was that individuals be required to provide evidence that enables proof of their competence to be established.

### **Summary: professional accountability to the public, the State, and to the self**

The participants supported the Standards role as a means to promote their professional accountability to the public, the State, and to the self. The findings directly connect the regulatory role of the Standards to nurses' notions of accountability by highlighting the internal rules and norms that hold nurses in practice accountable to the public, the registering body as well as being answerable for their own behaviour and competence. In this way the Standards are a vehicle through which accountability is exercised. The findings highlight that in nursing accountability is a normative concept with the Standards positioned as the means used to evaluate nurses' competence. At the same time, accountability is a mechanism whereby nurses are held to account by their peers, management, nursing regulation and the public.

### **Beginning level competence**

Whilst the Standards have many roles, a key role is to act as a framework for the assessment of beginning level competence. Determining beginning level competence against the Standards establishes whether an individual can gain or retain their license to practice as a registered nurse in Australia. Making an assessment of professional performance is therefore a key function of the Standards, which culminates in a professional judgement of either 'competent' or 'not competent'. Nurses understanding of the Standards as an assessment framework was linked to performance measurement, with the Standards described as a 'framework to assess competence' (PR00) and 'a framework to development [of] assessment tools' (CT01). These comments are in line with the literature that has focused on competence becoming a key topic of interest that has an overriding concern with safe practice and the production of skilled graduates (Arbon 2004).

The participants linked the Standards to the notion of ensuring quality nursing care. For example a clinical facilitator wrote: 'When working with undergraduates, they [the Standards] are the reference point for measuring Beginning Level Competence' (CF05). By capitalising the words 'Beginning Level Competence' suggests the Clinical Facilitator wants to make a forceful statement. Nurses in practice are responsible for assessment of students of nursing and work on behalf of the higher education sector that is ultimately responsible

for assuring the regulatory body of nurses' competence. The higher education sector is in turn required to comply with the regulatory mandates embedded within their programs accreditation.

The participants' descriptions of the Standards suggest that they act as a 'Gate', which can allow or preclude entry to practise and registered nurses act as the 'Gatekeepers'. That is, those who do not meet the Standards are deemed to be not competent and therefore ineligible for registration. Henry a preceptor provides an example, '..if you are not competent, that means you are not allowed to, or you are not deemed to be able to practise' (Henry PR) and similarly from another preceptors perspective if a nurse can 'not be deemed competent, they [the assessee] would not get necessarily signed off' (Yolanda PR). The literature has provided reference to the notion of nurses acting as a gatekeeper in two ways; gatekeeping as access, and gatekeeping through monitoring and supervision (Brammer 2006), however it is the assessor that is the guardian of the discipline at the practice level (McGrath, Anastasi et al. 2006) because it is the assessor who makes the determination of competence.

All of the academics/clinical teachers indicated in the questionnaire that they believed they had a sound knowledge of the Standards followed by 88% of preceptors and 68% graduates. In terms of their confidence to make an assessment using the Standards; 100% of academics/clinical teachers were confident to undertake this, followed by 94% of preceptors and 75% of graduates. The majority of respondents however did not believe the Standards were well understood by the nursing profession with this affirmed by only 13% of academics/clinical teachers, 43% preceptors and 48% of graduates. This raises a contradiction in that the respondents believed the Standards are not well understood by the profession but that the majority of respondents' believed they had a sound knowledge of the Standards and were confident to make an assessment using the Standards.

When asked about whether there was a shared understanding of the performance expected of a competent beginning level registered nurse only 25% of academics/clinical teachers respondents indicated that they believed there was, 56% of preceptors and 49% of graduates. This suggests that the expected minimum level of performance of a competent

beginning level registered nurse as defined the Standards is poorly understood. This highlights a tension regarding the Standards in that all nurses are required to annually attest to their competence against the Standards; however the majority of the nurses in this study indicated they did not believe the Standards were understood by the nursing profession.

A key finding the participants support for role of the Standards in the standardisation of nursing practice by providing the benchmark to define and assess beginning level competence practice. An example is provided by a graduate, 'Makes the nursing profession to have same standards/level anywhere in Australia' (GD10). Standardisation through the Standards was advanced as a means for standardising practice regardless of their context of practice as explained in the following excerpt, 'Ensure a base standard for all nurses so as practice is maintained throughout country' (PR02). The literature also highlights the process of the naming of competencies was reported as clarifying the practice knowledge of clinicians (Zerwekh 1990).

The duality of the purpose of the Standards to provide guidelines for practice, whilst simultaneously providing a framework for the assessment of practice, was described by all participant groups. For example, 'They [the Standards] provide the guidelines which outline our nursing practice and guide our performance and also provide a framework for assessment of practice' (CF00), 'They [the Standards] define the standard for me as a practitioner to perform and be assessed' (PR101), and 'By providing a benchmark for RN's to work at. A level of expectation that RN's are competent to care for certain individuals. Provides a baseline for assessment' (CF01). These findings are consistent with the literature that indicate that competency standards are accepted by a range of nursing bodies as a framework, guidelines and benchmark for practice as well as being the national competency standards for the registered nurse performance to be assessed against to obtain and retain their license to practice (Alsop 2003; ANF 2005; Cowan, Norman et al. 2005a; Chiarella 2006; Baldwin, Lyon et al. 2007; Klass 2007; Chiarella, Thoms et al. 2008).

### **Summary beginning level competence**

This section has highlighted the importance of the Standards to the participants as a means for determining beginning level competence. The formation of nurses' collective identity is

centred on nurses defining their place in the nursing profession through the Standards in relation to them being competent. Beginning level competence was acknowledged in the context of, and in relation to, nurses' professional identity, and as part of nurses' personal frame of reference. There was also general agreement between the participants that the Standards apply to all nurses regardless of their practice setting and further that all practising nurses must be deemed competent against the Standards. The participants supported that the Standards defined nursing and promoted a professional identity by setting the boundaries of practice. The participants positioned the Standards as an appropriate, acceptable and reasonable tool for the profession. The participants views align with current literature that concedes standards and standardisation are omnipresent conduits of a modernising and globalising world (Timmermans and Epstein 2010). The participants' examples of shared goals and aspirations within their professional social systems, of which the individual is a functional part, provide support to a collective identity within nursing.

### **Safety and quality agenda**

Nurses as regulated professionals are required by the Standards to deliver high quality, ethical and safe care to patients (ANMC 2006). To achieve this, the nursing profession adopted competency standards as an important mechanism for promoting safe and quality practice (Gonczi, Hager et al. 1990). As highlighted previously, whilst this is a foundational requirement of regulation it is also an expectation of the public, employers, the profession and individual nurses themselves. The participants connected the Standards to the safety and quality agenda in both their questionnaire and interview responses. A graduate described the role of the Standards as to 'Ensure we have an acceptable level of (benchmark) performance to ensure patient safety' (CT00). When asked about the purpose of the Standards, typical responses included the following, 'Quality and safety in practice' (PR103), 'Continuity and safety (of care) given to patient's and best practice' (PR66) and 'I think their [the Standards] function is to maintain safe practice' (Roberta AC). By highlighting safety and quality initiatives as a key concern in contemporary health care the participants recognised that the Standards are designed to support the safety and quality of nursing practice. This is in line with literature emphasising the link between competency

standards and the safety and quality of practice (Kohn, Corrigan et al. 2000; Adrian 2006; Hughes 2008a; CNO 2009; ACSQHC 2011).

The safety of health care consumers was understood by the participants as being reliant on nurses' practising within the bounds of their skills, knowledge and competency relevant to their context of practice. A preceptor provided a typical example explaining the purpose of the Standards as a 'Benchmark for safe, acceptable practice for the safety of health care consumers' (PR00). The Standards purpose in providing protection to the public was put forward as a significant function of the Standards. This finding shows that nurses believe there is a link between the Standards and safe practice and they believe that the Standards achieve this stated purpose.

Consistent with current safety and quality initiatives, the participant's opinions align with those that position nurses as crucial participants contributing to the emerging local and national safety and quality standards (Armstrong, Spencer et al. 2009). The participants recognised that the Standards contribution to the safety and quality agenda was applicable on a number of levels. The participants advanced the Standards role in the protection of the public as being, 'Not only for us as a nurse to be able to say yes I'm doing all those things, but also to the public too, to say that as a registered nurse you should do this as a minimum' (Martia CF), as well as 'They [the Standards] describe and specify the actions expected of nurses that result in safe, effective and affirming care' (PR48) , and from the personal perspective of Harriett an academic, 'I think it's also of course protection, to protect the public' (Harriett AC), and finally they 'Ensure nursing competence keeping the community/patients safe and nurses up-skilled' (CT04). Maintenance of safe practice was linked to the protection of the public and to nurse's professional identity with the Standards being a key tenet of the safety and quality agenda. Safe practice was achieved by nurses because the Standards 'Set a standard of competence and safety for others to follow' (PR49).

## **Summary of safety and quality agenda promoting collective identity**

Nurses recognised that their standard of practice is essential to the safety and quality agenda. As such, nurses individually and collectively aligned their norms and values of practice to support this agenda. Strong connections were made between the Standards and the safety and quality agenda. The nurses supported that the promotion of competence assessment of practising nurses was a core function in quality assurance systems, workforce planning and human resource management, which is firmly embedded by the Standards.

## **Conclusion**

The findings in this chapter have emphasised the power and influence of the Standards as a social structure. The structural power of the Standards is activated by factors largely emanating from the Standards being adopted as part of the National Law. The Standards were believed to support the registered nurse's role by defining their professional distinctiveness and by providing a mechanism for professional accountability. The findings in this chapter demonstrate that the role of the Standards is to define nursing, describe the limits of practice, guide the assessment of competence and promote professional identity. Nurses' socialisation promotes a transmission of a particular set of knowledge, beliefs and values that are supportive of the use and value of competency standards. As the Standards are the means by which all nurses are required to demonstrate their eligibility for registration, they provide nurses with a shared sense of professional belonging. Thus, as the Standards define beginning-level competence, they provide a coherence of purpose that contributes to a sense of collective identity.

The Standards position individual nurses within the nursing discourse of professional competence and this discourse also serves as a means, or a mechanism, that supports collective identity. Nurses' collective identity relates to how they see themselves and also how others see them, which is inclusive of the norms, expectations and professional responsibilities. The findings from this research supports that an individual nurses identity is strongly connected to the collective identity of the profession. It is this connection that encourages nurses to present and conceive of themselves as competent professionals with inherent responsibilities and accountabilities. This chapter has contributed to understanding

the significance of regulatory, professional and personal interests and how this connects to nurse's collective identity. The findings draw attention to nurse's support of the Standards as a tool of regulation that serves their interest by aligning with and promoting their professional and collective identity.

Both findings chapters acknowledge that nurses operate in a complex regulatory and practice environment. In the first findings chapter the participants voiced support for the Standards as a beneficial and important tool to the profession. However, whilst acknowledging the regulatory role of the Standards, the participants also problematised the Standards, their interpretation and use with a particular focus on the extent to which the Standards are 'disconnected' from practice. In this way, nurses perceptions of the value of the Standards, sits in tension with their assessment experiences whereby the application of the Standards is characterised by needing to apply broad language across dynamic clinical settings where they are interpreted diversely.



## Chapter 7 - Discussion

### Introduction

The Standards and their positioning have been generated and influenced by underlying structures and powers in nurses' social world. The 'social world' and nurses' meaning-making and interpretation of the Standards at the level of an individual nurse were central to this critical realist study. Meaning making involves the nurses' personal milieu, which includes the impact of their position as the person responsible for assessment or the person being assessed against the Standards. The structural and cultural properties of assessment (socialisation, norms and practice culture) only emerge through the activities of nurses and are only causally useful through nurses' assessment activities. The discussion presented in this chapter addresses the position of the Standards in the socio-cultural competency landscape with a particular focus on nurses' generative actions.

This research exposes a tension that exists in the way nurses understand and use the Standards. On the one hand, nurses identify and accept the Standards' function as an integral part of the safety and quality agenda, and as a mechanism to promote their nursing identity. On the other hand, nurses find the Standards difficult to operationalise, and so problematise their use for competency assessment. The research has three theoretical contributions which are described in this chapter. The first theoretical contribution is that the Standards operate as a social structure in that they have influence that can constrain nurses' use of the Standards. The social structures influencing nurses understanding and use of the Standards include regulatory codes and standards, organisational policy and procedures, professional nursing discourses, normative structures (practice environment, customs and social duty), and the relationship of Standards to a nurse identity. The second theoretical contribution is that nurses use agency to openly express the difficulties they have with operationalising the Standards. Nurses have the power or agency to make decisions and changes, but one that is always influenced by structural factors. Nurses' actual interpretation of the Standards is influenced by nurses problematising of the Standards language, which is an act of agency. The third theoretical contribution is that the Standards are morphostatic, which means that the practice environment is one whereby structural

stability and forces have maintained the Standards reproduction an essential part of practice. Nurses' social interaction with the Standards is the sole mechanism that has governed their stability.

In using the critical realist perspective following Archer (2000a) I was able to consider multiple levels of reality: the empirical, the actual and the real, as well as the interplay between culture, structure and agency. A critical realist perspective provides the conceptual framework to consider nurses as having the power or agency to make decisions and changes, whilst acknowledging those decisions are constrained by structural factors (Wainwright and Forbes 2000). I explored how the use of the Standards is dictated by policy, yet also directed by nurses themselves. So, the use of the Standards is normative, and firmly entrenched in nursing practice, which involves a particular set of expectations and constraints on assessment processes. However, how assessment of competence is undertaken is shaped by complex socio-cultural factors including nurse's interpretations and meaning-constructions, which means nurses have considerable agency to negotiate competence assessment.

The discussion answers the research questions; how do nurses understand and utilise the Standards, what is the relationship between agency and structure in the context of competency assessment, how does this relationship determine the ways in which nurses understand and utilise the competency standards, and finally how do nurses negotiate the interface of agency and structure when assessing competence? This is achieved by describing the relationship between the ideas of structure, agency and morphostasis. A focus on these aspects highlights how nurses use their own agency and interpretations to make meaning of the Standards as normative structures within practice, shapes their behaviours. Assessment of competence has been reflected as a complex interplay between the individual nurse, the assessor-assessee relationship, the bachelor of nursing program, as well as the socio-cultural and organisational factors that influence assessment outcomes in open systems. Nurses' education program and their practice environment assign a high status to human agency in determining competence behaviours. It is in this setting that

structures condition nurses, and nurses use their agency to modify structures, although structures may resist reformation.

### **The Standards as a social structure**

Social structures are present at many sites and levels, and the events experienced at the individual level may be the culmination of numerous, perhaps even countervailing influences (Scambler 2001). Whilst generative mechanisms are embedded within social structures and are contextually contingent, it is important to note that they always work through people's actions (Moren and Blom 2003). Nurse's assessment activity therefore takes place within the context provided by a set of pre-existing social structures, which Archer (1995) describes as the 'conditions-of-action'. Therefore cultural systems can influence social structures and vice versa, but they can only do so indirectly by structuring the situation of actions through constraints (Archer, 1995). For nurses, this occurs when nurses operationalise the Standards and are influenced by pre-existing expectations placed on them in practice (the norms, values, customs and practices). The role of being a nurse requires accepting that this social role is subject to normative expectations because a nurse's conduct is subject to social norms and practices. In assessment practice, this has resulted in nurses acting out of a sense of duty to align with normative expectations, rather than according to their own self-interest. These social duties are also separated into a personal sense of co-operative interdependence when their individual interest depends upon co-operation that aligns with normative expectations (Archer 2000a). Nurses act in terms of normative expectations of being a professional and of having a social duty to be competent to practise. As such nurses become subject to a sense of interdependence between professional, public and personal expectations.

Understanding the Standards as a social structure examines the impact of socialisation and interaction between nurses, and then considers the influence of norms and nursing culture. The discussion concludes with the sanctions that apply if competence to practise is not achieved.

## Socialisation

The role of socialisation and induction into a profession can further entrench the views that have become 'truth' over time (Riddell 1996; Lewis 2000; Mittler 2000; Slee 2005), in that new nurses are socialised and inducted into a profession that supports the internalisation of skills and knowledge deemed to be important. However, whilst nursing regulators 'officially' endorse a single set of norms around the use of the Standards, in practice sometimes conflicting norms are endorsed and enforced by different sub-sets of nurses. For example, on the whole the Standards are positioned by nurses as an objective measure of competence, and their continued use has been largely unquestioned. However nurses also interpret the Standards, and these subjectivities create diversity in usage, and challenges to the objectivity of the tool. Whilst it appears a norm that all nurses understand and mean the same thing when they talk about the Standards, this is not the case. However, in spite of this nurses' continue to make declarations about 'competence against the Standards' even though the majority of nurses indicated they did not understand the language of Standards or how they are connected to the assessment of competence.

Nurses are socialised to use and value the Standards and this is embedded in the fabric of the professional expectations. The socialisation process for students includes the process of enculturation (how the students learn about and identify with their own professional culture) and acculturation (how students assimilate selected aspects of other professional cultures) (Hong 2001). Through enculturation nurses acquire a collection of cultural 'lenses' or ways of seeing the world. From a critical realist perspective nurses practice will be shaped by the prevailing culture of the group which provides them with a lens to interpret the relevance of information and knowledge. Nurses therefore use specific practises and make individual choices that recognise their structural conditioning and motivations, as well as the consequences of their practices. This can be described as a morphogenetic sequence in which the Standards can condition or constrain agency (both corporate and primary), with nurses, in turn elaborate upon when interacting with structures. The nurses, as have continued to be largely passive recipients of their positions within their social practices when using the Standards. That is, nurses are not currently playing an active part in shaping the competency agenda in their profession through initiating any formal changes to the

Standards. A cultural morphostasis therefore exists and is maintained by the apparent stable reproduction of ideas amongst a unified population of these nurses as Primary Agents. This acts to generate a practice environment, which is conducive to the structural maintenance of the Standards.

Nurses as Primary Agents may complain to each other about the challenges they face with the language of the Standards but they have not been able to strategically bring about change to the Standards. Archer defines Primary Agents as 'collectivities sharing the same life-chances' (Archer 2000a: 263). Primary Agents are individuals with properties and powers of a position but are unable to use these powers to articulate their needs and to organise themselves in order to gain further interests (Archer 1996). This provides an example of the 'actual' level of reality described by Bhaskar (1975) and from a critical realist perspective exposes an ontological gap between what nurses experience and understand in the actual domain, with what is happening in the real domain.

For over two decades the use of the Standards has been largely unchallenged. This suggests the Standards have become 'a taken-for-granted' part of the normative system within nursing. The social norm approach described by Cialdini, Demaine et al. (2006) supported that what is regarded as normal, or as the norm, carries a normative influence (Foucault 1975). Nurse's conceptions of normality is influenced by their social rather than their individual perspectives, as discussed in the practice theory perspective (Schatzki 1996; Shove 2003; Warde 2005). Socialisation of nurses exposes newcomers to accepted norms, often performed by authority figures, and explains those behaviors as organisationally and professionally normative. Whilst competence against the Standards is generally conceptualised in terms of individual nurses performance in practice, it can also be conceptualised at a societal level, as shaping social norms, meanings and practices.

### **The normative power of the Standards**

The regulatory power of the Standards is a significant contributing factor to the normalised position of the Standards because they are embedded in notions of commitment,

accountability and professionalism. By virtue of their sustained relational proximity and interdependencies, professionals can feel a level of commitment and support towards one another (Banja 2010). Accountability applies to everyone involved in health care and encompasses a legal obligation; as well as an ethical and moral responsibility (Brinkerhoff 2004; Iliadi 2010; Wolff, Pesut et al. 2010). Within nursing, competence has been accepted as the legitimate indicator of professional practice (Scott 2008). The normalised rules of practice are supported by the socialisation process and form a key mechanism for the emergence of the actual routines of assessment practice. This rests on the critical realist understanding that the production and reproduction of empirical routines are affected by (nurse's) agential capacity, which is not innate or static, but relational (Kontos and Poland 2009). Nurses engage indirectly with structural and institutional properties and powers, by directly and indirectly dealing with other nurses (assessors and assessees), who act in the same way, and whose relative success or failures is influenced by their vested interests.

A major expectation of the higher education and practice environment was that nurses must be competent, and the Standards provide the framework for this determination to be made. Students of nursing are therefore required to become familiar with the expectations and norms of practice during their undergraduate experience. The socialisation process requires a negotiation between their personal identity and their developing role as a professional nurse. Through professional socialisation, students and graduate nurses learn to think and act in ways which are defined for them by the traditionally dominant groups within the health system, such as academics, clinical facilitators, nurse managers and preceptors. It is in this way that graduates come to accept as natural and common-sense, particular views of social reality (Clare 1993). Therefore, the socialisation process is the key site for normative construction and promotes the normative power of the Standards as a characterisation of a 'competent nurse.'

The nurses who do not conform to normative pressures may face negative sanctions that range from disapproval, raising questions about their competence or exclusion from eligibility for registration. It is the avoidance of sanctions associated with norm-breaking, which encourages nurses to conform. Whereas endorsing the norms elicits a positive response in that using the Standards is the means to deem someone as competent and

enables eligibility for registration. The nurses appear to have internalised these dominant norms, accepted them as ordinary and normal, which in turn has rendered the Standards less susceptible to revision.

These prevailing attitudes assume that as a tool of regulation the Standards have the exclusive or dominant power to influence the outcome regardless of the characteristics of either the individual or any elements of context. Critical realism would advise against only considering a limited scope of factors because this over-simplifies the decision-making process (Clark, MacIntyre et al. 2007). In critical realist terms, as the study focused on predictors, the findings are best understood as providing clues to the mechanisms that causally affect decision-making.

### **Influence of norms and nursing culture**

Contextual and practice-related factors influence nurses' assessment behaviours. Nurses' assessment context includes the policy landscape around competence assessment, which is influenced by the practice culture around the (normative) use of the Standards, and the emphasis on objectivity, or the observable, quantifiable aspects of competence. These aspects represent structural aspects which generate nurses' particular responses to the Standards and comprise of the multidimensional determinants of nurses' social action. Structural and cultural configurations (socialisation, norms, practice culture) work to reproduce assessment practices, which can be understood as agency but is somewhat subsumed by the dynamic context of competence assessment, which acts to shape nurses' decision-making processes.

Clinical context is a key aspect of the competency landscape which shapes nursing assessment. Within the clinical context there are constraints which act as social structures; assessor training, the quality of assessment tools, the resources available to support assessment activities, patient load and the particular systems of social activity related to patient acuity. Nurses are required to navigate these structures during their assessment interactions and when choosing between different courses of action or reaction. Nurses

support the use of the Standards not only because they are constrained to use them, but also because they experience some freedom within their practice to use their expertise to interpret the Standards and apply them to the given context.' Support for the Standards is facilitated by complex socio-cultural systems within the nursing practice environment that serve to maintain nurse's agency. The practice culture promotes the interaction of individual nurses with group values, attitudes and patterns of behaviour that is committed to, for example, a safety and quality agenda.

The Standards are a document developed to measure nurses competence to practise. They form a social structure that define; beginning-level competence, maintain the minimum standards of practice, guide the assessment of competence and promote nurses' professional identity. The way in which they are constructed influences nurses' behaviour predisposing them to use and value the Standards in particular ways. The Standards provide the regulatory mandate and practice rules that are aligned with a set of norms, beliefs and values that influence nurse's social action. In turn the development of the Standards was predicated upon the dominant norms which had previously privileged task-based assessment. Discourses around nursing practice emphasise the objective and quantifiable aspects of competence. Nurses actively work to reproduce the pre-existing structural relations that maintain the position of the Standards in practice. This highlights the primacy of position of the Standards as part of the regulatory framework that promotes professional identity and accountability.

The Standards provide the means by which all nurses are required to demonstrate their eligibility for registration. Once a nurse is registered, the Standards remain an important point of reference for a nurse's professional identity. Thus, the Standards facilitate a coherence of purpose that contributes to a sense of collective identity. The Standards are used because they have been adopted as a suitable tool to ensure competence to practise and are part of what is required for eligibility for nursing registration. The Standards are aligned with safety and quality agenda and contribute therefore to a nurses' identity as a registered, safe, accountable practitioner.



Nurses operate within a set of social constraints that are particular to their occupation as nurse, and also to their role as preceptor, academic, clinical facilitator or graduate. Nurse academics and clinical facilitators supported the Standards within curricular and as a benchmarking tool. Academics, clinical facilitators and preceptors acted as the 'gate keepers' of professional practice responsible for ensuring their assessees have met the Standards prior to registration. Some academics, clinical facilitators and preceptors noted it was challenging for them to identify the Standards in practice and have confidence in understanding their meaning in relation to the behaviours that describe the registered nurse on entry to practise. The different groups of nurses behaved in ways associated with their different levels of training. That is, the more expert, the more dismissive of the Standards, and yet the more confidence they had in assessment using the Standard.

Graduates or students on the other hand, described their experience with the Standards as 'overwhelming' and 'dry', which resulted in not promoting their understanding of them. Graduates described their assessment, and competence-assessment outcomes were influenced by varying levels of assessor skill and ability. Nurses' practice culture and the social structural processes (norms, values, policies and procedures) acted to support the emergence of nurses' assessment discourse practices. These discourses promoted the alignment of individual nurses with group values, attitudes and patterns of behaviour that is committed to, for example, a safety and quality agenda.

Nurses support the use of the Standards not only because they are constrained to use them, but also because they experience some freedom within their practice to use their expertise to interpret the Standards and apply them to a given context. Support for the Standards is facilitated by complex socio-cultural systems within the nursing practice environment that serve to maintain the Primary Agency of nurses. Agency is the capacity of individuals to act independently and to make their own free choices (Archer 1995). Thus, nurses' practice are shaped by social structures that intersect in complex ways, which in turn are reproduced and transformed through nurses' own actions and interactions.

Using the Standards for assessment results in cultural or normative patterns of behaviour that relate to the expectations nurses hold about a competence, nurse's behaviour and how nurses relate to each other within the context of assessment practice. Nurses' social behaviours when using the Standards are therefore influenced by the norms, values and the rules surrounding competence assessment practices. This explanation can be understood to be 'generative' in that the nurses' behaviour and decisions around the Standards can be understood to be a product generated by the underlying, independent structures and powers that exist in the social world at the level of the real. From a critical realist perspective, nurses practice world is theorised as an open dynamic system, which is not closed or fixed as in controlled experiments (Harwood and Clark 2011, p. 31). As such, this 'real' world has an unavoidable impact on the actions and perceptions of nurses in the environment regardless of their awareness or not of this effect.

### **The effect of Agency and re-interpretation of the Standards**

Social agency is viewed as interactions between groups and collectivities whereby Agency conditions (not determines) who comes to occupy different social roles (Archer 2000a). Nurses are defined as incumbents of the role of 'nurse' (assessor or assessee) and have emergent properties which cannot be reduced to the characteristics of these occupants of the role. Emergent properties can be demonstrated by the pre-existence of these nursing roles, their endurance over time, their capacity to sustain despite considerable changes in the personal features of successive holders of the title, and the relatively autonomous powers of constraint and enablement which are embedded in their role, not the occupant, which can be lost when nurses leave their position and the profession.

The nurses in this study recognised the subjective nature of assessment and when faced with dynamic practice-contexts, used their agency to interpret and then apply the Standards in a way that allowed them to both meet normative expectations to use the Standards, and maintain their identity as competent nurses. Nurses' interactions with the Standards are shaped by structural constraints, and their relative freedoms to interpret the Standards. Nurses use their agency to problematise the Standards language, usefulness to them for

assessment of competence and integrate their own expertise and practical wisdom<sup>41</sup> when making assessment decisions. Nurses identified there were numerous structural constraints that influenced their interactions with the Standards. Nevertheless, nurses continue to use the Standards to define competence and support their use as a tool for governing nurse's practice, defining beginning level competence, promoting the profession, describing the limits of practice and promoting nurses' professional identity. This resulted in nurses' social practices working to reproduce the existing cultural meanings and discourses for the purposes of meeting regulatory requirements. These systems of social activity therefore become 'conventions according to which actions of individuals can be related' (Sayer 1992: 21). Nurses negotiate the structural constraints within the practice context in such a way that results in the maintenance of the Standards in a state of equilibrium.

These nurses also faced the challenge of with navigating a number of constraints on their assessment practices, which included the concepts of competency, the language of the Standards and difficulties faced when operationalising the Standards in assessment of competence. It is when nurses made a judgement using the Standards that there was evidence of differences in opinion or understanding of the Standards that required nurses to use their unique interpretive judgement of the assessment event. The current nursing culture and structures that support the Standards has resulted in the reproduction of assessment activities despite these constraints. The Standards are accepted as a 'taken for granted' and a normalised part of practice, with the formal and informal culture of nursing exerting pressure on nurses to comply with practice norms.

### **Factors promoting nurses' interactions with the Standards**

Complex and deep interplay between agency and structural factors is evident in nurses' interaction with the Standards and their perceived value as a source of professional affirmation. A sense of belonging to the profession, an identity that transcended nurses' own personal identity, underpinned the acceptance of the Standards and rendered them

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<sup>41</sup> Practical wisdom or phronesis is the Greek word for wisdom or intelligence.

legitimate. The assimilation of the Standards into the professional identity of nurses is a process that begins in pre-registration education and continues throughout their nursing career.

Nurse academics introduce and re-enforce the importance of the Standards to students. In practice, the Standards continue to be promoted by clinical facilitators and preceptors as an integral component of the profession. The nursing socialisation and acculturation process reinforces the Standards as part of the normalised rules of practice adopted as part of the 'routine of assessment practices', regardless of any challenges or difficulties faced with implementing them. Hence, the formal and informal culture of nursing is an influential mechanism that promotes nurse's interaction with the Standards and exerts normative pressure on nurses to use and accept the Standards in order to meet their own and imposed ideas around the identity of a competent nurse.

Students' were introduced to the Standards as part of their education as well as part of their socialisation process. The way in which the Standards are introduced to students in the bachelor degree preparation does not promote students understanding. As students, it was challenging to understand how the Standards relate to assessment for a number of reasons including that they received a lack of feedback or there was ambiguity in the feedback they received from preceptors. These interactions took place within an environment that was complex and typified by competing demands and interactions with other health professionals inclusive of a variety of practice specialities, patient acuities, disease co-morbidities, financial and human-resource constraints. The practice context has a culture where the Standards are not uncritically, but unquestioningly implemented, and have therefore become part of the social and professional fabric of practice.

The Standards also provide nursing with professional distinctiveness, a mechanism for professional accountability and are supported as an essential component of the safety and quality agenda. For this to be successful required the alignment of both the practice and regulatory agendas, which occurs due to the structural power of the Standards that direct

and control the practice of individual nurses, whilst at the same time can hold nurses to account for their practice.

Whilst there are numerous structural forces at work within the practice environment, nurses also have agency in their actions, and their agency has the ability to influence their actions and interactions. The result of this is that individual nurses use their agency to exert effects on how the Standards are used in practice. Nurses have room to manoeuvre and exercise their use agency in their everyday work and in their decision-making around competency. It is here that nurses' use practical wisdom gained through practical experiences, which includes how they have interpreted the language of the Standards on previous occasions. Nurses have accepted the Standards as an intrinsic part of practice and their interactions with them are socially influenced. However, their everyday interactions and manoeuvrings have not resulted in any structural changes regarding the Standards language because there has been no collaborative change agenda. Decision making around competence is consequently viewed as an expression of human agency, but one that is always impacted by structural factors.

The Standards therefore exert normative power. The participants highlighted the need to comply with the Standards to gain registration and the socio-structural context of practice influenced their use of this tool for assessment of competence. Archer (1995, 1996, 2000) argues that socio-cultural interactions are conditioned and shaped but not fully determined by the conditioning context. This highlights that nurses are influenced by the rules and resources within practice and their social interchanges with these structural properties, which are reconstituted through their interactions.

### **Factors constraining nurses' interactions with the Standards**

There is a complex and deep interplay of agency and structural factors constraining nurses' interaction. The Standards imposed a number of constraints that a nurse must navigate during their interactions with the Standards. The language of the Standards is a major constraining factor in their use. This may in part explain why the literature shows that standards in general are often ignored or poorly operationalised (Grimshaw and Eccles

2004). Additionally, nurses believed the Standards language was repetitive and contained a large number of competency elements that caused confusion when trying to identify how they 'fit' into practice. For decades the literature has highlighted the debate surrounding widespread dissatisfaction with the professional assessment procedures and the tools used to assess competence (Dawkins 1989; McGaghie 1989; Gonczi, Hager et al. 1990; Masters and McCurry 1990; Crookes, Brown et al. 2010). The Standards language was believed to be constraining because it was not automatically understood by nurses (assessors or assessees), which resulted in challenges for nurses when applying the Standards to practice and the assessment of competence.

The socialisation of student nurses supports the promotion of their professional identity and the requirement that they demonstrate the Standards, and acts to further establish the centrality of the Standards. Research has shown it is often the preceptors who have the greatest influence on the internalisation of values by nursing students (Myrick and Yonge 2005). Assessors and assessees are both socialised through their interactions with nursing theory and practice. The discourses about regulation and the regulations themselves operate to constrain nurse's ability to direct their own work.

Nurses problematised the language of the Standards whilst recognising that the Standards are a non-negotiable aspect of their role. On the one hand, nurses did raise questions about the Standards and offered their own personal critique of them. The language of the Standards is a key part of nurses' re-negotiation of meaning, their co-construction or (re)interpretations. They were constrained to use the Standards, but they used their agency to apply them to practice in a contextualised way. On the other hand, challenging the Standards may raise questions about the individual nurse's own competence. Further, nurses raising challenges about the Standards appear to be outside of what is accepted behaviour of a 'competent' nurse.

Nurses use their agency to reinterpret the Standards in their own workday, and yet they had no broader awareness of how other nurses approached assessment and interpretation of competence in relation to the Standards. Nurses were positioned as primary agents that

neither expressed interests nor organised for their strategic pursuit, either in society or in a given institutional sector (Archer and Elder-Vass 2011). Having a lack of say is advanced by Archer (1996) as being conducive to reproduction or maintenance of the status quo. That is, the Standards continue to exist and be used in a relatively stable way, with nursing acting as Primary Agents, who were not actively expressing their concerns or organising a strategic intent to bring about changes or review of the Standards.

As a critical realist study the analysis of agency was embedded in the analysis of institutions and structures. Taking agency seriously meant seeking to understand nurses' situation, examining their values, identifying barriers and opportunities for change, whilst acknowledging that generative mechanisms operate to constrain and/or enable change. A major area of interest in this research was the interplay between nurse's social assessment practices, the rules, resources available and the power of nurses as a collective. Decision making around competence is viewed as an expression of human agency but one that is always impacted on by structural factors. The context and structure of the individuals developing and those allocating resources to support students in practice, both human and financial, may have had an influence on the utilisation of the Standards.

As primary agents, nurses were unable to use their agency to articulate their needs and to organise themselves in order to promote their interests by tasking strategic action to alter the set of constraints. Further, there was a lack of mechanisms available to nurses that would allow them to mobilise towards assertive social action in seeking changes to the Standards. That is, there was an absence of mechanisms for providing feedback on the Standards (positive or negative); whether through the initial or annual registration process, or via the regulatory website.

Nurses' use of 'practical wisdom', which has had limited discussion in preceptorship literature (Myrick, Yonge et al. 2010), as well as by Gadamer (2002) who considered practical wisdom as a discerning and ongoing interpretive process of evaluating the means and the ends of applying ideals or principles that emerge as they occur in the context of the action itself. Practical wisdom can be promoted by engaging in authentic nursing practice (Myrick, Yonge et al. 2010), which refers to nurses meaning making and construction of

meaning around competence. Practical wisdom is a discerning process of evaluating and applying ideals or principles that adapt and respond to the complexities and challenges of everyday nursing practice (Myrick, Yonge et al. 2010). Whilst nurses described a tension with the interpretive process of the Standards, this tension appeared greater when the interpretation was attempted in the name of reliability.

Understanding competency is extremely complex (Fielding, Rogers et al. 2001; Tamblyn, Abrahamowicz et al. 2002; Fitzgerald, White et al. 2003; Wells 2003; Austin, Marini et al. 2004; Kuchinke and Hee-Young 2005; Khomeiran, Yekta et al. 2006). Nurse's knowledge base is sophisticated and thus assessment of their practice needs to be able to capture this complexity. This issue has been raised in the literature with discussions suggesting that competence assessment may require a more sophisticated knowledge base than previously anticipated (Fitzgerald, Walsh et al. 2001; NHS 2008). It seems that nurses currently address the complexities of using the Standards to assess competence through their use of interpretation and their practical wisdom, which results in nurses assessing competence in dynamic ways. Nurses use their agency to interact with the Standards to re-negotiate their meaning, usefulness and purpose, and to re-interpret them according to their fit with the particular time of day and patient needs. This ability to creatively manage the inconsistencies or poor fit of the Standards to a given practice context is evidence of reflexivity.

### **Reflexivity in nurse's assessment practices**

Nurses have the power to reflect upon their social context, and to act reflexively towards it, either individually or collectively. Only by the virtue of such power can nurses shape their socio-cultural context to become active agents, rather than passive recipients. Nurses' assessment practices are therefore related to their individual reflexive abilities to resist or circumvent structural and social impingements. Whilst nurses are capable of consciously reflecting upon and changing their assessment interactions with the Standards and of influencing the form of these social structures, there was no evidence of the latter. Thus, the effect of generative mechanisms, for example nurses decisions around competency, is contingent upon their reflexive deliberations and creativity. Generative mechanisms are real



in that they provide the circumstances that serve to constrain or enable an individual's action (Kontos, Miller et al. 2010). Nurses as reflexive agents perceived, negotiated, and on the whole used the Standards. This occurred amidst the influences of context and alongside of their own individual backgrounds, socialisation and the micro-social context of peer relations in the workplace.

Few Primary Agents have advanced their individual positions to create a more diverse fund of ideas which furnishes Primary Agency as a whole with new cultural resources that would foster new forms of reflexivity. Nurses' reflexive response has yet to confront the daunting task of mobilising the similarities of nurses' grievances into collective action. The very notion of morphogenesis is predicated upon such active agents, otherwise there is no legitimate source to which structural or cultural elaboration can be attributed (Archer 1995). This means that nurses have the powers of critical reflection upon their social context and to creatively redesign their social environment, its institutional or ideational configurations, or both.

Competence assessment in practice is influenced by contextual factors which are interconnected with assessors' behaviour and the quality of their assessment.

Understanding how mechanisms play out in the context of the practice setting with particular groups of nurses at a specific time, must take account of how nurses as reflexive agents recognise, negotiate, accept or are constrained by the effects of broader contextual influences. Nurses' agency can be used as a counter to the structural forces. For example, nurses have the ability to positively impact on the assessor-assessee relationship and promote a constructive and positive relationship with competence as defined within the Standards. These influences must be understood in the context of life history, socialisation and peer interaction in the workplace (Kontos and Poland 2009).

### **The morphostatic nature of the Standards**

The Standards use in practice depends on interactions between nurses and the organisational structures within the practice culture, and it is these interactions that determine whether the Standards exist in a state of morphostasis (reproduction) or morphogenesis (transformation). As previously discussed in Chapter 3, Archers' (1995)

morphogenetic approach includes three phases; structural conditioning, social interaction and social elaboration. In the structural conditioning phase, nurses act within pre-defined circumstances in the practice environment. However, the structures (e.g. protocols, guidelines and the Standards), which represent this pre-defined context of nursing practice are the result of nurses agency, being (re)produced by people (academics, preceptors and graduates). Social interaction occurs when assessors and assessees use the Standards in practice. The social elaboration phase which is a result of nurses' socio-cultural interactions in phase two, results in structural reproduction/morphostasis of the Standards where nurses and structures work to largely reproduce assessment decisions against the Standards.

The current practice environment supports certain norms and 'working rules' in order for the interactions of nurses to reproduce the Standards in a morphostatic way. An explanation therefore needs to describe how structural and cultural powers impinge on nurses, and further how nurses use their own personal powers to act in a certain way. A morphogenetic approach challenges the respective weightings of structure and power by analysing the level of constraints and degrees of freedom in different structural contexts and within different social groups. As described in Chapter 3 morphostasis refers to those processes in a complex system, which 'preserve [the form, structure or state] unchanged' (Archer 1995: 75). In this research, morphostasis refers to the reproduction of the Standards as opposed to any moves to bring about changes to them as prevailing structures, which would occur with morphogenesis.

An examination of the conditions under which morphostasis of the Standards takes place required an examination of collective practices within nursing and the ways in which nurses are organised into social groups. In relation to the Standards, nurses can be divided into two categories; the assessor or the assessee. Assessors refer to academics, clinical facilitators and preceptors. Assesseees refer to those being assessed by assessors, which includes students and graduates. Some academics, clinical facilitators and preceptors noted it was challenging for them to identify the Standards in practice and have confidence in their meaning. In a critical realist sense, the assessor's role is shaped by the norms, expectations and values, which emanate from within the cultural context they inhabit. This raises

questions around the assessor's actual level of understanding of the Standards, what competence means, how it is constituted, how it is connected to the Standards and how the Standards can be used to assess competence with the multitude of practice contexts. This highlights the importance of an examination of the ways in which assessors understand and interpret the Standards. This has particular significance for academics because it is currently their role to introduce students of nursing to the Standards and they also are the final decision makers regarding the competency of a student of nursing.

Preceptors, like clinical facilitators and academics, use the suite of professional practice standards<sup>42</sup> (including the Standards), but are solely based in the clinical setting. Thus, they guide students through the transition from the academic institution into the professional practice environment. The education of preceptors (tertiary versus hospital-based) and training (formal preceptor training program versus no training program) impacted on how the students of nursing perceived the quality of their supervision and assessment in relation to the Standards. That is, the participants believed that training contributes positively to the ability to assess competence. This suggests structural constraints influence how preceptors act and role model engagement in professional practices, the operationalisation of the Standards and consequently how they undertake an assessment of competence using the Standards. This is particularly relevant in light of suggestions that assessors are not always adequately prepared for their assessment role and are often reluctant to fail a student (Lankshear 1990; Watson, Stimpson et al. 2002b; Hawe 2003; Baume, Yorke et al. 2004; Moore 2005). Whilst this research did not address the issue of failing a student (or nurse), nurses may ignore the Standards by choosing not to provide constructive feedback to their assessees or discuss where the Standards are evident in nurses' practice. This may occur because assessors are not adequately prepared for their assessment role, are sometime biased in their judgements and are often reluctant to fail a student (Watson, Stimpson et al. 2002b; Duffy 2003; Hawe 2003; Baume, Yorke et al. 2004; Moore 2005; Sharples, Kelly et al. 2007; Nettleton and Bray 2008; Kendall-Raynor 2009). Alternatively, this research raises questions of whether the Standards are respected as a true measure of 'failure', or whether nurses rely on practical wisdom to make this decision.

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<sup>42</sup> Professional practice standards include the Code of Conduct, Code of Ethics, the Decision Making Framework, and the Standards.

Preceptors, academics and graduates have vested interests in promoting competence, thus their use of the Standards works to sustain the status quo of regulatory initiatives. This acts as a constraint through the support of norms and expectations which shape behaviour towards what is considered appropriate and desirable. As already established, the nurses who occupy these roles are not absolutely compelled to act in this way because they have the agency to act in alternative ways. However, the structural characteristics of nurses' role, including their power and position means there will be certain consequences for not acting as expected. That is, it is expected that assessors not only use, but understand, the core competency standards by which a nurses' performance is assessed to obtain and retain their license to practice as a registered nurse in Australia.

Graduates have a particular exposure to the normative assumptions around the use of the Standards. In the education setting students are first introduced to the Standards as a theoretical construct, which they described as confusing and overwhelming, particularly in relation to the large number of competency elements contained within the Standards. However, it is in the context of the clinical setting that all the Standards must be demonstrated prior to the completion of student's final practical placement. A student of nursing assessment experience is influenced by informal structures, such as practice norms and the accepted practices, which can be countered or reinforced by formal structures, such as governance structures, policies and procedures. This suggests that the graduate's individual competence development is influenced not just by how knowledgeable their preceptor was but also by; the preceptor's understanding of the Standards, use of assessment tools and the time the preceptor takes to provide constructive feedback on the assessment. Hence it is important that assessors can interpret the Standards, but it is also important that their assessees understand these particular interpretations.

A cycle therefore exists where the structural properties of nursing practice act to promote certain interactions and constrain others, which results in continual compliance with the expectation to use the Standards. This action takes place at the level of the real because it is at this level where underlying structures and powers reside and these mechanisms can cause changes in events or outcomes (Bhaskar 1975). That is, the generative mechanisms

impacting at the level of the real are not simply the need for an assessment to be undertaken per se, but rather the interdependencies and relationship interactions between the assessor, the assessee, the assessment environment and the Standards. The specific context of practice can simultaneously and selectively influence the social action and agency of nurses. The meanings are conferred through interaction, in particular via the interactions between students and their assessor. The interplay between professional, personal, cultural and contextual influences of nurses resulted in the morphostasis of the Standards. At the same time, at the level of the individual nurse, there is a considerable amount of renegotiation of the meaning of the Standards. Considering the number of nurses who undertook this renegotiation of meaning it is a significant finding, and one that was not likely to have been uncovered by quantitative methods.

Nurses as primary agents are real, and their agency involves real actions by real people. Their success to realise collective action will largely depends on Corporate Agents who are able to organise social movements and articulate their goals, as opposed to Primary Agents who are simply 'collectivities sharing the same life-chances' (Archer 2000a: 263). However, in regard to the action they are able to take, the nurses responses were consistent with Archer's (2000) argument that cultural ideas available to Primary Agents engaged in structural interactions are extremely homogeneous with no visible alternative actions available to them (Archer 2000a: 270).

No group of nurses (academics, clinical facilitators, preceptors and graduates) had been demanding changes or alternatives to the Standards. That is to say, they make individual judgements and interpretations when undertaking assessments of competence within the narrow set of available options to them by the Standards. This is a new finding that contributes to our understanding of what influences nurses interactions with the Standards and their resultant assessment decisions. This is significant because the influence of individual nurses within the assessment process and the relationship between them stayed important throughout the analysis, since critical realism enabled the incorporation of the different views of individuals to assist in understanding how mechanisms generated outcomes in the relationship.

The findings of this study suggest that the interactions between agency, structures and culture in nursing practice have preserved and maintained the Standards in their current form. This morphostatic state is maintained by four aspects of the nursing assessment milieu: the normative power of the Standards, the primary agency of these nurses, the Standards link to nursing identity, and their alignment with the safety and quality agendas and other policy directives.

Future transformation or morphogenesis of the Standards could occur through what is advanced by Archer and Elder-Vass (2011) as morphogenetic cycles; comprising of subjective and objective moments. During these cycles nurses would have the potential, through their actions, to alter or modify the Standards. The type of actions nurses could undertake that would alter the Standards could be to implement assessment strategies and innovations that involve the interaction between structural, cultural and agential forces over time. For example, nurses could need to work together to identify an appropriate means to foster new ways to assess that nurses met the requisite standards of practice. This would allow nurses to largely cease being the passive recipients of their positions and begin to play a more active part in the shaping of the profession.

### **The Standards and the nurse identity**

A central argument of this thesis is that the nurses support the Standards role in the promotion of their nursing identity. The move of nursing into the higher education sector was seen as a way of reinforcing the profession and individuals' professional identity (Serra 2008). The historical, social and cultural factors that drove the introduction of the Standards also shaped their acceptance by nurses (Chiarella 2006) as a means for defining and legitimating the profession and the individual competence of nurses within it. The analysis of nurse's interactions with the Standards exposed that a nurse's identity as a professional is promoted through the socialisation process, which includes a particular set of norms and discourses around the use of the Standards.

Nursing has a vested interest in the promotion and maintenance of their professional identity. Each new 'generation' of nurse either reproduces or transforms its structural inheritance, but this heritage itself conditions their vested interests. Vested interests comprise of the roles and rules of nursing regulating set in train by Corporate Agents whose aspirations have supported stasis of the Standards. As such Corporate Agents had resources and strategies have been conducive to structural morphostasis, as opposed to morphogenesis.

The formation of nurses' professional identity was centred on the importance of nurse's 'belonging' to the nursing profession and this idea was strongly aligned to the Standards. Since the Standards introduction, which was largely driven by nursing regulators and nurse academics who were not practising in clinical nursing, there has not been systemic change to the Standards. Clinical nurses who are positioned as Primary Agents have been unable to develop relationships with those who have the power or resources to address their concerns and challenge the status quo. Primarily this is because regulatory bodies are separate to clinical practice and hence not easily accessible by clinical nurses to communicate their concerns or frustrations. This provides an example of the dynamic relationship between individual agency, organisational rules and regulations and the power of regulation.

### **The safety and quality agenda promoting morphostasis of the Standards**

Competence and the use of the competency standards have become politicised, not simply because a lack of competence is a risk to public safety (Flanagan, Baldwin et al. 2000), but because competence of nurses is a reasonable expectation for a profession (Watson and Elliott 2006). The development of the Standards has been directed at the level of the individual as part of their professional responsibility to align with the safety and quality agenda as well as political, economic and regulatory interests supported from within nursing. While the competency standards were adopted as a mechanism for promoting safe and quality practice (Gonczy, Hager et al. 1990) there is limited evidence regarding whether the introduction of competency standards has led to improved public safety (Carraccio, Wolfsthal et al. 2002).

Nurses believe it is important to align their practice with a safety and quality agenda and others have identified clusters of nursing values that relate to accountability and responsibility for practice, competence in practice and legal issues (Leners, Roehrs et al. 2006). This study highlights the difficulties nurses face in using the Standards to support these safety and quality values through competence assessment. This suggests that the Standards are only, at best, offering 'superficial' support to the concepts of safety and quality.

Despite the challenges nurses face with using the Standards; they have continued to use them with minimal overt resistance for over two decades. This means there are tensions regarding the assessment process for both the assessor and the assessee. Nurses don't fully understand the Standards and there is a lack of consistency in the provision of constructive feedback from the assessor to the assessee. Some assessors have chosen not to use the Standards as part of the assessment process and made their assessees undertake the assessment documentation process on their behalf. Nurses supported the subjectivity of the assessment process and the importance of assessor preparation, which is supported by the literature that emphasises that assessment of competence remains inherently subjective as it is open to interpretation from both the assessor and the assessee (Fereday and Muir-Cochrane 2004). This means that students of nursing and graduates experience various degrees of quality within the assessment process, which does little to promote an understanding of the Standards or ensure competency assessment enhances safety and quality education for nurses.

This thesis argues that competence is developed through a nurse's educational preparation and happens despite, not because of, assessment against the Standards. This is an interesting finding as nurses at the practice/clinical levels are using the Standards to address nurses' competence, but their decisions are influenced largely by their interruptive skills and use of practical wisdom. Nurses are utilising the Standards to produce competence, but what is unclear is whether this is a new or changed version of the Standards. This creates concerns about how fit for purpose the Standards are as the framework to allow a



determination of competence to practise to be made. As Grealish (2009) revealed, nurses are not undertaking the work of assessing competence; rather their assessments are aimed at undertaking the work of *producing* competence. This is an area where further research is warranted.

The competence of health care workers remains a key issue in contemporary policy debates at the international, national and organisational level (IOM 2001; Adrian 2006; Dieleman and Harnmeijer 2006; Wakefield 2008; Hughes 2008a; Hughes 2008b; Armstrong, Spencer et al. 2009; ACSQHC 2011). As discussed in Chapter 2, the notion of competence is omnipresent in health care environments, and is ubiquitous within nursing and other health professions (Gonczi, Hager et al. 1990; Kane 1992; Carraccio, Wolfsthal et al. 2002). Grealish (2009: 183) argues that the Standards have become 'uncritically accepted as a natural representation of competence' in nursing regulation, education, practice and research. The safety and quality agenda is a structural force which perpetuates the use of the Standards. Nurses have roles associated with being a competent professionals, which brings with it explicit responsibilities. The support by nurses for the safety and quality agenda forms the material causes that enable nurses to support the Standards as a robust and enduring social structure that holds nurses in positions they cannot alter without a level of personal (professional) risk.

### **The cultural context of nursing practice: influencing morphostasis**

Assessment of competence requires the navigation of the practice setting whilst succumbing to the pressures from the specific idiosyncrasies of the practice context. The participants described a dissonance between what they believed and supported the Standards 'did' by defining competence to practise, and how the Standards could be 'used' to assess competence in practice. The literature provides many examples of the analysis, theorising and debate regarding the challenges faced with assessment of competence (Williams, Wellard et al. 2001; Ashworth and Morrison 1991; Arvidsson and Firdlund 2005; Chitty 2005; Cowan, Norman et al. 2005a; Fereday and Muir-Cochrane 2006; Lichtenberg,

Portnoy et al. 2007; Alien, Lauchner et al. 2008; Bradshaw and Merriman 2008; Chiarella, Thoms et al. 2008; Grealish 2009; Crookes, Brown et al. 2010). However, whilst the participants acknowledged they found using the Standards for assessment of practice challenging, they had not been actively raising their concerns. Instead, the participants were constrained by the cultural norms that supported the Standards role in promoting their identity as a professional and this acted to constrain them from making any moves for change.

The few nurses who have, in the past, openly criticised<sup>43</sup> the Standards use in the tertiary sector have been unable to create a morphogenesis or a means to foster new forms of transformation. History provides evidence that it was nurses themselves<sup>44</sup> that drove the introduction of the Standards. However, the regulatory power of the Standards is distributed primarily amongst a small number of nurses in practice (including regulators, academics and clinical facilitators). Therefore, to bring about change to the Standards would require a morphogenetic scenario that engaged nurses so that their 'involuntary agency'<sup>45</sup> can be left behind. This would allow nurses to largely cease being the passive recipients of their positions and begin to play a more active part in the shaping of the profession.

The barriers to competence assessment under the current model could be, in part, overcome with an acknowledgement of the complexity of the social environment nurses work within. This acknowledgement recognises the way in which nurses draw on their own expert knowledge and experience in order to assess competence. The findings from this research re-conceptualise our understanding of how nurses' make decisions to use the Standards. Their decisions are not just related to whether they have been educated about the Standards or recognise that demonstration of them is required for eligibility for practice, but that the social context of practice is complex and there are other social and structural barriers are at work.

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<sup>43</sup> See examples in While 1994, Walker, 1995, Chapman 1999, Watkins, 2000, Watson et al. 2002, Pearson, 2002, McGrath 2006, Cowan et al, 2008.

<sup>44</sup> See Background page 22 for further clarification

<sup>45</sup> Involuntary agency was coined by Archer as referring to primary agents who can be left behind when Primary Agents collectively cease to be the largely passive recipients of their positions in the social distribution of life-chances and can begin to play an active part in their shaping (Archer 2000).

Through the collective sharing of their feelings, anxieties and concerns, Primary Agents can move to gain Corporate Agency and actively move to influence a review and change to the Standards. A review could include how the Standards are introduced, taught and applied to nurses' practice. As discussed above, the ethos of professionalism has silenced the complexities of using the Standards for assessment of competence with nurses giving the outward appearance of accepting the Standards as an inevitable and an unchallengeable part of nursing practice. Further, there was no evidence of either rejection or suggestions of innovation regarding the Standards. Nevertheless, nurses lack of action does not deem them as intrinsically passive but rather as advanced by Archer (2000a) that their 'passivity represents a suspension, often a deliberate suspension, of their agential powers on the part of those Corporate Agents whose interests this passivity serves' (2000a: 266).

The professional culture of nursing has discouraged any moves for primary agents to gain corporate agency. Despite the personal challenges nurses experienced with using the Standards, they have continued to work within these constraints. The cultural and structural conditions within nursing practice have created and maintained Primary Agents who have failed to come up with any innovative ideas or the structures to challenge the status quo (Archer 2000a). This has resulted in the Standards existing in a morphostatic way because the participants as Primary Agents are powerless to instigate change to the existing cultural and structural conditions in order to improve their life chances or meet their collective interests (Archer 2000a: 11). This occurs because 'only corporate agents are capable of shaping and reshaping societal context, primary agents live within it' (Archer 2007: 109). The professional culture of nursing and the structural conditions within nursing practice are the multiple factors that shape nurses assessment decision making. It is the influence of these factors on nurses' agency that have created and maintained Primary Agents.

## Conclusion

This chapter provides an understanding of the complex and multidimensional nature of competence assessment decisions nurses' make within the context of practice. It is here that nurses negotiate between culture, structure and agency to operationalise the

Standards for the assessment of competence. It cannot be denied that knowledge is an important factor in competence decision-making. Whilst knowledge of the Standards contributes to nurses assessment decisions, it is not, as these findings suggest, the primary and exclusive determinant of how assessment decisions are made. Using critical realism as a worldview to explore how nurses understand and use the Standards when making decisions around competence informs us of the complexity surrounding assessment decisions. To summarise, this research provides an explanation of the causal mechanisms that contribute to assessment decision-making processes, irrespective of the individual's perception of them, acknowledging the underlying social factors and the context in which decisions are made as well as agency and structure in an open system.

In using a critical realist perspective, this thesis offers a window to explore nurses contextualised competence assessment decision-making processes and illuminates an existing knowledge gap. A critical realist approach uncovered generative mechanisms underlying nurses' interactions with the Standards by capturing the complexity of causation in nursing assessment interactions. The Standards are poorly understood and the language of the Standards was believed to contribute to the difficulties nurses had with their interpretation of them. This was further complicated by a lack of feedback or ambiguous feedback given to assessees from preceptors.

A gap exists between the broad intentions of the Standards as a tool to assess beginning level competence and the individual approaches taken by the assessors and assessees using the Standards. Generative mechanism included; the contextual nature of the Standards, the normalised position of the Standards, student introduction to the Standards, the preparation and skill of the preceptor, the disconnection between the function and the application of the Standards, student introduction to the Standards and the impact of role when operationalising the Standards. At another level of influence, contextual factors reportedly contributed to the way nurses interacted with the Standards. The contextual factors identified in the study included a relational relationship between context and the assessor-assessee, nurses understanding, interpretation and interaction with the pre-existing structures (e.g. policies, procedures, assessment tools) within the practice setting,

the distribution of resources, the availability of the assessor and the time available and assessment tools used.

## Chapter 8 – Conclusion

### Introduction

My research has examined the social forces and processes that effect nurses interactions with the Standards including how these forces influence their interpretations and meaning-constructions. This thesis provides theoretical insights into how nurses' behaviour and decisions around competency can be understood to be a product generated by the underlying, structures and powers that exist in the practice environment and influence the ways in which nurses understand, assess and determine competence. The thesis also examined the way in which nurses use their agency to interpret the Standards and relate to interpretations and understandings around the use of the Standards by nurses. The position of the Standards has been generated by underlying structures and powers in nurses' social world. The study demonstrates that a fragile and negotiable understanding of the Standards exists which has resulted in diverse interpretation and varying levels of expectation in assessment interactions.

This critical realist explanation can be understood to be 'generative' in that the nurses' behaviour and decisions around the Standards can be understood to be a product generated by the underlying, independent structures and powers that exist in the social world at the level of the real. Generative mechanisms are embedded within social structures and are contextually contingent. The effect of generative mechanisms, for example nurses decisions around competency, is contingent upon their reflexive deliberations and creativity. For nurses a lack of understanding of the Standards led to a situation where nurses using their agency, ignore or renegotiate the meaning of the Standards, and use their 'practical wisdom' to interpret the Standards to fit with the context or nurse they are assessing that day. This recognises that nurses can, and do, have an influence in many assessment instances, but their influence is as a Primary Agent. The dissatisfaction nurses' face with using the Standards is not new. What is new is the recognition that nurse's use practical wisdom in their assessment processes and this recognition of this can be used to inform the way student nurses are trained and directed to use the Standards for assessment of competence. Therefore problematising the Standards is an act of agency, in that nurses use

their agency to renegotiate the meaning of the Standards to construct meaning around competence. Further, nurses' lack of understanding of the Standards has implications for regulators, higher education and the quality and safety agenda.

The findings highlight a tension in the way that nurses use the Standards. On the one hand, nurses support the Standards role as a mechanism to promote their professional identity and acknowledge their link to the safety and quality agenda. On the other hand, the Standards are difficult to operationalise for assessment of competence. This leads to a weak integration of the Standards in assessing competence in practice. The structure of the Standards can only exist through agency and agents rules and resources constraints, which can facilitate or constrain their actions. Agents' actions lead to the reconstitution of structures, which can affect future action. This thesis has exposed the importance of the interrelationship between structure and agency to the competence-assessment process and it is the significance of this relationship to competence assessment that has been ignored in previous research.

The literature review highlighted that there has been different interpretations of competency standards and confusion has arisen from the different interpretations of them (Cheek, Gibson et al. 1995; CS&HITB 2005). What has been exposed by this research is that the Standards are poorly understood and ensuring an appropriate assessment system for nurses is in place will require a multidimensional and stratified approach which considers the social and material conditions of assessment practices. Critical realism provided a useful framework for understanding the ways nurses understand and utilise the Standards, because it recognises that social and structural barriers are at work and have prevented nurses in the practice environment from being able to articulate and organise themselves around their needs to achieve a position of corporate agency. As Corporate Agents nurses would have the dominant cultural discourse at their disposal and be in a position to advance transformation of the Standards through their bargaining power.

## **How do nurses understand and utilise the Standards?**

Nurses' interactions with the Standards indicate that there is no shared sense of how to operationalise and apply the Standards within the dynamic context of practice. Nurses' understandings are shaped by the social world in which they live and interact. As an open system, historical, social, cultural, environmental and physical phenomena impact upon the social world of nursing, adding complexity to nurses' decision-making processes. These phenomena influence how the Standards are understood and utilised in areas such as nurse education and registration, practice policies and procedures and assessment resources, all of which can direct the action of nurses.

Socialisation promotes a transmission of a particular set of knowledge, beliefs and values that influence how nurses understand and use the Standards. The way in which nurses are socialised leads them to confer significant importance to the role the Standards play in supporting their professional identity. Nurse's collective identity is established through participating in nursing practice and promoted through nurturing a sense of belonging and 'professional identity'. The development of a nurse's professional identity is achieved through the socialisation process of students of nursing and promotes a collective way of thinking amongst graduates regarding the Standards. Once registered, the Standards are acknowledged as being an important point of reference for these nurses professional identity. Ironically this appears to constrain critique of the Standards and the challenges associated with applying them in practice.

The power and influence of the Standards as a social structure is activated by factors largely emanating from the Standards being adopted as part of the National Law. Nurses' identify and accept the Standards' function as an integral part of the safety and quality agenda that works to ensure protection of the public, and acts as a mechanism to promote their nursing identity. The formal and informal culture of nursing is an influential mechanism that promotes nurse's interaction with the Standards and exerts normative pressure on nurses to use and accept the Standards in order to meet their own and imposed ideas around the identity of a competent nurse.



An examination of the interactions between graduates, preceptors and academics/clinical facilitators revealed that a fragile and negotiable understanding of the Standards exists between nurses of different roles. Nurse academics and clinical facilitators supported the Standards within curricular and as a benchmarking tool. The nurses highlighted that the more exposure they had to the Standards the greater their understanding and ease of interpretation of them. The different levels of understanding between nurses regarding the Standards, is due, in part, to differing understandings of what the Standards mean and what the notion of beginning level competence means. The findings highlighted a fragile and negotiable understanding of the Standards between nurse's different roles which resulted in different standards and level of expectations in assessment interactions. At the same time, assessees rely on academics/clinical facilitators and preceptors to promote their understanding of competence within the complex social context of practice which include other social and structural barriers.

Academics/clinical facilitators and preceptors are the 'gate keepers' of professional practice responsible for ensuring their assessees have met the Standards prior to registration. Nursing regulators rely on these nurses' determinations to ensure the competence to practise of their assessees. If an assessee does not meet the Standards, as 'gate keepers' assessors have the power to recommend that nurses are not competent and therefore not eligible for registration.

How nurses understand and use the Standards has been explained through a generative explanation, which encapsulates the multiple factors that shape decision making and acknowledges both structural forces and agentic subjectivities as mechanisms or determinants of good competence assessment. These generative mechanisms emanate from the interplay between personal, professional, cultural, structural and contextual factors that underlie the use of the Standards and were captured through descriptions regarding the complexity of using the Standards for assessment of competence. As well as this, assessment decisions are not just related to whether nurses support the Standards, have been educated about the Standards, or recognise that demonstration of them is required for eligibility for practice. Assessment decisions are impacted on by the complexity of practice contexts and the other social and structural barriers at work which include nurse

own individual backgrounds, socialisation and the micro-social context of peer relations in the workplace. The micro-social contexts of peer relations include different power relationships between each of these groups of nurses who have a dependency relationship that acts as a catalyst to maintain the structural conditions.

There is no shared understanding of the Standards in nursing practice, in terms of what the language refers to, and how they should be operationalised or implemented. Nurses understand that a number of differing expectations converge on the notion of competency and the use of the Standards. Nurses interact with the Standards as Primary Agents and use interpretation skills to make meaning of them. Nurses engaged in teaching undergraduates comply with regulatory requirements in introducing the Standards to students, but this introduction does little to promote nurses' understanding of them in terms of how these standards can be interpreted across disparate practice environments. Academics highlighted that they found the Standards difficult to introduce to students of nursing, preceptors also faced challenges using and interpreting the Standards and graduates experienced similar difficulties. Regardless of these challenges, nurses continue to support the Standards position in the profession as a framework that defines nursing as a profession. The stability of the Standards use over time, despite these critiques, lies with the competency requirements of nursing registration; the link between the Standards and professional identity, and between the Standards and the safety and quality agenda.

### **What is the relationship between agency and structure in the context of competency assessment?**

The relationship between agency and structure in the context of competency assessment is complex. The act of assessment of competence using competency standards is complex because of the dynamic social contexts of competency assessment impacts on the assessor-assessee interactions, which in turn is influenced by assessor-assessee interactions with the Standards. Nurses use their agency to reinterpret the Standards in their own workday, and yet they appeared to have no broader awareness of how other nurses approach assessment and interpretation of competence in relation to the Standards. Nurses' actual interpretations of the Standards are influenced by nurses problematising of the Standards language, as an act of agency.

This process results in nurses renegotiating the meaning of the Standards meaning to suit the particular context within the structural constraints of practice. As a tool of regulation, the power of the Standards suppresses critique, serving to reinforce their normalised position in practice. That is, the structural-agentic alignment of the Standards to registration constrains nurse's ability to instigate momentum for the emergence of change. Structural-agentic alignment is predicated on networked combinations of different nurses' interactions with external social structures entering into the consciousness of individual nurses as they perform their roles and assessment duties. Whilst nurses' assessment interactions may be influenced by their past thoughts and experiences, intervening mechanisms and forces can affect the assessment experience of an assessor or assessee, by affecting their assessment interactions or requiring the nurse to respond and make judgements in relation to the demands and dilemmas of the changing context and evolving situations. This emphasises the importance of acknowledging nurses' reflexivity and ensuring nurses are able to account for, and be aware of, the reasons and implications of their assessment interactions.

Academics/clinical facilitators and preceptors are the 'gate keepers' of professional practice responsible for ensuring their assessees have met the Standards prior to registration. Nursing regulators rely on these nurses' determinations to ensure the competence to practise of their assessees. If an assessee does not meet the Standards, as 'gate keepers' assessors have the power to recommend that nurses are not competent and therefore not eligible for registration.

Nurses lack the corporate agency required to articulate their concerns, or exercise the power to become strategically involved in shaping change to the Standards. Instead, nurses continue to follow the regulatory controls dictated to them by the social structures of professional practice. The claim that nurses' lacked collective agency is based on the evidence that although nurses faced challenges with the language of the Standards and how to interpret them, they have not collectively acted to instigate any change the status quo.

Instead, it is the regulatory authority that continues to control the Standards and is responsible and influential in the review process and any changes to the Standards.

**How does this relationship between agency and structure determine the ways in which nurses understand and utilise the competency standards?**

The practice environment within nursing is one whereby structural stability and forces act to maintain the Standards. The relationship between agency and structure is determined by nurses' use of their agency within the constraints of the social world they inhabit. Nurses have the power or agency to make decisions and changes, but this is also influenced by structural factors. Nurses operate within a set of social constraints that are particular to their occupation as a nurse, and also to their role as preceptor, academic, clinical facilitator or graduate. Nurses actively negotiate the meaning and importance of Standards within the constraints set by the requirements of their profession. Nurses used their agency to interpret and then apply the Standards in a way that allowed them to both meet normative expectations to use the Standards, and maintain their identity as competent nurses. The use of the Standards is entrenched within practice as normative, which involves a particular set of expectations and constraints on assessment processes. However, how assessment of competence is undertaken was shaped by complex socio-cultural factors including nurse's interpretations and meaning-constructions, which means nurses have considerable agency to negotiate competence assessment.

Numerous generative mechanisms exist within practice that determines nurses' relationship with the Standards and the ways in which nurses understand and utilise them. The activation of generative mechanisms occurs in the domain of the real with their effects impact in the domain of the actual. These generative mechanisms include the powerful positioning of the Standards as a gateway to practice, the normalisation of Standards position through socialisation, nurses need to be identified as competent and part of the profession and the support for the safety and quality agenda. A nurse's understanding of the Standards is therefore shaped by structure, and contextualised against a background of socio cultural factors. These socio cultural factors include their socialisation, the practice

norms, identity construction, the prevailing practice culture and the clinical and policy context.

The relationship between agency and structure resulted in the Standards being morphostatic. The Standards hold a powerful position in practice; one that has been maintained and preserved as a useful part of practice. Nurses continued interaction with the Standards to produce determinations of competence to practise was such that they preserve their form, without change to their structure of the Standards. The status of nurses as primary agents reinforces the *status quo* through the stable reproduction of current ideas and practices related to the Standards. Nurses' practice culture supports the normalisation of the Standards as a 'taken for granted' part of practice. This has exposed a self-replicating cycle whereby the normalisation of the Standards acted to influence nurses to behave in a way that continually endorses and enforces particular behaviours.

### **How do nurses negotiate the interface of agency and structures when assessing competence?**

Nurses negotiate between culture, structure and agency to operationalise the Standards for the assessment of competence. Nurses negotiate these interfaces when assessing competence by reinterpreting their work to shape the practice culture when using the Standards. Nurses' behaviour might suggest a morphogenetic sequence. One in which structure conditions agency, and agency, in turn, elaborates upon the structure which it confronts. However, nurses' actions are as Primary Agents, not Corporate Agents as these morphogenic sequences are not enough to strategically elaborate on the cultural context to the point where the current assessment model can be transformed.

A critical realist exploration uncovered the ways in which nurses' assessment practices are constructed through the language of the Standards, whilst simultaneously recognising the existence of an external-to-discourse reality. Hence, nurses' assessment experiences were located within the broader material and institutional contexts they operate within. The context of practice was perceived to decisively influence the assessment process. Nurses identified they had to negotiate different practice contexts and there was insufficient

human resources to support the assessment process. Further, the differing levels of assessor preparation and insufficient time allocated to undertake assessment and provide feedback acted as a constraint to the assessment process. The position of the Standards as a tool of regulation however, promoted their continued use as they must be demonstrated prior to eligibility for registration. The absence of a minimum set of standards for assessors further fragmented the landscape of assessment practices as there is no standardised accountability mechanism in place. Assessment practices have therefore continued to reflect the nurses' dominant ideological beliefs which situate them as a 'taken for granted' part of practice.

## **Conclusions arising from the study**

This thesis challenges the assumption that the Standards are well operationalised in practice. It has uncovered generative mechanisms emanating from the interplay between personal, professional and contextual factors that underlay the use of the Standards by capturing descriptions regarding the complexity of assessment of competence. As a critical realist study an explanation has been provided of the causal mechanisms that contribute to nurse's assessment decision-making processes, irrespective of the nurse's individual perception. This explanation acknowledges the underlying social factors and the context in which decisions are made, as well as the impact of agency and structure in an open system. This approach has enabled the development of an understanding of the interplay of culture, structure and agency in how nurses understand the Standards and use them for assessment.

The analysis of the data shows (Chapters 5 and 6) that the Standards are a structure, a powerful tool of regulation that promotes the Standards place in practice and influences nurses who are positioned as Primary Agents to develop and maintain their professional identity and support the safety and quality agenda for nurses in practice. It was important that a range of structures, as opposed to a single social or cultural structure (i.e. as norms and values, organisational settings and legislation), were identified as impacting on nurses interactions with the Standards. A critical realist perspective provided a useful framework for understanding how nurses understand and use the Standards, which are mediated by intentional, interpretive human agency within the broader structures and processes of

nursing. The research has exposed that these nurses' interests have not been prominently promoted by any existing forms of collective action.

Nurses' relative silence regarding their concerns about the Standards has contributed to their morphostasis. To date the few who have protested and critiqued the Standards as an assessment technology have been unable to bring about any change or morphogenesis. Therefore, the current assessment environment and (mis)use of Standards has been brought into question. Based on a critical realist analysis, it is argued that replacement with a better set of standards than the current version would not provide a solution. Instead, more research is needed to move beyond the empirical domain into an investigation of the real relations that condition the assessment practices of nurses across the multiple contexts of practice. This research has reinforced that competence must be understood more broadly and conceptualised as a matter of converging the contextually activated forces, many of which originate from sites beyond the everyday experiences of nurses.

The research did not resolve the various conceptual challenges involved in assessing competence. However, the participants provided a clear message that it would be beneficial and useful to continue to develop practical strategies that enable this to be achieved. In planning for a future assessment technology the use of clear and unambiguous language is essential and greater education and training around assessment is required to facilitate quality student learning and assessment experiences. Any change to the assessment framework must recognise the effects of culture and structure and how these relationships affect the nurses as the agents who use them. Hence, the ontological reflections regarding the phenomenon of competence assessment using the Standards contained within this critical realist thesis can assist nurses to more accurately understand the real-world where competency assessment occurs and this is a significant and important accomplishment. This is significant because it provides evidence that can be used in a number of areas including a review of assessment practices and policy.

This thesis contributes to building theory on how the Standards are understood and translated in practice by providing insights from the perspective of graduates, preceptors, clinical teachers and academics and provides three specific theoretical contributions. The

first theoretical contribution is that the Standards operate as a social structure that promote or constrain nurses' use of the Standards. The second theoretical contribution is that nurses use agency to interpret and operationalise the Standards. The third theoretical contribution is that the Standards are morphostatic and have been maintained as an essential part of practice. The thesis findings are significant and shed new light on the way nurses interpret and use the Standards to assess competence, which is not only important new knowledge but given the link between competence and the safety and quality agenda has implications for the quality of patient care.

As well as the theoretical implications of the argument advanced, there are several recommendations.

## **Recommendations**

Recommendations based on this study's findings revolve around rethinking to move beyond the tradition of seeking quantitative, objective measures, to one that more fully considers the subjectivity of the nurses' social world and the assessment process inclusive of the generative potential of the socio-cultural context of practice. Research and policy objectives therefore need to acknowledge the cultural and structural power dimensions involved in the assessment of nurses.

### **Recommendation 1**

Poor understanding of the Standards results in tensions evident in nurses' current assessment practices and strongly indicates that an urgent review of the Competency Standards be undertaken. Critical questions for such a review include whether competency standards continue to be an appropriate tool for the profession or whether there is a more suitable assessment framework that could be adopted.

### **Recommendation 2**



There is strong need for critical debate and research to identify the modes of teaching and learning activities that promote competence in terms of knowledge, understanding and skills that are consistently understood and applied by nurses.

### **Recommendation 3**

There is insufficient existing knowledge regarding how nurses use the Standards and make decisions regarding another nurses or their own competence. Suggested changes are not limited to just providing nurses with more education, but instead support a multidimensional and stratified approach in which the social and material conditions are considered in relation to how they affect assessment practices. Further, critical realist research is recommended that focuses on the generative mechanisms that impact on assessment. A critical realist perspective has a lot to offer for future research because it can distinguish between the actual consequences of a generative mechanism in specific circumstances and the generative mechanism itself.

### **Recommendation 4**

Finally, it is recommended that effective mechanisms be established for gaining feedback from nurses regarding the assessment framework adopted and that these mechanisms are made available to nurses to allow them to mobilise towards assertive social action in seeking changes to the Standards. That is, there was an absence of mechanisms for providing feedback on the Standards (positive or negative); whether through the initial or annual registration process, or via the regulatory website.

Implementing these four recommendations will require strong leadership to ensure a strategic policy framework exists, which is combined with effective oversight, professional involvement, attention to framework design and accountability.

## Strengths of the research approach

A critical realist perspective, within mixed methods research was an advantage in that it allowed me to take into account both the subjectivity of the nurses social world, to add to understandings of the complexities of assessing competence, alongside the objective information nurses use to inform their decisions. This approach enabled the development of a richer account of the nature of nurse's interactions with the Standards that was achieved by focusing on how the structural and cultural context within which action takes place, shaped how nurses behave and think. Importantly, critical realism is a perspective that invokes the complexity of the 'messy' interrelationship between agential and structural factors allowing both causal mechanisms and their contingency in competence assessment to be captured. A critical realist perspective therefore made it possible to consider nurse's interactions with the Standards as ontologically real entities, which can have emergent powers to cause events under certain conditions.

This study exposed the contradictions and tensions associated with competency assessment when the Standards are used by academics, regulators, policy developers and individual nurses in a clinical context. This is an important and fundamental question in relation to assuring safety and quality and public protection. The findings of this research call for a re-conceptualisation of the way in which the competency standards are understood and used as an assessment framework in relation to the profession, individual nurses and students of nursing.

The research study has made a number of contributions to nursing theory. It has provided evidence of how nurses interact with the Standards in nursing practice which has been an area where there has been a paucity of literature. This evidence demonstrates how nurses understand and translate their understanding of the Standards into nursing practice and confirms that the Standards are poorly understood in relation to how nurses interpret competency standards and use their practical wisdom. It has exposed evidence of a self-replicating cycle regarding the Standards use in practice. That is, a practice culture exists that supports the normalisation of the Standards as a taken for granted part of practice. It is the avoidance of sanctions associated with norm-breaking, which encourages nurses to

conform. Evidence has also been provided that nursing can be uniquely and rigorously explored methodologically through a mixed methods and critical realism approach.

The research study made a number of contributions to nursing practice by providing evidence of how nurse academics, clinical facilitators, preceptors and graduates interact with the Standards. The challenges nurses face in operationalising the Standards in the higher education and nursing practice settings has been made visible. For the academe, policy developers and regulators evidence on the current understandings and translation of the Standards in practice has been provided. Evidence is also provided of the challenges nurses face in using the Standards in the higher education and in nursing practice settings. A key finding of the thesis is that assessment of competence in nursing is complex and the traditional assessment paradigms should be revisited to ensure future assessment technologies acknowledge the complexity of social context and the impact of structural barriers. The outcomes from this research could be used to inform other professions on the way professionals might interact with competency standards. Finally, it has highlighted that nursing regulation, in collaboration with the profession, should urgently undertake a review to determine an appropriate assessment framework for the profession.

### **Limitations of the research approach**

There are number limitations to this research project. As a critical realist study, the research generated cannot be taken to be reproducible which means it has limited generalisability. This recognises that social systems, whilst containing real structures, are open-ended and informed by individual agency and situational circumstances. The purposive sampling method also has the limitation that the samples are not easily defensible as being representative of populations due to potential subjectivity of researcher (Black 1999). Further, research based on critical realism cannot provide easy answers because conclusions reached are always provisional, fallible, incomplete and extendable. This is because critical realism supports that the reality of what actually exists is stratified. Hence, what is experienced isn't the whole story, and it requires the reader to draw conclusions about transferability and applicability. The research is theorised from the empirical evidence encounter by applying *a priori* concepts relative to reality, identity,

power. The study may be generalisable to theoretical propositions (Yin 1994; Marsden 2005: 136) but not to all nurse populations.

However, whilst a critical perspective has some limitations, the findings from this study could not have been accessed by a generalisable quantitative study, and an interpretivist approach allowed for depth and rich descriptions of the competency landscape. Finally, this study was primarily limited because it was undertaken on an island where relationships are tightly bound by geographical constraints and the available population. In particular, I was well known across the state because of my position in nursing regulation. Having this position may have at times been an advantage whilst at others times may have been viewed as having been prohibitive.

### Directions for future research

One of the main motivations for the research was that the outcomes be useful, applicable and relevant for policy formulation in the national context. As a practical means of managing future reform of the Standards critical realism provides a potential methodological tool. The findings from this research illuminate a new dynamic in understanding how the Standards are currently being used in practice that can significantly re-shape the way that competence is understood and assessed in relation to the Standards. Further research is necessary to evaluate the applicability of the findings to other settings and professions.

Fundamental questions need to be asked to determine whether minimum competency standards have been and continue to be a successful approach for determining competence. This is particularly significant given the move towards the introduction of global standards is currently positioned as a crucial next stage for the regulation for all health professionals (Baumann and Blythe 2008) and the continued work for over a century of the International Council of Nurses to promote the notion of worldwide standards for nurses.

## In closing

At the commencement of this study the key aim was to describe the relationship between agency and structures in the context of competency assessment in nursing and the ways in which nurses understand and utilise the Standards. This aim has been achieved and the research questions answered. The findings around nurses' difficulties in understanding and using the Standards is not new, but their use of agency to renegotiate what this looks like for their own practice is a new insight. Whilst it is acknowledged that individual action is constrained by structures, this research has emphasised that nurse's use their agency to renegotiate the Standards, within the set of policy and normative constraints of their practice. A recommendation has been put forward that the nursing profession review the assessment framework, which were last reviewed seven years ago. However, more than a review of the Standards themselves is required. It is timely to ask the questions of whether minimum standards work, whether competency standards continue to be an appropriate assessment framework for nursing and how the success of the adopted strategy is assessed in terms of positive practice outcomes for the patient. The future success of any competency standards as the framework for competence assessment will be dependent on ensuring both the structural forces and agentic subjectivities that shape nurses decision making are acknowledged and addressed within the assessment framework.

The current Standards are not well understood and the notion of competency as it relates to the Standards needs reviewing. So whilst reviewing the assessment framework is important, it is equally important that a greater understanding is gained of how nurses use their agency and practical wisdom to interpret practice. Effectively addressing this will require an acknowledgement of the complex social environment of nursing to capture how nurse's use agency to interpret and utilise the competency standards. A reconceptualisation of how nurses' undertake decision-making that is not based in rationality but on the deeper determinants or mechanisms that shape assessment decision making is also required. Competence is viewed as a key issue in nursing, which is fundamental to the safety and quality agenda. Attaining, maintaining, and advancing competence is a shared responsibility between the individual nurses, employer, regulators, nursing education and the profession. The critical realist perspective has described the events, as well as identified the influences,

of structural factors on nurses' agency that act as mechanisms or determinants of good competence assessment. The outcomes from this research open the possibility of transformative corporate and primary agency to promote nursing practice and its assessment.

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## Appendices

### Appendix 1: Letter of request for participation in the research project

Date

Name & address

Dear

**Re: Recruitment of subjects for PhD Research Project**

I am currently a PhD candidate with the University of Tasmania's (UTAS) School of Nursing and Midwifery (SNM) undertaking a research project to explore how the *ANMC National Competency Standards for the Registered Nurses (the Standards)* are understood by nurses and how that understanding is translated when educating teaching and assessing students of nursing.

This research study is timely in light of the recommendations of Council of Australian Governments (COAG) from the research report, *Australia's Health Workforce* and the imminent move for national registration and national accreditation. The issue of competence is currently a national agenda item with debate highlighting the contextual nature of competence and the complexities around both the understanding and assessment of competence. Outcomes of this research can inform the future understanding of competence and improve future assessments of competence.

I am writing to request your approval and support in sending out fifty (50) questionnaires to UTAS SNM academics, sessional teachers and clinical facilitators on my behalf. The academics, sessional teachers and clinical facilitators must have taught the students of nursing within the last five (5) years and may be full time, part-time or sessional employees of SNM. The questionnaire will take approximately 30 minutes to complete and I have attached a copy of the Information Sheet and Questionnaire for your reference.

To promote confidentiality and anonymity I wish to send the questionnaires via a nominated third party and I would be happy to discuss this further with you. The questionnaire will be ready to post and include a self-addressed envelope for its return.

Thank you for your consideration of this request. I will contact you via phone within the next fortnight to follow up this letter and answer any further questions you may have about the study".

Yours sincerely,

Kathryn Terry  
PhD Candidate  
UTAS SNM

## Appendix 2: Questionnaire information sheet

### HUMAN RESEARCH ETHICS COMMITTEE (TASMANIA) NETWORK PARTICIPANT INFORMATION SHEET SOCIAL SCIENCE/ HUMANITIES RESEARCH

#### STUDY TITLE

An exploration of how the *ANMC National Competency Standards for the Registered Nurses* are understood by nurses and how that understanding is translated when educating, teaching and assessing students of nursing.

#### Invitation

You are invited to participate in a research project that will explore how the *ANMC National Competency Standards for the Registered Nurses* are understood by nurses and how that understanding is translated when educating teaching and assessing students of nursing. Kathryn Terry is undertaking the Research as part of the requirements of a PhD research project with the University of Tasmania's, School of Nursing and Midwifery under the supervision of Associate Professor Rosalind Bull and Professor Denise Fassett.

The recent Council of Australian Governments (COAG) recommendations and the imminent move towards national registration and national accreditation highlight an urgent need to determine whether variations exist in the ways that nurses in Australia define, understand and assess competency. The findings from this research will provide important foundational information that will assist in promoting national consistency as well as improving the quality and safety of health care.

#### 1. 'What is the purpose of this study?'

The purpose is to investigate nurses understanding of competence in order to improve future assessment of beginning level competence as well the assessment of nursing competence in advanced extended or specialist practice.

#### 2. 'Why have I been invited to participate in this study?'

You have been invited to participate in this study because you are currently employed as one of the following; (i) an SNM nurse academic or clinical facilitator engaged in teaching and/or assessing undergraduates of nursing; (ii) a registered nurse engaged in teaching and/or assessing undergraduates of nursing in the clinical setting; or (iii) a first year graduate registered nurse. As such, your opinions are important to the study.

#### 3. 'What does this study involve?'

Your participation in this study is entirely voluntary. It is evidenced, in the case of the questionnaire, by the return of the completed questionnaire, and for the focus group, by signing a consent form. Whether in the questionnaire or in the interview, you may decline to answer or address any question. You also have the right to withdraw both yourself and your data from the study without explanation or penalty.

The researchers will not disclose your identity as a participant, whether in the survey or in the interview, to persons outside the research team.

Anonymity for participants will be maintained through the use of identification concealment measures, such as the use of pseudonyms in the notes.

Data will be stored in a locked filing cabinet at the SNM in Launceston and on password protected computer files. Data will be kept for 5 years and will then be destroyed by shredding and deleting.

#### **4. Are there any possible benefits from participation in this study?**

The research findings will potentially improve future assessment of beginning level competence as well the assessment of nursing competence in advanced extended or specialist practice.

#### **5. Are there any possible risks from participation in this study?**

There are no specific anticipated risks with participation in this study. However, if you find that you are becoming distressed you will be advised to receive support from a counsellor at no expense to you.

#### **6. What if I have questions about this research?**

If you would like to discuss any aspect of this study please feel free to contact either Kathryn Terry [kterry@utas.edu.au](mailto:kterry@utas.edu.au) or ph 62243991 or Associate Professor Rosalind Bull via email [Rosalind.Bull@utas.edu.au](mailto:Rosalind.Bull@utas.edu.au) or ph 63243741 or. Either of us would be happy to discuss any aspect of the research with you.

Once we have analysed the information we will be mailing / emailing you a summary of our findings. You are welcome to contact us at that time to discuss any issue relating to the research study.

The Tasmanian Social Sciences Human Research Ethics Committee have approved this study. If you have concerns or complaints about the conduct of this study should contact the Executive Officer of the HREC (Tasmania) Network on (03) 6226 7479 or email [human.ethics@utas.edu.au](mailto:human.ethics@utas.edu.au). The Executive Officer is the person nominated to receive complaints from research participants. You will need to quote [*HREC project number: H10040*].

**Thank you for taking the time to consider this study.  
If you wish to take part in it, please sign the attached consent form.  
This information sheet is for you to keep.**

## Appendix 3: Questionnaire

### Section 1 – Demographics

**Please tick your choice or complete as appropriate**

1. I am currently employed as a:

Graduate  Preceptor  Clinical Teacher  Academic

Graduate Nurse Coordinator  Other \_\_\_\_\_

2. Within what range does your age fall?

20 - 30      31 - 40      41 - 50      51 - 60      61 - 65

Other \_\_\_\_\_

3. In what year did you gain your first nursing qualification leading to eligibility for registration?

\_\_\_\_\_

4. In which country did you obtain your initial nursing qualification?

Australia  New Zealand

UK  USA

Other – please specify \_\_\_\_\_

5. In what year did your name first appear on a nursing register?

\_\_\_\_\_

6. Where did you obtain your first nursing qualification?

VET sector  Hospital

College  University

Other – please specify \_\_\_\_\_

7. What is the highest additional nursing qualification you have you gained?

- |                               |                          |                      |                          |
|-------------------------------|--------------------------|----------------------|--------------------------|
| VET Certificate or equivalent | <input type="checkbox"/> | Hospital certificate | <input type="checkbox"/> |
| Graduate certificate          | <input type="checkbox"/> | Bachelor Degree      | <input type="checkbox"/> |
| Associate Degree              | <input type="checkbox"/> | Graduate Diploma     | <input type="checkbox"/> |
| Masters                       | <input type="checkbox"/> | PhD                  | <input type="checkbox"/> |
- Other – please specify \_\_\_\_\_

8. In what year did you gain your most recent nursing qualification?

\_\_\_\_\_

9. In what area are you currently practising nursing?

- |           |                          |            |                          |
|-----------|--------------------------|------------|--------------------------|
| Clinical  | <input type="checkbox"/> | Management | <input type="checkbox"/> |
| Education | <input type="checkbox"/> | Research   | <input type="checkbox"/> |

Other – please specify \_\_\_\_\_

## Section 2- Background knowledge on competence assessment

**When '*Standards*' are referred to in the questions below this means the ANMC National Competency Standards for the Registered Nurse.**

10. What contribution do you think the '*Standards*' make to the nursing profession?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

11. When did you first learn about the '*Standards*'?

- |  |                          |
|--|--------------------------|
| Whilst gaining an education in the hospital setting        | <input type="checkbox"/> |
| Whilst gaining an education in the higher education sector | <input type="checkbox"/> |
| Whilst working in the practice setting                     | <input type="checkbox"/> |
- Other \_\_\_\_\_

12. Do the 'Standards' describe the benchmark for beginning level competence in Australia?

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13. I have sound knowledge of the 'Standards'?

Yes

No

14. I am confident I have the required expertise to make an assessment of competence using the 'Standards'?

Yes

No

15. I feel confident making an assessment of my own competence against the 'Standards'?

Yes

No

16. I am aware of the *ANMC Principles for the Assessment of National Competency Standards for Registered Nurses*?

Yes

No

17. I understand the *ANMC Principles for the Assessment of National Competency Standards for Registered Nurses*?

Yes

No

18. I find using the 'Standards' cues useful when making an assessment of competence?

Yes

No

19. I believe the 'Standards' are relevant to contemporary nursing practice?

Yes

No

20. In my experience I believe the 'Standards' are understood by the nursing profession?

Yes

No



21. I feel confident using the '*Standards*' to assess a nurse as competent to practise?

Yes

No

22. I feel confident using the '*Standards*' to assess a nurse as not competent to practise?

Yes

No

23. I believe all nurses have a shared understanding of the level of performance expected of a competent beginning level registered nurse?

Yes

No

24. I believe an individual's attainment of competence is an important part of professional identity?

Yes

No

### **Section 3 - Undertaking an assessment of competence**

25. I believe my peers have the professional knowledge to undertake assessments of competence?

Yes

No

26. I believe my peers have the professional skills to undertake assessments of competence?

Yes

No

27. I believe my peers have the professional attitude to undertake assessments of competence?

Yes

No

28. I believe subjectivity plays a role in making an assessment of competence?

Yes

No

29. I believe clinical context has an impact on an assessment of competence?

Yes

No

Please provide the reason for your choice

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30. I believe all nurse assessor's should complete specific educational preparation prior to undertaking assessments of competence?

Yes No

31. I use my own assessment tool(s) to undertake assessments of competence?

Yes No

32. I use organisational tool(s) to undertake assessments of competence?

Yes No

33. My formal training on the 'Standards' included?

- Purpose of Standards
  - Description of the Registered Nurse on entry to practice
  - Domains of practice
  - Individual competency standards
  - Elements of competence
  - Assessing competence
  - Principles for the assessment of National Competency Standards for the Registered Nurse
  - Using the Standards for assessment
  - Other
- (pleasespecify)\_\_\_\_\_

34. My formal training on assessment skills included?

- Adult learning principles
- Identifying learning needs
- Effects of context on assessment
- Using observational skills

Using interviewing skills

Skills to interpret evidence

Promoting validity and reliability in assessment

Scope and level of practice to be assessed

Providing positive and constructive feedback

Procedure for assessment

Pitfalls of assessment

Other (please specify)

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35. Do you prepare registered nurses to undertake assessments of competence on students of nursing?

Yes

No

36. The '*Standards*' are a central focus when I interact with students of nursing?

Yes

No

37. Are your assessment tools developed to assess the '*Standards*' in the practice setting?

Yes

No

38. Are the assessment tools you use developed to assess clinical skills only?

Yes

No

39. Are the assessment tools you use developed to assess a clinical skill as well as the '*Standards*'?

Yes

No

40. I feel confident providing education to other nurses regarding the '*Standards*'?

Yes

No

**Section 4 - The following questions require you to provide a written response. Please provide as much details you are able too, which may be supported by examples.**

41. Please describe how you assist students of nursing to assess of their own level of competence?

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42. Please describe how you facilitate the development of competence in students of nursing?

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43. Please describe how you prepare other registered nurses to make assessments of competence for students of nursing?

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44. How do you promote a valid assessment of competence?

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45. How do you promote a reliable assessment of competence?

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46. How do you promote a transparent assessment of competence?

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47. How do you promote a fair assessment of competence?

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48. What evidence do you collect when making an assessment of competence against the '*Standards*'?

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49. Do you have any further comments to make?

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**Thank you for taking the time to complete this questionnaire, your responses is greatly valued.**

Please return to: Attention Ms Caroline Gray, Competence Standards Questionnaire, School of Nursing and Midwifery,  
University of Tasmania, Private Bag 121, HOBART TAS 7001.

## Appendix 4 Consent Form

**Title of Project:** An exploration of how the *ANMC National Competency Standards for the Registered Nurses* are understood by nurses and how that understanding is translated when educating teaching and assessing students of nursing.

1. I have read and understood the 'Information Sheet' for this project.
2. The nature and possible effects of the study have been explained to me.
3. I understand that the study involves completing a one-hour interview that will be recorded, and coded for the purpose of member check only and a maximum of two people, the data entry person and the interviewer will only know this. Any reports of this research will contain only data of an anonymous or statistical nature: my name will not be used.
4. I understand that participation involves no anticipated specific risks. However, if I find that I am becoming distressed I am aware that I can receive support from a counsellor at no expense.
5. I understand that all research data will be securely stored on the University of Tasmania premises for at least five years, and will then be destroyed when no longer required.
6. Any questions that I have asked have been answered to my satisfaction.
7. I agree that research data gathered from me for the study may be published provided that I cannot be identified as a participant.
8. I understand that the researchers will maintain my identity confidential and that any information I supply to the researcher(s) will be used only for the purposes of the research.
9. I agree to participate in this investigation and understand that I may withdraw at any time without any effect, and if I so wish, may request that any data I have supplied to date be withdrawn from the research.

Name of Participant: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

### Statement by Investigator

I have explained the project & the implications of participation in it to this volunteer and I believe that the consent is informed and that he/she understands the implications of participation

If the Investigator has not had an opportunity to talk to participants prior to them participating, the following must be ticked.

The participant has received the Information Sheet where my details have been provided so participants have the opportunity to contact me prior to consenting to participate in this project.

Name of investigator \_\_\_\_\_

Signature of investigator \_\_\_\_\_ Date \_\_\_\_\_

Participant Name \_\_\_\_\_ Date \_\_\_\_\_

## Appendix 5: Checklist for developing a questionnaire adopted

### Checklist for developing a questionnaire adopted Boynton and Greenhalgh (2004)

Section	Quality criterion
Title	<p>Is it clear and unambiguous?</p> <p>Does it indicate accurately what the study is about?</p> <p>Is it likely to mislead or distress participants?</p>
Introductory letter or information sheet	<p>Does it provide an outline of what the study is about and what the overall purpose of the research is?</p> <p>Does it say how long the questionnaire should take to complete?</p> <p>Does it adequately address issues of anonymity and confidentiality? Does it inform participants that they can ask for help or stop completing the questionnaire at any time without having to give a reason?</p> <p>Does it give clear and accurate contact details of whom to approach for further information?</p> <p>If a postal questionnaire, do participants know what they need to send back?</p>
Overall layout	<p>Is the font size clear and legible to an individual with 6/12 vision? (Retype rather than photocopy if necessary)</p> <p>Are graphics, illustrations and colour used judiciously to provide a clear and professional overall effect?</p> <p>Are the pages numbered clearly and stapled securely?</p> <p>Are there adequate instructions on how to complete each item, with examples where necessary?</p>
Demographic information	<p>Has all information necessary for developing a profile of participants been sought?</p> <p>Are any questions in this section irrelevant, misleading or superfluous?</p> <p>Are any questions offensive or otherwise inappropriate?</p> <p>Will respondents know the answers to the questions?</p>
Measures (main body of questionnaire)	<p>Are the measures valid and reliable?</p> <p>Are any items unnecessary or repetitive?</p> <p>Is the questionnaire of an appropriate length?</p> <p>Could the order of items bias replies or affect participation rates (in general, put sensitive questions towards the end)?</p>
Closing comments	<p>Is there a clear message that the end of the questionnaire has been reached?</p> <p>Have participants been thanked for their co-operation</p>
Accompanying materials	<p>If the questionnaire is to be returned by post, has a stamped addressed envelope (with return address on it) been included?</p>

## Appendix 6: Interview Guide for the Semi-structured Interviews

Q	Main question	Follow on question	Clarifying/Probing
1	Just as a starting point can you tell me a story about your interactions with assessment and the assessment of competence?	At what point in your nursing education were the Standards first talked about?	
2	Why do you think the <i>Standards</i> exist, what role play in your practice?	What functions do you think the <i>Standards</i> are intended to serve?	Are they successful? Why yes or why not?
3	How do you use the <i>Standards</i> ?	How do you know what is the right way to use them? Tell me how you use the <i>Standards</i> in a normal working day?	And give me some examples
4	What do you think about the <i>Standards</i> ?	Where do they miss, do they miss at all?	
5	Do you think differently about the <i>Standards</i> now as a Preceptor than you did as a Graduate?	In what way has your thinking changed?	
	How have you developed your understanding of the <i>Standards</i> ?	How do you think others have developed their understanding?	What would improve your understanding of the <i>Standards</i> ?
6	Have you assessed another nurse's <i>Standards</i> ?	Yes, how and why? Why not? Yes, why? How? Which Standards?	Why did you use those <i>Standards</i> ?
7	What would make you feel confident that you are adequately prepared to undertake assessments using the <i>Standards</i> ?		If not raised re challenges faced in making assessments of students using the <i>Standards</i> ?
8	What sorts of tools do you use?	When do you use a tool? How do you use the tool? Can you tell me which sorts of tools make assessments easier?	What advantages does the tool have when assessing competence? What limitations does the tool have when assessing competence?
9	Would you say that the <i>Standards</i> are alive in your practice?	How do you know you are using the <i>Standards</i> in the right way?	Can you give me some example?
10	How do you know you are competent?	How do you know that a person is competent? What indicates to you that they are? How do you know that a graduate (nurse) is not competent? How do you know a student is ready to graduate?	Can you give me some examples?  Can you give me some examples?
11	How do you know that you were able to practise as a beginning level practitioner? Or? That they are going to make the mark of what is expected	Can you tell me about those that you don't think will make the	What are the key indicators to you? What are the give a



	for a beginning level RN?	mark?	ways? Can you give me an example?
<b>12</b>	Would you feel confident in the assessments your peers?	Do you feel confident in the assessments your peers? What makes you feel confident in their ability to undertake assessments? What would not feel confident in their assessments of competence?	Can describe what makes you feel like this? Can you give me an example?
<b>13</b>	How have you developed your understanding for undertaking assessments?	How do you think your understanding is different from others?	Can you explain what impact you think this has on competence assessments?
<b>14</b>	Have you encountered any situations in which it appeared one of your nursing colleagues misunderstood the <i>Standards</i> ?	Why do you believe this happened? How do you believe they could be made easier to understand?	Do you think there are issues when trying to apply them?
<b>15</b>	It is now twenty years since the <i>Standards</i> were first developed, do you believe the <i>Standards</i> still describe the benchmark for beginning level competence of a graduate?	Why yes, why no? How could that be addressed?	Is it something about what it is now the nurse as opposed to twenty years ago? Is it something to do with the tools we use or is there something else?

## Appendix 7: 15-point checklist of criteria for good thematic analysis

### Braun and Clarke (2006: 96) 15-point checklist of criteria for good thematic analysis

Process	Number	Criteria
<b>Transcription</b>	1	The data have been transcribed to an appropriate level of detail, and the transcripts have been checked against the tapes for 'accuracy'
<b>Coding</b>	2	Each data item has been given equal attention in the coding process.
	3	Themes have not been generated from a few vivid examples (an anecdotal approach), but instead the coding process has been thorough, inclusive and comprehensive.
	4	All relevant extracts for all each theme have been collated.
	5	Themes have been checked against each other and back to the original data set.
	6	Themes are internally coherent, consistent, and distinctive
<b>Analysis</b>	7	Data have been analysed - interpreted, made sense of -rather than just paraphrased or described.
	8	Analysis and data match each other - the extracts illustrate the analytic claims.
	9	Analysis tells a convincing and well-organized story about the data and topic.
	10	A good balance between analytic narrative and illustrative extracts is provided.
<b>Overall</b>	11	Enough time has been allocated to complete all phases of the analysis adequately, without rushing a phase or giving it a once-over-lightly.
<b>Written report</b>	12	The assumptions about, and specific approach to, thematic analysis are clearly explicated.
	13	There is a good fit between what you claim you do, and what you show you have done, i.e. described method and reported analysis are consistent.
	14	The language and concepts used in the report are consistent with the epistemological position of the analysis.
	15	The researcher is positioned as active in the research process; themes do not just 'emerge'.

Table adopted from Braun and Clarke (2006: 96)