

Assessing the clinical capabilities of Maternal, Child and Family Health Nursing students

Katie Lucas

RN BN Grad Dip In Health (CAFHN) Grad Dip Clinical Ed

School of Medicine

Faculty of Medicine, Nursing and Health Science

Flinders University

Date March 2015

Table of Contents

ASSESSING THE CLINICAL CAPABILITIES OF MATERNAL, CHILD AND FAMILY HEALTH NURSING STUDENTS	1
LIST OF TABLES	4
ACKNOWLEDGEMENTS	5
SUMMARY	6
DECLARATION OF AUTHORSHIP	8
CHAPTER 1: INTRODUCTION AND BACKGROUND TO THE STUDY	1
THE IMPORTANCE OF MCAFH NURSING.....	2
THE ROLE OF A MCAFH NURSE.....	3
OBTAINING A QUALIFICATION IN MCAFH NURSING.....	4
ASSESSING STUDENT PERFORMANCE ON PLACEMENT.....	6
CHAPTER SUMMARY.....	11
CHAPTER 2: LITERATURE REVIEW	13
INTRODUCTION.....	13
SEARCH STRATEGY.....	13
AUSTRALIAN LITERATURE SEARCH.....	14
INTERNATIONAL LITERATURE SEARCH.....	14
POSTGRADUATE LITERATURE SEARCH.....	14
ALLIED HEALTH LITERATURE SEARCH.....	15
UNDERGRADUATE LITERATURE SEARCH- HEALTH DISCIPLINES.....	16
AUSTRALIAN LITERATURE.....	17
INTERNATIONAL LITERATURE.....	18
MAJOR APPROACHES TO CLINICAL PRACTICE ASSESSMENT.....	20
COMPETENCY STANDARDS.....	21
COMPETENCY BASED ASSESSMENT.....	23
CONTINUOUS ASSESSMENT.....	28
SUMMATIVE AND FORMATIVE ASSESSMENT.....	29
GRADED VERSUS NON GRADED ASSESSMENT.....	30
PORTFOLIO, SELF-ASSESSMENT AND REFLECTIVE PRACTICE.....	32
DISCUSSION.....	38
CHAPTER SUMMARY.....	41
CHAPTER 3: METHODS AND APPROACH	44
METHODOLOGY.....	44
RESEARCH APPROACH.....	46
<i>Design</i>	46
<i>Participants</i>	46
<i>Ethical Considerations</i>	48
<i>Data Collection</i>	49
<i>Data analysis</i>	51
RIGOR.....	55
CHAPTER SUMMARY.....	57
CHAPTER 4: FINDINGS	59
BACKGROUND.....	59
MCAFH NURSING ENTRY REQUIREMENTS.....	60
PROFESSIONAL EXPERIENCE PLACEMENTS.....	62
PRE PLACEMENT WORKSHOPS OR MANDATORY PRIOR LEARNING.....	68
THE ROLE OF THE PRECEPTOR ON PROFESSIONAL EXPERIENCE PLACEMENTS.....	69
ASSESSMENT OF STUDENTS.....	73

COMPETENCIES USED TO BENCHMARK STUDENTS' PERFORMANCE	76
ASSESSMENT METHODS AND DOCUMENTATION	78
REFLECTIVE PRACTICE	82
UNDERPERFORMING STUDENTS	83
CHAPTER SUMMARY	85
CHAPTER 5: DISCUSSION AND RECOMMENDATIONS	86
HOW LONG IS ENOUGH?	87
HOW DO WE KNOW MCAFH NURSING GRADUATES ARE CAPABLE?.....	93
WHO IDENTIFIES CAPABILITY?	100
LIMITATIONS.....	103
RECOMMENDATIONS.....	103
SUMMARY AND CONCLUSION	107
APPENDICES	109
APPENDIX 1 CRITICAL APPRAISAL TOOL FOR QUALITATIVE RESEARCH	109
APPENDIX 2 LETTER OF INTRODUCTION	115
APPENDIX 3 INFORMATION SHEET	116
APPENDIX 4 CONSENT FORM.....	118
APPENDIX 5 ETHICS APPROVAL	119
REFERENCES	122

List of Tables

Table 1: Programs offered by the participating Education Providers.....	61
Table 2: Placement Structure.....	64
Table 3: Current Assessment Processes used by each Education Provider.....	75

Acknowledgements

I would like to acknowledge my supervisors Dr Linda Sweet and Dr Julian Grant for their enduring support and guidance throughout this thesis. I would also like to acknowledge the course coordinators who gave up their time to be interviewed and providing me with information and documents over and above what I needed for this research.

I would also like to acknowledge the support and love of my husband and my three children, who have endured three years of my bad moods, short tempers and being permanently attached to a laptop. If it were not for your support, I would have given this up a long time ago.

I would also like to acknowledge Dr Maria Fedoruk for her enduring wisdom and guidance throughout the past three years. Thank you for urging me to finish the thesis, assisting in it was greatly appreciated.

Summary

This research study focuses on the clinical assessments developed for registered nurses enrolled in Maternal Child and Family Health (MCaFH) nursing postgraduate programs. The findings of this qualitative descriptive study describe the assessment methods and documentations used to assess the clinical capabilities of MCaFH nursing students on professional experience placements.

At the commencement of this research study it was anticipated that there was a limited amount of research available on the best assessment practices to determine the clinical capability of MCaFH nursing students, and the literature review supports this. There is a vast amount of literature on the clinical assessment of undergraduate nursing and allied health students. However the literature does not extend to providing an understanding of the best assessment practices of postgraduate students completing speciality practice placements.

The main finding from the interviews conducted with the education providers of MCaFH nursing programs, was that there were similarities and differences evident between the assessment methods and documentation used to assess the clinical capabilities of students on placement. The similarities centred on a continuous assessment process which used a clinical portfolio or journal to frame the assessments conducted over the duration of the placement.

The differences highlighted by this research centred on the type and duration of the placement offered, the assessment of clinical skills, the inclusion of autonomous practice and reflection as an assessment item and the role and function of a clinical preceptor. A finding of this research was that the type and duration of the clinical placement, and the quality and capability of the preceptor to make an accurate determination of a student's performance impacted the assessments used to determine a student's clinical capability on.

Lastly, it was identified that students were benchmarked against differing sets of competencies that were state and territory based, because currently national MCaFH

nursing clinical competencies do not exist. While students were still assessed against competencies, they were only deemed clinically capable in the state to which the competencies pertained and therefore there is no evidence of a national clinical capability benchmark for the entry of students into the profession of MCaFH nursing.

The study findings provide insights, new knowledge and recommendations into the assessment methods that can be used to assess the clinical capability of MCaFH nursing students on professional experience placements.

Declaration of authorship

I certify that this thesis does not include without my acknowledgement, any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person expect where reference is made to it in the text.

Katie Lucas

Chapter 1: Introduction and Background to the Study

This research study focuses on the assessments developed for registered nurses enrolled in Maternal Child and Family Health (MCaFH) nursing postgraduate programs. Specifically, this research looked at the assessments currently used to assess student's clinical capability. Maternal, Child and Family Health nursing is a specialist area of nursing practice, and registered nurses working in this area of practice require specific specialist skill sets which are taught in MCaFH nursing postgraduate programs.

A key component of these postgraduate programs is a professional experience placement which aims to introduce and prepare the nurses to work effectively within this complex and highly specialized field of nursing (Kruske and Grant 2012). Ensuring that registered nurses enrolled in MCaFH nursing programs are clinically capable requires successful completion of a professional experience placement in this area of nursing practice. Professional experience placements offer MCaFH nursing students the opportunity to develop clinical experience in the practice environment and to develop and understand the functional competencies and professional responsibilities of this nursing role (Fowler et al. 2014). Professional experience placements therefore provide opportunities for students to demonstrate their clinical competencies and knowledge. It also provides an opportunity for the education providers to assess the students' competencies in core activities of MCaFH nursing practice (Kruske and Grant 2012).

Professional experience placements offer student's learning experiences that may be in the form of employment or non-employment placement. In the employment model the student undertakes their education at the same time, as working within the health service. Throughout this thesis the employment model will be referred to as a work integrated learning professional experience placement. In the non-employed model, students are provided a placement at a MCaFH nursing site and are supernumerary to the nursing staff of the venue. The engagement of the students in this supernumerary role can vary from observational experiences, whereby they follow the clinician and only observe practice, to supernumerary experiences where the student participates in the provision of nursing care under direct support, to autonomous practice where they

are able to be responsible for the provision of care under direct supervision of the clinician. Throughout this thesis the words observational, supernumerary, and autonomous practice will be used when referring to supernumerary non-employed models of placement, and work integrated learning when referring to the employed model.

This study will review the different assessment methods and clinical documentation used to assess the clinical capability of MCaFH nursing students at the completion of their postgraduate education program. As the researcher I have an interest-in this topic having worked as a MCaFH nurse and as a preceptor for MCaFH nursing students on their professional experience placements. Currently, I work as an academic in a School of Nursing and Midwifery. This has raised my awareness of the variability apparent in clinical assessments. My interests centre on how students' capabilities are assessed and how they align with professional practice standards, ensuring graduates are safe, competent MCaFH nurses.

The importance of MCaFH nursing

The importance of MCaFH nurses in the enhancement of the health of children and their families is noted throughout international literature, which provides an overview of the role and responsibilities needed to practice within specific countries (Ondeck 1997, Briggs 2007, Cowley et al. 2007, Plunket 2011, Kruske and Grant 2012, Fowler et al. 2014, Fraser et al. 2014). The literature does not indicate how MCaFH nursing students are assessed clinically, or more importantly, how they are assessed for clinical capability on the completion of their education program. This study seeks to begin to address this knowledge and practice gap. The importance of having a nursing workforce that is equipped with the capability required to work in the community with children and their families is supported by the national agenda for early childhood, detailed in the report "Investing in the early years: a national early childhood development strategy" (Australian Health Ministers Advisory Council 2011). This framework highlights the importance of effective universal services being delivered by a nursing workforce that possesses "relevant knowledge, skills and attitudes" to work in partnership with children and adults. (Australian Health Ministers

Advisory Council 2011 p. 32). The report notes that a highly skilled nursing workforce will support the improvement of the development and the overall wellbeing of children and their families across Australia (Australian Health Ministers Advisory Council 2011 p.34).

In Australia, the overall health and wellbeing of children is a high priority for national policy development (Australian Institute of Health and Welfare 2011). Particularly, concerns focus on the significant increases in behavioural, mental, social and developmental deficits among children living in social, economic and culturally disadvantaged areas in Australian society (Schmied et al. 2011). A MCAFH nurse can promote optimal physical, social and emotional development of infants and children, across all levels of socio-economic status. Creating a stable, safe and nurturing home environment encourages optimal growth and development of children and is a core practice area for MCAFH nurses across Australia (Briggs 2007). MCAFH nurses predominantly provide support and intervention services to families with infants and children up to the age of 5 years (Kruske and Grant 2012, Fraser et al. 2014). Health surveillance, child development, early intervention, parenting support and education have been some of the services provided to parents by MCAFH nurses over the past 100 years (Kruske and Grant 2012). More recently, the introduction of the Universal Home Visiting Program in Australia has emphasised the need to build the family's capacity to parent, by providing maternal psychosocial support (Briggs 2007).

The role of a MCAFH nurse

Currently the title for the role and responsibilities of a MCAFH nurse varies internationally (Fraser et al. 2014). For example these nurses are called Plunket Nurses in New Zealand (Plunket 2011), Health Visitors in the United Kingdom (Cowley et al. 2007) and Public Health Nurses in Canada (Canadian Public Health Nurse Association). The inconsistencies noted in the title and variation to the role is also reflected in Australia; for example: Community Child Health Nurses in Western Australia, Northern Territory and Queensland; Child and Family Nurses in New South Wales and South Australia; Maternal and Child Health Nurses in Victoria and the Australian Capital Territory and Family and Child Health Nurses or Parenting Service Nurses in Tasmania

(Briggs 2007, Kruske and Grant 2012, Fraser et al. 2014). For literary ease, the term Maternal Child and Family Health (MCaFH) nurse will be used throughout this thesis, and is inclusive of all facets of the role that is evident throughout the states and territories of Australia.

Together with the lack of consistency in the title of the MCaFH nurse, there is also a lack of regulation in the role, professional standards of specialist nurse practice and curricula currently in Australia. In Australia there are two professional bodies that represent MCaFH nurses: The Australian College of Children and Young People's Nurses (ACCYPN) and the Australian Association of Maternal, Child and Family Health Nurses (AAMCFHN). These professional bodies represent the nursing speciality but do not regulate MCaFH nursing practice. Individual states and territories within Australia oversee the clinical practice of MCaFH nurses, through policies such as 'Maternal & Child Health Nurse Position Statement' (Maternal and Child Health Special Interest group ANF Vic Branch 2007) used in Victoria and the 'Professional Practice Framework 2011-2016' (New South Wales. Department of Health 2011) in NSW.

Obtaining a qualification in MCaFH nursing

To gain a qualification in MCaFH nurse in Australia, registered nurses are able to enrol in a program of study in MCaFH nursing. Programs are taught in registered training organisations (usually universities). Courses are state and territory based, and prepare the students to practice in that state and territory. Therefore, there are multiple course offerings throughout Australia designed to meet local needs. For nurses to be able to work across state and territory borders a consistent national approach to curriculum development for MCaFH nursing courses is needed (Kruske and Grant 2012). A national curriculum would ensure that there is consistency in the course delivery, course content and professional experience placement assessment of students (Lennie and Juwah 2010 p. 222). Currently there is no evidence of consistency in MCaFH nursing education provided by the education organisations throughout Australia. (Kruske and Grant 2012). Kruske et al. (2006) have highlighted that the programs offered in Australia differed in the course duration, content and importantly the entry requirements into the programs.

Kruske and Grant (2012) identified the different requirements for entry for many of the MCaFH nursing courses within Australia. The authors argue these differences can potentially result in variable assessment methods and student learning outcomes. The different entry requirements, create employment difficulties for nurses wanting to work in different states and territories in similar roles. (Kruske and Grant 2012). Different professional qualification criteria accepted into state and territory programs assume different standards of pre-existing knowledge required for a nationally recognised profession. The lack of cross border recognition of practice may impact on the future workforce of the speciality. By not allowing the movement of staff between states and territories may potentially impact on the recruitment and retention of staff in the profession (Ogle et al. 2007).

A national set of minimum standards for MCaFH nurses together with a national curriculum would provide the national benchmark for education providers to develop relevant assessment items to assess the development of students' clinical capability. This would enable MCaFH nurses to work within all states and territories of Australia. This type of national approach was adopted by the Australian College of Critical Care Nurses (ACCN) which recommended that the competency standards for the specialist critical care nurse become the framework used by universities to develop curriculum and clinical assessment. These competencies became the minimum standards of practice expected of a student at the completion of the Critical Care Nursing postgraduate program (Gill et al. 2006).

Currently, national competency standards for MCaFH nursing do not exist in Australia, increasing the probability of differences in nursing practice across the country. Without a national competency framework for MCaFH nursing, the clinical capability of students completing MCaFH nursing courses may be variable across Australia. When determining a graduate nurse's ability to practice capably in the delivery of specialist nursing care, it is essential that they be assessed against attributes and standards specific to the nursing specialty (Dunn 2000). Attributes and standards reflect the complex and specialist nature of the profession therefore, it is appropriate for graduates developing clinical capabilities to be assessed against these (Dunn 2000).

The lack of a national approach to preparing clinically capable MCaFH nurses has the potential to influence the quality of graduates entering this nursing speciality.

Assessing student performance on placement

Assessing a student's performance on a professional experience placement ensures that a beginning specialist MCaFH nurse is working capably providing safe, quality care to children and families. However the lack of research focusing on MCaFH nursing education particularly, research focused on the clinical assessment or competency assessment of graduates is problematic. Developing clinical capability is an ongoing process which demonstrates a nurse's ability to use technical, interpersonal, decision making, critical thinking, cognitive, affective and psychomotor skills (Athlin et al. 2012 p. 91). These competencies would enable a nurse to adapt to an ever- changing MCaFH nursing environment. Clinical assessment ideally should assess the acquisition and application of a specialised body of knowledge and reflect the reality of the environment the nurse will work in (Dunn 2000, Ward and Willis 2006). Graduates must be assessed on their ability to work as a novice within their new environment and not as an expert (Benner 1982). It is therefore optimal that graduates will be benchmarked against appropriate MCaFH nursing competency standards that determine their ability to work at a novice level within the speciality area. These competencies should reflect specialist nursing practice in addition to the professional standards required for national registration as a registered nurse (Nusing and Midwifery Board of Australia 2013).

The professional experience placement is one area where students' capabilities and competencies to provide safe, quality care can be assessed according to professional standards of practice. Providing students with professional experience placements enables them to have learning opportunities to experience the role and responsibilities of MCaFH nursing. Students immersed in the clinical environment are provided with the best opportunity for skill development and professional identity formation (Newton et al. 2010). It is appropriate that a national approach to clinical assessment is developed to increase the professional status and meet the workforce demands and the declining numbers of MCaFH nurses across Australia (Kruske and Grant 2012). More

importantly this national approach safeguards the profession against compromised consumer outcomes from poor clinical practice (Levett-Jones et al. 2011).

Research on assessment in nursing is reported widely in the nursing literature. Literature pertains to defining and assessing clinical competence of undergraduate nursing students, but little has been written on post-graduate students entering a nursing speciality (Gill et al. 2006). To ensure that the assessment is fit for purpose it is important to align student assessments with the learning outcomes of the overall program (McNeil et al. 2006).

The Australian Qualification Framework (AQF) (Australian Qualification Council 2013) highlights that the learning outcomes of postgraduate courses should incorporate the development of lifelong learning while addressing personal and professional strategies for future career development (Australian Qualification Council 2013). The AQF framework defines the complexity and depth of achievement and autonomy required of students when achieving a postgraduate certificate qualification. The Australian Qualification Council (2013 p.16) acknowledges that post-graduate students need to develop competencies that are beyond what is required in an undergraduate program. The graduate certificate level of education qualifies students with a specialised body of knowledge enabling them to think critically, generate and evaluate complex ideas, to make independent judgements, and initiate, plan and implement care for their clients. The principles of accountability and responsibility should be embedded in the curriculum and reflected in assessment activities and in the graduate MCAFH nurse (Australian Qualification Council 2013).

The AQF (2013) framework is consistent with current adult learning theory and contemporary health education in Australia. The AQF (2013) recognizes and supports individual student learning, career goals, lifelong learning and recognizes prior learning and experiences. It is therefore important for this piece of research to apply the theories and underpinning principles of adult learning to review best practices in MCAFH nursing clinical placement assessment. The concepts of adult learning theory will provide the conceptual framework against which the findings will be reviewed.

Postgraduate students' learning is driven by the need for the qualification, personal self-motivation to improve and its relevance to their current clinical practice (Murray and Lawrence 2000, Das et al. 2008). Adult learners commit to their learning when the goals and objectives of the learning experiences are important to them, their career development and progression. Embedding adult learning principles into nursing curriculum provides the students with the opportunity to use their previous life and career experiences to determine their own learning needs while on clinical placement (Murray and Lawrence 2000, Das et al. 2008). Knowles's (2005) adult learning theory (also known as Andragogy), is an appropriate educational theoretical base for this inquiry as it focuses on the student as an active not a passive participant in the education process (Knowles 2005 p.71). Knowles' approach to education centres on a collaborative problem based process that establishes an environment that is democratic and equal between the student and the teacher (Knowles 2005).

The six key principles of adult learning, outlined by Knowles (2005 p.4) will be used to guide the discussion of the findings in chapter 5 and include;

- The need to know: Adults need to know why the learning is important and what the value is in the learning experience
- The learners self-concept: The adult learner wants to be respected and seen as capable. They are self-motivated and self-directed in their learning
- Prior experience: Adult learners possess a diverse experience and knowledge base that should be used to support their new learning experiences.
- Readiness to learn: Adult learners are ready to learn when they experience the need to further their learning to cope with life situations. They are goal orientated and want clear learning goals to achieve.
- Orientation to learn: Adult learners are life centred and therefore their learning aims to achieve their full potential or developing competence.
- Motivation to learn: Adult learners have an internal motivation to learn where there is intrinsic value evident.

The notion of student centeredness in the learning process has been noted (Heron 1989, Milligan 1997, Knowles 2005) as essential in adult learning where control of learning often lies with the student in consultation with the educator. Although there are many theoretical frameworks for education, Knowles's (2005) key principles of adult learning are one set of principles that have been applied widely in adult education practices. Some authors have reported that Knowles has changed the role of the student learner in adult education more than any other theorist (Raufman and Mann 2014).

Knowles's concept of andragogy whilst widely accepted has also been widely criticised. One major criticism is a noted lack of empirical evidence to support its characteristics as a science (Taylor and Kroth 2009). Critics indicate there is overwhelming evidence for it being-at best-a series of good practice principles describing how an adult learner should learn (Hartree 1984, Raufman and Mann 2014). Other criticisms focus on whether all adult learners are as self-directed and self-motivated, as Knowles indicates (Darbyshire 1993, Merriam 2001). Darbyshire (1993 p.329) argues that Knowles' presents little to no evidence for his bold assumptions that adults fundamentally learn differently to children. Knowles' suggests that children are dependent learners with little self-direction and are forced to partake in education, compared to that of adults who are self-motivated and voluntary in their own learning experiences (Darbyshire 1993). Darbyshire (1993 p.334) argues that Knowles' theory elevates the education of adults, while demeaning children.

Adult learning, with its philosophical and humanistic roots makes it an individual "transactional model" (Holton et al. 2001 p.123) of learning, and as such it fails to include the social change and critical theory outcomes of education (Merriam 2001). Milligan (1997 p.489) supports the use of the adult learning principles, as they are concerned with the preparation for work specific roles enhancing the individual's self-concept and understanding of their workplace. Adult learning principles are not focused on goals and purposes, instead transcend application to be more flexible to suit individual learning contexts. These reason makes it appropriate to use as the framework for the clinical education and assessment of MCAFH nursing students.

The use of adult learning principles to frame students' learning and assessment processes can be seen throughout the health professional education literature. One example is seen in the medical curriculum used at the University of New South Wales (McNeil et al. 2006 p.528). Adult learning principles were adopted throughout the learning and assessment process. This enabled students to have autonomy over their own learning; ensured students' personal and past experiences were included; that the different learning styles of students were respected and learning was authentic and meaningful to the individual students (McNeil et al. 2006 p.528). Adult education therefore is important in the education and assessment of MCAFH nursing students as it is developed around student individuality and past life and work experiences. Adult learning allows for autonomous learning. However all students have different learning styles, and engage with the same learning situations differently. Haggis (2002 p.218) highlights that individual students' learning is a unique process. These key principles provide guidance for educators to encourage adults to be in control of their learning, while directing them to appropriate learning experiences (Mitchell and Courtney 2005).

Being in control of their learning, students are active not passive participants in the education process (Billett 2009). This is evident in the professional experience placement where students are immersed in the clinical environment engaging in experiential learning. The richness of the clinical experience enables and encourages the adult learner to be active in identifying their learning needs (Billett 2009). This ensures they gain the appropriate knowledge and experience required to become clinically capable to work within their area of speciality practice (Knowles 2005 p.38).

Currently the clinical capability of the graduate entering the MCAFH nursing specialty is unknown. As there is little research evidence, one outcome of this research is the identification of current assessment practices used across Australian MCAFH courses. Once these practices are identified, future recommendations towards developing a national benchmark of clinical competence for these graduates can begin.

The research question used to guide this research is “How are the clinical capabilities of registered nurses, enrolled in MCaFH nursing courses in Australia, assessed during the professional experience placements? The objectives for this research are:

1. Discuss the professional experience placement assessment methods used in the MCaFH nursing programs offered in Australia
2. Critically analyse the clinical practice assessment documents used in MCaFH nursing programs offered in Australia

Chapter summary

A MCaFH nurse plays an essential part in the Australian health care workforce promoting optimal physical, social and emotional development of infants and children. The highly specialised nature of their role requires a workforce that is equipped with the capability to work competently and confidently with complex clients and family dynamics. It is essential that the clinical preparation and assessment of the students completing MCaFH nursing courses prepare graduates to comply with professional standards and requirements to meet the health care needs of children and their families. As the health and wellbeing of children is a high priority for policy development in Australia (AIHW 2011) the clinical capability of registered nurses entering the MCaFH nursing specialty is important. This safeguards organisational compliance with safety, quality and risk management requirements in the health care sector.

Chapter one has provided the background to the role of a MCaFH nurse and the postgraduate qualification to assist registered nurses to work safely with children and their families. As part of postgraduate qualifications, a professional experience placement is offered to broaden their understanding of the role and responsibilities and occupational practice of a MCaFH nurse.

Chapter two will examine the literature currently available on the best assessment practices of postgraduate students while on clinical placement. A search of the literature will include global and Australian literature and will include literature from allied health and medicine. The chapter will provide a thematic analysis of the most

commonly used assessment methods gleaned from the literature and conclude how best these fit with postgraduate education.

Chapter three will present the methods used in this research study. The chapter will provide a rationale for using a qualitative descriptive design. It will discuss the selection of participants and the ethics approval process undertaken prior to data collection. A description and rationale will be provided on why in-depth telephone interviews were used for data collection; the management of the data; coding and the analytical approach chosen.

Chapter 4 will outline the results. The chapter is separated into the common themes that emerged from the participants' transcripts and the assessment documentation provided. Participants' statements will be included throughout the chapter, supporting the themes to ensure that the participants' voices remain as the core of this research.

Chapter 5 will provide an overall discussion of the main findings, comparing these with the best assessment practices of postgraduate MCaFH nursing students on professional experience placements found within the literature. Adult learning principles will be used to underpin the discussion. The quality and the support of the assessment of MCaFH nursing students as well as the clinical environment will be highlighted as important components to the development of a student's clinical capability. The most commonly used assessment method of clinical capability will be discussed and compared to the findings in the literature. This chapter will conclude with recommendations for future educational practice in the area of assessing postgraduate students' clinical capability when completing MCaFH nursing professional experience placements.

Chapter 2: Literature Review

Introduction

The purpose of this literature review is to examine the available and relevant literature on professional experience placement assessment of MCaFH nursing students. Using thematic analysis of the literature, the current methods of clinical assessment for post-graduate MCaFH nursing students, will be presented. This literature review will focus on the assessment of MCaFH nursing students on professional experience placements only and will discuss literature focused on the achievement of clinical capability by a student and not on continuing nurse competence. Continuing nurse competence assumes that the nurse has already been deemed capable of working as a MCaFH nurse whereas this study only focuses on how students are deemed capable prior to the completion of their program of study.

Search Strategy

A comprehensive search of the literature was conducted between February 2012 and March 2014. It aimed to identify evidence based literature that focused on the clinical assessment methods used by educators and clinicians to assess the clinical skills developed by MCaFH nursing students while on clinical placement. Databases searched were: PROQUEST, CINAHL, COCHRANE, OVID, PUBMED and SCOPUS. Searches were not restricted to years and focused on literature written in English, limited to scholarly publications and journal articles from, but not limited to, the United Kingdom, Australia, Canada, North America and New Zealand. The inclusion criteria for the subsequent searches used peer reviewed literature that focused on:

- Clinical assessment methods used in clinical practice,
- Clinical competence assessment of students,
- Final clinical placements or professional experience placements
- Work based learning assessment.

Articles were excluded from this literature review when they:

- Were not focused on evaluating or comparing assessment methods

- Were focused on the mentors and student’s perceptions or experiences of using clinical assessment tools or methods
- Did not evaluate assessment methods or tools used on clinical placement.
- Were solely assessing the effectiveness of Objective Structured Clinical Examinations (OSCE) in any discipline

Articles were initially included if they met the aforementioned inclusion criteria, based on title and abstract. Screening of the full text was necessary when it was unclear from the title and abstract if the article met the inclusion criteria. All reference lists of the included articles were reviewed for additional relevant research that could be included in the literature review. The searches focused on the MCAFH nursing literature as well as the literature focusing more broadly on postgraduate, undergraduate and allied health assessment methods.

Australian literature search

The first search conducted focused on the speciality of Maternal, Child and Family Health nurses in Australia. The key words used in this search were “clinical placements”, “professional experience placement”, “MCAFH nurse”, “competence” and “assessment”. This search yielded 2 articles with only one article discussing clinical placement and assessment methods. This demonstrated the significant gap in the literature focusing on clinical assessment of MCAFH nurses in Australia.

International literature search

The global search used the key words: “Plunkett Nurse”, “Child Health Nurse” and “Home Visitor”, along with “Assessment”, “Placement” “Competence” and “Students”. After reviewing the articles only 5 were included in this literature review as only these focused on student assessment or the clinical environment.

Postgraduate literature search

This search was much broader. Key words used: “Postgraduate” “Students”, “Competence”, “Assessment”, “Work based learning” and “Placement” were included to find articles focused on the assessment and development of expert clinical skills rather

than the assessment of students using the National Competency Standards for a Registered Nurse (Nusing and Midwifery Board of Australia 2013). The numbers of articles collated from these searches were:

- medical (14)
- paediatrics (2)
- critical care nursing (2)
- palliative care nursing (3)
- emergency nursing (1)
- community health nursing (5)
- perioperative nursing (2)
- gerontological nursing (1)
- intensive care (2)
- psychology (6)
- midwifery (3)
- Nurse Practitioner (1)

The total result of the first three literature searches did not yield the quantity of articles required to successfully identify a range of effective assessment methods for postgraduate nursing student professional or clinical experience placements. The search was then expanded to incorporate the allied health literature.

Allied Health Literature Search

A subsequent search of the literature focused on clinical assessment methods of students from a variety of health related disciplines. It was important to include disciplines other than nursing to support adequacy and depth of this literature review. The disciplines included were known to have, or are currently developing sets of national competency standards for clinical practice. The disciplines selected for this literature search were “dietetics”, “speech pathology”, “dentistry”, “occupational therapy” and “physiotherapy”. The key words used here included the above disciplines as well as the original key words of “students”, “competence”, “assessment”, “work based learning” and “placement”. The numbers of articles from these subsequent searches are:

- dietetics (3)

- speech pathology (2)
- dentistry (3)
- occupational therapy (4)
- physiotherapy (1)

This search yielded a positive result but it identified the need to extend the literature search to include undergraduate student placements. Many of the identified articles from these disciplines were focused on undergraduate students only because working within these disciplines did not require any specialist postgraduate qualifications. Further evidence to support this was found in the first 3 searches where there was a significant lack of current literature that focused specifically on postgraduate clinical assessment. This was in stark contrast to the extensive literature available from all health related discipline on clinical assessments of undergraduate students.

Undergraduate literature search- Health disciplines

A fifth search was conducted to locate literature that primarily focused on the clinical assessment methods used with undergraduate students on placement. The key words used in this search were “undergraduate”, “students” “competence”, “assessment”, “work based learning” and “placement”. This was the most valuable literature search yielding over 30 articles that met the inclusion criteria.

The article abstracts that met the inclusion criteria from all five searches were downloaded and analysed to determine their relevance to MCAFH nursing postgraduate programs and clinical assessment. If the abstract was relevant to this research, the full text article was then downloaded and it was then critiqued using a critical appraisal tool for qualitative and quantitative research (Critical appraisal skills program 2014) . A series of ten questions are used to appraise qualitative and quantitative research (see appendix 1). The first two questions were used to screen the literature for appropriateness and whether the article is relevant to the research. This excluded 10 articles that were small studies with unclear research statements and that lacked relevance to the Australian nursing and allied health context. Twenty articles focusing on undergraduate assessment met all eight questions. No quantitative research studies that were relevant to the research question were found; therefore only Critical

Appraisal Tool for Qualitative Research was used. A thematic analysis was then conducted and the main themes located in the literature will be presented under the central themes of:

- Major approaches to assessment
- Assessment of competencies
- National competency standards
- Competency based assessment
- Multi-modal assessment
- Portfolios
- Self-assessment and reflective practice
- Summative versus formative assessment
- Continuous assessment
- Graded versus non-graded assessment.

An overview of what was located in the Australian and international literature will now be presented.

Australian Literature

It was evident from this search that there was a lack in the Australian nursing and related literature that addressed clinical assessment of MCAFH nursing students on clinical placement. Only two articles (Kruske and Grant 2012, Fowler et al. 2014) retrieved from the search presented a discussion on the current education status for MCAFH nursing courses in Australia. Kruske and Grant (2012) and Fowler et al. (2014) highlight the courses and clinical placement components offered in Australia. However, their research did not discuss in any detail the clinical placement assessment practices used in individual programs to determine the clinical capabilities of MCAFH nursing students.

A significant amount of the current research in the field of MCAFH nursing has occurred in the policy development arena (Schmied et al. 2011), the role of the MCAFH nurse (Kruske et al. 2006, Fraser et al. 2014), current clinical practice (Briggs 2007, Guest et al. 2013), nature and services provided (Schmied et al. 2014), the importance of supportive competency based transition to practice programs (Bland et al. 2011,

Cusack et al. 2013), and ongoing nurse competence (Fowler et al. 2014).

International Literature

Internationally, the nursing literature focuses on the MCaFH nursing specialty in more detail. Internationally, significantly more research has been done to define competence and developing the clinical competencies of already practicing MCaFH nurses (Ondeck 1997, Handler et al. 2006). Evidenced in the literature from Canada, the United Kingdom and America is the development and evaluation of competency (Paterson et al. 2004, Handler et al. 2006) however, this literature does not extend to assessing MCaFH nursing students for competence, specifically on professional experience placements. One article located focused on the assessment of student competence through the use of a objective structured clinical examination (OSCE) in the clinical laboratories but not on clinical placement (Walters and Adams 2002). It is evident that there is a significant gap in the nursing literature that focuses on this area of education and clinical practice assessment. The international literature shows that MCaFH nurses are assessed by demonstrating their ability to meet and comply with organizational competency standards (Handler et al. 2006). These standards address the professional, interpersonal, critical thinking skills and knowledge needed to provide high quality care to their clients in the community (Paterson et al. 2004).

The current literature on clinical assessment does not provide a contemporary view on the best assessment methods available to determine a MCaFH nursing students' capabilities on clinical placement. Paterson et al. (2004 p. 233) described the Vermont project that developed a set of competencies to assess the MCaFH nurse clinical performance statewide. The Vermont Department of Health (VDH) had a working party, which over a four year period, created, implemented and evaluated a clinical assessment process, to determine the beginning MCaFH nurse's competence, while also validating the competence of experienced staff. The study provided a framework for new MCaFH nursing graduates to develop from advanced beginner to expert, with supported and guided learning. Paterson et al. (2004) did not highlight whether universities or training organizations adopted the tool to determine student competence. They did however provide an understanding of the expectations of a MCaFH nursing graduate's clinical competence within MCaFH nursing services in

Vermont. Although this research was conducted over ten years ago and its relevance to contemporary practice is outdated, it does demonstrate the importance of assessing clinical competence in practice to ensure beginner specialist MCaFH nurses are performing at a level where quality, safe and effective nursing care is provided to clients and their families. However, a major limitation of this work for the present study is that the Vermont Project does not provide any insights into how the competence of MCaFH nursing students is actually assessed on professional experience placement.

Macduff and West (2004) evaluated a specialist Family Health Nurse (FHN) degree which focused on comparing a course curriculum proposed by the World Health Organization, as well as other specialist programs offered in Scotland. This evaluation provided a small discussion on the differing assessment techniques offered in the program. It did not provide an overview on when the assessments were conducted and what aspects were focused on in the clinical placement. Macduff and West (2004) proposed that more research was needed; research that provided a holistic overview of effective assessment techniques in assessing specialist (MCaFH) nurse's practice, to ensure continuing competence.

Major Approaches to Clinical Practice Assessment

The Australian and international literature, shows that clinical assessment in undergraduate and postgraduate health professional specialties is required (Dunn 2000, Way 2002, McGaughey 2004, Coffey 2005, Hanley and Higgins 2005, Hartigan-Rogers et al. 2007, McCready 2007, Dijksterhuis et al. 2009, Damen et al. 2011, Scott et al. 2011, Coyne and Needham 2012, Walters et al. 2012, Byrom and Aiken 2014). Specialist nursing is often noted in the literature as advanced practice nursing within a specific clinical area of nursing practice (Kaiser and Rudolph 2003, Gardner et al 2014, Fowler et al. 2014). The assessment of specialty nursing competence must reflect the advanced level of practice and not the entry level practice standards used in undergraduate nursing (Dunn 2000). Assessing advanced practice competencies prepares the graduate with the depth of knowledge and skills required to work within the specialty field (Coyne and Needham 2012, Gardner et al 2014). The education and assessment frameworks for specialist nursing practice must include “advanced knowledge, skills, attitudes and values”, to practice competently in a specialty area (Gill et al. 2006 p. 106). These attributes and/or competencies are important to include in the education and assessment of specialist nurses who are already demonstrating competence as Registered nurses.

The development of competencies drives the research in educational assessment in healthcare today (Redfern et al. 2002, Cowan et al. 2005, Fahy et al. 2011, Athlin et al. 2012, Gardner et al 2014). Educational research centers on the notion of undergraduate and postgraduate competence, competence versus performance, preceptor/mentorship relationships, clarity and validity of competence assessment and the simulated experience (Andre 2000, Watson et al. 2002, Kaiser and Rudolph 2003, McCarthy and Murphy 2008, Fahy et al. 2011, Gardner et al 2014). It is essential that the type of assessments available to students will reflect their ability to work competently within the workplace and not only within a controlled environment provided at the university level, to ensure their ability to transcend theory into the work environment (McAllister 2005).

In the following sections themes will be presented that depict the specific methods for assessing a postgraduate student's clinical competence in postgraduate and undergraduate education for health professionals. The foci of these themes include competency standards, competency based assessment, multi-modal assessment, continuous assessment portfolio and reflective practice, summative and formative assessment, and non-graded and graded assessment.

Competency Standards

The review of the literature centering clinical competence assessment found that assessing students against the current professional standards for the discipline was a key feature. Professional practice standards are a benchmark against which an individual's clinical practice is measured. Professional standards include not only task mastery but behavioural and attitudinal elements (Kaiser and Rudolph 2003). The international literature on clinical assessment focuses on the use of standardised assessment to determine varying levels of student competence (Schaffer et al. 2011). The use of standardized assessments should measure more than just a pre-determined set of skills but enable the demonstration of the student's preparedness to enter the profession (Schaffer et al. 2011).

In Australia, the competency standards for the Registered Nurse are well established and provide an excellent framework for the assessment of competence in undergraduate nursing students (Nusing and Midwifery Board of Australia 2013). The NMBA competency standards for the Registered Nurse are legislative requirements for nurses to practice within any state or territory of Australia and therefore are essential in the assessment and benchmarking of students' performance. Kaiser and Rudolph (2003 p.226), in their evaluation of a clinical assessment tool used to determine the competence of community and public health nurses, agreed that the use of the national standards of practice provides the students with the understanding of what is expected when working within the health care environment.

Beesley (2004) and O'Connor et al. (2009) highlight the importance of assessing Scottish and Irish nursing students against a broad range of occupational competency standards that focus on knowledge, performance and clinical abilities across a range of

different contexts. Although their research predominantly focused on undergraduate student assessment an important point to highlight is that the competencies used to benchmark student performance must be representative of the criteria that determines registration. These standards provide a framework for the future workforce to meet and ensure high quality nursing care is afforded to all patients and clients.

O'Connor et al. (2009) emphasised the need for a competency assessment tool which clearly stated the competencies to be developed on placement. Although the validity of assessment tools are beyond the scope of this literature review, O'Connor et al. (2009) made a valid argument that for the validity of the assessment of student competence. The assessment tool needs to be clear in its requirements and minimise assessor bias to provide a reliable indicator of student performance. Fahy et al. (2011 p.47) agree with O'Connor et al. (2009) and argue that assessing nursing students against competencies is valuable, as long as knowledge, attitude and skills are assessed equally and that the competencies chosen are appropriate for the area the student is to work in.

Holmboe et al. (2010) also support the importance of using competency standards for professional regulation in medical education in the United States. They argue that competency standards should frame the assessments conducted on placement and provide evidence of how the student performs in the clinical environment. They develop this argument further by suggesting that students ideally develop competence through their placement experiences. Furthermore, it is beneficial for them to develop an understanding of what is required of them, professionally, to maintain their certification by introduction to the occupational competencies prior to employment (Holmboe et al. 2010).

Speech Pathology students are assessed against a set of national competency standards that include combinations of knowledge, skills and attitudes (McAllister 2005, McAllister et al. 2010). Student performance in practice is benchmarked and compared to the competency standards underpinning Speech Pathology practice. Student development of competence is assessed using levels of performance measures/indicators that determine student competence to enter the profession at an independent level, seeking support when required (Ferguson et al. 2010 p.10,

McAllister et al. 2010). Student performance is also seen consistently in the nursing literature where While (1994), Tilley (2008 p.63) highlight that assessing competence in practice on its own is not sufficient. The actual performance in real life situations is more important where the outcomes demonstrate student accountability and clinical judgment is required. It appears important that nursing students are able to work confidently and be accountable for their actions in the clinical environment, while requesting assistance when required.

McAllister et al. (2010) argue that even when a reliable and valid assessment tool is constructed, the issue still remains of what level of performance indicates an undergraduate student's competence. Clinical assessment rating scales are required to realistically portray the actual level of a students' competence (Gill et al. 2006). The level of proficiency on the completion of the assessment ideally should be different in undergraduate and postgraduate students.

Undergraduate assessment must reflect the student's ability to work as a novice through a continuum of developing competence and confidence while integrating knowledge with clinical experience (Paterson et al. 2004). The assessment of a student's performance in postgraduate courses should demonstrate a movement from an "advanced beginner" through to "competent" at the completion of their course (Dunn 2000). Dunn (2000) poses the questions of proficiency and the expected level of a postgraduate beginner nurse specialist at the completion of their clinical experience and whether this should be different to the level expected of an experienced nurse specialist. This became a recommendation in the creation of a clinical assessment tool to assess competence in critical care nurses in Australia. For the critical care nurses in Australia an entry level of "advanced beginner" for a specialist student nurse was added to the assessment grading tool with a clear progression to "competent" at the completion of the course (Gill et al. 2006 p. 106).

Competency Based Assessment

There is a strong debate present in the literature about the validity of competency based assessment in determining students' clinical competence (Tilley 2008, Yanhua and Watson 2011). Historically competency based assessment was seen as a method

that taught a skill and did not develop critical thinking and therefore was limiting in its approach to determining competence (Dolan 2003 p.133). In more contemporary literature competency based assessment is effective in determining competence and developing critical thinking of undergraduate students when it is supported by a competency based curricula and supportive clinical mentorship (Komaratat and Oumtanee 2009, Yanhua and Watson 2011).

Calhoun et al. (2011) advocate that competency based assessment models adopted by public health courses in the United States, enhance graduates' education through aligning assessments to career pathways. Research from both nursing and allied health demonstrates a strong link between students' clinical competence against a set of standards for professional practice in both undergraduate and postgraduate education (Dunn 2000, Way 2002, Holmboe et al. 2010). These performance measures are either assessed in a single encounter or over the duration of the clinical placement (van der Vleuten et al. 2010). Competency assessment aims to be multidimensional and takes into account not only the psychomotor skill development of a student, but also the attitudes and values that are specific to the discipline specialty (Gill et al. 2006). Competency based assessment therefore demonstrates the level of performance necessary for a graduate at the completion of university courses by benchmarking their performance against the standards of professional practice (Gill et al. 2006).

A more recent study conducted by Beesley (2004) provided a comprehensive overview of why competency based assessment was important in perioperative nursing in England. The program aimed to develop staff to achieve competencies within this area of nursing practice by identifying strengths and weaknesses of nurse's knowledge and practice (Beesley 2004 p.58). Although Beesley (2004) focused on already practicing perioperative nurses, the study showed that competency based assessment can be modified and adopted to assessment methods used in postgraduate courses.

The subjectivity of assessor's views on a student's clinical competence has become a significant issue in nursing literature. O'Connor et al. (2001) suggested that assessors should attempt to develop objectivity when assessing student competence. Similarly, Neary (2001), Dolan (2003) and Foss et al. (2004) found that the assessor's

understanding of the assessment requirements and their own interpretation of competence may impact on the objectivity of the student's final grade. The assessor and the student need to have a clear understanding of the assessment process for it to enable a balance between clinical skill development and the holistic placement experience (Dolan 2003, McCarthy and Murphy 2008).

Allied health literature focuses on competency based assessment in many formats. In disciplines such as psychology in Australia, competency based assessments include video or audio reviews of performance, as well as an observation of skills in practical work (Scott et al. 2011 p.84). This process aims to ensure that a student's competence is determined through a multi-modal approach and attempts to reduce the reliance on single assessments. Student deficits can be pinpointed and remedial attention implemented more quickly due to assessors having more documented evidence of a student's performance.

Using professional competencies, assessors are able to assess a student against the benchmark standard required to work competently within a specialty while allowing universities to determine students' clinical competence in their programs (Taleghani et al. 2004, Scott et al. 2011). The use of competency based assessment in medical education has allowed for the assessment of medical students to possess the skills, attitudes and knowledge to function competently within the work environment (Dijksterhuis et al. 2009, Holmboe et al. 2010). The majority of the assessment of medical students in the Netherlands occurs within the workplace with real patients (Holmboe et al. 2010 p.677). The aim of competence assessment is therefore to ensure that patient care is of the highest quality because graduates are being assessed to possess the skills required to work competently and safely within the medical profession. Holmboe et al. (2010) suggest that more research needs to be conducted on student's development of competence in medical education because traditionally it has only focused on the tasks and performance instead of the development of competence.

Like other disciplines, competency based assessment in medical training is multi-modal and requires students to demonstrate their competence through a series of different assessment modalities. Calman et al. (2002) identified that a multimodal

approach to assessment may be more beneficial in determining a holistic understanding of a student's competence than just assessing them against a set of professional competencies. A multi-modal approach could include simulation, competence assessment and educational theoretical assessment pertinent to the specific clinical area (Watson et al. 2002), Dijksterhuis et al. (2009 p.1163) highlighted the use of Objective Structured Assessments of Technical Skills (OSATS), direct observation of procedural skills (DOPS) and mini clinical evaluation exercises (Mini-CEX) as assessments that identify procedural, clinical performance and theoretical knowledge. Using a multi-modal approach enables the identification of deficits in student knowledge and skill ability. However Dijksterhuis et al. (2009 p.1163) did not highlight what benchmarks the students are assessed against when determining student's competence to practice within their specialty.

Research into current medical education assessment methods, highlights the concept of using "work based assessments" (Schuwirth 2004, Damen et al. 2011, Byrom and Aiken 2014). This form of assessment aims to focus on student performance throughout their placement maintaining that feedback is an integral part of its success. Work based can determine the student's ability to work within the profession by doing the work required on a daily basis and not in stand- alone assessments (Byrom and Aiken 2014). Wilkinson (2007 p.633) agrees with Schuwirth (2004) in his review of clinical performance assessment in medical education. He believes that using a range of different assessments to determine competence, contributes to the validity of the overall assessment. Multiple work based assessments, are therefore required to determine a student's ability and decrease subjectivity of either the assessor or the assessment. Work based assessment holds immediate feedback as an important aspect of this model and aligns with the current professional competencies for practice. This enables the assessor to identify unprofessional behaviors, as well as competence and performance and feed this information back to the student(s). Wilkinson (2007 p.17) argues that students should be provided with instant feedback as well as feedback drawn from a range of assessors to ensure validity and reliability of the process.

A key finding from the review of the literature was that the approaches to assessments of clinical practice, in many health care disciplines were different. Dermatology nursing

in the UK can be seen to be paving the way for new assessment methods to be trialed in nursing. A competency based career framework was developed to measure Dermatology nurse competency from novice to expert (British Dermatology Nursing Group 2012). It highlights that direct observation of a nurse's clinical skills is one of the important assessments conducted to determine dermatology nurses competence. In the British Dermatology Nursing program a nurse's performance is benchmarked against the dermatology nurse competencies that are included into each individual assessment (British Dermatology Nursing Group 2012). Adopted from medicine and allied health assessments, dermatology nurses are now being assessed through a multimodal assessment process using Direct Observation of Procedural skills, Cased Based Discussion's and Mini Clinical Evaluation Exercises (Mini CEX) (British Dermatology Nursing Group 2012).

The use of multi-modal assessment, Direct Observation of Procedural Skills and Case Based Discussions are evident in undergraduate nursing assessment in differing forms however; the Mini-CEX is predominantly seen in medical (Norcini and Burch 2007) and midwifery (Sweet et al. 2014).

Continuous Assessment

The continuous assessment process features consistently within the literature. It is apparent in the work of van der Vleuten et al. (2010 p.708) who reported that assessment of medical students has moved away from the task based and individualistic assessment based framework to that of continuous assessment. The importance of continuous assessment appears in the international literature (Wilkinson 1999, Andre 2000, Neary 2001, Taleghani et al. 2004, Leigh et al. 2007, Karayurt et al. 2009, Holmboe et al. 2010, Lennie and Juwah 2010, McAllister et al. 2010). Karayurt et al. (2009) argue that continuous assessment provides midwifery students with the ability to demonstrate their achievement of learning goals and ongoing skill development, using learning plans, personal development plans and outcomes of discussions between the student, the assessor and the university tutor.

It is evident in nursing and allied health literature that the placement should be considered the assessment period and multiple forms of relevant feedback about the student's progress should be provided (Wilkinson 1999, Andre 2000, Neary 2001, Taleghani et al. 2004, Leigh et al. 2007, Karayurt et al. 2009, Holmboe et al. 2010, Lennie and Juwah 2010, McAllister et al. 2010, Scott et al. 2011). This way student learning is observed and their ability to learn from the experience can be monitored, while reducing the need for a 'checklist' approach to assessment (Fahy et al. 2011).

In the assessment of Dietetic students the optimum plan, suggested by Lennie and Juwah (2010 p.219), incorporates "multiple assessment methods relevant to the competencies being measured while taking into account the different stages in professional development and practice". Inconsistent practice can be seen to develop into consistent practice and ultimately the development of competent practice on the placement.

Not all literature on continuous assessment reported on its benefits as a hallmark assessment framework. In theory, continuous assessment provides the assessor with the time to observe the student's cognitive, affective and psychomotor skills and their integration of theory into practice. However Neary (2001) and Leigh et al. (2007) note

that this form of assessment is time consuming and difficult to operationalize.

Summative and Formative Assessment

Formative modes of assessment provide the student and the assessor time to debrief and discuss areas of strengths and weaknesses, while providing time for learning plans to be created to support student development (Neary 2001). Formative assessment ensures students receive constructive and frequent feedback that can guide their development to competence. It can also provide the means for early identification of learning deficits or facilitate a rapid advancement, depending on the quality of the student (Levett-Jones et al. 2011).

The literature shows that formative assessments enable poor performing students to receive immediate feedback to develop a learning plan and obtain assistance, to improve their performance before failing the clinical placement (Holmboe et al. 2010). Wilkinson (1999) noted that assessment drives learning using a mixture of formative and summative assessments throughout the learning experience is preferable. Formative assessment can be used to reveal what the student has learnt and what is required of them towards the completion of their placement. Formative feedback should be continuous throughout the placement to achieve student's learning goals and strategies (van der Vleuten et al. 2010).

The literature reports that the use of formative and summative assessments on clinical placements varies across programs (Karayurt et al. 2009 p.1124). In some Australian nursing courses a combination of formative and summative assessments were used whereas others relied on only the summative method of assessment (Williams et al. 2001, Klein 2006, Oermann et al. 2009, Levett-Jones et al. 2011). In Ireland nursing students on clinical placement for more than three weeks are assessed through a three-phase formative interview process (Williams et al. 2001). Interviews are split up over the placement with the three interviews focusing on identifying and agreeing on learning objectives; the student's self-assessment of progress and the assessor's formative feedback on the student's clinical achievements and progress towards competence. These are used to contribute to the overall summative assessment grade

(McCarthy and Murphy 2008 p.308). In Sweden formative and summative assessments are conducted throughout nursing placements with a mid-placement discussion before the final summative grade is awarded (Athlin et al. 2012). A mixture of theoretical and practical assessments provide a comprehensive assessment of a student's interaction with the course objectives/content and development of competent nursing practice (Athlin et al. 2012).

The development of the "COMPASS" assessment tool (McAllister 2005) using formative and summative approaches to assessments to determine the competence of speech pathology students in Australia, provided the outcomes of quality learning and reflection on the student's performance. Using the 'COMPASS" tool, formative and summative ratings are conducted at the mid-point and at the completion of the placement to measure student competence (McAllister 2005). Although the "COMPASS" tool used summative assessments to determine a student's competence there was little discussion in their article on how they are used. McAllister et al. (2010 p.8) highlighted the use of formative assessment pieces, as they are student focused, use adult learning principles and encourage reflection on performance. They argue that through formative assessments a student learns to monitor their own progress through setting their own learning targets that ensures their development of competence.

It is evident throughout the literature that formative and summative assessments are incorporated into multi-modal and continuous assessments of clinical placement (McAllister et al. 2010 p.5). They should appear together in a continuous assessment process providing both the student and the assessor with a an overview of their learning needs, achievements and developing competence (Redfern et al. 2002).

Graded versus Non Graded Assessment

From reviewing the literature on competence assessment it is evident that the use of graded versus non-graded assessment is dependent on the desired outcome and nature of the assessment (Tolley et al. 2010). Redfern et al. (2002), Gadbury-Amyot et al. (2003). Holmboe et al. (2010) assert that assessments in health professional courses require a mixed method, qualitative approach to judging the overall competence of a

student. They believe that too much focus is placed on numerical graded assessments, where qualitative narrative assessments would be more beneficial to the students learning. Non-graded clinical evaluation of dental students has been at the forefront of research in America to ensure nontechnical and procedural skills are emphasized in the assessment of students (Taleghani et al. 2004).

Pfeil (2003 p.1920) and McAllister et al. (2010) found similar results in nursing and speech pathology that students benefit from a non-graded assessments as it encouraged learning and not competition between peers. It is seen that through the non-graded skills assessment, student deficits in learning are identified more readily and remedial work put in place before the student is deemed incompetent or fails the course overall. Therefore the non-graded assessment provides an overview of the student's progress and determines their competence to begin practice within their specialty (Pfeil 2003).

Taleghani et al. (2004) support the notion that non-graded assessments are robust and provide a more holistic and longitudinal assessment grade of dentistry students. In contrast Brennan and Lennie (2010) argue grading clinical competencies with a pass/fail does not reflect the significance of the competency development of a student. Pass/fail grades highlight practical based assessments may be considered less important than that theoretical or written assessments. In contrast the evaluation of the Learning Advisory Council (LAC) of the National League for Nursing (2009), conducted a survey of American nursing programs of clinical evaluation and grading practices. In this survey it was found that 83% of the clinical courses offered in the United States used a non- graded approach to grading instead of a letter or numerical grade with positive outcomes (Henderson and Tyler 2011).

Oermann et al. (2009) highlight that grading assessments cause unnecessary competition in student performance in Australian nursing courses. However limiting student achievement to pass/fail can discourage students from extending themselves to achieve a higher grade detracting from the adult learning process and environment (Andre 2000, Oermann et al. 2009). Therefore there are strong arguments both for and against grading assessments. Andre (2000) and Henderson and Tyler (2011) also

stated that graded assessments can distract from a student's overall performance while on placement indicating this needs to be taken into account in the graded versus non-graded assessment debate. However, when the overall summative success of a student is defined by graded assessment, the student will attempt to increase their success through improved performance (Henderson et al. 2010). The impact is evident in many countries where the overall grade of the student's clinical assessment will ultimately affect their overall future employment (Brennan and Lennie 2010, van der Vleuten et al. 2010, Henderson and Tyler 2011, Ulfvarson and Oxelmark 2012).

Portfolio, Self-assessment and Reflective Practice

Portfolios have been widely reported in the literature as being a powerful tool in assessing the development of clinical competence (Andre 2000, Brennan and Lennie 2010). Redfern et al. (2002), Coffey (2005) and Brennan and Lennie (2010) concur that portfolios can include a variety of different assessment methods including reflective practice, self-assessment and learning plans. There are differing views on whether portfolios should be used as single assessment pieces on placement, and concerns have been raised about the validity and reliability of them as assessment items (Damen et al. 2011). Portfolios have been found to be beneficial in allied health disciplines such as dentistry in the United States (Joyce 2005, Lennie and Juwah 2010) and midwifery in the United Kingdom (Gadbury-Amyot et al. 2003). Portfolios have now become part of the approach to assessment in many undergraduate nursing programs in countries such as Australia and the United Kingdom, and therefore are a well-known approach for nurses once they embark on postgraduate study (Roodhouse et al. 2007).

Portfolios can comprise of multiple components that provide evidence of ongoing development of a student's competence in clinical practice. Portfolios are a multi-modal approach to assessment, aiming to measure the student's ability to integrate knowledge, theory and practice and do not focus solely on clinical skills acquisition (Rutkowski 2007, Brennan and Lennie 2010). Portfolios can be used for self-reflection and guided learning or can form the basis of clinical competence assessment. Using competencies, a student can use self-directed learning to provide evidence of their practice that supports their ability to work competently within their specialty (Schaffer

et al. 2011). McCready (2007) explored the introduction of a portfolio assessment in nursing education in Ireland. The portfolio framework explored by McCready (2007) comprises of clinical placement, clinical debrief time with a facilitator and independent learning time used to complete the portfolio and self-reflection.

Portfolios are used as part of a multimodal assessment program in postgraduate medical training by which a student is assessed and monitored both summatively and formatively throughout their placement (Schaffer et al. 2011). In this way, the portfolio is learner driven and provides the student with the ability to collect evidence of their work, promote self-reflection of their learning and performance throughout the placement. Schaffer et al. (2011) draws similar conclusions to Joyce (2005) in the use of portfolio's to develop public health nurse's understanding of core health concepts to prepare for practice in the United States. Damen et al. (2011) used portfolios as part of a multi-modal assessment in medical education in the Netherlands. The portfolio was successfully used to monitor the medical students' progress, develop learning plans and provide an avenue for self-reflection. This performance program is used throughout the clinical placement and demonstrates progressive independence towards the completion of the placement objectives.

Research around portfolio assessment demonstrates that portfolios develop self-awareness skills and intellectual growth through self-reflection, reflective statements and analysis of thoughts and actions (Dijksterhuis et al. 2009 p.1162). Portfolios require students to demonstrate their developing clinical skills through the application of theory and research into their practice and not as a checklist of clinical skill acquisition. Gadbury-Amyot et al. (2003) support the use of portfolios in midwifery practice in the United Kingdom, as they provide the students with the ability to collect evidence of their learning throughout their placements. Students are required to demonstrate in their portfolio an identification of their own learning needs and provide a "Self-assessment, planned critical reflections and an evaluation" (Roodhouse et al. 2007 p.232).

Portfolios can be an effective assessment method to assess clinical competence if the process used is well developed and focuses on both the student's skills and knowledge.

The literature demonstrates that both the time taken to complete the portfolio assessment and the unclear requirements from both the student and the mentor perspective, can detract from its value in clinical practice learning (Pitts et al. 2001 p.351).

Roodhouse et al. (2007 p.232) questions the use of portfolios in the assessment of intensive care nurses in Ireland. Doughty et al. (2007) in the assessment of intensive care nurses in Ireland, describe the time afforded to completing daily reflections and clinical incident reviews as a weakness. They argue that a portfolio requires significant time to complete as a single assessment item and if it is coupled with theoretical assignments and a clinical assessment tool, to assess competence, the portfolio was often neglected by the student. Across the health care disciplines, portfolio assessments are used widely. However, Hanley and Higgins (2005), Brennan and Lennie (2010) and Scott et al. (2011) agree that the time commitment, student's lack of clear understanding of the values of the portfolio in the development of critical thinking contributed to the lack of student engagement and enthusiasm for portfolios. Portfolios are not subjected to the time limiting approach of other forms of assessment but the multiple tasks and evidence collection required to complete a clinical portfolio adds to the student and the assessor's ambiguity with this form of assessment (Schaffer et al. 2011).

Much of the literature supports portfolios as more effective in assessing a student's ability to link theory into practice in a clinical environment, than a summative essay based assignment (McCready 2007, Dijksterhuis et al. 2009, Scott et al. 2011). Pitts et al. (2001) and McCready (2007 p.149) raise the question of validity of the portfolio as a summative assessment piece, due to the assessor's subjectivity and the student's concern for confidentiality. Brennan and Lennie (2010) add that when a portfolio becomes a summative piece of assessment, it alters the students' approach to learning and their ability to reflect accurately on clinical situations and the content of the portfolio then becomes driven by the outcome of the assessment.

Portfolios have also been criticised for challenges of marking and grading them (Joyce 2005, Brennan and Lennie 2010). Much of the research is focused on grading portfolios

using rubrics and marking templates, however, the literature does not provide a concrete decision on how to effectively assess portfolios. Pitts et al. (2001 p. 351) raised the concern about the grading system afforded to portfolio assessment and how this will affect the quality of the entries by the students. The concern for doctored or censored entries is evident if students know the portfolio is linked to assessment. Joyce (2005 p.459) and Pitts et al. (2001) agreed that qualitative rather than quantitative criteria awarded to the assessment of a portfolio is appropriate due to the qualitative nature of the assignment item. McCready (2007) further states that the concept of the portfolio is lost when it is driven by assessment grading and students become less likely to share their thoughts and provide a self-reflection on their experiences honestly when they know they are being graded.

Joyce (2005) reported the results of extensive research in the UK around the relevance of portfolios in learning and their validity as assessment pieces. Joyce (2005) determined that the inter-rater reliability of psychometric measurements did not support the assessors ability to make a summative judgment on a students' portfolio. Pitts et al. (2001) conclude that the traditional measures of reliability and validity may be the main reason for portfolio assessments to lose their educational meaning and limit the personal and professional judgments made by the student. Pitts et al. (2001 p. 354) go further to suggest that validity and reliability in portfolio assessment in the United Kingdom's Dietetic practice placements, requires standardization in both the portfolio requirements and the tool used to assess student's work to maintain the validity of the assessment method nationally. Pitts et al. (2001) argue that standardising assessments nationally by using the same portfolio and portfolio assessment tool will ensure the validity of the outcome of the assessment and the reliability of the student's performance in practice.

Lennie and Juwah (2010 p.222) discussed the use of a portfolio in demonstrating progressive independence during medical placements in the Netherlands. The notion of progressive independence requires a strong and supportive mentor program, which enables the student to feel confident to ask questions and seek clarification about assessment items or clinical practice. Dijksterhuis et al. (2009 p.1163) and Pitts et al. (2001) indicate the support provided by the mentor must enable the student to

understand the assessments and be able to link their learning with the requirements of the portfolio, for it to be a successful assessment item. Therefore portfolio assessments must have clear processes and guidelines for assessors and students, for it to be a reliable indicator of student competence.

The main components identified in the portfolio assessment are reflective practice and self-assessment. Many authors have demonstrated the importance of these components in competency assessment (for example see Dijksterhuis et al. 2009). Assessing students overall competence includes using reflective practice and self-assessment to determine their ability to link theory, practical and critical thinking skills (Redfern et al. 2002, Way 2002, Coffey 2005, McCready 2007, Lasater 2007). The importance of learning and incorporating reflective practice in the clinical environment is seen extensively in the literature as it provides the student with the opportunity for critical thinking, learning from their experiences and debriefing about clinical incidents (Lasater 2007, McCarthy and Murphy 2008). It becomes an essential skill for all health professionals and particularly for students. This assists health professional students in becoming aware of their own limitations while simultaneously developing intuition in their practice, a requirement for the expert practitioner (Redfern et al. 2002, Way 2002, Lasater 2007 Brennan and Lennie 2010, Walters et al. 2012).

There is still a lack of clarity on how reflective practice should be assessed and whether it is a reliable form of assessment. Benner (1982) believed that it may be of benefit to teach critical analysis, evaluation, clinical reasoning and problem solving skills over reflective practice, which she regarded as a more sophisticated skill. Reflective practice can demonstrate a student's learning of multitude competencies but determining how these competencies are assessed is problematic (McCarthy and Murphy 2008 p.309). Way (2002) included self-reflection as part of the portfolio in a pilot study in gerontological nursing in Ireland. She believed a framework must guide self-reflection, as this would encourage a higher degree of critical thinking and learning in the student's written work for the portfolio. This author believed that unstructured reflection does not promote the understanding of the actual role of the nurse and the development of critical thought processes.

Structured approaches to reflection can be seen in “Reflection in action” used in midwifery education in the United Kingdom (Coffey 2005 p.79) and “Reflection on practice” used in undergraduate nursing in Ireland (Roodhouse et al. 2007 p.232). Structured forms of reflection provide students with the opportunity to investigate, evaluate and analyse their clinical experiences before making plans for their future learning. By thinking critically about their current practice and reflecting on it, students can apply their learning to their new experiences and therefore develop a more expert practice (McCarthy and Murphy 2008 p.307). There is a body of literature on approaches to reflective practice and writing, an important aspect for this thesis is that reflection is considered an integral component to a portfolio for clinical assessment. (Redfern et al. 2002, Coffey 2005, McCarthy and Murphy 2008).

Self-assessment is often included in a portfolio and enables students to be reflective on their current practice while assessing their own needs for future development. Many authors (Coffey 2005, McCreedy 2007, Roodhouse et al. 2007) believe that self-assessment is a skill that needs to be learnt because it is a requirement for registration as a registered nurse in the United Kingdom and in Australia. It is therefore important for students to develop this skill in their undergraduate education (Redfern et al. 2002). Self-evaluation is also a term used in speech therapy education in Australia and is relevant in the student’s development of critical professional learning and self-monitoring in undergraduate education (Redfern et al. 2002, Nursing and Midwifery Board of Australia 2013). Self-assessment therefore relies on the student identifying their current level of competence and determining their future learning needs to ensure their continuing competence (McAllister et al. 2010).

Leigh et al. (2007) argue that incorrect self-assessment with psychology and medical students leads to over confidence in the clinical area. The value of self-assessment can also be considered as limited and flawed due to the gaps that are present between the student’s perception and actual clinical performance. Dijksterhuis et al. (2009 p.1163) found that self-assessment allows poor performing students to over-estimate their abilities in practice and disadvantages the students who provide an honest representation of their level of competence at assessment, by potentially awarding them a lower grade overall. Coupled with self-reflection, self-assessment does however

provide the student with the knowledge and understanding required to develop their skills and confidence in their own adult learning.

Discussion

From reviewing the literature it was evident that there is a lack of literature that focuses on the clinical assessment of MCAFH nursing students while on professional experience placements. There was a small body of work that focused on the clinical assessment of postgraduate students however it was identified that all health care disciplines assessed students differently. The assessment of undergraduate nursing and allied health discipline students was represented throughout literature. The literature on undergraduate assessment demonstrated that single assessment methods were not appropriate instead a mixture of different assessments conducted over the duration of the placement was more holistic in assessing student competence. Evidence of competency based assessment, continuous assessment, portfolios, summative and formative and the use of reflective practice were used as assessment practices on nursing and allied health clinical placements.

Competency based assessment was highlighted in most of the published research in both nursing and allied health literature demonstrating the link between professional standards and student competence (Leigh et al. 2007). Competency based assessment is slowly replacing older styles of assessment in countries such as Australia, Canada and the United Kingdom, because it enables the use of professional competency standards for disciplines to benchmark student competence using single or continuous assessment pieces. A two-sided argument is evident on the benefits of competency based assessment with some authors supporting competency-based assessment, because it identifies student's strengths and weaknesses and allows students to build upon their existing knowledge base. It also allows for early identification of poor performing students and remedial work may be commenced early allowing the student has the ability to improve their performance (Dunn 2000, Way 2002, Holmboe et al. 2010).

The opposing argument is that competency based assessment is influenced by assessor subjectivity which can impact on the students' overall grade. Competency based assessment assesses a student on their developing skill acquisition only and fails to promote overall critical thinking and reflection making students superficial learners affecting students clinical placement assessments (Beesley 2004, Taleghani et al. 2004, Scott et al. 2011).

Work based assessment, which is closely aligned to competency based assessment, may provide a more holistic method of determining a student's ability to work competently and safely within the clinical environment. This form of assessment is seen widely within the medical literature using a multitude of assessments to determine a student's competence, while ensuring the objectivity of the assessor is kept to a minimum (Hewitt-Taylor 1998, Dolan 2003, Foss et al. 2004, McCarthy and Murphy 2008). It is evident that undergraduate nursing and allied health have adopted the multi-modal and continuous assessment methods to provide a holistic measure of a student's knowledge, understanding and critical thinking (Schuwirth 2004, Wilkinson 2007). Although this is evident in the medical literature, it does not appear significantly in the current nursing postgraduate literature.

Work based assessment is based on the idea that the student's placement should be considered over the entire assessment period and the methods of continuous and multi-modal assessment take this into account (Calman et al. 2002, O'Connor et al. 2009, Athlin et al. 2012). Continuous and multi-modal assessment provides a realistic assessment of a student's achievement on placement in both undergraduate and postgraduate nursing (Fahy et al. 2011). The literature supports the use of continuous and multi-modal assessment methods within a competency based framework, to ensure a holistic and multidimensional assessment that accounts for not only psychomotor skill development, but also the attitudes and values that are specific to the discipline specialty (O'Connor et al. 2009).

It is evident that the functionality, reliability and validity of assessment methods are important when determining clinical competence. Therefore a combination of appropriate assessment methods will determine accurately the competence level of

students, at the completion of their placement. Information extracted from multiple assessments, using different tools, is the most beneficial to the student because it allows for the student to demonstrate competence in all aspects of their role in the clinical environment (Gill et al. 2006). Basing a student's final grade on a single observation of practice is inadequate and does not consider other factors such as the student's anxiety or ability to work under pressure.

Portfolios are described in the literature as a commonly used form of continuous and multi-modal assessment. Portfolios, as an assessment piece, allows the student to demonstrate developing skill acquisition, application of theory to practice, document evidence of their progressive independence, while providing an avenue for self-reflection in all health care disciplines (Andre 2000, Redfern et al. 2002, Watson et al. 2002, Leigh et al. 2007, McCarthy and Murphy 2008, Holmboe et al. 2010, Lennie and Juwah 2010, van der Vleuten et al. 2010, Fahy et al. 2011, Athlin et al. 2012). Portfolios often include a component of self-assessment, reflective practice and a learning plan to measure the students' capacity to integrate knowledge into their current clinical practice (Gadbury-Amyot et al. 2003, McCready 2007, Roodhouse et al. 2007, Dijksterhuis et al. 2009, Brennan and Lennie 2010, Damen et al. 2011).

Portfolios are now included as assessment items used in undergraduate nursing programs in Australia and the United Kingdom with some researchers questioning their reliability and validity (Schaffer et al. 2011). Critics of the portfolio suggest it is time consuming and often neglected by the student due to misunderstanding or a lack of direction from the assessor (Hanley and Higgins 2005, Scott et al. 2011).

Although there are differing opinions on the benefits of portfolio assessment, the literature still demonstrates its value as a longitudinal assessment of student's integration and connection with the clinical environment through self-assessment and reflective practice (Pitts et al. 2001, Gadbury-Amyot et al. 2003, Hanley and Higgins 2005, Dijksterhuis et al. 2009, Brennan and Lennie 2010, Scott et al. 2011). Although self-assessment is used widely within nursing, dental hygiene, speech pathology and occupational therapy; its use is limited in medicine and psychology, due to the gaps

identified between the students' actual performance and their over-estimation of abilities in practice (Coffey 2005, McCready 2007, Roodhouse et al. 2007).

The final criticism of portfolio assessments is whether they should be graded and what type of grading should be used. It has been argued that the value of a portfolio to student learning is lost when it becomes driven by the final assessment grade (Australian Institute of Health and Welfare 2011). Students are seen to limit their personal reflection or judgment within the portfolio if they believe it will impact on their overall grade. A mixture of formative and summative assessments is also seen to be beneficial in the final assessment grade and determination of a student's clinical competence at the completion of their placement (Pitts et al. 2001, Joyce 2005, McCready 2007, Brennan and Lennie 2010, Australian Institute of Health and Welfare 2011). As assessment drives learning, the use of formative assessment allows for a student to receive constructive feedback and identify learning deficits, during their placement. The feedback process of formative assessment encourages rapid advancement in clinical competence, before the summative assessment is completed (Allison and Turpin 2004, Karayurt et al. 2009, Brennan and Lennie 2010, Ulfvarson and Oxelmark 2012).

Using data collected from a range of assessments that are completed over the duration of the clinical placement will reduce the need to rely on single assessment methods that focus on the performance of a student on a given day (Leigh et al. 2007). The literature reporting assessment grading in nursing and dietetics suggests that a qualitative approach to portfolio assessment, to assess the overall competence of a student on placements is favoured (Neary 2001, van der Vleuten et al. 2010). However the importance of grading when the overall grade allocated to a student's performance may affect future employment has also been highlighted (Pfeil 2003, Taleghani et al. 2004, McAllister et al. 2010, Australian Institute of Health and Welfare 2011).

Chapter Summary

This literature review aimed to identify the current literature available on clinical assessment methods used to determine MCAFH nursing student's clinical capabilities, at

the completion of their professional experience placements. It aimed to determine through a thematic analysis of the literature the current forms of assessment used to assess clinical competence in postgraduate MCaFH nursing students. From the four literature searches conducted it is evident that there is a significant lack of literature internationally on MCaFH nursing students in clinical practice. There is also a lack of literature highlighting how clinical capability is determined in postgraduate MCaFH nursing students while undertaking professional experience placements. Some of the of the international literature reviewed focused on the role of the MCaFH nurse and the professional competence of the practicing MCaFH nurse, but does not extend to the current student or recent graduate to the MCaFH nursing profession. The literature review centered predominantly on undergraduate and postgraduate nursing and allied health specialties with evidence that some clinical assessment methods are inter-related and used across disciplines.

The use of national competency standards to govern clinical practice is evident throughout the international literature and the benefit of competency-based assessment is sometimes controversial across disciplines. No single method of assessment appears to be most effective. However it is evident from the literature that multi-modal and continuous assessment is considered at present to be, the most appropriate. It is in postgraduate clinical practice where the assessment of advanced knowledge and skills are essential (Andre 2000, Gardner et al 2014). Literature (Redfern et al. 2002, Australian Qualification Council 2013) indicates that the most effective way of assessing the postgraduate student is through a multi-modal approach to ensure a comprehensive assessment of students' clinical capability.

With the current lack of evidence found to support clinical capability assessment in MCaFH nursing courses across Australia, it is important to explore current assessment practices to determine what types of assessments are being used during clinical placement and whether they align with current best assessment evidence. Clinical education and assessment of student's competence occurs in practice every day across all health care disciplines. The challenge is that it is not widely researched in the area of MCaFH nursing clinical assessment and therefore the evidence in postgraduate nursing assessment is not evident. It is a possibility that this research has not been

conducted yet however it does not mean that it does not occur. Unless educational practice and assessment of MCaFH nursing students is researched, the outcomes will remain anecdotal. **Chapter 3** will discuss the methodology chosen for this research study.

Chapter 3: Methods and Approach

This study explores the current assessment methods and documentation used to assess MCaFH nursing student's clinical capability, while on professional experience placements. The characteristics and style of this research process suits the realm of descriptive research frameworks. The aim of this research is to therefore establish an understanding of the types of clinical assessment methods and documents used nationally, while ensuring accuracy in the data reported by all participants (Welch 2011 p.110). In this chapter the research design and process will be outlined and the rationale for its selection will be described.

Methodology

This research study seeks an understanding of how different nursing education institutions, across Australia, assess the clinical capability of MCaFH nursing postgraduate students while on professional experience placements. A qualitative methodology has been chosen to demonstrate the realities and experiences of the participants, by the researcher through the participants' own words (Redfern et al. 2002 p.216).

This study assumes that there is not one objective reality but multiple realities, and by using a descriptive approach explore and describe connections or relationships within the practice context. It intends to create knowledge by developing an understanding of what currently exists in this area of study to enlighten and provide new insights for both the researcher and the participants (van der Vleuten et al. 2010 p. 708). From a descriptive perspective, reality is not fixed but rather it is constructed from events and or situations that occur naturally. Therefore reality is considered to be flexible and can exist in many different contexts with differing meanings (Swanson 2005, Welch 2011). This flexibility is important for this study because the universities and training organisations are located in different states and territories of Australia may have different meanings for participants.

Descriptive methods require dialogue between the researcher and the participants to construct a meaning of the reality being investigated (Liamputtong 2013). Whitehead

(2013 p.25) highlights that using a descriptive approach assumes that individuals have different understanding, knowledge and meaning of situations or experiences and therefore it is important for the researcher to understand and make sense of these. The goal of using this approach is to seek understanding and meaning of the connections and structures apparent within the data (Whitehead 2013). In keeping with a descriptive framework, a qualitative approach was considered the most appropriate to obtain information on what assessment methods are used to determine the clinical capability of students on placement..

The aim of quantitative research is to capture empirical data collected through identical processes to ensure the validity of the collection process (Serry and Liamputtong 2013).

In quantitative research the researcher is separate to the research limiting the bias from the researcher's own experiences, viewpoints and background (Serry and Liamputtong 2013 p.40). As quantitative research reduces the subjectivity from the data collected resulting in a lack of holistic and interpretive ability, this was inappropriate for this research (Morse and Field 1995). Unlike quantitative research, there are no experimental controls in qualitative research and all aspects of the phenomenon under investigation are explored in detail.

Qualitative research aims to understand the "meaning, interpretations and subject experiences of individuals", while allowing them to express their feelings in their own words (Onwuegbuzie 2008 p.2). Qualitative research is about exploring, learning, understanding and describing the world as it appears in everyday life (Thorne et al. 1997). A qualitative research design was chosen for this research to enable the participants to discuss the assessment methods used currently and allow them to clarify their views about the assessment of MCAFH nursing students on professional experience placements.

Qualitative descriptive studies are chosen when aspects of a phenomenon are not well understood (Liamputtong 2013 P.13). Currently there is very little information published on this topic in Australia and no research evidence internationally on the

assessment of MCAFH nursing students' clinical capabilities, while on professional experience placements. A qualitative descriptive study was selected to explore the current understanding of the clinical assessment methods used to assess MCAFH nursing student's clinical capabilities.

The description in a qualitative descriptive study involves a comprehensive summary of an event and presents the facts in plain language and in a coherent and useful way (Sandelowski 2000 p.336). Researchers seek to describe an accurate account of the events by staying close to the data and to the words, experiences and the meaning given to the experiences by the participants (Sandelowski 2000). Through qualitative description this research will raise the awareness of the current assessment methods used in MCAFH nursing programs in Australia and describe the commonalities and differences that may influence practice into the future.

Research Approach

Design

This study was designed as a qualitative descriptive study incorporating two forms of data. Interviews with key informants responsible for the clinical assessment of MCAFH nursing students were sought, along with the documents used in the assessments. Through the data collection and analysis, the researcher will search for patterns and conduct a thematic analysis to determine relationships and themes present in both data sets. The findings will then be compared against the current literature available on clinical capability assessment for MCAFH nurses. By interviewing the participants within this study, content rich descriptions can be recorded to provide far greater detail into understanding the participants' actions and what influences their decisions in their environment (Liamputtong 2013).

Participants

This study used a purposive sampling strategy to select and invite participants for inclusion in the research. Purposive sampling is used when there is a need for a deliberate selection of participants, because of their knowledge and experience

(Sandelowski 2000 p. 336). Through purposive sampling a researcher is able to obtain extensive information or knowledge about individuals, settings or experiences from participants who have a crucial understanding of the reality being examined (Sandelowski 2000). This strategy was appropriate for this study because it anticipated that the course coordinators, or their delegates, would possess the relative experience and necessary information required for this study.

It is important to be able to identify and select participants who are able to recall certain events or experiences or who are able to discuss freely about their thoughts and experiences of the phenomenon under study (Liamputtong 2013 p. 18). The inclusion criterion for the participants in the study was a current course coordinator, or a delegate teaching in the course that had intimate knowledge of the current clinical assessment methods used within the program.

The quality of the data gathered in qualitative research studies is seen to be more important than the quantity because the focus is on capturing depth and breadth of data (Howie 2013 p.75). Educational organisations offering MCAFH nursing courses in Australia were identified, through an Internet search, and nine course coordinators or their delegates were identified. After ethical approvals were attained the Deans of the Nursing and Midwifery schools of each organisation were contacted via email for approval to include their organisations in the research. Participation and the provision of contact details of course coordinators or delegates within their programs was sought. Once the course coordinators were identified, a letter of introduction (see Appendix 2) was emailed inviting them to take part in the research study. An introductory email (was sent to each potential participant, detailing the purpose of the study. The email included an information sheet (see Appendix 3) and a consent form (see Appendix 4) for the participants to complete. Participants accepted or declined participation via email and a mutual day and time for the telephone interview was made upon confirmation of participation. Written consent to participate in the research was required before the commencement of the interviews and therefore the participants were required to complete the consent form and email it back to the researcher, prior to the commencement of the interview.

Ethical Considerations

Ethics approval was sought from Flinders University Social and Behavioural Research Ethics Committee, Adelaide South Australia. This was provided on the 25th of February 2013. All participants received the information sheet that explained the objectives of the study and informed them of their rights as a participant in this research project. Participants were advised that their participation was voluntary and that they had the right to decline an interview, ask questions at any time or cease the interview once it had commenced without consequences.

Due to the small population size there were potential threats to the participants' anonymity and confidentiality. Therefore to minimize the risk and protect their privacy all identifying details were removed from the transcripts. Electronic data files of the interviews were stored on the researcher's password protected university computer. Audio files were transcribed into text and were stored and accessed by the principal researcher via a password protected website. Electronic copies of the assessment tools, used by the participants, were filed on a password protected computer in the researcher's office and were only sighted by the researcher and the supervisors for this project. Paper copies of the de-identified transcripts, signed consent forms and clinical assessment documentation were stored in a locked cupboard located in the researcher's office. A potential conflict of interest was identified for one of the researcher's supervisors who is the Program Coordinator of one of the courses included in the research project. To reduce the risk the supervisor was excluded from participation and a delegate nominated by the Dean invited to participate on their behalf. All participant transcripts were de identified prior being sighted.

Participants were informed via the information sheet that individuals and organisations would not be identified from the data collected. Names of the Course coordinators or delegates and the training organisations were removed or presented through pseudonyms within the research findings and discussions. No personal information other than the participant's credentials was sought for this research. The researcher ensured confidentiality of the information provided by the participants confirming data would not be discussed outside of the research, unless the participants

granted permission. The provision of the assessment resources and participation in the interview process only occurred after approval of the Dean and the individual participant returned the signed participant consent forms.

Data Collection

Two forms of data were collected for analysis and interpretation. Participants were invited to (1) discuss the assessment processes used in their courses and (2) submit the clinical assessment tools and documentation used to assess student clinical capability.

Interviews are seen as one of the most common but effective methods of qualitative data collection (Howie 2013, Liamputtong 2013). Interviewing allows for a deeper exploration of the processes used to assess clinical capability that may not be otherwise visible. Interview allow for the interpretation of the internal processes that guide learning (Liamputtong 2013 p.19). The in-depth interview usually takes on the form of a one to one interaction with both the interviewer and the interviewee and can be conducted in person or via the telephone or email (Serry and Liamputtong 2013 p.40). Interviews were chosen as a data collection method because it was important to enable the participants to clarify their views on how they assess students on placement and the reasons for using the tools to determine clinical capability.

The semi structured interview process was chosen because it provided the researcher with the ability to prepare a combination of open ended and guiding questions before the interview (Welch and Jirojwong 2011). Open and closed questions were used to ensure information gathered via the telephone interviews was captured correctly while allowing for unanticipated responses or accounts of events from the participants. Interviewing enables the researcher to spend time with the participants to ask questions, probe and seek clarification of the responses provided to ensure that the participants were represented correctly (Serry and Liamputtong 2013). Open- ended questioning therefore supports the researcher to discover the history to the assessments and the reasons for using them.

Following a review of the literature, questions were developed to provide guidance to the interview to obtain an understanding of what clinical assessment methods are conducted to assess the clinical capability of student's on MCAFH nursing placements and why they were used. The semi- structured interviews were conducted via the telephone between the months of April and September 2013. While initial questions were created to guide the interview, they were not extensive, as the interview was designed to be semi structured and open for in-depth discussions and clarification of topics (Braun 2013). Pertinent information was also elicited through closed questions such as university demographics, nominating topic coordinators or delegate's credentials and the length and timing of clinical placement offered in the program.

Participants were asked to address questions that focused on the different forms and methodology of assessments used in the clinical placement components of the MCAFH nursing courses they taught in. Participants were asked to discuss the assessment methods, the documentation used, and how they determined clinical capability on placement. Participants were also asked to provide copies of the documents used on clinical placement for the researcher to review and compare to other clinical documents provided. The comparison of the clinical documents would provide an overview of the different types of documentation used in clinical placements in Australia.

The interview process used open and closed ended questions to allow both unexpected digressions and succinct answers to be given, while ensuring leading questions were avoided (Welch and Jirojwong 2011, Braun 2013). The interviewer also paraphrased the participant's responses to ensure the researcher gained clarity and an understanding without changing the meaning or context of the participants' responses. Paraphrasing also demonstrates the researcher is actively listening to the participant ensuring the participants' expressions, pauses and feelings are accurately captured (Patton 1990, Serry and Liamputtong 2013).

Interviews were conducted from the researcher's office using a work phone to ensure privacy and confidentiality. The participants nominated the date and time of the interview and they also provided the interviewer with a contact phone number via

email. A confirmation email was sent to the participants two days prior to the interview, as a reminder and to allow for the change of contact telephone details or the time of interview to occur. The interviews were recorded on a digital audio recorder and the files transferred onto the researcher's computer and sent off for transcribing by a professional secretarial company. A secure on line uploading system was used for transcribing the audio files into text and any identifying information was removed and a study code used before transmission of data.

The second set of data collected was clinical documentation and clinical assessment tools used to assess students while on placement and were sent to the researcher at the time of the interview. The clinical documents were sought because they provided additional data that highlighted the context in which the participants of the study operated (Serry and Liamputtong 2013). Documents can provide the researcher with necessary background and historical information while contextualising the data gathered from the semi structured interviews (Welch and Jirojwong 2011 p. 221). Documents can serve a dual purpose where they provide the researcher with background, attitudes and processes while also presenting concepts for the researcher to clarify and question during the interviews (Ruona 2005 p.235).

In this study, the documents provided clarity to the participant interviews and helped to identify questions that needed further clarification. The content of the documents were reviewed and patterns reported using the same method of analysis as that for the participant interviews for continuity and rigor.

Data analysis

Thematic analysis was chosen to analyse and report patterns evident within the two data sets collected for this research project. Thematic analysis is flexible in its approach while providing complex, well detailed accounts of the data (Bowen 2009). Many researchers believe that thematic analysis should not be considered as a method on its own, but rather a tool that can be used across multiple qualitative analysis methods and can be simply referred to as analysis for common themes (Patton 1990 p. 233). Braun and Clarke (2006 p.78) highlighted the increased evidence of literature

promoting thematic analysis as a valuable tool in qualitative research where its power lies within its 'exploratory and explanatory' abilities, through the development of reoccurring themes.

The work of Attride-Stirling (2001 p.385) affirmed that thematic analysis is flexible allowing the researcher to describe the data in thick, rich detail, the content of the analysis, while demonstrating the reoccurring themes in the data. Thematic analysis therefore was the most appropriate approach for this research project, as the analysis method reflected the reality of the situation being researched.

Using an application and an evaluation method for thematic analysis, the researcher was able to produce rigorous, methodologically sound research findings that offered a complex account of the data (Boyatzis 1998, Attride-Stirling 2001 p.386, Morse et al. 2002). Braun and Clarke (2006 p.94) indicate that there is not one 'ideal' theoretical framework for all researchers to follow when conducting qualitative research, but in fact there are many. It is up to the researcher to adopt one that matches the researcher's intent for the research and that the decisions for choosing that framework are recorded.

When commencing the thematic analysis it was important for the researcher to read and re read the transcripts and documents carefully while making sense of what the participants have said (Attride-Stirling 2001, Braun and Clarke 2006). Themes captured provided the key points found within the data while identifying the patterns present that address the research question (Braun and Clarke 2006 p.80)

Searching through the data gathered from each participant's interview and the assessment documents provided, aided in identifying the embedded themes and patterns of meaning. This process was essential when gathering a rich, detailed description of the entire data set, so that the reader is able to clearly understand the dominant themes evident in this research (Ruona 2005, Minichiello 2008). Braun and Clarke (2006) confirm that this method is essential when conducting research in an under investigated area. The data analysis processes provided frameworks for the

researcher to code and collate the findings, included in the subsequent findings section of this research.

In this research study, the four stage data analysis process outlined by Ruona (2005) was used. The analysis consisted of searching and analysing across the data set, which included the participant interview transcripts and the clinical assessment documents provided, to find the common patterns and meanings present. Data analysis processes, such as Braun and Clarke (2006 p.83) and Sandelowski (2000) were also considered, however the method described by Ruona (2005) was chosen because of its simple but effective process for sorting, coding and understanding the emerging themes. Ruona's (2005) four stage data analysis process and how it was incorporated into this research is as follows:

Stage 1: Data Preparation

Once the data was collected from the telephone interviews it was transcribed to produce transcripts for thematic analysis. Each transcript was read for accuracy and de-identified. In this process, one participant's transcript was anonymised and required significant removal of de-identifying information throughout the entire transcript. The particular participant, throughout the recording of the interview, nominated the identifying information. This checking and de-identifying process was also applied to the assessment documentation and conducted prior to commencing any data analysis.

Stage 2: Familiarisation

Familiarisation began by reading each transcript and assessment documentation individually several times to ensure that the researcher understood exactly what the participant views were. At this stage participants' views were also compared to the assessment documentation to ensure that both data sets complemented each other. Immersion in the data was essential to this process enabling the participant's voice to be heard, while ensuring that important data was not missed (Bryman 2012). Initially the researcher coded the text making sure that reoccurring topics and patterns, words or ideas were marked on the transcripts. These preliminary codes were then grouped together and simplified into a group of patterns which became a code (Ruona 2005).

Stage 3: Coding

Coding is a process that commences with splitting sentences and paragraphs into segments that are able to be labelled with a term (Ruona 2005 p.240). Coding enables the researcher to interrogate, simplify and interpret the data to uncover concepts and formulate questions. The codes are then represented with a letter, number or word (Ruona 2005). Codes contain consistently similar data that are then collapsed and checked against the raw data to ensure that all codes demonstrate a common theme. Creswell (2003 p.192) and Ruona (2005 p.241) describe a code as having elements of the following: a label or name which is conceptually meaningful, clear and concise; the essence of the theme is communicated, in the fewest words possible, while remaining close to the data; a definition of what the characteristics of the theme and a description of how to know when the theme occurs is required; a description of the qualifications, inclusions or exclusions to identify the theme and finally examples both positive and negative are also included to eliminate possible confusion when looking for the theme.

When coding sections of the data it was important to use words that were consistently seen within the participants' statements, to ensure accuracy of the patterns emerging. The use of a journal enabled detailed explanations of each code to be developed throughout the data analysis process. This ensured consistent analysis and interpretation of the subsequent transcripts and assessment documentation. All coded themes and subthemes were collated and represented in a table in the findings section of this thesis.

Stage 4: Generating Meaning

The final stage of analysis involves interpretation of the data. Generating meaning from the codes uses a descriptive mode of data analysis and this is where the researcher is able to offer a descriptive summary of what is going on in the data and generating meaning from what can be seen. In an ongoing process the researcher explores how the themes connect or fit together while generalizing how these themes fit with the researcher's own views, the literature or prior research relevant to the topic (Ruona 2005 p.241).

Rigor

Rigor demonstrates the legitimacy of the methods used within the research process (Ruona 2005). Research becomes unreliable and untrustworthy without rigor (Lincoln 1985). Tobin and Begley (2004) affirm that rigor is created when the researcher uses verification strategies, throughout the research process, to establish trustworthiness instead of leaving it to the end of the study when it can be too late to correct any potential threats.

To ensure that the researcher demonstrated qualitative rigor the four components of Trustworthiness outline by Lincoln and Guba (1985) was adopted (Thomas and Magilvy 2011 p.152-4). The components of “credibility, transferability, dependability and confirm ability”, were also supported by Ruona (2005) and Braun and Clarke (2006) to ensure that their results were trustworthy and credible, while allowing future application and replication of the study. The four components of trustworthiness and how they were implemented in this study are as follows.

Component 1: Credibility

The first stage of trustworthiness is when the researcher reviews all transcripts and assessment documentation, individually, to identify similarities and differences between the participant’s responses. In this phase the participant’s thoughts are represented in the data accurately, and included the researcher making contact again with the participants if ambiguity was identified within some of their responses.

Component 2: Transferability

The second stage of Trustworthiness required the findings and methods to be written clearly so that the research study would have applicability in other research contexts. Providing an accurate, clear description of the population being studied and detailing the inclusion and exclusion criteria will enable the potential replication of the study.

Component 3: Dependability

The third stage of trustworthiness enables other researchers to follow the decision-making trails of the researcher and can be achieved by following the detailed account of

the research methods included in the final write up of this study. The methods section clearly outlines and includes the purpose of the study, the selection process and criteria for the participants, clear documentation of the data collection process, the coding and data analysis processes, a presentation of the research findings including the interpretation of the data phase.

Component 4: Confirmability

The final stage of trustworthiness can only be reached when credibility, transferability and dependability have been achieved (Thomas and Magilvy 2011 p.153). The researcher kept detailed research field notes that recorded any personal feelings or biases they had after each interview. This phase required the researcher to be reflective on the data collection process ensuring they maintained an open mind while attempting to identify their preconceptions about the unfolding themes and results present after the data analysis has been conducted (Thomas and Magilvy 2011).

Using the 'table of codes' required by Ruona (2005) enabled the researcher to complete the organisation of the data into significant groupings and then to refine the themes. Having all themes visible enabled the researcher to create the final list of theme names that are succinct and let the reader have an immediate understanding of the essence of the theme (Ruona 2005).

Morse et al. (2002 p.13) provides a framework that best suits qualitative description used for this research project. To establish trustworthiness it is important for the researcher to make their bias known from the beginning. Their beliefs of what the research will highlight should be noted, as this does not promote validity or constitute original research (Creswell 2003, Tobin and Begley 2004). Researchers bring their own bias and positioning to the research and therefore they must be recognized and set aside prior to the commencement of the research process (Morse et al. 2002 p.17).

The principal researcher has declared her position in Chapter 1. Researcher positioning may influence the outcome of the research study, and although bias cannot be completely removed it is important that it is minimised by the researcher acknowledging the influence upon the research findings where possible (Lincoln 1985,

Thorne et al. 2004 p.8). Maintaining a record of research notes and data collection processes provided a pathway for the researcher to retrace the analytical thought processes, while also highlighting the potential biases encountered within this research (Onwuegbuzie 2008, Thomas and Magilvy 2011). The verification strategies of Creswell and Miller (2000 p.16) were incorporated and used throughout the research process to ensure rigor was consistent. Ensuring a visible congruence between the research question of this study and the methodology used was the first step in the process of ensuring rigor in the study. The components of the research question, the methodology, the participant sample, the data sets and analysis were constantly reviewed to ensure they suited the research aims (Morse et al. 2002 p.18). Continuously rechecking that the researcher represented the views of the participants accurately was an important step in demonstrating credibility and authenticity of the data collected (Morse et al. 2002). Collecting thick, rich data for qualitative analysis provides the reader with the experiences and accounts of the participants that aid in research credibility (Morse et al. 2002, Tobin and Begley 2004, Thomas and Magilvy 2011).

To ensure validity Tobin and Begley (2004) and Thomas and Magilvy (2011) believe that the collection and the analysis of the data must be concurrent as this will highlight what is known and what is not, allowing the researcher to move between the participants and the data to gain a better understanding (Tobin and Begley 2004, Thomas and Magilvy 2011). Other authors (Creswell and Miller 2000, Morse et al. 2002, Braun and Clarke 2006) argue that rigor and validity is the responsibility of the individual researcher and not restricted by rigid rules so participant validation of the data analysis process was not used.

Chapter Summary

This chapter has highlighted the nature of the research study detailing the qualitative descriptive framework and a discussion on the thematic analysis process adopted to interpret and present the results. The confidentiality and anonymity of the participants has been addressed. The methods of data collection and collation into workable themes for discussion have been discussed in this chapter. The following chapter will highlight the themes that emerged from the participants' interviews and clinical

assessment documentation, to create an understanding of the clinical assessments used to assess MCaFH nursing students while on professional experience placements.

Chapter 4: Findings

This chapter provides a description of the results obtained from the semi structured interview process and assessment document analysis conducted with five participants and detailed in the previous chapter. This chapter begins with a discussion of the outcome of the participant recruitment process and then present the themes identified as a result of the data and document analysis. The commonalities and differences of assessments used to determine the clinical capabilities of students undertaking professional experience placements in MCaFH nursing will be presented. When presenting the data and explaining the findings, an acronym of Ep will be used to represent the Education Provider.

Staff from five out of a potential pool of nine MCaFH nursing postgraduate programs across Australia, took part in the research conducted between the months of April and September 2013. Four participants were the current coordinators of the courses and one was the coordinators' delegate who team-taught in the program. Initial analysis of the participants' data provided detailed background and contextual information that is detailed to provide context. .

Background

It was considered valuable to discuss the role of a MCaFH nurse in the individual states and territories that partook in this research, prior to commencing the interview. This was to ensure that the functional aspects of the role were similar across Australia and the responsibilities consistent for analysis purposes. It was also important to determine whether the graduates of MCaFH nursing courses were being assessed as clinically capable at a role that was similar across Australia. The role and responsibilities of MCaFH nursing graduates were seen to be comparable for the five education providers.

All five education providers stated that the MCaFH nurse worked within the community in either a community health clinic or home visiting. All MCaFH nurses would assess for the health and developmental status of children and provide support to parents through anticipatory guidance and education. Their main role was described by all

participants as providing health promotion, developmental assessment and early intervention services to children 0-5 years and their families. All education providers discussed the MCAFH nurses' facilitation of groups in regards to new parenting, breastfeeding and settling support. The MCAFH nurses all worked with vulnerable infants and their families and predominantly worked with people aged 0 to 12 years with only one education provider (EP 2) stating that their graduates worked with children 0 to 5 years only. One participant described the role of a MCAFH nurse as:

Basically, the role is the same as everywhere else....they do home visiting, they do phone calls, they follow people up and they do all health checks, they run group.
(EP 1)

One point of difference in the role of the MCAFH nurse was in relation to school health. Three out of the five education programs provided a component on school health nursing (EP 1,3,4). The inclusion of school health nursing was dependent on whether the state employed school health nurses or whether the student anticipated that they would be working in a state that required knowledge about school health nursing. Two participants (EP 2,5) stated that school health nursing was not part of their postgraduate program as it was not a requirement within the work of a MCAFH nurse in their state or the state the program was offered in.

MCAFH nursing Entry Requirements

All participants recognised that a postgraduate program led to a qualification for recognition as a MCAFH nurse throughout Australia. It was stated by all participants that there was a different level of qualification needed to practice within some of the states; however for four out of the five involved in this study, the minimum educational requirement was a Graduate Certificate (EP 2,3,4,5). Four out of five education providers offered both a Graduate Certificate and a Graduate Diploma option (EP 2,3,4,5), while one provider offered a Graduate Diploma only (EP 1). All participants stated that they accepted registered nurses into their courses working in a variety of nursing settings, as well as registered nurses currently working in the field of MCAFH nursing wanting the qualification. They all stated that students, regardless of their current employment, needed to complete the minimum qualification required to practice as a specialist MCAFH nurse in the state they were to work in. This is evident in the following statements:

(The requirement) is the graduate certificate and for some other states, like one state requires a graduate diploma and we certainly tell them (students) to make sure that they search with their state as to the requirements. (EP 5)

If a student from state A wants to do our course it's made very clear to them that this course will only be a graduate certificate and then they will need to check with the universities in state A to see if they can get recognition for prior learning for that, so they can then go on to do that further graduate diploma. (EP 2)

Although it is not a requirement to have a Masters qualification to work in MCAFH nursing in any state of Australia, a nested master's option of study was identified in three of the five education programs and one participant did not comment on whether there was or would be a master's option available to students in the future. Table 1 shows the current MCAFH nursing program qualification levels offered by participating education providers.

Table 1: Programs offered by the participating Education Providers

Education Provider	Graduate Certificate	Graduate Diploma	Masters
Education Provider 1	Not offered	Offered	Did not comment
Education Provider 2	Offered	Not offered	Not offered
Education Provider 3	Offered	Offered	Offered
Education Provider 4	Offered	Offered	Offered
Education Provider 5	Offered	Offered	Offered

The minimum entry requirements for all five MCAFH nursing programs was a Bachelor of Nursing, or an equivalent hospital acquired nursing qualification, and current registration to practice as a registered nurse in Australia.

While midwifery was a desirable but not essential entry requirement into the five education programs, three out of the five providers stated that registered nurses without a background in Midwifery would be required to complete a bridging module (EP 1,3,5). The bridging modules required were: maternity nursing and breastfeeding education. These modules provided the nurses with supporting knowledge for their MCAFH nurse role but did not provide them with additional qualifications as stated by EP 3.

They can have midwifery, we'd really like them to have midwifery competencies.....they do a maternity bridging unit, which doesn't give them a qualification but gives them enough competencies to practice in the area of child health. (EP 3)

Breastfeeding modules were offered as an option for students who identified breastfeeding as a knowledge gap only. One education provider required them to complete four modules as well as a case study assignment to demonstrate their learning on breastfeeding management (EP 3). In addition to the above entry requirements, two education providers (EP 1,3) explicitly stated that they did not accept direct entry Registered Midwives into their program of study,

They are always a registered nurse with midwifery. We do not take any direct entry midwives into the course.....I've had it written into our criteria. (EP 1)

We don't admit midwives only.....the ones who've done direct entry midwifery, we can't admit them. (EP 3)

From the data it was highlighted that direct entry midwives, whilst having related knowledge and skills, do not possess the nursing qualification or registration required to work as a MCAFH nurse.

Professional Experience Placements

All five participants highlighted the importance of the professional experience placement in their program as a means of student immersion in the clinical environment. The placement was designed to allow the students to learn the day-to-day role and responsibilities of a MCAFH nurse. Professional experience placements, in the context of nursing practice, can be defined as planned events that occur within a health care agency where students are allocated to a supervising registered nurse to gain practical experience (Coyne and Needham 2012). Professional experience placements, also known as clinical placements, provide the students with the ability to link theoretical knowledge with the practical application of skills, within a supportive clinical environment (Coyne and Needham 2012). Education provider 2 described the purpose of the professional experience placement as:

The purpose is so that the student can consolidate the actual theoretical learning so that it can be applied in practice, so the student can see the applications of

what we're teaching in a practice setting....They will then see what the scope of practice is for a child and family health nurse. (EP 2.)

Health Workforce Australia (2011) highlight that the clinical placement or clinical training also supports the students' acclimatisation to the reality of the clinical environment and the work undertaken by nurses. The statement made by EP 4 also supported this expectation:

I believe that's important, to acclimatise themselves to the culture of child and family health nursing.....the nuts and bolts of health screening and surveillance activities.....So they're learning the basics to be able to function in a clinical setting as a child and family health nurse. So that it is really building on their level of knowledge and expertise. (EP 4)

All five education programs offered a professional experience placement in the Graduate Certificate and the Graduate Diploma levels of study. This research study focuses on the professional experience placements offered in the base entry-level programs, which for four of the five providers was the Graduate Certificate (EP 2,3,4,5), and for one organisation was the Graduate Diploma (EP 1).

Listed in table 2 are the placement structures offered from the 5 education providers within this study.

Table 2: Placement Structure

Organisation	Placement type	Placement Duration	Position within the course	Autonomous practice
Education Provider 1 Graduate Diploma	Supernumerary participatory placement	40 clinical days equivalent to 320 hours	20 days in semester 1 20 days in semester 2	No formal requirement for autonomous practice
Education provider 2 Graduate Cert.	Supernumerary observational placement	10 clinical days equivalent to 80 hours.	2 x 5 day placements in semester 2	Not included
Education Provider 3 Graduate Cert.	Supernumerary participatory placement	20 days equivalent to 160 hours	Second semester only offered as a 4 week placement	No formal requirement students should be working autonomously in week 3
Education provider 4 Graduate Cert.	Placement 1 observational Placement 2 Supernumerary participatory	30 days equivalent to 240 hours	2 x 15 days in semester 1 and 2	5 days of autonomous practice Semester 2 only
Education Provider 5 Graduate Cert.	6 days observational 14 days Supernumerary Participatory with 4 days (additional) of autonomous practice as an option	20 days equivalent to 160 hours	Semester 2 placement Ideally 2 days per week for the duration of the semester	4 days of autonomous practice (optional)

Interview questions asked of the participants comprised of the type, duration, position and timing of the professional experience placements. It was identified from the responses that, although 4 out of the 5 education providers offered graduate certificate programs of study, there were significant variances between the placement duration and structure (EP 2,3,4,5).

Placement allocated hours varied between programs, and ranged from 80 hours to 240 hours for a graduate certificate program of study and 320 hours for the Graduate Diploma program.

All five programs required a clinical placement, although this was provided using variable models and sequencing. Four out of the five courses offered students a clinical placement full time; working 5 clinical days a week for blocks at a time to fulfil the required hours (EP 1,2,3,4). In contrast to the block placement, education provider 1 and 5 offered more flexibility in the rostering of student's days and times during the academic semester. This flexibility was afforded to students who required an extended period of time to complete placement due to other work commitments. Education provider 5 offered a regular 2-day per week placement over the duration of the semester, allowing student flexibility to determine the days they worked each week.

Education provider 5 required students to still continue with the theory component of the program while on placement, therefore students could also negotiate how many clinical days they attended a week with their preceptor. Education provider 5 highlights in the below statement that students had the flexibility to coordinate their own placement days which ensured that they received the most valuable placement experience, while meeting the clinical goals and requirements of the course.

Because they're still doing their topic there are some theory aspects that they do because their placement is stranded out ideally for the two days across the semester.....There are you know some areas some weeks where they wouldn't be doing placement. It depends how the student maps that out with the preceptor. (EP 5)

Professional experience placements were only offered within the second semester for 3 out of the 5 programs of study, to enable students to have a solid foundation of theoretical knowledge before entering the clinical environment (EP 2,3,5). Education provider 1 stated that although the majority of students completed their clinical placement in the allocated placement block time in semester 2 they did allow students to complete it over the duration of the course if required.

Some of them don't do their clinical in the clinical semester; some of them do it right across the course. (EP 1)

One education provider structured the placements over both semester 1 and semester 2 making the individual placements shorter in duration and highlighted the importance of combining theory and practice from the commencement of the course as justification for their approach (EP 4). However, the semester 1 placement was purely

observational in nature and only provided an introduction to the role and the context of MCAFH nursing, whereas the placement in the second semester focused on skill acquisition and autonomous practice. The differences in the semester placements are highlighted in the statement provided by Education provider 4:

Semester one is more observational, semester two is when they're actually doing the work of a child and family health nurse....in semester one they are observing their preceptor and then they can gradually take on the activities.....then in semester two they're building on and developing their knowledge, skills and experience. (EP 4)

Another variance identified between the programs was the type of placement offered. Placements varied from a purely observational supernumerary placement through to work integrated learning. When questioning the coordinators on the difference between observation and work integrated placements, it was highlighted that some courses provided placements for both students with MCAFH nursing experience and students without. Work integrated placements allowed for students that had a varying degree of understanding and experience of the role of a MCAFH nurse and can be seen in the statement provided by EP 1.

It's a work integrated learning. Because I get students ranging from rookies.....people who come from the hospital system, through to people who are very experienced maybe working as a midwife. (EP 1)

Four Education providers stated that they had students currently employed as nurses in MCAFH services and students who did not have experience in the speciality (EP 2,3,4,5). One coordinator highlighted that the placements they offered needed to accommodate students with and without pre-existing MCAFH nursing knowledge and skills and for students progressing at differing rates (EP 1). One education provider stated students undertaking their course were mainly registered nurses who were not currently working in the area of MCAFH nursing and therefore their model of placement offered was observational and supernumerary in nature, to account for this lack of prior experience (EP 2). Although Education provider 2 did support students that were currently working within the area, they recognised that the placement offered would potentially not allow them to develop complete autonomy in their clinical experience as highlighted in the participants' following comment.

It's mainly observational. It's a supernumerary.....the purpose is so that the student consolidates the actual theoretical learning.....so that the student can see the applications of what we're teaching in a practical setting. (EP2)

As all the education programs had both experienced and non-experienced students undertaking placements concurrently, the use of autonomous practice as a component of the professional experience placement varied. There are varied definitions of autonomous practice within nursing literature (Morse et al. 2002). Many definitions of autonomy in nursing centre on a nurse's ability to exhibit control over his or her clinical practice, while demonstrating an ability to make clinical judgements in regards to their patients' care (Rowe 2010). Autonomous practice therefore provided the students with an opportunity to demonstrate their ability to make decisions and initiate care for their clients care with indirect clinical supervision.

The reasons for inclusion or exclusion of autonomous practice opportunities were varied and were dependent on the type of placement offered. Furthermore, the use of autonomous practice as a component of the professional experience placement was dependent on the location of the clinic service and the availability of senior staff to supervise, assess and debrief the students' practice. This point was supported by Education Provider 2 who agreed that it was dependent on having adequate nurse specialists available to support students' autonomous practice on placement.

"The rationale is based on actually having enough clinical nurse specialists or clinical nurse educators available to be able to assess the students because it is quite time consuming" (EP 2).

The programs that offered purely observational placements did not include a component of autonomous practice, whereas the supernumerary and work integrated placements did, although it was not a compulsory component to the completion of the placement. Education Program 1 placed students in rural or remote communities where they could achieve more autonomous practice than in metropolitan health clinics. Therefore autonomous practice was an expectation rather than a compulsory requirement on placement. Education provider 4 was the only provider to require the student's final placement assessment to be conducted while the student was undertaking autonomous practice. Education providers 1, 3 and 5 offered autonomous practice as optional rather than a compulsory requirement and therefore autonomous

practice did not form part of the overall student assessment on placement. Education provider 3 commented that autonomous practice was optional and dependent on the preceptor allocated to the student and this can be seen in the following statement.

“(Autonomous practice) is very much dependent on the preceptor’s assessment, formative assessment of them (students), but we usually recommend that the first week in child health placement that the student observes for a couple of days and then assists the preceptor. Usually by the beginning of the second week they’re starting to do short sessions of autonomous practice. Then by the third week they’re running the clinic by themselves”. (EP 3)

Pre placement Workshops or Mandatory Prior Learning

Pre placement clinical skills workshops and mandatory learning modules were included in two of the five education provider. This was essential in the skill development of students prior to commencing clinical placement (EP 1, 3). These workshops were conducted at the beginning of the semester and designed to provide the students with exposure and experience of basic mandatory skills used within the role of a MCAFH nurse. Education provider 1 conducted a five day clinical skills intensive using live simulation with infants to provide students with hands on experience. The workshops were seen by providers to provide the students with basic clinical skills enabling the student to consolidate their learning on placement. In addition to clinical skills, education provider 3 delivered education on The Edinburgh Post Natal Depression Scale, Mandatory Reporting Frameworks and the Parent Evaluation Developmental Status (PEDS) Tool during the workshops. Both providers stated that in addition to clinical skills workshops, registered nurses without a background in Midwifery needed to complete a module of either Midwifery (EP 3) or Breastfeeding (EP 1), prior to the commencement of placement. Evidence of attendance to the mandatory workshops was required to be included in the assessment portfolios for education provider 1 and 3. If the workshop evidence was not included, then the student was unable to attend the clinical placement.

Three out of the five education providers did not offer any pre placement workshops to introduce students to the clinical skills required in MCAFH nursing (EP 2, 4, 5). The reasoning provided was that the pre placement workshops were not offered because students were completing theory and clinical components concurrently (EP 2, 4, 5).

Students in these three programs attended placement after they had completed a portion of the theoretical learning to enable them to consolidate their knowledge and apply it to the real practice environment. Education provider 2 allowed students to complete clinical skills in a supernumerary capacity, only if the preceptor deemed them appropriate to do so.

Students in the program offered by education provider 4 attend placement in both the first and second semester, with the first semester placement being observational in nature. Semester one placements enabled the students to observe and develop their understanding of the skills required to be a MCaFH nurse. Once they had completed their observational placement, the students then performed clinical skills in their second semester and were not required to attend a pre placement workshop.

The role of the preceptor on professional experience placements

The last finding regarding context is about the role and responsibilities of the preceptor who supports the students on placement. The role of the preceptor and clinical facilitator on MCaFH nursing professional experience placements varied between the five Education Providers. The participants used a variety of terms interchangeably to identify the clinician responsible for supporting the MCaFH nursing students; including preceptor, clinical facilitator, clinical mentor and clinical assessor. The roles of these clinical support people differed in their time allocation, responsibilities of guiding student learning and the role in assessment of clinical capabilities. The most common name for the clinical supervisor of the students associated with all five -education providers was that of the 'preceptor'. The preceptor role was allocated to a qualified MCaFH nurse who was currently practicing and would be working in the region that the student had been allocated. These requirements can be seen in the statements provided by education providers 1 and 2.

We require the clinical preceptor from the place that the student is doing placement to buddy with them. (EP2)

I insist that they have someone who is child and family health trained. (EP1.)

All participants stated they used preceptors to monitor the day to day experience and learning of the student on placement. Four out of the five education providers also used the preceptors as the assessors of the students' clinical capabilities (EP 1, 3, 4, 5). The preceptor was responsible for monitoring and signing off on the students' hours spent on placement, ensuring the students' clinical documentation was completed, as well as determining the student's clinical capabilities through the required assessments.

From the participants' statements it was evident that there was a lack of clear and common guidelines for the time allocated to the role of preceptor of students on professional experience placements. This was also evident in the assessment documentation where the preceptor role or guidelines were not included in the student copy.

The assessment documentation was written entirely for student use and only one education provider provided the student with a comprehensive outline of the responsibilities of the preceptor or the requirements during the clinical placement. Two out of the five education providers stated that they required the preceptors to spend a minimum of two sessions per week with the student providing debriefing, completing paperwork and conducting formative assessments (EP 3, 4). This requirement was not outlined in the clinical documentation provided by Education Providers 3 and 4. However education provider 3 required these sessions to be recorded as formative student meetings in the clinical portfolio and is seen in the following statement.

Student and preceptor sit down formatively every week or twice a week preferably, but at least every week, and go through and just assess how they are going, what's happened, has it worked, what's worked well, what hasn't worked well and the issues around that and whether extra resources are needed to be put in or whether we as university staff need to be called in. (EP 3)

Three out of the five education providers did not offer a specific time allocation for preceptor contact per week (EP 1, 2, 5). Time allocated to the role of preceptorship was dependent on the clinical workload of the preceptor and the capability of the venue to relinquish the preceptors from their daily workload. Education provider 3 stated that

some students would be allocated two or three preceptors for the duration of the placement, as staff worked part time.

Because a lot of our preceptors are part timers, so either the student goes for longer with one preceptor or they might have two or three child health preceptors for instance. (EP3)

In general the student would shadow the preceptor, following them each day during the shift. This approach enabled the preceptor to educate and guide the students' learning. However the allocated time for this was dependent on each individual venue. Two out of the five education providers used both preceptors and clinical facilitators to monitor student progress on placement (EP 2,5). The roles and responsibilities of these positions were different, with the preceptor providing support to the student's educational requirements and clinical skill development on a daily basis, while the clinical facilitator acted as the supportive link between the education provider and the clinical venue.

The role of the clinical facilitator was delegated to a nurse in a management position within the MCAFH service or an independent facilitator employed by the education provider. This role would not provide daily supervision of the student but was allocated time to be a conduit between the preceptors and the education provider, ensuring that students would achieve the appropriate support and experiences on placement. The facilitator would make contact with the student and the preceptor and spend time ensuring that the student understood the requirements of placement and the preceptor understood and felt supported in their role of educator and assessor.

We also have apart from the preceptor and I guess you would call him a seconded clinical facilitator who monitors what is happening with the preceptor plus the organisation just with the organisation of the placement.... So that person can email the students. They might have a trip out to them in relation to see how they're going. (EP5).

The clinical facilitator was therefore responsible for allocating preceptors that would enable the students to meet their learning needs and goals on placement. The main responsibility of the clinical facilitator was solely to be a liaison between the student and the education provider and is highlighted in the bellow statement.

They (students) would need to work in conjunction with the facilitator to get the best outcomes on their placement. So that might mean that they would sit down on the first day and actually work out with their facilitator what they want to

learn and what would be advisable to them to learn if they're beginning practice nursing. (EP2)

The role of the preceptor for students placed in rural or remote communities posed many difficulties for the education provider and the student alike (EP 1). Students generally did not have access to the preceptor in person as much as students allocated in the metropolitan area. Education provider 1 stated that preceptoring student's rurally or remotely often involved phone contact and flying in to assess student's performance or using the doctors in the regions to observe and sign the placement documentation, if a MCaFH nurse was not available.

"We organise sometimes people to fly in and on the very rare occasion, there might be one or two competencies that are signed off by the paediatricians or the doctor". (EP1)

Participants raised concerns about the employment and regulation of interstate preceptors' practice.. All education providers offered the MCaFH nursing courses nationally and students enrolled in their courses were from all states of Australia. Therefore students would be offered a preceptor in the state they would be completing their clinical practice. This posed an issue particularly for education providers 1 and 3 as they did not have the ability to control the quality and experience of the preceptors they used. The education providers concern is evident in the following two statements.

You don't know what level of training they have and also, you don't know whether there's consistency across states and territories with the preceptorship training, and I suspect some don't have it at all. (EP 1)

Unfortunately we don't have a set of minimum standards for being a preceptor. We have tried to get preceptor workshop and preceptor standards going but it's been problematic, so there is a lot of variation between preceptors. (EP 3)

The education providers were required to be vigilant in their communication when using interstate preceptors. Using teleconference ensured that the preceptors understood their role in enabling the students to achieve their desired clinical placement outcomes (EP1, 2). Education provider 2 stated that they did not assess student's clinical skills because they were unable to ensure that the interstate preceptors were capable of assessing appropriately the students on placement.

All participants stated that they required consistent feedback from the preceptors and clinical facilitators while students were on placement. This feedback process was the main approach coordinators used to keep abreast of student development. All participants stated that this feedback was crucial in ensuring that their students were deemed clinically capable at the completion of their placements but sometimes it was difficult to obtain. Two out of the five education providers ensured consistent contact and communication with their preceptors and clinical facilitators through teleconferencing or in personal meetings over the duration of the placement (EP 4, 5).

Feedback was part of the preceptorship process and recorded in the students' clinical portfolio as part of the student assessment. Consistent feedback enabled the education providers to be sure that the student development was sufficient to be assessed as clinically capable on the completion of the placement. Preceptor feedback centred on the student's performance during the clinical placement. Assessments methods varied between education providers and are dependent on the overall program requirements for determining clinically capable MCAFH nursing graduates.

The above discussion has provided context to the MCAFH nursing courses offered within Australia. The thematic analysis of the different assessment modalities under study will be discussed further in this chapter.

Assessment of Students

This study focuses on the processes used by education providers to determine whether a student is adequately skilled and has the clinical capabilities to practice as a MCAFH nurse, at the completion of professional experience placements. Although the assessment modalities were different between programs, the assessments conducted on the professional experience placements were all aimed at determining the student's ability to practice as a beginning MCAFH nurse. The main commonalities and differences identified in the assessment of students on placement were seen as:

- The competencies used to benchmark student performance against
- The assessment methods and documentation used on placement
- The use of reflective practice

- The processes involved with identifying underperforming students.

Listed in Table 3 is the current assessment processes used by each education provider and each of these components will now be discussed.

Table 3: Current Assessment Processes used by each Education Provider

Organisation	Competencies used for benchmarking performance	Assessment method	Setting of learning objectives/goals	Clinical Skill assessment	Clinical portfolio/log book/ experience record	The use of reflective practice	Under performing students
Education Provider 1 Graduate Diploma	MCaFH nursing state or territory based competencies	Continuous assessment Competency based assessment	Set learning goals at the beginning of placement	Clinical skills checklist used for assessment	Clinical practice portfolio	No requirement for reflective practice	Clinical learning contract implemented
Education provider 2 Graduate Cert.	A combination of MCaFH nursing state or territory based competencies, Australian College of Children and Young Peoples Nurses (ACCYPN) competencies, NMBA competencies	Continuous assessment	Set learning outcomes prior to placement	No formal clinical skill assessment	Clinical Placement portfolio	Reflective practice included in assessment	Not discussed
Education Provider 3 Graduate Cert.	MCaFH nursing state or territory based competencies	Continuous assessment Competency based assessment	Set learning objectives prior to placement	Clinical skill assessment conducted on autonomous practice	Professional Portfolio/Clinical experience record	Reflective log included in assessment	Clinical learning contract implemented
Education provider 4 Graduate Cert.	A combination of NMBA competencies for a Registered Nurse and a MCaFH Nursing behavioral cue document created by the education provider	Continuous assessment. Formative and Summative reporting of student progress continues until completion of placement	Set learning goals and objectives prior to placement	No Specific Clinical skill assessment or checklist required	Clinical practice Journal	No formal reflective practice included in assessment	Poor performance noted on preceptor reports and additional time added to placement
Education Provider 5 Graduate Cert.	A combination of MCaFH nursing state or territory based competencies and NMBA competencies for a Registered Nurse and the ACCYPN competencies	Continuous assessment Competency based assessment	Set learning goals daily	Clinical skill assessment required	Professional experience placement portfolio	Self-reflection is required but not part of an assessment	Learning contracted implemented

Competencies Used to Benchmark Students' Performance

A common factor among all education providers was the use of clinical competencies as a benchmark for student's performance to determine whether they were clinically capable as a beginning MCaFH nurse. Clinical competencies were used in many ways, ranging from assessing students written work to assessing clinical skills. There was not one specific set of competencies that all education providers used, as currently there is no set of national competency standards for the practice of a MCaFH nurse in Australia. However, there is an array of different competency standards available and can be seen to be used in the programs included in this study, for example: the Child and Family Health Nursing Australia (CAFHNA) competencies, the Australian Confederation of Paediatric and Child Health Nurses (ACCYPN) competencies, the Nurses and Midwifery Board of Australia (NMBA) competencies for the Registered Nurse and state and territory based competencies.

All education providers stated that students enrolled in their courses were required to use the competencies that were used for the regulation of their clinical practice in their state. Education provider 1 and 2 assessed some students using the Child and Family Health Nursing Australia (CAFHNA) but stated that students from other states were to use the competencies relevant to their state in. Education provider 1 stated they supported students using their own state or territory competencies in the following statement.

So when people are in their own state or territory, I get them to use their own clinical practice standards or competencies, if they have been written. (EP 1)

Education provider 2 also suggested that interstate students should use the Australian Confederation of Paediatric and Child Health Nurses (ACCYPN) competencies or the Nurses and Midwifery Board of Australia (NMBA) competencies for Registered Nurses. These competencies were preferred particularly if they had not worked as a MCaFH nurse prior to the commencement of the course. In some cases, both sets of competencies were used together to provide students with the benchmark for beginning MCaFH nursing practice.

If no competencies are available in that specialised area, then we advise them to use the Nurses and Midwifery Board of Australia Registered Nurse Competency standards.....I always advise the students to look at the CAFHNA competencies as a bit of a benchmark, just so it guides them in thinking about what it is they're actually going to learn when they get on their placement. (EP2)

Education provider 4 used the NMBA competencies for a Registered Nurse only because national MCAFH nursing competencies were not available. This participant stated that the students from any state in Australia would be familiar with these competencies as they already use them in their current practice. Education provider 4 did create a document of behavioural cues to support the NMBA competencies while reflecting that the clinical practice of a beginner MCAFH nurse. It was expected that the preceptors used these MCAFH nursing behavioural cues when conducting the assessment of the student's performance against these competencies, in light of the core work of a MCAFH nurse.

Education provider 3 based the assessment of student's clinical capabilities against the state or territory based MCAFH nursing competencies unless the students were undertaking a placement in another state.. Education provider 3 used the ACCYPN competencies for students from states that did not possess current competencies for practice. The state or territory based competencies were deemed appropriate to use because they governed the practice of both MCAFH nurse and school health nurses in that particular state. Therefore students could be assessed as clinically capable for both clinical practice environments. The participant was also of the belief that the preceptors would be more comfortable in assessing students clinical capabilities against competencies that they were currently using in their own clinical practice. This would make for a smoother, more accurate assessment process and is highlighted in the comment below from Education Provider 3.

So these (state and territory based competencies) were deemed to be the better ones, plus the other ones that are actually known by the community health nurses, because most of them belong to Community Health Nurses Association as well. (EP 3)

Education provider 5 developed their own set of competencies using the Australian College of Children and Young Peoples Nursing (ACCYPN) and a variety of jurisdictional

Child and Family Health Nursing) competencies to assess their student's clinical capabilities. The NMBA competencies for a registered nurse were also used in the assessment of students as a baseline for practice. Students would progress on from this standard to that of a beginning MCAFH nurse. Education provider 3 disagreed with the use of the NMBA Competencies for a registered nurse as assessment and benchmark of student clinical capabilities on MCAFH nursing placements. This participant stated that MCAFH nursing is a speciality and a nurse's performance should be benchmarked against competencies that reflect the skills, attitudes and capabilities required to work competently within the speciality and not for the beginning registered nurse.

"They (MCAFH nurses) are expected to be a higher level of thinking, much more autonomous practice and decision making. I think these standards reflect better than the Registered nurse competencies. These competencies reflect better the community based work that we do" (EP 3).

It was evident from the data that participants used different sets of competencies to frame the assessments of students on placement. There did not appear to be one consistent set of competencies that all education providers used. This was dependent on the competencies that were currently used in clinical practice in the state or territory in which the student was completing their clinical placement.

Assessment Methods and Documentation

The analysis of participant responses showed varying methods of assessment used to determine students' clinical capabilities on professional experience placements. The variety of assessment practices also gave rise to the variety of assessment documents provided by the five Education providers. Competency based and continuous assessments were the main forms used by the five education providers and all participants stated that they used a form of competency-based assessment as the mode of assessing student's overall clinical capabilities on clinical placement. In the competency based assessment framework, students were assessed on the clinical knowledge, skills and attitudes required to work as a MCAFH nurse. Education providers 1 and 5 assessed clinical skills and theoretical knowledge continuously over the duration of the placement. Student's clinical

capabilities were determined through competency based assessments using the knowledge, skills and attitudes of a beginning MCaFH nurse.

Competency based assessment was demonstrated differently by each Education Provider but the overall intent was to determine the student's ability to adequately function as a beginning MCaFH nurse. The competency based assessment process was conducted over the duration of the placement, in all five education programs and referred to as a continuous assessment process. A continuous assessment process was used by all participants as it allowed preceptors to keep abreast of the student's continual progress and enabled them to determine when a student was developing competence, as well as identify students who were underperforming. This was consistent with the clinical documentation that was provided and each document demonstrated assessments to be performed over the duration of the placement. The assessments were demonstrated in a clinical assessment document commonly referred to as a clinical practice portfolio, professional portfolio, clinical practice journal or a professional experience placement portfolio. For literary ease, assessment documentation will be referred to as a clinical portfolio.

Students were required to develop learning objectives or goals for their placement and these were included in the clinical portfolio, which was used as the assessment evidence of student's performance. The learning objectives or goals and strategies to achieve these were to align with the competencies used for MCaFH nursing in the state the student was to work. Education providers 1 and 5 required the preceptor to also observe and assess student's clinical skill development through a checklist of specific clinical skills required in the practice of a MCaFH nurse. This checklist was included in the portfolio and was ticked and initialled by the preceptor during the clinical placement. Education provider 5 also included the assessment and signing off of skills for example: physical and developmental health assessments, in the portfolio. The list used was not an exhaustive list of skills, but it did provided a clear guide to the minimum performance requirements of a beginner MCaFH nurse in education provider 5's course, as highlighted in the following statement.

There are certain things they need to complete as part of the clinical experience record. Some of these are –a physical assessment for example, also a mental assessment, a health education assessment and then certain competencies that need to be complete by the end. (EP 5)

Education provider 1 demonstrated a wider approach to skill assessment using five key clinical skill requirement categories including transition to parenting, developmental assessment, breastfeeding, artificial feeding and psycho-social support. Under each of these categories were skill requirements, which the students needed to achieve. These requirements were individually sighted and signed off by the preceptor and included in the portfolio before the student was assessed as clinically capable. For ease of student assessment, education provider 1 included in the portfolio the Bondy scale (Bondy 1983) to ensure the preceptor was accurately assessing the students' level of performance. Education provider 1 was the only provider to include a scale for the assessment of student performance, in the clinical documentation. Unlike education providers 1 and 5 education providers 2, 3 and 4 did not assess the students' clinical skill development on placement.

Education providers 2 and 3 stated that the students' skills were observed, but were not captured or reflected in the assessments outlined in the portfolio because they did not possess sufficiently trained preceptors to do this. They claimed that the standard of preceptors varied between states and they could not guarantee that students would be assessed correctly and continuously over the placement period. Education provider 2 highlighted this with the below statement.

The rationale is based on actually having enough clinical nurse specialists or clinical nurse educators available to be able to assess the students.....from an assessment point of view you really do need to have facilitators to have been educated in being able to do these clinical skills and be able to be accredited to sign them off. (EP2).

Instead of clinical skill assessment, education provider 2 used a clinical placement portfolio to demonstrate students' clinical capabilities by requiring the student to reflect on their achievements against the competencies used in their within their state. Students were assessed over the duration of the placement on the entries added to their portfolio.

Students were required to benchmark their own clinical performance through reflective reports using clinical incidents and scenarios experienced on placement. Students' theoretical knowledge was assessed in the writing of clinical learning goals in the placement portfolio, before and during the placement. The learning goals were skill driven and collectively focused on the strengths and the weaknesses of the students' overall developing clinical knowledge and is supported by the following statement.

They have to look at the areas where they feel their strengths are, their weaknesses etcetera; what they want to learn, why they want to learn it. Then they try and find the things that they're actually going to do. It's based very much on where their strengths and weaknesses lie in the area. (EP 2)

Education provider 2 required all aspects of the portfolio to demonstrate the student's ability to articulate and validate their developing understanding of competence in relation to the Competency Standards for a Community Nurse. Preceptors observed students' performance while on placement and together with assessing their learning objectives and reflective journal entries, against the Competency Standards used, they were assessed as competent as a beginning MCaFH nurse. Overall, the student's clinical skills were observed by the preceptor but the clinical placement assessment centred around their ability to provide written evidence on their developing understanding of competence, compared to the competency standards listed within the portfolio.

Education provider 4 used a clinical practice journal, which is similar to that of the clinical practice portfolio used by education provider 2. Students' clinical capabilities were assessed by observation and consultations between the preceptor and the student over the duration of the placement and did not involve the assessment of clinical skills.

The clinical journal aimed to assess the students' ability to assume the role and function of an independent beginner level MCaFH nurse however it did not assess their clinical performance. The students' clinical development and final grade was recorded in their clinical practice journal along with the record of the days spent on placement. Part of the assessment process was the time spent discussing and debriefing the student's performance in light of the National Competency Standards for the Registered Nurse, in the context of MCaFH nursing. A performance criteria guide was included in the clinical

practice journal to ensure that all preceptors were able to assess students against the competencies in the context of MCaFH nursing while reducing assessor ambiguity.

Students and preceptors met with the Coordinator half way through the clinical placement to discuss the students' progress. Discussions centred on the students identification of strengths and learning goals but these were not included in the assessment process. This verbal conversation was recorded in the clinical journal as part of a formative assessment process and aimed to guide the students' progression, through constructive feedback, towards the final summative assessment of performance at the completion of placement. The process followed by education provider 4 can be seen in the following statements.

I have a meeting where I can discuss with the three of us, as to where the student is at....The preceptor is asked as to their thoughts regarding the students competency, discussing their strengths, to focus on out in practice in that last week or so and to develop to make sure they are actually able to meet the competencies that we want. (EP 4)

So preceptors are asked to assess them in the context, but also for those competencies to assess them as competent or not in the context of child and family health nursing practice at a novice level. So as a guide for preceptors, in conjunction with practice we've developed a set of tools, if you like, for each competency element as to what might be a performance indicator as to whether or not that student meets that particular competency. (EP 4).

Reflective practice

The use of reflective practice as a component of assessment on clinical placement varied between education providers. Education provider 3 and 4 stated that they did not use reflective practice as a component of assessment on placement and therefore it was not evident in the assessment documentation. Education provider 1 required students to complete a reflective incident assignment within the clinical topic but it was not included in the assessment documentation or as part of the overall grade for clinical placement. Students did however use self-reflection to set their daily objectives over the duration of the placement and record these in the clinical portfolio. Education providers 2 and 5 did use reflective practice as a component of assessment and required students to reflect on their achievements in the clinical portfolio and how these achievements related to the

competencies they would use in clinical practice. Education providers 2 supplied students with the SWOT analysis tool and were required to use it to determine and outline their strengths and weaknesses and how they would develop these into competent clinical practice. A SWOT analysis tool is used to examine “Strengths-Weaknesses-Opportunities-Threats” and addresses the complexity of situations by reducing the quantity of information required to enhance the decision making process (Helms and Nixon 2010 p.216). These reflections were recorded in the clinical portfolio and formed part of the overall students’ assessment on placement. Education provider 2 stated that students were asked to complete a reflective paper in the theory component of the clinical topic using the student’s own reflections on clinical scenarios and incidents to frame the assessment.

Students have to complete as an assessment item, where they reflect on their achievements and which competencies that those achievements fall under.....the student keeps a portfolio for the while time that they’re doing the course. For the assessment we ask them to submit a reflective paper, so using the benchmark with the competency standards. So they gather all their materials and they have clinical scenarios and clinical incidents that they discuss in the reflective paper and how they felt about this at the time. (EP2).

Underperforming students

Four out of the five education providers outlined a process for identifying underperforming students on placement (EP 1,3,4,5). All education providers stated that students were observed and their progress followed throughout the duration of the placement, regardless of the assessment process. This continual observation ensured that underperforming students were identified early and opportunities to improve practice were implemented. Four out of the five education providers stated that underperforming students would be given additional time on placement to meet and demonstrate their clinical capabilities (EP 1,3,4,5). Education provider 5 assisted students in passing their clinical placement by providing extra time for the implementation of a clinical learning contract and is supported by the following statement.

We encourage preceptors to highlight where there are situations that aren’t progressing well. So we work with that and try and put strategies in that will help the student to do those. So on the rare situation where they didn’t meet that, like they

didn't respond to that intervention, then they could be placed on a learning contract which would have specific areas that the student needs to improve their practice on. Then they would be reassessed. That might mean that they needed to do some additional days of clinical practice. (EP 5)

Three out of the five education providers identified underperforming students through the verbal and written feedback from the preceptor, after which a clinical learning contract was implemented in consultation with the preceptor and the student, at a formative student meeting (EP 1,3,5). Formative student meetings ensured that the student was aware of their underperformance and the strategies identified early to support their practice development. The clinical portfolios supplied by all three education providers detailed the process for initiating a clinical learning contract and the required documentation. All three of the education providers (EP 1,3,5) required preceptors to contact the topic coordinator in advance should the student be underperforming. Ensuring that poor performance was identified early was important to the development of student's clinical capabilities at the completion of placement.

Students and preceptors would then identify what resources they required to support their achievement of the learning contract. If students could not achieve the learning contract, additional formative performance management meetings would occur, as education provider 3 highlights in the following statement.

If they haven't achieved the learning contract, we sit down with the preceptor and the student and work out whether extra time would be beneficial; so most of the time we can arrange extra clinical time say another couple of weeks. We look at the learning contract to see what hasn't been achieved there. (EP 3)

Education provider 4 required underperforming students to be identified early and students were notified of their poor performance at the first preceptor, student and topic coordinator progress meeting in the first half of placement. Progress was recorded on the preceptor report, over the duration of the placement and this report was discussed at the first formal meeting and submitted as evidence of the students' clinical capabilities at the completion of placement. Underperforming students were identified and notified at this meeting and objectives and strategies were collectively created and implemented to support the student to continue their development on placement. Students and preceptors

were required to have regular contact time during the placement and part of the assessment process was the requirement for documented formative student progress meetings.

Education provider 2 did not discuss a process for identifying and supporting underperforming students because the placement was supernumerary and students were not assessed on their clinical skills. Weekly meetings conducted between the student and the preceptors were considered to be the appropriate way to determine a student's progress and implement strategies to improve overall performance. These meetings were recorded in the clinical portfolio but not included as part of the overall assessment of student performance.

Chapter Summary

This chapter has provided a summary of the findings and outlined the assessment methods used to assess the clinical capabilities of MCaFH nursing students on professional experience placements. It is evident that the five education providers use different assessment modalities to determine the student's ability to function as a beginner MCaFH nurse. It is evident that ultimately the student's performance is benchmarked against a set of pre-determined clinical competencies that are appropriate for the state in which the student will ultimately work in. Whether the assessments include clinical skill assessment or focus solely on reflective written pieces, students are assessed, via competency based methods, continuously over the duration of the clinical placement. The following chapter will compare the assessment methods outlined and clinical documentation used by the five education providers against the best assessment methods evident within the literature.

Chapter 5: Discussion and Recommendations

The overall aim of this research was to determine the current assessment methods used to assess the clinical performance of MCaFH nursing students on professional experience placements throughout Australia. The main contribution to this thesis came from the literature review and the participants' interviews to provide an understanding of the assessment methods determining clinical capability of MCaFH nursing students on professional experience placements. The findings highlighted commonalities and differences between the five participant education providers' assessment requirements and practices. In order to improve the standard across MCaFH nursing courses nationally, these findings provide evidence to be considered. Improving the assessment practices for MCaFH nursing students enables a more accurate determination of whether students are equipped with the skills and expertise to work confidently within a primary health care paradigm. It will also safeguard the continuing and future obligations of the profession in supporting children and their families to maximise their social, emotional and physical health needs (Skår 2010, Fowler et al. 2014). This can be achieved through a national approach to the assessment of MCaFH nursing students' clinical capability while on a professional experience placement.

In this chapter the findings of the similarities and differences of the clinical assessment methods will be discussed, while drawing on education principles highlighting current best assessment practices. The adult learning principles as defined in chapter 1 will be referred to in this chapter. The principles will guide the descriptive analysis of the assessment methods used to assess clinical capability of MCaFH nursing students on professional experience placements. Using the adult learning principles to guide the analysis will highlight how using the best assessment practices can assist education providers to prepare MCaFH nursing students successfully for professional practice on the completion of their program of study. As stated in chapter one, the six key principles of adult learning outline by (Knowles 2005) are as follows;

- The need to know: Adults need to know why the learning is important and what the value is in the learning experience

- The learners self-concept: The adult learner wants to be respected and seen as capable. They are self-motivated and self-directed in their learning
- Prior experience: Adult learners possess a diverse experience and knowledge base that should be used to support their new learning experiences.
- Readiness to learn: Adult learners are ready to learn when they experience the need to further their learning to cope with life situations. They are goal orientated and want clear learning goals to achieve.
- Orientation to learn: Adult learners are life centred and therefore their learning aims to achieve their full potential or developing competence.
- Motivation to learn: Adult learners have an internal motivation to learn where there is intrinsic value evident.

At the commencement of the study the aim was to determine whether the assessment and documentation requirements were appropriate for determining the clinical capability of a MCAFH nursing student on a professional experience placement. The findings have identified factors contributing to a successful assessment than just the process and documentation used. The most important points these findings raise are that of the differences in the type and duration of the professional experience placements, the function and regulation of the preceptor's role within the assessment of MCAFH nursing students is varied, and the inconsistencies in the assessment techniques and documentation used in the clinical assessment processes.

How long is enough?

All five education providers offered students a professional experience placement. The placement type and duration impacted on the assessment methods and documentation used to determine the students' clinical capability. All five participants agreed that a professional experience placement was an appropriate way for students to receive practice based experiences. Participants also agreed that for students to gain an

understanding of the role and requirements of a MCAFH nurse engaging with expert nurses and clients in the clinical environment was necessary.

The most common reason discussed for the use of the professional experience placement was to enable students to gain the clinical experience necessary to develop into clinically capable graduates. The use of the clinical experience placement is supported by literature as a method of providing the student with the opportunity to integrate theory and practice, while practicing key nursing skills of assessment, communication and critical thinking in the clinical setting (Weston 2008 p.407, Fowler et al. 2014). The involvement of the student in the clinical environment provides the preceptor or facilitator with immediate knowledge of how the student will conduct themselves in complex situations where critical thinking and expert knowledge are required (Barnett et al. 2008, Benner et al. 2010, Coyne and Needham 2012, Fowler et al. 2014). Theory without practical application does not provide the depth of knowledge required to create clinically capable professionals. It is important then that a component of the education process be centred in the clinical environment where the student gains clinical experience and develops in the role of the MCAFH nurse (Gaberson 2006, Coyne and Needham 2012).

The time allocated to the clinical placements varied between the five participants' programs and ranged from 80 hours to 320 hours. There were no reasons given for such variation in hours allocated to the placements however justifications were provided for the variation in the type of placement offered. The vast range of clinical hours allocated to the clinical placements, poses the question of what is an appropriate amount of time required for students to be suitably prepared to work safely in this specialist area of nursing practice? It also raises the point of how much time allocated to clinical placements constitutes capable clinical practice. This question indicates a need to determine the appropriate amount of clinical hours or an assessment process, which caters for student's individuality and to take the hours they need to achieve capability and safe practice.

Currently there is very little published literature on the appropriate duration of a clinical placement for postgraduate MCAFH nursing students. Two opposing views about the

amount of time spent in the clinical environment are evident. Rose and Best (2005 p.38) and Walters et al. (2012) emphasise that the longer a student is exposed to the clinical environment the greater the opportunity to seek out rich educational experiences and receive feedback to develop practice. This then contributes positively to the overall quality and experience of the new graduate entering the profession.

This is in contrast to Byrom and Aiken (2014 p.277) who believe that just being in the clinical environment does not constitute learning, therefore question whether the learning opportunities available to students on placement should be more of a focus than the actual duration of the placement. Further to this point is that many students entering postgraduate programs of study come with a range of clinical experiences and many with transferrable skills such as midwifery or paediatric nursing. With this in mind the time given to professional experience placements may be arbitrary and more of a focus should be placed on the quality of the teaching and learning while on placement.

Fowler et al. (2014 p.69) confirm that Child and Family Health nurses in Australia valued the hands on experience that a professional experience placement provided and the importance of being exposed to the complexities of the role however they also highlighted that the duration of the placement did not “enhance the readiness to practice”. Regardless of the hours spent on placement, the educational experiences and learning that is achieved may be inconsistent and dependent on the support and guidance of the clinical preceptor. The supportiveness of the clinical setting and the matching of the educational theory component of the course to the realities of the clinical landscape can also influence readiness to practice. This view is consistent with that of the participants in this research who highlighted the support of the preceptor and the clinical environment as integral to the quality of the students learning than the actual placement hours.

The participants stated that the overall placement time was divided up into active clinical learning, preceptor-student meetings, debriefing sessions and the completion of the assessments. With this in mind, a student completing an 80 hour placement will have less time to demonstrate their clinical capability and may be disadvantaged over students

completing a longer placement due to the time required for assessments, establishing a relationship with the preceptor and debriefing (Fowler et al. 2014 p.71). It is evident that the mode of placement in some cases was more observational in nature and therefore the exposure to 'hands on experience' was significantly decreased. The lack of time devoted to hands on experience may impact on the student's ability to function capably and safely as a MCAFH nurse at the completion of their placement.

Observational placements did not provide students with the hands on experience they required to develop core practical skills. The quality and capability of the graduate would seemingly be different at the completion of an observational placement to that of a student completing a longer, more hands on placement. This point is supported by the literature where professional experience placements that provide opportunities for active learning and participation in the care of clients contribute to richer learning experiences than observational placements (Newton et al. 2012 p.630). Newton et al. (2010), Betony (2012) and Taylor et al. (2012) agree that allowing students to be observers rather than being actively part of the learning process may direct a student to developing a wide non-specific knowledge base rather than developing a skill set that allows them to work capably and confidently in a specific area of practice.

All five MCAFH nursing education programs offered clinical placements to students with and without previous MCAFH nursing experience. The two groups of students completed the same clinical hours set by the individual programs and no exceptions were made for a student's lack of previous experience. The clinical capability of students completing observational placements, who lack relevant previous experience, would be questionable and not comparable to students who were supported through a supernumerary mode of placement with longer clinical hours. The purpose of a professional experience placement is to provide students, with or without previous clinical experience, sufficient clinical time to ensure their capability of working capably in the MCAFH nursing role (Fowler et al. 2014).

An observational placement may benefit a registered nurse currently working as a MCAFH

nurse or have relevant midwifery or paediatric experience, providing opportunities to observe and ask critical questions. Professional experience placements should provide a student, with or without previous MCaFH nursing experience, sufficient clinical time to ensure their capability of working as a MCaFH nurse and this should not be limited to placements that offer hands on clinical experience. Therefore observational placements may not enable students without previous related nursing experience to be appropriately prepared for the complexities of the MCaFH nursing profession.

It was evident in this research that the observational placements did not include clinical skills as a placement or assessment objective and students ultimately passed placement without being observed in clinical practice. As clinical skill acquisition was not a placement objective, the placement would only offer exposure to the role and the responsibilities of a MCaFH nurse. Students were aware that they would observe an expert nurse's practice; they would use critical thinking and reflection to complete their written assessments to pass the placement. However this poses the question for the potential variability in the level of capability of students completing courses that assess skills compared to courses that do not.

Gaberson (2006) argues that placements should offer quality not quantity of experience to promote skill acquisition. Observational placements therefore, would require a more supportive teaching environment offering a range of exposures to different clinical situations to be as beneficial as hands on clinical practice. One education provider with students who had a previous clinical experience role, acknowledged that the duration and the type of their clinical placement was insufficient to ensure their students were prepared to meet their desired learning goals and needs that extended their current practice. This implies that students would not gain any further clinical experience to what they have had been exposed to previously and therefore limited their development beyond their current capability level.

Inconsistency across MCaFH nursing programs nationally has been reported by Kruske et al. (2006) who suggest that some education programs in Australia provide inadequate

preparation for the nursing practice for MCaFH nurses. Both argue for a consistent national approach to the education of MCaFH nurses. Currently the professional experience placements offered are different in their duration and therefore have different assessment practices. It was stated by one education provider that an 80 hour placement is insufficient time to enable participatory practice and therefore the assessment of clinical capability is not conducted. This study therefore poses the question of what is the right amount of time required to prepare individual students for capable and safe MCaFH nursing practice.

The literature review identified that clinical placement time is expensive and time consuming for the clinicians involved, and the teaching and learning time has to be maximised supporting the student to successfully complete the placement (Gaberson 2006 p.11, Walters et al. 2012). Health Workforce Australia (2011 p.5) has highlighted the concerns for the availability and suitability of placements for future health professional students due to the expense and sheer number required to meet the future health workforce demands. It would be of benefit for the quality of the learning environment to be more of a focus for future research and planning than the hours allocated to the individual placements. If the learning environment is not positive and does not provide quality experiences then students may not be motivated to learn. The motivation and the self-directed nature of adults is central to adult learning (Knowles 2005). All participants agreed that a learning environment that encouraged activity and participation in care contributed to a better achievement of learning outcomes compared to placements that were observation only. Participation enables adult learners to utilise their prior knowledge and skills to support their new learning experiences, while identifying their deficits and formulating new learning goals (Knowles 2005). The participants had a consistent opinion that supernumerary placements, regardless of clinical hours, were ideal to provide students with the exposure to the clinical environment.

How do we know MCAFH nursing graduates are capable?

Assessing students' clinical capabilities on professional experience placements confirms to the education providers and future employers that the students are able to work capably and safely upon graduation. A consistent approach to clinical assessment seen in all five programs of study was that of continuous assessment. Continuous assessment was demonstrated through the use of a clinical practice journal or portfolio. Students were required to set learning objectives, evaluate and re-evaluate their goals with feedback from the preceptors, reflect on their developing capability and in some instances perform clinical skills under supervision. The journal or portfolio was to be completed over the duration of the placement. The student and the preceptor or facilitator were required to complete the required observations and written assessment components to demonstrate the students' overall development. The continuous assessment process enabled students to demonstrate their continued development, over the duration of the placement in either written or skill based assessments or a combination of both.

The use of continuous assessment in the MCAFH nursing courses was consistent with the relevant literature from nursing and allied health. Continuous assessment aimed to provide a holistic measure of students' clinical capabilities through observing practice, skill assessment, reflection and preceptor feedback (Leigh et al. 2007, Holmboe et al. 2010, Fahy et al. 2011). The continuous assessment method assesses does not just take into account a student's performance on any given day but how they can adapt to the ever-changing clinical environment. Continuous assessment views performance as a developmental process where a student builds upon skills learnt each day (Lennie and Juwah 2010, McAllister et al. 2010).

The continuous assessment process incorporated a portfolio, which was an indicator of the student's clinical capability and used to pass or fail clinical placement. It was used as a vehicle to assess a student's clinical competencies but a portfolio can also be used to demonstrate a student's growth and learning while on placement (Kruske and Grant 2012, Fowler et al. 2014). The portfolio can lead a student to identifying their strengths and

weaknesses, through setting their learning objectives and develop lifelong learning through reflective practice, which is also consistent with Adult learning theory (Knowles 2005, Athlin et al. 2012). As a result a portfolio can be seen to close the theory practice gap (McMullan 2008)

Although the literature on portfolios as a method of continuous assessment is positive there are opposing views, which need to be taken into consideration. Portfolios are time consuming (Schaffer et al. 2011) not supported by clear guidelines (Pitts et al. 2001); assessor ambiguity (McCready 2007), and students can falsify information to achieve passing grades (McCready 2007). Despite these negative aspects portfolios are still seen as an effective assessment too for students on professional experience placements. It can be concluded that the use of portfolios or journals as an assessment for MCAFH nursing students can offer a holistic assessment process. A combination of assessment items collected over the duration of the placement can determine a student's capability and reduce the need for a series of assessments that focus solely on clinical skill acquisition.

Aligning a set of national competencies that govern the practice of MCAFH nurse to the assessments required on placement may increase the success of the portfolio or journal as an assessment item. The portfolio or journal can assist students in their understanding and application of the core competencies used in the practice of a MCAFH nurse (Schaffer et al. 2011). The competencies would ideally frame the assessment and provide evidence of the students' achievement of the role and responsibilities required to work within the specialty (McCready 2007). This process is achievable when the students are studying and completing the placement within the same state. However as some students chose to complete courses outside their home state, they are required to use competencies that potentially do not fit with the placement assessment objectives. This creates inconsistencies in the ability to benchmark student performance nationally. It also creates students that are only considered clinically capable in the state to which they have completed their professional experience placement in.

From reviewing the participants' responses it was evident that they all used a holistic approach to the assessment of MCAFH nursing students including: written assessments, the setting of learning goals and objectives, student reflections on learning, constructive and written feedback from the preceptor, all detailed and recorded within the professional portfolio or journal. The learning objectives and goals set by the students were based on the state or territory based MCAFH nursing competencies because there are no national competencies (Kruske and Grant 2012, Fowler et al. 2014). The learning objectives were reviewed and re-evaluated with the assistance and feedback of the preceptor to match the students' learning experiences to the placement objectives set by the education providers. It was evident that all five education programs used the adult learning principle, "Readiness to learn" (Knowles 2005 p.4) to provide educational experiences that utilised the program requirements and the students' personal learning needs, to frame the professional experience placement assessment.

Adult learning principles recognise the importance of prior learning experiences to the current learning of adults (Knowles 2005). Students of MCAFH nursing courses come with previous nursing experience that should not be overlooked particularly if the experience is in the area of MCAFH, midwifery or paediatric nursing. MCAFH nursing students are central to the creation of their learning goals and identifying clinical learning needs because their previous nursing experience will determine their personal learning requirements on placement. Providing students with the ability to utilise their previous experience to support the creation of their personal learning objectives is consistent with the Adult learning principles (Knowles 2005).

The clinical documentation of all five MCAFH nursing courses provided the student with the resources and guidance needed to set their learning goals and establish their learning requirements prior to the commencement of their placement. This process is consistent with Knowles (2005 p.115) who emphasises the need for students to have access to resources, information and continual evaluation and feedback to assist in the setting and reassessing their learning needs. Knowles (2005 p.294) recommends that students need to generate problem solving skills and resilience while on placement. It is important for

students to know what to do in unfamiliar situations and act appropriately. It is these situations where students learn to ask why their learning is important and how their learning assists in acknowledging their own learning deficits, while applying their new knowledge to clinical situations (Knowles 2005).

The assessment and benchmarking of a student's clinical capability would ideally be consistent across MCaFH nursing education providers within Australia. This consistency would contribute to students being determined capable to work in any state of Australia and not just within the state they studied. Using state based competencies to frame assessments, in the absence of national competencies therefore limits the freedom of student mobility nationally. Kruske and Grant (2012) and Fowler et al. (2014) highlight the already declining numbers of MCaFH nurses in Australia and therefore this research poses the question of whether the lack of cross border recognition of performance and employment may ultimately contribute to the continued decline in numbers of MCaFH nurses. The specialised nature of the work of a MCaFH nurse requires consistency in the education, assessment and evaluation of student performance; against national standards.

Evidence of national competency standards and frameworks being used in nursing specialities and allied health is apparent in the literature (McAllister 2005, Gill et al. 2006, British Dermatology Nursing Group 2012). For example, the Australian College of Critical Care Nurses developed competency standards for the assessment of competence and professional regulation in critical care nursing (Dunn 2000). These competency standards enabled education programs to be developed using the competency requirements for the specialist profession. Kruske and Grant (2012 p.201) identified that MCaFH nursing in Australia does not currently have national education standards or credentialing frameworks and therefore this contributes to the differing assessment standards and practices within the courses identified in this research.

The assessment of skills or performance in practice is important in determining a student's ability to function and work capably within a nursing speciality (Kruske and Grant 2012 p.201) however it is not the only determinant of this. The importance of an assessment is

to enable a student to demonstrate that they are able to function as a capable novice health professional within the clinical environment (van der Vleuten et al. 2010). Assessments ideally reflect the uniformity between the “educational preparation” of the students and the “workplace expectations” of students to work capably and safely (Embo et al. 2015 p.345). Therefore it is essential that the assessments of MCAFH nursing students have clear requirements and have clear outcomes on what is to be achieved from the assessment.

Clinical assessment should be a holistic and accurate account of a student’s ability to demonstrate skills, behaviours, attitudes and problem solving ability appropriate for the speciality profession they are entering (Embo et al. 2015). While the skill or task is easily observed emphasis also needs to be placed on the thinking that occurs before, during and after the event. Clinical placement assessments are only one assessment piece during a program of study and therefore cannot attempt to assess entirely a student’s learning. If this occurs then a student will become a superficial learner resorting to memorising information and temporarily learning skills that will be assessed (Wooley and Jarvis 2007 p.74) and this is not consistent with the process of adult learning.

One inconsistency highlighted by this research was the observation and assessment of clinical skills while on placement. In two of the five MCAFH nursing courses, clinical skills assessment was not conducted because the duration and location of the placement did not allow for it to occur. One participant highlighted that using a short observational placement allowed for the students to be engaged in the clinical environment but it did not allow them to develop assessable clinical skills. Students completing this course were deemed clinically capable without any formal assessment of performance in practice. Students studying courses that offered supernumerary placements however were required to demonstrate their clinical capability prior to the completion of the placement.

It was also highlighted by two participants that clinical skills assessments were not conducted on placement because they lacked suitably qualified and trained preceptors to assess students. Education providers could not be certain that the preceptor could make

an appropriate determination of the capability of the student particularly if the preceptor was from interstate. In the case of rural students, an assessor may be a medical practitioner who was not qualified to make an assessment of the nursing practice of a MCAFH nursing student. The mode of placement and the lack of qualified preceptors to make appropriate assessments of student's clinical capabilities were some of the factors that influenced the type of assessment used on placement. Knowles (2005) adult learning principles acknowledge that students want to be recognised and respected and seen as capable of working within their future profession. Therefore if the preceptor does not possess the ability to make an accurate assessment of a student's performance on placement, the student's internal motivation to learn and develop to their full potential may be impacted.

The inclusion of autonomous practice as a component on placement was another variation seen between the education programs. Autonomous practice was offered by two education programs but not as a formal educational objective to be completed because it was expected that students would work autonomously at the completion of the professional experience placements. Only one education provider offered a five day autonomous practice objective to be achieved prior to the completion of the placement. The varying requirements between education providers providing autonomous practice as a requirement of placement, raises the question of whether all students are prepared appropriately for the day to day work of a MCAFH nurse?

Observing autonomous practice enables the preceptor to identify whether students possess the skills to perform the day to day role and requirements safely and efficiently in a dynamic work environment (Gaberson 2006, Embo et al. 2015). As a MCAFH nursing student will be required to work with limited supervision in the community on the completion of their program of study, engaging them in autonomous practice, may be of benefit. Autonomous practice on placement may assist a student in becoming capable of working beyond a task based role and towards professional practice that incorporates critical thinking and reflection (Livsey 2009). Being able to practice under the supportive and watchful eye of the preceptor, a student can develop confidence and control over the

clinical environment and in turn become autonomous in their practice (Livsey 2009 p.1). Autonomous practice fits with the adult learning principles (Knowles 2005) because it provides the opportunity for students to be self-motivated and self-directed in their learning. Autonomous practice enables the student to apply their previous nursing experience and current knowledge to new clinical situations, while being able to demonstrate their ability to work capably with minimal supervision. (Knowles 2005 p.4). Adult learners want to be respected and to be seen as capable (Knowles 2005) and autonomous practice provides students with this opportunity.

The final difference identified between the five education providers assessment on placement was the use of reflective practice. Reflective practice was used differently in three out of the five education providers that used it as an assessment component of the clinical placement. Reflection was used as a written assessment piece in the form of a reflective report, used to reflect on the student's weaknesses and achievements or to aid in the setting of daily learning objectives during the placement. Reflective practice did not appear to be a major component in the five education providers' assessments. This raises the question of what opportunities education providers afford to students' learning of critical reasoning skills in clinical situations, if students do not reflect on their own practice.

Self-reflection enables a student to reflect on experiences that can inform their self-assessment process and is a central tenet of Adult learning (Fahy et al. 2011). Reflection provides the opportunity for students to ask why their learning is important, how their goals will be achieved and what value is in their learning to their future career (Knowles 2005). It is important for students to develop the ability to critically reflect on their own performance as this is a part of their professional regulation (McCready 2007). Including reflective practice in the continuous assessment process highlights to the student that the journey from novice to expert is just as important as the end result. This continual learning ideally is captured and recorded in a series of assessments designed to identify the students' knowledge, ability to adapt to new and different clinical situations, critically

think and reflect on their strengths and deficits and apply their new skills to the day to day activities of the profession (Driscoll and Teh 2001).

Who identifies capability?

All five MCaFH nursing education programs utilised a preceptor and or a facilitator to provide the direction and support to student learning while on placement. The preceptor supported the students by providing assistance in the setting of learning goals that would provide the richest clinical experiences. The preceptor also provided feedback on the students' performance to ensure they were capable of working capably at the completion of the placement. All education providers acknowledged the importance of the role of the preceptor to student learning and assessment on placement. Concerns outlined by two participants centred on the qualifications and experience of the preceptor. Both believed that the quality of the preceptor was essentially unknown and was generally because the preceptors were interstate and their practice was not observed.

From analysing the participants' responses it was evident that there was a significant lack of consistency between the role and the responsibilities of the preceptor within the five MCaFH nursing courses. Variability was evident in the level of the staff member required to assess the students in practice. The qualification of the staff member ranged from the RN working in the field to a Nurse Manager or a Medical Officer .This issue raised concerns for suitably qualified professionals to educate and assess students while on placement made more difficult by the location of both the student and the assessor. The location of the preceptors was seen as a concern for the large variation in the supervision and assessment practices of preceptors. Depending on where the student was situated in either a metropolitan or rural region would depend on the availability of a suitably qualified preceptor to educate and assess the student while on placement. In some instances rural students would require a medical professional to assess their performance and determine their capability in a role that is essentially not within their scope of practice.

Another concern outlined was the impact on the preceptor student relationship and the performance of a student when a preceptor was also the MCAFH nurse manager. Students may feel pressure to perform when their preceptor was their manager and this raised concerns for future employment should the relationship between the student and the manager not constitute success on placement. Three out of the five participants stated that there were a clear lack of common national guidelines to the role and the qualification required to be a preceptor of MCAFH nursing students on placement. Having a preceptor that is not suitable for the education and assessment of MCAFH nursing students on professional experience placements, may inhibit the student's internal motivation to learn, a central tenant in (Knowles 2005) adult learning principles. If the intrinsic value of the learning experience is lost then the student will less likely be self-motivated and self-directed in their learning on placement (Knowles 2005).

Preceptors are responsible for creating a learning environment that is positive (Elcigil and Sari 2008) and supportive and encourage the growth of the student's performance through forming links between theory and practice (Hartigan-Rogers et al. 2007, Okerby et al 2009). Barriers such as the qualification and the clinical role of the chosen preceptor, the of time allocated to the preceptor student relationship (Coyne and Needham 2012), feeling overloaded, underprepared for teaching and having their clinical practice scrutinised, coupled with the students' inexperience and unfamiliarity of the clinical environment can influence the development of a positive learning environment (Burns et al. 2006, Wade and Hayes 2010, Fowler et al. 2014).

It is consistently documented in the literature that there are better educational outcomes for students and clients when the clinical preceptor is suitably qualified and prepared to educate and assess the student's in practice (Coyne and Needham 2012, Walters et al. 2012). Aligning a student with a current clinical expert does not guarantee the quality of the learning experience and the clinical experience of the preceptor does not guarantee that they are equipped with the necessary skills to assume the role of the preceptor (Burns et al. 2006, Wade and Hayes 2010).

All participants agreed that it was important to increase the preceptor's preparedness to assist in their fulfilment of the role of educator and assessor in the clinical environment. Zilembo and Monterosso (2008) , Ockerby et al (2009) and Luhanga et al. (2010) support the need for preceptor preparedness as preceptors can lack the background in teaching and in particular assessment, evaluation, giving feedback and prioritising and setting learning goals. Luhanga et al. (2010 p.13), further add that preceptors require education in clinical assessment to reduce ambiguity and interpretation of how a clinically capable graduate should perform. Providing education to the preceptors will ensure a more accurate assessment of student's performance and reduce the disparity that potentially occurs between a student's performance and a preceptor's interpretation of it.

Although the use of preparation programs for preceptors is supported in the literature, it is evident that there is a lack of consistency in the support and education preparedness of MCAFH nursing preceptors nationally. If a suitable education and assistance structure is in place, then the preceptor will be supported to successfully fulfil the role of supporting students learning on placement (Ockerby et al 2009 p 370). Preparing the preceptor for their role will assist in providing a quality experience where students are able to see the value in their learning (Knowles 2005). If the preceptor is supportive then students will feel confident and motivated to be able to set and achieve learning goals that enable them to develop to their full potential (Knowles 2005). If the education principles, the clinical environment and the quality of the preceptor are not appropriate and do not support the development of MCAFH nursing students, then it is unlikely that graduates will enter the profession as clinically capable. Students with poor educational experiences may also become disheartened with the profession and leave, potentially causing further staff shortages within this speciality area of nursing. Without quality graduates entering the profession, the continued ability to work safely and capably with vulnerable populations in society may diminish and the overall standard of expertise of the profession may be in question.

Limitations

The number of participants that accepted the invitation to participate limited this qualitative study. Four education providers declined to be in the study, which decreased the already small numbers of education providers of MCAFH nursing programs within Australia. This study attracted participants that have a vested interest in the assessment of clinical capability on MCAFH nursing professional experience placements. This may contribute to potential bias accounts of information provided by the participants. One participant stated that the professional experience placement offered was currently under review; therefore this may impact on the currency of the data described in this research. Participants offered a wealth of information on the current assessment practices used on professional experience placements. However some information provided by one participant was removed on request for confidentiality and anonymity reasons. Although some of the information was personal opinion, it would have been beneficial to include for clarity of the participants' responses.

Another limitation is that this study only explored what happens during the PEP and surrounding documentation. It did not incorporate other assessments or content in the topic within which the placement was embedded. As such, concepts such as reflective practice may have been taught and assessed at other times during the program of study.

Recommendations

From this research it is evident that there are similarities and differences in the assessment practices of five education providers of MCAFH nursing courses in Australia. A recommendation from this research is a national approach to the educational preparedness of students undertaking MCAFH nursing courses. A national approach would assist education providers to provide a standardised professional experience placement. A standardised professional experience placement would offer consistency in both the type and duration and expectation of the minimum educational experiences required to work clinically capable across Australia.

The mode and the duration of the professional experience placement were seen to impact on the assessments for clinical capability and this inconsistency was evident between the five programs of study. Supernumerary placements offered students the ability to be engaged in the clinical environment working alongside a clinical expert to develop and enhance their ability to become clinically capable graduates; while observational placements did not. There was also a varying degree of hours spent in the clinical environment. The variety of hours raised the question of whether all five placements offered similar experiences and in turn produced equally capable graduates at the completion of the placement hours. It was stated by all the participants that the supernumerary or work integrated learning mode of placement with a longer clinical hours provided the best opportunity for students to develop clinical capability. It would therefore be beneficial to adopt a supernumerary mode of placement for future placements. Supernumerary placements would ensure all students are receiving the same quality of experiences with the same exposure to hand on clinical practice regardless of the hours afforded to the individual placements.

Currently the literature on the appropriate amount of clinical time required for postgraduate students is limited. It would be important for further research to be conducted into the appropriate amount of clinical hours afforded to postgraduate placements, to ensure MCAFH nursing students are afforded the appropriate amount of time on placement, if indeed clinical hours are the most appropriate measure of clinical capability. Hours may not be the appropriate measure, considering that some students already have a range of transferrable skills and may not need as much time on placement as students who do not possess these skills.

A national approach to clinical placements would ensure that all students across Australia would be afforded the same opportunities for active learning and clinical practice. The opportunities for the development of clinical skills would then be consistent across all education providers and enable clinical skills assessment to be incorporated into the overall assessments conducted on placement. Including clinical skills assessment will

provide a more holistic and accurate assessment of a student's clinical capability and would provide a national benchmark of clinical practice.

The benchmarking of student achievement on placement against state and territory based clinical competencies was another inconsistency seen between the five education programs. As national MCaFH nursing clinical competencies do not currently exist, each individual education program uses different competencies to benchmark their student's performance. These are state and territory based competencies and therefore it is difficult to determine whether students are performing at a level that is considered appropriate for working in a nationally recognised profession. The assessment and benchmarking of a student's ability to function as a novice practitioner in the area of MCaFH should be consistent across education providers, within Australia. This consistency ensures students are assessed as being clinically capable to work in any state of Australia.

The specialised nature of the work of a MCaFH nurse requires consistency in the education, assessment and evaluation of student performance; to ensure the national professional standards are upheld. This requires a national approach supported by policy and national standards against which competencies can be developed. Evidence of national competency standards and frameworks in nursing specialities and allied health is seen in the literature. Although MCaFH is a recognized specialisation, credentialing and regulation is still governed by the NMBA Competencies for a Registered Nurse (Nusing and Midwifery Board of Australia 2013).

Although students entering the specialisation are already considered competent as registered nurses, their scope of practice can still be assessed against the NMBA competency standards for a Registered Nurse. However the nature of the MCaFH work requires specific competencies that focus on the role and responsibilities that make the nursing specialty different to that of a generalist registered nurse. These specific specialist competencies should focus on the highly specialised knowledge, skills and attributes that are used in the profession nationally. Therefore it is recommended that a minimum set of consistent national competencies is developed to assist with the assessment and

benchmarking of MCAFH nursing students practice. In the interim the NMBA competencies for a registered nurse (Nusing and Midwifery Board of Australia 2013) are appropriate to use to benchmark student performance against, as they provide competencies that are relevant to all aspects of care provided by a MCAFH nurse across Australia. Australian Nursing and Midwifery Federation (2005) competency standards for the advanced practice nurse may also be of benefit to use to benchmark students' performance against especially if the student is already employed as a MCAFH nurse. However it is noted that the five Education providers programs included in this study did not highlight these as the main competencies used.

Finally a nationally recognised preceptor education program would assist in the standardisation of the role and responsibilities required to be a preceptor of MCAFH nursing professional experience placements. A recognized preceptor program that provides staff with the educational background and guidelines to competently educate and assess students' clinical practice would be beneficial. All participants raised concerns in regards to the appropriateness of the preceptor's qualifications and past experiences and how this potentially impacted on their ability to accurately assess students in practice. A standardised preceptor program would reduce the ambiguity around whether interstate and rural preceptors had the experience and the ability to accurately assess students in both written and clinical skills assessments.

Further research and deliberation needs to be undertaken around the appropriateness of medical practitioners and nurse managers as preceptors of MCAFH nursing students on placements. Student assessment of clinical capability is paramount to the future of this nursing speciality, without appropriate qualified preceptors on placement; the quality and the enthusiasm of the graduate would potentially decline. The decline in quality will ultimately impact on the professions ability to ensure safe nursing practice to clients of MCAFH nursing services across Australia.

Summary and conclusion

On completion of this research it was evident that there were similarities and differences in the assessment practices used by the five education providers programs; who participated in this study. At the beginning of this research the main focus was evaluating the assessment methods and documentation used to determine a student's clinical capability when completing a professional experience placement. However, the findings from this research have identified that the mode and length of placement, the placement objectives and the quality, knowledge and capabilities of the preceptor influence assessment practices significantly. These factors determined how students were assessed and what clinical assessments were thought to be appropriate to establish a student's clinical capability.

Similarities were evident in the structure of the clinical placement, the use of a preceptor as a clinical teacher and assessor, the use of a continuous assessment process, a portfolio or journal to document achievements while on placement and the setting of learning goals and objectives with the support and guidance of the preceptor.

This research study has highlighted the inconsistencies in the assessment practices of the five education providers programs. The inconsistencies centred on the observation and assessment of clinical skills. It was evident that the type, duration and location of the clinical placements and the qualification and education preparedness of the preceptor influenced how a student's clinical skills were assessed on placement. Some education programs offered students the ability to spend time working alongside an expert clinical nurse in a supernumerary capacity and other programs offered limited hand on experience. Inconsistencies were also evident in the use of autonomous practice as an assessment component on placement, and again this was dependent on the mode, duration and location of the placement as well as whether it was an overall placement objective.

The final inconsistency demonstrated was the use of state and territory based competencies to benchmark a student's clinical performance against. Without national

competency standards for MCaFH nursing, all five education providers used relevant state based competencies. Students were only considered to be clinically capable in the state or territories using their own specific competencies.

MCaFH nursing students require an advanced level of knowledge and skills to work with vulnerable populations in Australia (Fowler et al. 2014), therefore the assessment practices must reflect accurately the requirements to work safely and capably within the profession. Using different assessment methods supports the individuality of the education programs offered, however the clinical capabilities of the students still needs to be accurate to decrease the inconsistencies between education, theory and safe practice nationally.

Education and assessment needs to reflect the current and future requirements of the profession. When analysing the assessment practices used within the five education programs outlined in this research, the performance and capabilities of students in comparison between states and territories is essentially unknown. If the capabilities of students entering the profession were not comparable, then movement of the workforce across borders may be affected and employers would find it difficult to determine the work readiness of the graduates they were employing. Students are only considered to be clinically capable to work within the state and territory in which they have been assessed in or in other states that use similar clinical assessment practices and benchmarking competencies. Therefore the cross border recognition of their capabilities to work safely is also potentially affected; creating a workforce that cannot work outside their educational jurisdiction.

Appendices

Appendix 1 Critical Appraisal Tool for Qualitative Research



10 questions to help you make sense of qualitative research

How to use this appraisal tool

Three broad issues need to be considered when appraising the report of a qualitative research:

- Are the results of the review valid?
- What are the results?
- Will the results help locally?

The 10 questions on the following pages are designed to help you think about these issues systematically. The first two questions are screening questions and can be answered quickly. If the answer to both is “yes”, it is worth proceeding with the remaining questions.

There is some degree of overlap between the questions, you are asked to record a “yes”, “no” or “can’t tell” to most of the questions. A number of italicised prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

These checklists were designed to be used as educational tools as part of a workshop setting

There will not be time in the small groups to answer them all in detail!

©CASP This work is licensed under the Creative Commons Attribution - NonCommercial-ShareAlike 3.0 Unported License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-sa/3.0/> www.casp-uk.net

Screening Questions

1. Was there a clear statement of the aims of the research?

Yes Can't tell No

HINT: Consider

- What was the goal of the research?
- Why it was thought important?
- Its relevance

2. Is a qualitative methodology appropriate?

Yes Can't tell No

HINT: Consider

- If the research seeks to interpret or illuminate the actions and/or subjective experiences of research participants
- Is qualitative research the right methodology for addressing the research goal?

Is it worth continuing?



Detailed questions

3. Was the research design appropriate to address the aims of the research?

Yes

Can't tell

No

HINT: Consider

- If the researcher has justified the research design (e.g. have they discussed how they decided which method to use)?

4. Was the recruitment strategy appropriate to the aims of the research?

Yes

Can't tell

No

HINT: Consider

- If the researcher has explained how the participants were selected
- If they explained why the participants they selected were the most appropriate to provide access to the type of knowledge sought by the study
- If there are any discussions around recruitment (e.g. why some people chose not to take part)

5. Was the data collected in a way that addressed the research issue?

Yes Can't tell No

HINT: Consider

- If the setting for data collection was justified
- If it is clear how data were collected (e.g. focus group, semi-structured interview etc.)
- If the researcher has justified the methods chosen
- If the researcher has made the methods explicit (e.g. for interview method, is there an indication of how interviews were conducted, or did they use a topic guide)?
- If methods were modified during the study. If so, has the researcher explained how and why?
- If the form of data is clear (e.g. tape recordings, video material, notes etc)
- If the researcher has discussed saturation of data

6. Has the relationship between researcher and participants been adequately considered?

Yes Can't tell No

HINT: Consider

- If the researcher critically examined their own role, potential bias and influence during
 - (a) Formulation of the research questions
 - (b) Data collection, including sample recruitment and choice of location
- How the researcher responded to events during the study and whether they considered the implications of any changes in the research design

7. Have ethical issues been taken into consideration?

Yes

Can't tell

No

HINT: Consider

- If there are sufficient details of how the research was explained to participants for the reader to assess whether ethical standards were maintained
- If the researcher has discussed issues raised by the study (e.g. issues around informed consent or confidentiality or how they have handled the effects of the study on the participants during and after the study)
- If approval has been sought from the ethics committee

8. Was the data analysis sufficiently rigorous?

Yes

Can't tell

No

HINT: Consider

- If there is an in-depth description of the analysis process
- If thematic analysis is used. If so, is it clear how the categories/themes were derived from the data?
- Whether the researcher explains how the data presented were selected from the original sample to demonstrate the analysis process
- If sufficient data are presented to support the findings
- To what extent contradictory data are taken into account
- Whether the researcher critically examined their own role, potential bias and influence during analysis and selection of data for presentation

9. Is there a clear statement of findings?

Yes Can't tell No

HINT: Consider

- If the findings are explicit
 - If there is adequate discussion of the evidence both for and against the researchers arguments
 - If the researcher has discussed the credibility of their findings (e.g. triangulation, respondent validation, more than one analyst)
 - If the findings are discussed in relation to the original research question
-

10. How valuable is the research?

HINT: Consider

- If the researcher discusses the contribution the study makes to existing knowledge or understanding e.g. do they consider the findings in relation to current practice or policy?, or relevant research-based literature?
- If they identify new areas where research is necessary
- If the researchers have discussed whether or how the findings can be transferred to other populations or considered other ways the research may be used

Appendix 2 Letter of Introduction



Rural Clinical School
School of Medicine
GPO Box 2100
Adelaide SA 5001
Australia
Tel: 61 8 8204 5017
Fax: 61 8 8204 5800
linda.sweet@flinders.edu.au

LETTER OF INTRODUCTION

Dear Sir/Madam

This letter is to introduce Katie Lucas who is a Masters of Clinical Education student in the School of Medicine at Flinders University. Katie is undertaking research leading to the production of a master's thesis and other publications on clinical placement assessment methods used in Maternal, Child and Family Health Nursing programs in Australia.

She would be most grateful if you would volunteer to assist in this project, by participating in a telephone interview and by sharing the assessment documentation used in the program you teach. It is anticipated that the interview will take up to 60 minutes, and document provision up to 10 minutes of your time. Further details of the study are provided on the attached information sheet. It is planned to audio record the interview and therefore we seek your consent, on the attached form, to record and then transcribe the interview, and to use the transcription in preparing the report and other publications, on condition that your name or identity is not revealed. The recording will be transcribed by a professional secretariat company, bound by the same level of confidentiality as the researchers.

Be assured that any information provided will be anonymous and none of the participants will be identifiable in the resulting thesis, or other publications. You are, of course, entirely free to discontinue your participation at any time or to decline to answer particular questions.

If you have any queries regarding this project please contact Dr Linda Sweet on the above address or by telephone on (08) 8204 5017, by fax on (08) 8204 5800 or by email: linda.sweet@flinders.edu.au

Thank you for your consideration of this activity.

Yours sincerely

Dr Linda Sweet
Senior Lecturer, Masters of Clinical Education

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project Number 5907). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on 8201 3116, by fax on 8201 2035 or by email human.researchethics@flinders.edu.au.

inspiring
achievement

Appendix 3 Information Sheet



Rural Clinical School,
School of Medicine
GPO Box 2100
Adelaide SA 5001
Tel: 08 8204 5017
Fax: 08 8204 5800
Linda.sweet@flinders.edu.au
CRCOS Provider No. 00114A

INFORMATION SHEET

Investigators:

Mrs Katie Lucas
School of Medicine
Flinders University
Ph: 0422 372 366

Dr Linda Sweet
School of Medicine
Flinders University
0404 837665

Dr Julian Grant
School of Nursing & Midwifery
Flinders University
08 8201 2126

Description of the study:

This study is part of a project titled Clinical Placement assessment methods used in Maternal, Child and Family Health Nursing (MCFHN) courses within Australia. This project will investigate the clinical assessment methods used to assess the Clinical competence of MCFHN students on clinical placements in Australia. This project is being conducted for a Masters of Clinical Education by research through Flinders University School of Medicine.

Purpose of the study:

Currently, Clinical assessment practices of MCFHN courses are largely unknown. The question to be asked in this research is, 'How are registered nurses, studying maternal child and family health nursing courses, assessed for clinical competence while on clinical placements?'

The Objectives are:

- To map the clinical practice assessment methods used in MCFHN programs offered in Australia
- To map the clinical practice assessment resources used in MCFHN programs offered in Australia
- To critique the clinical practice assessment methods and resources against the current clinical assessment literature available.

What will I be asked to do?

You are invited to participate in a one-on-one telephone interview with me. I will ask some in depth questions on the assessment methods used to assess students on clinical placement in your course. The interview will take up to an hour. You will also be asked to supply your current clinical placement documentation to be included in this project. The interview will be recorded using a digital voice recorder. Once recorded, the interview will be transcribed and stored as a computer file. Your participation in this study is voluntary.

What benefit will I gain from being involved in this study?

inspiring
achievement

You will be aiding in the investigation of how MCFHN courses across Australia assess their student's clinical competence. This is essential when ensuring graduates are ready for practice. The benefit to you will be the potential of assessing and benchmarking of students nationally to ensure consistency within the profession.

Will I be identifiable by being involved in this study?

All identifying information about you and the institution you work for will be removed. The interview will be typed-up and saved as a file. Any identifying information will be removed and the transcript and voice file will be stored on a computer protected by a password. Information will be discussed with Dr Sweet and Dr Grant for supervisory purposes. Your comments will not be linked directly to you.

Are there any risks or discomforts if I am involved?

I anticipate no risks from your involvement in this study. If you have any concerns regarding anticipated or actual risks or discomforts, please raise them with me.

How do I agree to participate?

Participation is voluntary. Please make sure you have had all of your questions answered fully before you agree to participate. If you are willing to participate I ask that you sign the consent form and return this to me via email or post. I will then make contact with you to arrange a suitable time for the interview. You are free to terminate the telephone interview at any time or withdraw your consent without effect or consequences.

How will I receive feedback?

This research will be written up in the form of a thesis for examination. It is anticipated that the research will also be published in a peer reviewed nursing journal. Please let me know if you would like to be notified of any resulting publications and I will be happy to contact you.

Thank you for taking the time to read this information sheet and we hope that you will accept our invitation to be involved. Please feel welcome to contact me or my supervisors if you have any further questions.

Appendix 4 Consent Form



CONSENT FORM FOR PARTICIPATION IN RESEARCH (by interview and document provision)

Clinical placement assessment methods used in Maternal, Child and Family Health Nursing programs in Australia
--

I
being over the age of 18 years hereby consent to participate as requested in the information sheet for the research project on Clinical placement assessment methods used in Maternal, Child and Family Health Nursing programs in Australia

1. I have read the information provided.
2. Details of procedures and any risks have been explained to my satisfaction.
3. I agree to audio recording of my information and participation.
4. I am aware that I should retain a copy of the Information Sheet and Consent Form for future reference.
5. I understand that:
 - I may not directly benefit from taking part in this research.
 - I am free to withdraw from the project at any time and am free to decline to answer particular questions.
 - While the information gained in this study will be published as explained, I will not be identified, nor will any institution for whom I work. Individual and Institutional information will remain confidential.
 - I may ask that the recording be stopped at any time, and that I may withdraw at any time from the research without disadvantage.
6. I agree/do not agree* to the tape/transcript* being made available to other researchers who are not members of this research team, but who are judged by the research team to be doing related research, on condition that my identity is not revealed. * delete as appropriate
7. I have had the opportunity to discuss taking part in this research with a family member or friend.

Participant's signature.....Date.....

I certify that I have explained the study to the volunteer and consider that she/he understands what is involved and freely consents to participation.

Researcher's name.....

Researcher's signature.....Date.....

NB: Two signed copies should be obtained. The copy retained by the researcher may then be used for authorisation of Items 8 and 9, as appropriate.

FINAL APPROVAL NOTICE

Project No.:	5907		
Project Title:	Clinical placement assessment methods used in Maternal, Child and Family Health Nursing programs in Australia		
Principal Researcher:	Mrs Katie Lucas		
Email:	luca0076@flinders.edu.au		
Address:	School of Medicine		
Approval Date:	25 February 2013	Ethics Approval Expiry Date:	31 December 2014

The above proposed project has been **approved** on the basis of the information contained in the application, its attachments and the information subsequently provided with the addition of the following comment:

Additional information required following commencement of research:

1. Please ensure that copies of the correspondence granting permission to conduct the research from all relevant University Department Heads are submitted to the Committee *on receipt*. Please ensure that the SBREC project number is included in the subject line of any permission emails forwarded to the Committee (item D8 and Conditional approval response – number 5).

RESPONSIBILITIES OF RESEARCHERS AND SUPERVISORS

1. **Participant Documentation**
Please note that it is the responsibility of researchers and supervisors, in the case of student projects, to ensure that:
 - all participant documents are checked for spelling, grammatical, numbering and formatting errors. The Committee does not accept any responsibility for the above mentioned errors.
 - the Flinders University logo is included on all participant documentation (e.g., letters of Introduction, information Sheets, consent forms, debriefing information and questionnaires – with the exception of purchased research tools) and the current Flinders University letterhead is included in the header of all letters of introduction. The Flinders University international logo/letterhead should be used and documentation should contain international dialling codes for all telephone and fax numbers listed for all research to be conducted overseas.

the SBREC contact details, listed below, are included in the footer of all letters of introduction and information sheets.

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project Number 'INSERT PROJECT No. here following approval'). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on 8201 3116, by fax on 8201 2035 or by email human.researchethics@flinders.edu.au.

2. Annual Progress / Final Reports

In order to comply with the monitoring requirements of the *National Statement on Ethical Conduct in Human Research (March 2007)* an annual progress report must be submitted each year on the **25 February** (approval anniversary date) for the duration of the ethics approval using the [annual progress / final report pro forma](#). Please retain this notice for reference when completing annual progress or final reports.

If the project is completed *before* ethics approval has expired please ensure a final report is submitted immediately. If ethics approval for your project expires please submit either (1) a final report; or (2) an extension of time request and an annual report.

Your first report is due on **25 February 2014** or on completion of the project, whichever is the earliest.

3. Modifications to Project

Modifications to the project must not proceed until approval has been obtained from the Ethics Committee. Such matters include:

- proposed changes to the research protocol;
- proposed changes to participant recruitment methods;
- amendments to participant documentation and/or research tools;
- extension of ethics approval expiry date; and
- changes to the research team (addition, removals, supervisor changes).

To notify the Committee of any proposed modifications to the project please submit a [Modification Request Form](#) to the [Executive Officer](#). Please note that extension of time requests should be submitted prior to the Ethics Approval Expiry Date listed on this notice.

Change of Contact Details

Please ensure that you notify the Committee if either your mailing or email address changes to ensure that correspondence relating to this project can be sent to you. A modification request is not required to change your contact details.

4. Adverse Events and/or Complaints

Researchers should advise the Executive Officer of the Ethics Committee on 08 8201-3116 or human.researchethics@flinders.edu.au immediately if:

- any complaints regarding the research are received;
- a serious or unexpected adverse event occurs that affects participants;
- an unforeseen event occurs that may affect the ethical acceptability of the project.

Andrea Fiegert
Executive Officer
Social and Behavioural Research Ethics Committee

c.c. Dr Linda Sweet

Dr Julian Grant

References

- Allison, H. and M. J. Turpin (2004). "Development of the student placement evaluation form: A tool for assessing student fieldwork performance." Australian Occupational Therapy Journal **51**(3): 125-132.
- Andre, K. (2000). "Grading student clinical practice performance: the Australian perspective." Nurse Education Today **20**(8): 672-679.
- Athlin, E., M. Larsson and O. Soderhamn (2012). "A model for a national clinical final examination in the Swedish bachelor programme in nursing." Journal of Nursing Managment **20**(1): 90-101.
- Attride-Stirling, J. (2001). "Thematic networks: an analytic tool for qualitative research." Qualitative Research **1**(3): 385-405.
- Australian Health Ministers Advisory Council (2011). National Framework for Universal Child and Family Health Services. K. S. Schmied. V, Barclay. L, Fowler. C: 1-36. Retrieved 30/8/2013 From [Http://www.health.gov.au/internet/main/publishing.nsf/NFUCFH.S.PDF](http://www.health.gov.au/internet/main/publishing.nsf/NFUCFH.S.PDF)
- Australian Institute of Health and Welfare (2011). Australia's welfare 2011. Canberra. Retrieved 15/3/2105 From [Http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id+10737420589](http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id+10737420589)
- Australian Nursing and Midwifery Federation (2005) "Competency standards for the advanced registered nurse." Periodical Competency standards for the advanced registered nurse, 1-40. 20/2/2015. Retrieved 18/3/2015 From anmf.org.au/documents/reports/Competency_Standards_adv_RN.pdf
- Australian Qualification Council (2013). Australian Qualification Framework. Australia. Retrieved 20/2/2015 From www.aqf.edu.au/
- Barnett, T., M. Cross, E. Jacob, L. Shahwan-Akl, A. Welch, A. Caldwell and R. Berry (2008). "Building capacity for the clinical placement of nursing students." Collegian **15**(2): 55-61.
- Beesley, J. (2004). "Managing competency within a perioperative setting." British journal of perioperative nursing : the journal of the National Association of Theatre Nurses **14**(2): 54.
- Benner, P. (1982). From novice to expert. Menlo Park California, Addison-Wesley Publication. **82**: 402.
- Benner, P., S. M, V. Leonard and L. Day (2010). Educating Nurses-A call for radical transformation. San Francisco CA, Jossey-Bass.

- Betony, K. (2012). "Clinical practice placements in the community: A survey to determine if they reflect the shift in healthcare delivery from secondary to primary care settings." Nurse Education Today **32**: 21-26.
- Billett, S. (2009). "Realising the educational worth of integrating work experiences in higher education." Studies in Higher Education **34**(7): 827-843.
- Bland, M., D. Oakley, B. Earl and S. Lichtwark (2011). "Examining the barriers to RN transition for students on competency assessment programmes." Nurs New Zealand **17**(5): 18-21.
- Bondy, K. (1983). "Criterion-referenced definition for rating scales in clinical education." Journal of Nursing Education **22**(9): 376-382.
- Bowen, G. A. (2009). "Document Analysis as a Qualitative Research Method." Qualitative Research Journal **9**(2): 27-40.
- Boyatzis, R. E. (1998). Transforming qualitative information : thematic analysis and code development. Thousand Oaks, CA : Sage Publications.
- Braun, V. (2013). Successful qualitative research : a practical guide for beginners, London : SAGE Publications Ltd.
- Braun, V. and V. Clarke (2006). "Using thematic analysis in psychology." Qualitative Research in Psychology **3**(2): 77-101.
- Brennan, K. M. and S. C. Lennie (2010). "Students' experiences and perceptions of the use of portfolios in UK pre-registration dietetic placements: a questionnaire-based study." Journal of Human Nutrition and Dietetics **23**: 133-143.
- Briggs, C. (2007). "Nursing Practice in Community Child Health: developing the nurse-client relationship." Contemporary Nurse **23**(2): 303-311.
- British Dermatology Nursing Group (2012). Dermatology Nursing Competencies: Developing dermatology nurses from novice to expert. A. Davies, D. Joseph et al. London, British Dermatology Nursing Group: 1-21. Retrieved 10/6/2012 From [Http://www.bdng.org.uk](http://www.bdng.org.uk)
- Bryman, A. (2012). Social research methods. Oxford, Oxford : Oxford University Press.
- Burns, C., M. Beauchesne, P. Ryan-Krause and K. Sawin (2006). "Mastering the preceptor role: Challenges of clinical teaching." Journal of Paediatric Health Care **20**(3): 172-183.
- Byrom, T. and V. Aiken (2014). ""Doing it differently" Re-designing the curriculum to face the challenges of student work-based learning opportunities." Higher Education, Skills and Work-Based Learning **4**(3): 271-283.

- Calhoun, J. G., C. A. Wrobel and J. R. Finnegan (2011). "Current State in U.S. Public Health Competency-Based Graduate Education." Public Health Reviews **33**(1): 148-167.
- Calman, L., R. Watson, I. Norman, S. Redfern and T. Murrells (2002). "Assessing practice of student nurses: methods, preparation of assessors and student views." Journal of Advanced Nursing **38**(5): 516-523.
- Coffey, A. (2005). "The clinical learning portfolio: a practice development experience in gerontological nursing." Journal of Clinical Nursing **14**(8B): 75-83.
- Cowan, D. T., I. J. Norman and V. P. Coopamah (2005). "Competence in nursing practice: a controversial concept: a focused review of literature." Nurse Education Today **25**: 355-362.
- Cowley, S., W. Cann, S. Dowling and H. Weir (2007). "What do health visitors do? A national survey of activities and service organisation. ." Public Health **121**: 869-879.
- Coyne, E. and J. Needham (2012). "Undergraduate nursing students' placement in speciality clinical areas: understanding the concerns of the student and registered nurse." Contemporary Nurse **42**(1): 97-104.
- Creswell, J. W. (2003). Research design: qualitative, quantitative and mixed methods approaches. London, Sage Publishing, Inc.
- Creswell, J. W. and D. L. Miller (2000). "Determining Validity in Qualitative Inquiry." Theory into practice **39**(3): 124-130.
- Critical Appraisal Skills Program, C. (2014, 31.05. 2013). "CASP qualitative research checklist." Retrieved 30.6.2012, from http://media.wix.com/ugd/dded87_29c5b002d99342f788c6ac670e49f274.pdf.
- Cusack, L., S. Gilbert and J. Fereday (2013). "Flexibility in Competency-Based Workplace Transition Programs: An Exploratory Study of Community Child and Family Health Nursing." The Journal of Continuing Education in Nursing **44**(3): 129-136.
- Damen, A., R. Remmen, J. Wens and D. Paulus (2011). "Evidence based post graduate training. A systematic review of reviews based on the WFME quality framework." Medical Education **11**(1): 80.
- Darbyshire, P. (1993). "In defence of pedagogy: A critique of the notion of androgogy." Nurse Education Today **13**: 328-335.
- Das, K., S. Malick and K. S. Khan (2008). "Tips for teaching evidence-based medicine in a clinical setting: lessons from adult learning theory. Part one." Journal of the Royal Society of Medicine **101**(10): 493-500.

- Dijksterhuis, M. G., M. Voorhuis, P. W. Teunissen, L. W. Schuwirth, O. T. Ten Cate, D. D. Braat and F. Scheele (2009). "Assessment of competence and progressive independence in postgraduate clinical training." Medical Education **43**(12): 1156-1165.
- Dijksterhuis, M. G. K., M. Voorhuis, P. W. Teunissen, L. W. T. Schuwirth, O. T. J. Ten Cate, D. D. M. Braat and F. Scheele (2009). "Assessment of competence and progressive independence in postgraduate clinical training." Medical Education **43**(12): 1156-1165.
- Dolan, G. (2003). "Assessing student nurse clinical competency: will we ever get it right?" Journal of Clinical Nursing **12**(1): 132-141.
- Doughty, R., T. Harris and M. Mclean (2007). "Tripartite assessment of learners during practice placements in midwifery pre-registration programmes." Education + Training **49**(3): 227-235.
- Driscoll, J. and B. Teh (2001). "The potential of reflective practice to develop individual orthopaediatric nurse practitioners and their practice." Journal of Advanced Nursing **5**: 95-103.
- Dunn, S. V. (2000). The development of competency standards for specialist critical care nurses. Oxford, Oxford : Blackwell Science.
- Elcigil, A. and H. Y. Sari (2008). "Students' opinions about and expectations of effective nursing clinical mentors." Journal of Nursing Education **47**(3): 118-123.
- Embo, M., E. Driessen, M. Valcke and C. P. M. Van Der Vleuten (2015). "Intergrated learning assessment and supervision in a competency frameworkfor clinical workplace education " Nurse Education Today **35**: 341-346.
- Fahy, A., D. Tuohy, M. C. Mcnamara, M. P. Butler, I. Cassidy and C. Bradshaw (2011). "Evaluating clinical competence assessment. (art & science: research) (Survey)." Nursing Standard **25**(50): 42.
- Ferguson, A., S. Mcallister, M. Lincoln, L. Mcallister and S. Owen (2010). "Becoming familiar with competency-based student assessment: an evaluation of workshop outcomes." International Journal of Speech Language and Pathology **12**(6): 545-554.
- Foss, G. F., J. K. Janken, D. R. Langford and M. M. Patton (2004). "Using professional specialty competencies to guide course development." Journal of Nursing Education **43**(8): 368-375.
- Fowler, C., V. Schmied, K. Psaila, S. Kruske and C. Rossiter (2014). "Ready for practice: What child and family health nurses say about education." Nurse Education Today **35**: 67-72.

- Fraser, S., J. Grant and T. Mannix (2014). "The role and experiences of child and family health nurses in developed countries: a review of the literature " Neonatal, Paediatric and Child Health Nursing **17**(3).
- Gaberson, K. B. (2006). Clinical teaching strategies in nursing, New York, NY Springer Publishing Company, LLC.
- Gadbury-Amyot, C. C., J. Kim, R. L. Palm, G. E. Mills, E. Noble and P. R. Overman (2003). "Validity and reliability of portfolio assessment of competency in a baccalaureate dental hygiene program." Journal of Dental Education **67**(9): 991.
- Gadbury-Amyot, C. C., J. Kim, R. L. Palm, G. E. Mills, E. Noble and P. R. Overman (2003). "Validity and reliability of portfolio assessment of competency in a baccalaureate dental hygiene program." Journal of Dental Education **67**(9): 991-1002.
- Gardner, A, G, Gardner, F, Coyer, A, Henderson, H, Gorsby and S, Lenson. (2014). "Educating Nurse Practitioners:Advanced Speciality Competence, clinical learning and governance Final Report". Australian Catholic University. Office for Learning and Technology (OLT). Retrieved: 8/8/2015 From [Http://www.olt.gov.au](http://www.olt.gov.au)
- Gill, F., G. Leslie and K. Southerland (2006). "Evaluation of a clinical performance assessment tool (CPAT) within a critical care context." Australian Critical Care **19**(3): 105-113.
- Guest, E. M., D. R. Keatinge, J. Reed, K. R. Johnson, H. M. Higgins and J. Greig (2013). "Implementing and evaluating a professional practice framework in child and family health nursing: a pilot project." Nurse Education in Practice **13**(5): 393-399.
- Haggis, T. (2002). "Exploring the black box of process: A comparison of theoretical notions of the adult learner with accounts of post graduate learning experience." Studies in Higher Education **27**(2): 207-220.
- Handler, A., H. Grason, M. Ruderman, M. Issel and B. Turnock (2006). "Assessing capacity and measuring performance in Maternal and Child health." Maternal and Child Health Journal **6**(2): 115-126.
- Hanley, E. and A. Higgins (2005). "Assessment of clinical practice in intensive care: a review of the literature." Intensive and Critical Care Nursing **21**(5): 268.
- Hanley, E. and A. Higgins (2005). "Assessment of clinical practice in intensive care: a review of the literature." Intensive and Critical Care Nursing **21**(5): 268-275.
- Hartigan-Rogers, J., S. Cobbett, M. Amirault and M. Muise-Davis (2007). "Nursing graduates' perception of their undergraduate clinical placement." International Journal of Education Scholarship **4**(1): 1-12.

- Hartree, A. (1984). "'Malcom Knowles" theory of Androgogy: A critique." International Journal of Lifelong Education 3(3): 203-210.
- Health Workforce Australia (2011) "Mapping clinical placements: Capturing opportunities for growth-Demand (University) Study." Periodical Mapping clinical placements: Capturing opportunities for growth-Demand (University) Study, 1-93. Retrieved 22/2/2015 From [Http://www.hwa.gov.au/sites/.../mcp-cog-demand-report-a20111028.pdf](http://www.hwa.gov.au/sites/.../mcp-cog-demand-report-a20111028.pdf)
- Helms, M. and J. Nixon (2010). "Exploring SWOT anaysis-where are we now": A review of academic reserach from the last decade." Journal of Strategy and Management 3(33): 215-251.
- Henderson, A., M. Twentyman, E. Eaton, D. Creedy, P. Stapleton and B. Lloyd (2010). "Creating supportive clinical learning environments: an intervention study." Journal of Clinical Nursing 19(1-2): 177-182.
- Henderson, A. and S. Tyler (2011). "Facilitating learning in clinical practice: Evaulation of a trial of a supervisor of a clinical education role." Nurse Education in Practice 11(5): 288-292.
- Heron, J. (1989). The facilitators handbook. Suffolk, Kogan Page.
- Hewitt-Taylor, J. (1998). "The education of registered nurses for practice in paediatric intensive care units in Australia and New Zealand." Intensive and Critical Care Nursing 14(2): 74-81.
- Holmboe, E., J. Sherbino, D. M. Long, Swing, Sr. and Frank, Jr. (2010). "The role of assessment in competency- based medical education." Medical Teacher 32(8): 676-682.
- Holmboe, E. S., J. Sherbino, D. M. Long, S. R. Swing and J. R. Frank (2010). "The role of assessment in competency-based medical education." Medical Teacher 32(8): 676-682.
- Holton, E. F., R. Swanson and S. Naquin (2001). "Androgogy in practice: Clarifying the androgogical model of adult learning." Performance Improvement Quarterly 14(1): 118-143.
- Howie, L. (2013). Narrative Enquiry and Health Research Research Methods in Health - Foundations for Evidence-based practice. P. Liamputtong. Victoria Australia, Oxford University Press: 72-84.
- Joyce, P. (2005). "A framework for portfolio development in postgraduate nursing practice." Journal of Clinical Nursing 14(4): 456-463.

- Joyce, P. (2005). "A framework for portfolio development in postgraduate nursing practice." Journal of Clinical Nursing **14**(4): 456-463.
- Kaiser, K. L. and E. J. Rudolph (2003). "Achieving clarity in evaluation of community/public health nurse generalist competencies through development of a clinical performance evaluation tool." Public Health Nursing **20**(3): 216-227.
- Karayurt, O., H. Mert and A. Beser (2009). "A study on development of a scale to assess nursing students' performance in clinical settings." Journal of Clinical Nursing **18**(8): 1123-1130.
- Klein, C. J. (2006). "Linking competency-based assessment to successful clinical practice." Journal of Nursing Education **45**(9): 379-383.
- Knowles, M. S. (2005). The adult learner : the definitive classic in adult education and human resource development. Amsterdam ; Boston, Amsterdam ; Boston : Elsevier Butterworth-Heinemann.
- Komaratat, S. and A. Oumtane (2009). "Using a mentorship model to prepare newly graduated nurses for competency." Journal of Continuing Education in Nursing **40**(10): 475-480.
- Kruske, S., L. Barclay and V. Schmied (2006). "Primary Health Care, Partnership and Polemic: Child and Family Health Nursing Support in Early Parenting." Australian Journal of Primary Health **12**(2): 57.
- Kruske, S. and J. Grant (2012). "Educational preparation for maternal, child and family health nurses in Australia." International Nursing Review **59**(2): 200-207.
- Laseter, K (2007) "Clinical Judgement Development: using simulation to create an assessment rubric". Journal of Nursing Education **46**(11): 496-503
- Leigh, I. W., I. L. Smith, M. J. Bebeau, J. W. Lichtenberg, P. D. Nelson, S. Portnoy, N. J. Rubin and N. J. Koslow (2007). "Competency assessment models." Professional Psychology-Research and Practice **38**(5): 463-473.
- Lennie, S. C. and C. Juwah (2010). "Exploring assessment for learning during dietetic practice placements." Journal of Human Nutrition and Dietetics **23**(3): 217-223.
- Levett-Jones, T., J. Gersbach, C. Arthur and J. Roche (2011). "Implementing a clinical competency assessment model that promotes critical reflection and ensures nursing graduates' readiness for professional practice." Nurse Education in Practice **11**(1): 64.
- Liamputpong, P. (2013). Qualitative research methods. South Melbourne, Vic. : Oxford University Press.

- Liamputtong, P. (2013). The Science of Words and the Science of Numbers: Research Methods as Foundations for Evidence- based Practice in Health. Research methods in health : foundations for evidence-based practice. South Melbourne, Vic., South Melbourne, Vic. : Oxford University Press: 3-23.
- Lincoln, Y. S. (1985). Naturalistic inquiry. Beverly Hills, California, Beverly Hills, California : Sage Publications.
- Lincoln, Y. S. (2005). Content, Lived Experience, and Qualitative Research. San Francisco CA, Berrett-Koehler Publishers, Inc.
- Livsey, K. (2009). "Structural empowerment and professional nursing practice behaviours fo Baccalaureate nursing students in clinical learning envrionments." International Journal of Education Scholarship **6**(1): 1-16.
- Luhanga, F., P. Dickieson and S. Mossey (2010). "Preceptor preparation: An investment in the future generation of nursing." International journal of Education Scholarship **7**(1): 1-18.
- Macduff, C. and B. J. West (2004). "An evaluation of an educational programme to prepare family health nurses." Nurse Education Today **24**(7): 575-583.
- Maternal and Child Health Special Interest Group Anf Vic Branch. (2007). "Maternal & Child Health Nurse Position Statement." from http://www.pc.gov.au/_data/assets/pdf_file/0007/105739/sub015.pdf.
- Mcallister, S., M. Lincoln, A. Ferguson and L. Mcallister (2010). Issues in developing valid assessments of speech pathology students' performance in the workplace. International Journal of Language and Communication Disorder. Oxford, UK. **45**: 1-14.
- Mcallister, S. M. (2005). Competency based assessment of speech pathology students & performance in the workplace, University of Sydney. Retrieved 10/3/2013 From [ses.library.usyd.edu.au/bitstream/2123/1130/1/01 front.pdf](http://ses.library.usyd.edu.au/bitstream/2123/1130/1/01%20front.pdf)
- Mccarthy, B. and S. Murphy (2008). "Assessing undergraduate nursing students in clinical practice: do preceptors use assessment strategies?" Nurse Education Today **28**(3): 301.
- Mccready, T. (2007). Portfolios and the assessment of competence in nursing: A literature review. International Journal of Nursing Studies. **44**: 143-151.
- Mcgaughey, J. (2004). "Standardizing the assessment of clinical competence: an overview of intensive care course design." Nursing in Critical Care **9**(5): 238-246.

- McMullan, M. (2008). "Using portfolios for clinical practice learning and assessment: The pre-registration nursing students perspective." Nurse Education Today **28**(7): 873-879.
- Mcneil, P., C. Hughes, S. Toohey and S. Bruce Dawton (2006). "An innovative outcome-based medical education program built on adult learning principles." Medical Teacher **20**(6): 527-534.
- Merriam, S. B. (2001). "Androgogy and self directed learning: Pillars of adult learning theory." New directions for adult and continuing education(89).
- Milligan, F. (1997). "In defence of Androgogy: Part 2: On educational process consistent with modern nursing's aims." Nurse Education Today **17**: 487-493.
- Minichiello, V. (2008). In-depth interviewing : principles, techniques, analysis. Sydney, N.S.W. : Pearson Education Australia.
- Mitchell, M. and M. Courtney (2005). "Improving transfer from the intensive care unit: The development, implement and evaluation of a brochure based on Knowle's adult learning theory." International Journal of Nursing Practice **11**: 257-268.
- Morse, J. M., M. Barrett, M. Mayan, K. Olson and J. Spiers (2002). "Verification strategies for establishing reliability and validity in qualitative research." International Journal of Qualitative Methods **1**(2): 13-22.
- Morse, J. M. and P. A. Field (1995). Qualitative research methods for health professionals. Thousand Oaks CA, SAGE.
- Murray, L. and B. Lawrence (2000). Practitioner-Based Enquiry Principles for Post Graduate Research. London, Falmer Press.
- Neary, M. (2001). "Responsive Assessment: Assessing Student Nurses' Clinical Competence." Nurse Education Today **21**(1): 3-17.
- New South Wales. Department of Health (2011). Child and Family Health Nursing: Professional Practice Framework 2011-2016. Nursing and Midwifery Office. Health System Support. N. S. W. Department Of Health. North Sydney NSW, Department of Health. Retrieved 12/4/2014 From <http://www.health.nsw.gov.au/nursing/projects/Publications/child-and-family-health-practice-framework.pdf>
- Newton, J. M., B. C. Jolly, C. M. Ockerby and W. M. Cross (2010). "Clinical learning environment inventory: factor analysis." Journal of Advanced Nursing **66**(6): 1371-1381.

- Newton, J. M., B. C. Jolly, C. M. Ockerby and W. M. Cross (2012). "Student centredness in clinical learning: the influence of the clinical teacher." Journal of Advanced Nursing **68**(10): 2331-2340.
- Norcini, J. and V. Burch (2007). "Workplace-based assessment as an educational tool: AMEE Guide No.31." Medical Teacher **29**: 855-871.
- Nursing and Midwifery Board of Australia (2013). Framework for assessing national competence standards for registered nurses, enrolled nurses and midwives. Victoria Australia, Nursing and Midwifery Board of Australia. Retrieved 1/3/2013 From [Http://www.nursingmidwiferyboard.gov.au](http://www.nursingmidwiferyboard.gov.au)
- Nusing and Midwifery Board of Australia (2013). National Competency Standards for the Registered Nurse. Australian Nursing and Midwifery Council. Melbourne Victoria Nursing and Midwifery Board of Australia 11. Retrieved 1/3/2013 From [Http://www.nursingmidwiferyboard.gov.au](http://www.nursingmidwiferyboard.gov.au)
- O'connor, S. E., J. Pearce, D. Smith, D. Voegeli and P. Walton (2001). "An evaluation of the clinical performance of newly qualified nurses: a competency based assessment " Nurse Education Today **21**: 559-568.
- O'connor, T., G. M. Fealy, M. Kelly, A. Mcguinness and F. Timmins (2009). "An evaluation of a collaborative approach to assessment of competence among nursing students of three universities in Ireland." Nurse Education Today **21**: 559-568.
- Ockerby, C.M, Newton, J.M, Cross, W.M & Jolly, B.C. (2009) "A learning partnership exploring preceptorship through interviews with registered and novice nurses". Mentoring and Tutoring: Partnership in Learning. 17:4, 369-385
- Oermann, M. H., K. J. Saewert, M. Charasika and S. S. Yarbrough (2009). "Assessment and grading practices in schools of nursing: national survey findings part I." Nursing Education Perspectives **30**(5): 274-278.
- Oermann, M. H., S. S. Yarbrough, K. J. Saewert, N. Ard and M. E. Charasika (2009). "Clinical evaluation and grading practices in schools of nursing: national survey findings part II." Nursing Education Perspectives **30**(6): 352-357.
- Ogle, R., E. Bethune, P. Nugent, A. Walker and D. Wellman (2007). Mapping Postgraduate Nurse Education in Australia 2001-2002. **14**: 32-40.
- Ondeck, D. A. (1997). "Competency Assessment for Maternal Child Nursing " Home Health Care Management Practice **9**(78): 78-80.
- Onwuegbuzie, A. J. (2008). Interviewing the interpretive researcher: A method for addressing the crises of representation, legitimation, and praxis. **7**: 1.

- Paterson, E. K., W. E. Leff, M. M. Luce, D. M. Grady, M. E. Clark and R. E. Allen (2004). "From the Field: A Maternal-Child Health Nursing Competence Validation Model." MCN, The American Journal of Maternal/Child Nursing **29**(4): 230-235.
- Paterson, K. E., E. W. Leff, M. M. Luce, M. D. Grady, E. M. Clark and E. R. Allen (2004). "From the field: a maternal-child health nursing competence validation model." MCN: The American Journal of Maternal Child Nursing **29**(4): 230-235; quiz 236-237.
- Patton, M. Q. (1990). Qualitative evaluation and research methods. Newbury Park, Calif., Newbury Park, Calif. : Sage Publications.
- Pfeil, M. (2003). "Assessing the clinical skills performance of nursing students." Journal of Child Health Care **7**(3): 191-206.
- Pitts, J., C. Coles and P. Thomas (2001). "Enhancing reliability in portfolio assessment: 'shaping' the portfolio." Medical Teacher **23**(4): 351-356.
- Plunket. (2011). "Plunket Nurse." from <http://plunket.org.nz/what-we-do/careers/choose-a-career/clinical/plunket-nurse/>.
- Raufman, D. and V. Mann (2014). Teaching and learning in medical education: How theory can inform practice. Understanding Medical Evidence, Theory and Practice. T. Swanwick, John Wiley and Sons LTD. pp16-32
- Redfern, S., I. Norman, L. Calman, R. Watson and T. Murrells (2002). "Assessing competence to practise in nursing: a review of the literature." Research Papers in Education **17**(1): 51-77.
- Roodhouse, S., R. Doughty, T. Harris and M. Mclean (2007). "Tripartite assessment of learners during practice placements in midwifery pre - registration programmes." Education + Training **49**(3): 227-235.
- Rose, M. L. and D. L. Best (2005). Transforming practice through clinical education, professional supervision, and mentoring. Edinburgh, Edinburgh : Elsevier Churchill Livingstone.
- Rowe, J. (2010). "Commentary on Skar R (2010). The meaning of autonomy in nursing practice. ." Journal of Clinical Nursing **19**(17-18): 2662-2663.
- Ruona, W. E. A. (2005). Analyzing qualitative data. San Francisco California USA, Berrett-Koehler Publishers, Inc.
- Rutkowski, K. (2007). "Failure to fail: assessing nursing students' competence during practice placements.(art & science)." Nursing Standard **22**(13): 35.
- Sandelowski, M. (2000). "Whatever happened to qualitative description?" Research in Nursing and Health **23**(4): 334-340.

- Schaffer, M. A., S. Cross, L. O. Keller, P. Nelson, P. M. Schoon and P. Henton (2011). "The Henry street consortium population-based competencies for educating public health nursing students." Public Health Nursing **28**(1): 78-90.
- Schmied, V., J. Donovan, S. Kruske, L. Kemp, C. Homer and C. Fowler (2011). "Commonalities and challenges: a review of Australian state and territory maternity and child health policies.(Report)." Contemporary Nurse **40**(1): 106.
- Schmied, V., C. Fowler, C. Rossiter, C. Homer, S. Kruske and C. H. Team (2014). "Nature and frequency of services provided by child and family health nurses in Australia: results of a national survey." Australian Health Review **38**(2): 177-185.
- Schuwirth, L. W. (2004). "Assessing medical competence: finding the right answers." Clinical Teacher **1**(1): 14-18.
- Scott, T. L., N. A. Pachana and K. Sofronoff (2011). "Survey of Current Curriculum Practices within Australian Postgraduate Clinical Training Programmes: Students' and Programme Directors' Perspectives." Australian Psychologist **46**(2): 77-89.
- Serry, T. and P. Liamputtong (2013). The indepth Interviewing Method in Health. Research methods in health: Foundations for Evidence Based Practitce. P. Liamputtong. Victoria Australia, Oxford University Press: 40-53.
- Skår, R. (2010). "The meaning of autonomy in nursing practice." Journal of Clinical Nursing **19**(15 - 16): 2226-2234.
- Swanson, R. A. (2005). The challenges of Research in Organisations. San Francisco USA, Berrett-Koehler Publishers, Inc.
- Sweet, L. P., P. A. Glover and T. Mcphee (2014). "The midwifery miniCEX--a valuable clinical assessment tool for midwifery education." Nurse Education in Pactice **13**(2): 147-153.
- Taleghani, M., E. S. Solomon and W. F. Wathen (2004). "Non- graded clinical evaluation of dental students in a competency-based education program." Journal of Dental Education **68**(6): 644.
- Taleghani, M., E. S. Solomon and W. F. Wathen (2004). "Non-graded clinical evaluation of dental students in a competency-based education program." Journal of Dental Education **68**(6): 644-655.
- Taylor, B. and M. Kroth (2009). "Andragogy's transition into the future: Meta-analysis of Andragogy and its search for a measurable instrument." Journal of Adult Education **38**(1): 1-11.
- Taylor, J., M. Hayes and L. Wallace (2012). "Dental hygiene student expeirences in external placements in Australia." Journal of Dental Education **76**(5): 651-655.

- Thomas, E. and J. K. Magilvy (2011). "Qualitative rigor or research validity in qualitative research." Journal for Specialists in Pediatric Nursing **16**(2): 151-155.
- Thorne, S., L. Jensen, M. H. Kearney, G. Noblit and M. Sandelowski (2004). "Qualitative metasynthesis: reflections on methodological orientation and ideological agenda." Qualitative Health Research **14**(10): 1342-1365.
- Thorne, S., S. R. Kirkham and J. Macdonald-Emes (1997). "Interpretive description: a noncategorical qualitative alternative for developing nursing knowledge." Research in Nursing and Health **20**(2): 169-177.
- Tilley, D. D. S. (2008). "Competency in Nursing: A Concept Analysis." Journal Of Continuing Education In Nursing **39**(2): 58-64.
- Tobin, G. A. and C. M. Begley (2004). "Methodological rigour within a qualitative framework." Journal of Advanced Nursing **48**(4): 388-396.
- Tolley, K., D. Marks-Maran and L. Burke (2010). "The Snapshot tool: a new form of practice assessment." British Journal of Nursing **19**(14): 905-911.
- Ulfvarson, J. and L. Oxelmark (2012). "Developing an assessment tool for intended learning outcomes in clinical practice for nursing students." Nurse Education Today **32**(6): 703-708.
- Van Der Vleuten, C. P., L. W. Schuwirth, F. Scheele, E. W. Driessen and B. Hodges (2010). "The assessment of professional competence: building blocks for theory development." Best Practice and Research. Clinical Obstetrics and Gynaecology **24**(6): 703-719.
- Wade, G. and E. Hayes (2010). "Special features: education: challenges and opportunities associated with preceptored community health clinical experiences." Public Health Nursing **27**(5): 459-467.
- Walters, J. and J. Adams (2002). "A child health nursing objective structured clinical examination (OSCE)." Nurse Education in Practice **2**(4): 224-229.
- Walters, L., J. Greenhill, J. Richards, H. Ward, N. Campbell, J. Ash and L. W. T. Schuwirth (2012). "Outcomes of longitudinal intergrated clinical placement for students, clinicians and society." Medical Education **46**: 1028-1041.
- Ward, H. and A. Willis (2006). "Assessing advanced clinical practice skills: Helen Ward and Annaliese Willis show how the development of an objective structured clinical assessment (OSCA) has enabled assessment of nurse practitioner advanced clinical practice skills at Masters level." Primary Health Care **16**(3): 22.

- Watson, R., A. Stimpson, A. Topping and D. Porock (2002). "Clinical competence assessment in nursing: a systematic review of the literature." Journal of Advanced Nursing **39**(5): 421-431.
- Way, R. (2002). "Assessing clinical competence." Emergency nurse : the journal of the RCN Accident and Emergency Nursing Association **9**(9): 30.
- Welch, A. (2011). Qualitative research design. Research Methods in Nursing and Midwifery: Pathways to Evidence-Based Practice S. Jirojwong, M. Johnson and A. Welch. Sydney NSW Australia, Oxford University Press: 109-135.
- Welch, A. and S. Jirojwong (2011). Data Collection: Qualitative Research. Research Methods in Nursing and Midwifery- Pathways to evidence based practice. S. Jirojwong, M. Johnson and A. Welch. Victoria Australia, Oxford University Press: 211-234.
- Weston, J. M. (2008). "Defining control over nursing practice and autonomy." JONA: The Journal of Nursing Administration **38**(9): 404-408.
- While, A. E. (1994). "Competence versus performance: which is more important?" Journal of Advanced Nursing **20**: 525-531.
- Whitehead, D. (2013). An overview of research theory and process. Nursing and Midwifery Reserach- Methods and Appraisal for Evidence- Based Practice. Z. Schneider and D. Whitehead. Australia, Elsevier: 20-34.
- Wilkinson, J. (1999). "A practical guide to assessing nursing students in clinical practice." British Journal of Nursing **8**(4): 218-222.
- Wilkinson, T. (2007). "Assessment of Clinical Performance: Gathering Evidence." Internal Medical Journal **37**(9): 631-636.
- Williams, A., S. J. Wellard and E. Bethune (2001). "Assessing Australian undergraduate clinical learning." Collegian **8**(4): 9-13.
- Wooley, N. and Y. Jarvis (2007). "Situated cognition and cognitive apprenticeship: A model for teaching and learning clinical skills in a technologically rich and authentic learning environment." Nurse Education Today **27**: 73-79.
- Yanhua, C. and R. Watson (2011). "A review of clinical competence assessment in nursing." Nurse Education Today **31**(8): 832-836.
- Zilembo, M. and L. Monterosso (2008). "Towards a conceptual framework for preceptorship in the clinical education of undergraduate nursing students." Contemporary Nurse **30**(1): 89-94.