



Development of a professional recognition scheme for specialist nursing

Literature Review and Environmental Scan

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Contents

Executive Summary.....	3
Introduction	7
Methodology.....	8
Discussion.....	9
1. Credentialing terminology and definitions	9
2. Definition of specialist practice.....	12
3. Recognition of the intrinsic value of credentialing	12
4. The correlation between credentialing and improved patient outcomes.....	14
5. Developments in credentialing models and programs	16
6. Developing specialist practice standards.....	19
7. Education requirements	21
8. The cost of credentialing.....	22
9. Consumer participation and ‘person centred’ approaches to credentialing.....	23
Conclusion.....	23
Bibliography	25
References	30

Executive Summary

Note: This summary addresses the key findings from two separate literature reviews:

1. The Coalition of National Nursing Organisations Literature Review (2011), which provided the evidence base for the project to develop the Coalition of National Nursing Organisations' National Nurse Credentialling Framework.
2. The literature review following this Executive Summary, which provides a basis for the project: ***Development of a professional recognition scheme for specialist nursing*** (2014).

The history of credentialing in Australia can be traced back to the introduction of nursing competency standards in the late 1980s, when there was recognition of the need to identify specialist or advanced practice. Since that time, a few organisations have developed their own credentialing programs, and efforts were made by Royal College of Nursing, Australia in the late 1990s to introduce a national credentialing scheme. The various individual programs which emerged, however, were not consistent in their approach to educational requirements, specialist practice standards and processes for meeting credentialing criteria.

In 2006, a significant body of work was undertaken by the National Nursing and Nursing Education Taskforce (N3ET) to develop a specialist practice framework. Whilst this framework did not include credentialing, it did provide a useful definition of specialist practice which has since provided direction for the development or review of credentialing programs.

In 2009, the lack of consistency in credentialing specialist practice resulted in members of the Coalition of National Nursing Organisations (CoNNO) requesting work to be undertaken to address this. The resulting project, coordinated by the Australian Nursing and Midwifery Federation, led to the development of the CoNNO National Nurse Credentialling Framework and a Resource Toolkit (2011). The Framework was based on evidence from a review of the literature which was published as a supporting document.

In 2014, a further project has commenced to develop a professional recognition scheme for specialist nursing. This project intends to draw substantially on the previous work

undertaken by CoNNO in order to formulate a process for credentialing which is contemporary and evidence based. It was deemed appropriate, therefore, to undertake an additional review of the literature to identify any emerging issues in the field of credentialing.

In 2011, one of the key issues which was identified in the CoNNO literature review related to the inconsistencies in terminology – both within Australia and internationally. Having an acceptable credentialing definition for specialist nurses seeking recognition of their skills was considered important to avoid any confusion both within the profession and for other health service providers. The preferred definition was developed following extensive consultation with CoNNO members. The review also proposed a definition for specialist practice which, as discussed above, evolved from the N3ET report into specialist nursing practice in 2006. This definition is still considered appropriate, as it does not attempt to enter the debate about whether specialist nurses practice at advanced levels, or whether specialist practice is one part of a continuum which extends from generic entry level practice through to advanced practice and the role of the nurse practitioner.

There is important work currently underway in Australia, supported by the Nursing and Midwifery Board of Australia, to define advanced practice, so it may be appropriate to revisit the definition of specialist nursing practice when that work is completed, to ensure definitions remains contemporary.

Other issues explored in the CoNNO literature review included identification of the benefits and limitations relating to credentialing. Whilst many benefits were identified from North American experiences where credentialing (known as certification) was well established, few studies had specifically focused on Australian experiences. This review (2014) has been able to identify some local studies which have supported findings from elsewhere that credentialing has several intrinsic benefits, such as career advancement, a sense of achievement, professional satisfaction and empowerment. Barriers, as in 2011, continue to include cost, and lack of support from employers. However, this review has provided evidence of some innovative models where support is provided to credentialing programs from within the nursing profession and by employers.

In 2011, the authors of the CoNNO literature review reported that there was a lack of research to demonstrate a link between credentialing and improved patient outcomes. This has been previously identified as a significant barrier to increasing the profile of credentialing in Australia. There are now, however, studies which do demonstrate correlations between the two. These are described in this literature review, which concludes that, whilst acknowledging the difficulties in undertaking such research, more studies are warranted.

Another area of concern identified in the CoNNO literature review related to the differences in educational requirements and the lack of evidence based competency standards to provide the basis for specialist practice both at the time of initial credentialing and when re-credentialing. The CoNNO review included a table of CoNNO member organisations and their progress towards developing standards and a credentialing program. This illustrated the differences which existed in 2011. This review has revisited that data, and found that limited improvements have occurred. Exceptions include CRANA*plus*, which has recently developed practice standards and a credentialing framework for nurses working in remote or isolated practice, and the Australian College of Mental Health Nurses, (ACMHN) which undertook a scan of postgraduate mental health programs in 2011. This was part of a process to review the College's Credential for Practice program (CPP), and assisted in confirming a post graduate diploma as the minimum standard for meeting the criteria relating to the required level of education for credentialing.

The CoNNO review emphasised the development of evidence based specialist standards as an essential component for credentialing, but acknowledged some of the difficulties in doing this. This review has also referenced studies which describe various approaches in standards development, and has identified some of the challenges associated with undertaking the process.

In 2011, the importance of consumer participation was emphasised in the CoNNO literature review and the credentialing framework, with examples included in the resource kit demonstrating how this could occur throughout the credentialing process. Since then, there has been even greater attention given to patient centred care, consumer participation and the links with safety and quality. This review has re-visited the literature and provided

examples of work which emphasises the importance of including consumers throughout the credentialing process as a means to improve patient outcomes and also to raise the profile of credentialing.

This literature review has identified some key issues for consideration by specialist organisations participating in the project *to develop a professional recognition scheme for specialist nursing*. Whilst some of these replicate issues which were identified in the CoNNO review in 2011 which guided the development of the National Nurse Credentialing Framework, this review has provided contemporary evidence which may assist in the design and implementation of future credentialing programs.

Introduction

The purpose of this literature review and environmental scan is to provide background information and a rationale for the 2014 project leading to the **Development of a professional recognition scheme for specialist nursing**. The importance of recognising specialist nursing practice in Australia has a history of being viewed from two perspectives – its place in managing workforce issues in relation to safety and quality, and from the individual nurse’s perspective in providing professional advancement. This review of the literature draws on both perspectives, discussing latest trends in credentialing for individual nurses, including evidence relating to the intrinsic value of specialist credentialing, and secondly literature is presented supporting the premise that credentialing is associated with improved health outcomes.

Over the last ten years, there has been slow but increasing interest in nurse credentialing in Australia, possibly as a result of the reported success of the Australian College of Mental Health Nurses’ Credential for Practice Programⁱ, and a few other specialist credentialing programs. Approximately five years ago members of the Coalition of National Nursing Organisations (CoNNO), an alliance of more than 50 specialist national nursing organisations which work collectively to advance the nursing profession to improve health care, noted that there were significant differences between how these various programs were structured and operated. Interest was also expressed by some member organisations to have access to a template for introducing credentialing more widely. In response to this, in 2010-11, a project was undertaken by CoNNO to develop a national nurse credentialing framework and implementation toolkit to assist organisations considering developing their own programs. As part of the project, an extensive review of relevant literature up to 2010 was undertaken. The review addressed:

- Terminology, definitions and purpose of credentialling
- Benefits and limitations of credentialing
- Nursing regulation in Australia, which was in the process of moving from state based regulation to a national system in 2010.
- Nurse credentialling in Australia
- International nurse credentialling
- Credentialling in other health professions in Australia

The CoNNO report is attached as *Appendix 1*.

Findings from the 2011 literature review guided the development of the CoNNO National Credentialing Framework and Resource Toolkitⁱⁱ, which was published on the CoNNO website in 2011. Since 2011, there has continued to be interest both internationally and within Australia in the specialisation of nursing, and the credentialing processes which identify and monitor specialist skills and knowledge. This latest review of the literature (2014) undertaken as background information to assist participating organisations in the ***project to develop a professional recognition scheme for specialist nursing identifies*** key issues which need consideration. These are: the evolving meaning of the term ‘credentialing’ in the workplace in Australia, which has the potential to cause confusion amongst nurses and other health professionals; increasing evidence of the intrinsic value of credentialing; some recent evidence supporting the impact of credentialing on improving patient outcomes; descriptions of new models for credentialing; the importance of establishing evidence based practice standards for each specialty offering credentialing; meeting the cost of credentialing and consumer participation in the credentialing process.

Note: Whilst the CoNNO review and the framework used the Australian spelling of credentialing (ie. Credentialling with two ‘lls’) this paper uses the internationally accepted spelling with only one ‘l’.

In North America, the term ‘certification’ has the same meaning as ‘credentialing’ in Australia. In this review, when North American literature is discussed, the term ‘certification’ is used.

Methodology

An extensive review of recent literature (including grey literature) was undertaken with the following database sources utilised in conducting the search:

Medical Literature Analyses and Retrieval (MEDLINE), Cumulative Index of Nursing and Allied Health Literature (CINAHL), Pubmed, ProQuest, National Library of Australia Catalogue, Primo and the Cochrane Database of Systematic Reviews (CDSR). These databases were searched for relevant literature from 2009, using a range of terms and combinations of terms including: credentialling; credentialing, certification, nursing specialisation, nursing specialties, advanced practice, competence, competency assessment, capabilities. In addition searches using these terms were conducted using the Google search engine, confining access to pages from Australia, New Zealand, the United Kingdom, USA and Canada. Some relevant pre- 2009 papers were also identified from reference lists and where not previously accessed in the CoNNO review, these were also retrieved.

In total 89 papers were reviewed, with 46 being found to be of direct relevance to this project.

Discussion

1. Credentialing terminology and definitions

An important issue identified in the 2011 CoNNO literature review related to clarification of terminology, taxonomy and definitions used in the credentialing literature. The terminology continues to cause confusion, and is re-visited in this review of the literature in light of evolving workforce issues.

As described in the CoNNO review, there continues to be a lack of consensus in the use of the term 'credentialing' within the Australian health professions. For example, within nursing, credentialing has traditionally been used by employing health services (as opposed to professional bodies) to refer to competence in procedural activities such as cardio-pulmonary resuscitation, medication administration, manual handling and fire training. Employees are expected to be 'credentialed' in such activities as part of quality and safety requirements. This meaning has also extended to other health professionals. Within medicine, however, credentialing is described by the Australian Commission on Safety and Quality in Health Careⁱⁱⁱ (2009) as *the formal process used to verify the qualifications, experience, professional standing and other relevant professional attributes of clinicians*^{iv}. The recording of credentials of individual medical practitioners are an important component

of arranging contractual arrangements, the allocation of clinical privileges and defining individual scopes of practice.

This medical interpretation of the term credentialing has recently been expanded to the broader health workforce – and is mentioned here as it has the potential to cause confusion to those unfamiliar with the various meanings. The evolving usage of the term to allied health professionals and nurses has come about in part following the development of The National Safety and Quality Health Service Standards^v by the Australian Commission on Safety and Quality in Health Care, which were implemented nationally from 1 January 2013 and are compulsory for the majority of public and private healthcare organisations. The Australian Council of Healthcare Standards provide a review program to address the requirements of these new National Standards entitled EQulPNational . Within the EQulPNational program, Standard 1 – *Governance for Safety and Quality in Health Service Organisations*, and Standard 13 – *Workforce Planning and Management* refer to credentialing. Standard 13 articulates the requirement for organisations to have *credentialing processes* in place for *all clinicians*, and the need for identification of personnel responsible for credentialing and defining the scope of clinical practice of the workforce.

These credentialing processes refer, like medical credentialing requirements, to the recording of qualifications, experience and scope of practice of individual practitioners. As a result, state health departments and individual workplaces have either revised or produced various credentialing policy statements which are often closely aligned with scopes of practice of individual practitioners. Examples of these in the ACT and Queensland are summarised in Table 1, and demonstrate how the term ‘credentialing’ is now widely used within workplaces to refer to processes for identifying individual professional standing.

Table 1 – Examples of recent State/Territory policies relating to health workforce credentialing.

Date	Scope and source	Title	Summary of content
2012	Territory - ACT Government – Health Directorate ^{vi}	Policy – Senior Medical and Dental Practitioners Appointment and Credentialing	A policy which outlines the guiding principles and approach to: <ol style="list-style-type: none"> 1. Recruitment and appointment 2. Initial credentialing and defining scope of clinical practice 3. Ongoing performance review

			4. Scheduled re-credentialing and redefining of scope of clinical practice
2011/2012	Queensland Health ^{vii}	Set of 3 documents relating to credentialing of allied health professionals: 1. Guidelines for credentialing and defining scope of clinical practice for allied health professionals 2. Policy – credentialing and defining the scope of clinical practice and professional support for allied health professionals 3. Credentialing and defining scope of clinical practice for allied health professionals not recruited by Qld Health	A suite of documents which aim to provide policies, processes and accountabilities for all allied health professionals and their managers in Qld Health relating to credentialing and scope of clinical practice.

The expansion of the meaning of the term ‘credentialing’ to the broader health workforce has the potential to confuse nurses who are unfamiliar with other meanings associated with credentialing within nursing. In contrast to the workforce interpretation described above, professional nursing organisations both in Australia and overseas generally have a profession specific meaning for the term credentialing. In North America in particular, (where it is referred to as ‘certification’) it may be linked to regulatory requirements or mandatory qualifications for practising as a nurse in specialist fields of health (PMETB 2010, p.21). In Australia, however, as noted in the CoNNO report, nurse credentialing at a national level remains linked with demonstrating specialist or advanced practice skills. The agreed definition for credentialing which was adopted by CoNNO in 2011 following the development of a national framework for credentialing, was:

The process by which an individual nurse is designated as having met established specialist professional nursing practice standards as determined by the CoNNO member organisation. In Australia this is a voluntary process for nurses, and credentialing is governed by professional nursing organisations.

For the purposes of this paper, and to ensure consistency in relation to its meaning in the project **to develop a professional recognition scheme for specialist nursing**, the CoNNO definition will be adopted.

2. Definition of specialist practice

There is also much debate in the nursing literature about definitions for specialist practice. In 2006, the National Nursing and Nursing Education Taskforce (N3ET) paper entitled *A national specialisation framework for Nursing and Midwifery - Bringing order to the development of specialty areas of practice in Australia*^{viii} discussed this issue in detail, in particular addressing the relationship between specialist and advanced practice. The CoNNO literature review and Credentialing Framework (2011), also explored this relationship, viewing specialist practice as one part of a continuum from beginner to advanced practice nurse. CoNNO concluded that:

A specialty/area of nursing practice subscribes to the overall purposes, functions and ethical standards of nursing. It requires application of specially focused knowledge and skills. (Adapted from criteria 1 and 2, 'Specialty in Nursing', NNO, 2004)^{ix}.

As work is currently taking place to clarify the dimensions of the advanced practice nursing role in Australia^{xxi}, how this may impact on defining specialist nursing roles in the future remains unclear. For this reason, this review has not explored advanced practice/specialist practice interfaces any further. The review has therefore adopted the CoNNO definition of specialist practice cited above which avoids reference to advanced practice.

3. Recognition of the intrinsic value of credentialing

The CoNNO review of the literature noted that there was a body of evidence which demonstrated the intrinsic value of credentialing for individual nurses, and examples identified by the Canadian Nurses Association (CNA) were quoted. Recent literature from North America continues to provide evidence of the benefits of certification, and has led to continued growth in nurses voluntarily seeking recognition of specialist skills. The CNA has now certified almost 18,000 nurses in twenty different specialties, with the largest numbers per specialty being in gerontology, oncology and psychiatric and mental health nursing. Their 2014 website^{xii} describes certification as demonstrating a national standard of nursing excellence and continuing competence. The program now offers an Employer Recognition Award to nominated organisations which support nurses to undertake certification. The CNA views these employers as supporting excellence in nursing, and committing to

delivering the best in patient care. The website also describes the key benefits of certification for the individual specialist nurse as: achieving formal recognition by peers of specialist knowledge in the workplace; having opportunities for career advancement and greater responsibility; and the possibility to access potential increases in salary from some employers.

The Magnet Recognition Scheme administered by the American Nurses Credentialing Center also places emphasis on the benefits of certification by including two outcome indicators which are listed as examples of empirical quality and are specific to specialty certification: *the percentage of direct-care registered nurses (RNs) with certification*, and *the percentage of nurse leaders with certification*.^{xiii}

Stromberg et al (2005)^{xiv} undertook a study in the US to investigate the opinions of nurse managers about certification. Responses to a survey indicated that 86% of managers would prefer to employ a certified nurse over other nurses, with the most common reason being that certified nurses have a proven knowledge base in a given specialty. The survey was unable to identify improved patient outcomes, but did conclude that certification is valued in the workplace. Whilst Stromberg's survey relied on feedback from managers, Marshall (2009)^{xv} in her research into the benefits of certification in hospice and palliative care settings, explored nurse, employer and family opinions of certification. Her findings led her to state that certification is a 'win win' process for the employer, the patients and families and the specialist nurse. Employers, and patients and families benefit by having motivated and committed nurses who provide expert specialist care, and the individual clinician benefits by having increased self-confidence and a sense of empowerment. Martinez (2011)^{xvi} in another paper exploring certification in hospice and palliative nursing, draws on a range of studies including one with 11,000 participants across 20 specialities. She found evidence which supports views that specialty certification is associated with a range of professional benefits for the specialist nurse and increased clinical competence. From these studies though, barriers were identified which replicate findings reported in the 2011 CoNNO review. These included: lack of institutional reward and recognition, cost, and lack of support with regard to accessing materials and courses.

4. The correlation between credentialing and improved patient outcomes

Whilst there have been a significant number of international studies which identify the intrinsic value of credentialing for the nurse, there remains a paucity of evidence relating to the impact of credentialing on patient outcomes. Indeed, some studies which have attempted to 'prove' any direct benefits to patients arising from care specifically provided by credentialed nurses have been unsuccessful. (Schuelke et al, 2014^{xvii}, Wilkerson, 2011^{xviii}). This has been, in part reported as being due to the difficulties in measuring nursing sensitive patient outcomes, and certified nursing specific patient outcomes. As noted by Drenkard (2010), few researchers have used multivariate analyses to investigate relationships between specialty certification and patient, workforce, or organizational outcomes.^{xix} There have, however, been some recent studies from the US, and limited evidence from Australia which suggest interventions from credentialed mental health nurses may be linked to improved patient outcomes.

Kendall-Gallagher and Blegen's US study (2009)^{xx} explores the relationship between the number of certified nurses in intensive care units and reductions in adverse events. The study, believed to be the first in which quantitative data was used to explore the link between nurses competence, as measured by certification status and patients' outcomes, analysed data from 48 intensive care units to examine the relationships between unit nurse certification rates, organizational nursing characteristics (magnet status, staffing, education, and experience), and rates of medication administration errors, falls, skin breakdown, and 3 types of nosocomial infections. Results indicated that specialty certification and competence of registered nurses were related to patients' safety in intensive care units. The results provided a preliminary basis for further investigation. Boltz et al (2013)^{xxi} used a similar approach in a pilot study to examine the impact of certification on older patients in medical surgical units. They concluded that nursing-sensitive outcomes in hospitalized older adults may be influenced by nurse certification.

A further study by Kendall- Gallagher and colleagues (2011)^{xxii} reported on the relationship between educational levels of nurses, certification and surgical patient outcomes. The study, which used a large sample from four US states, included data from staff surveys, characteristics of hospitals where they worked and patient outcomes reviewed from surgical

patient discharge data. The findings indicated that there was a statistically significant correlation between decreased mortality and failure to rescue rates amongst nurses who had a baccalaureate degree and specialist certification. An additional finding was that years of experience in the hospital did not have a significant effect on patient outcomes. Limitations of the study included difficulties in controlling for some factors such as higher nursing hours per patient per day, education levels of doctors, and existing quality improvement initiatives in place in some hospitals. Conclusions drawn by the authors were that the results support the contribution of nurse certification in lowering surgical mortality amongst baccalaureate educated nurses. It was emphasised, however, that it was premature to conclude that certification will generally improve patient care. An area identified for future research was the need to investigate whether the process of undergoing certification changes the way a nurse practises, or whether those seeking certification already practised differently.

Lakeman and Bradbury's Australian paper (2014)^{xxiii} provides an indication of improved client outcomes when receiving care from credentialed mental health nurses. The study was designed to assess the effectiveness of the Mental Health Nurse Incentive Program (MHNIP), a government funded scheme in Australia that enables credentialed mental health nurses to work in primary care settings with people with complex mental health problems for as long as necessary. All nurses working in the program are required to be credentialed mental health nurses – a title obtained by successful application to the Credential for Practice program, which includes a rigorous process of peer review and evidence of advanced specialist knowledge. The program is administered by the Australian College of Mental Health Nurses.^{xxiv} The study utilised nurses' reports which compared admission symptoms with post intervention symptoms in clients, and concluded that significant improvements were measurable in some clients following intervention by credentialed mental health nurses. There were several limitations acknowledged in this study, including the non-random selection of client profiles, no comparison with a control group of non-credentialed mental health nurses, and no exploration of what elements of the program contributed to positive outcomes. However, the positive outcomes resulting from interventions provided by credentialed mental health nurses suggests that further analysis to explore correlations of the findings are warranted. In addition, the recognition by

the Australian Government of the importance of credentialing as a measure of expertise is also significant in the history and development of specialist nurse credentialing in Australia.

Also reported in the literature is the success of the Victorian Nurse Cervical Screening Providers Credentialing Program, which has been in place since 1996. The Victorian Cytology Service provides 'practice numbers' to nurse cervical screening providers who have successfully been awarded credentialing status. There are now approximately 500 credentialed nurse cervical screening providers, and the 2012 annual report of the Victorian Cervical Cytology Register notes that *the data in this report highlights the increasingly important role that nurses have in the success of the Victorian Cervical Screening Program, particularly in relation to the rising number of Pap tests performed by them in recent years and the high quality of their tests*^{xxv}. Statistics in the report indicate that credentialed nurses achieve a higher level of success in including endocervical cells in specimens (75.8%) compared with other providers (73.4%). Presence of endocervical cells is considered to be a marker of the quality of the practitioner's technique in undertaking the procedure. Anecdotal additional information provided on the PapScreen Victoria website also indicates that women report preferring to undergo their cervical screening with a credentialed nurse rather than other providers.

5. Developments in credentialing models and programs

With evidence continuing to emerge about the value of credentialing, health administrators and nurse leaders are closely monitoring, and in some cases assisting specialist organisations to develop specialist scopes of practice and standards for practice as a means of improving patient outcomes. For example, in the US, where credentialing (certification) has been in place for over 15 years, the American Nurses Association has provided a support service to nursing specialties since the late 1990s through its Congress on Nursing Practice and Economics (CNPE) and has procedures to approve specialist standards for practice. In 2010, a review of its processes took place. As part of this review it released a revised *Nursing's Social Policy Statement: The Essence of the Profession* (ANA, 2010^{xxvi}), and *Nursing: Scope and Standards of Practice, Second Edition* (ANA, 2010^{xxvii}) which includes a discussion about specialist nursing, characteristics of a specialty, certification and the development of standards for practice.

Holloway (2012) describes the recent development of the New Zealand Nurse Specialist Framework^{xxviii}, which has already been adopted by some specialist organisations in New Zealand. Whilst not a credentialing framework, role development is implicit within the New Zealand Framework and is designed to be responsive to future workforce needs by ensuring that a suitably qualified workforce of specialist nurses is available, and able to contribute to enhanced patient outcomes.

The author of the framework acknowledges international concerns raised about the increasing specialisation and sub-specialisation of the health professions and the subsequent plethora of specialist competency standards being developed. Rather than being based on specialist competencies, the framework takes a different approach and uses capability statements – which are viewed as more dynamic and responsive to specialist practice than competency standards, and *inspirational, aspirational and future looking* (p.148). This approach is not new – in 2005 the Australian Nursing and Midwifery Council Competency Standards for the Nurse Practitioner^{xxix} (now superseded) were released. These were originally designed as capability statements, reflecting the then evolving role of the Nurse Practitioner in Australia. As Holloway (2012) states, *capability is also recognized as an integral part of specialist expertise, where specialists not only need to be knowledgeable about the specialty but also be confident to apply their skills and knowledge in changing complex situations.* (p.149). Issues surrounding the development of practice standards are further described on page 19.

In Australia, as previously described, in 2006 the N3ET released a series of documents relating to specialisation, including a framework for defining and identifying specialty nursing. The framework and criteria for specialisation were consistent with an earlier document, the ICN Guidelines on Specialisation in Nursing (1992^{xxx}). The purpose of the N3ET framework was to *develop a robust and nationally consistent framework for the categorisation of specialties with a focus on assisting health workforce planning and policy development.*^{xxxi} Whilst the document did not refer to credentialing, it did create discussion amongst nursing groups about the defining features of specialty areas of practice. Additional work undertaken by the N3ET which was directed at assisting specialty nursing groups was the development of a governance framework.^{xxxii} Tools associated with the governance

framework were subsequently utilised in the development of the CoNNO Credentialing Framework (2010)^{xxxiii}.

Shortly after the release of the N3ET framework, the International Council of Nurses released its Framework for Nurse Specialities (2009)^{xxxiv}. This document was well received internationally, and subsequently adopted by the European Network of Nurses Organizations and the European Federation of Nurses Associations (previously the Standing Committee of Nurses of the EU) in Recommendations for a European Framework for Specialist Nursing Education.^{xxxv} The ICN framework emphasises that education and competence are the two key defining factors of specialist practice.

Since the release of the CoNNO Credentialing Framework, CRANaplus (previously the Council of Remote Area Nurses of Australia) is one organisation in Australia which has taken steps to implement its own credentialing program. In 2012- 13 it coordinated the *CRANaplus National Standards and Credentialing Project*,^{xxxvi} the aim of the project being to: develop a framework for clinical governance in remote areas; and to develop, trial and evaluate a credentialing process for the remote nursing and midwifery workforce in Australia. The process included undertaking a literature review of national and international standards relating to governance and remote area practice, agreeing on definitions about the specialty and clinical governance in remote areas, identifying characteristics of remote health services, and stating the pathways required to becoming a specialist.^{xxxvii}

An important component of the project was the development of national standards for nurses and midwives working in remote areas. A credentialing pilot process was set up, which required nurses and midwives to demonstrate their ability to meet the new national standards. Following completion of the project and evaluation of its outcomes, CRANaplus released its Framework for Remote Practice which states: *The process for becoming a credentialed remote area nurse is assessed against the Professional Standards of Practice within the specialty area as determined by CRANaplus*^{xxxviii}.

The CoNNO Literature Review (2011) described various credentialing models used overseas and within Australia. Whilst there have been various international developments in

clarifying roles for specialist nurses since that time, with the exception of the new CRAN*plus* framework described above, this review of the literature (2014) has failed to identify any significant new credentialing models and/or processes for achieving credentialed status in Australia. Of those CoNNO member programs previously described in the CoNNO Literature Review (2011), key components of the credentialing process continue to refer to the requirement for nurses to meet pre-determined specialist standards either by demonstrating skills, knowledge and attributes through a written examination, or by providing evidence (often in the form of a professional portfolio) of educational achievements, recency of specialist practice and/or peer review. Credentialing by sitting a written examination has not been commonly practised in Australia, with only two specialist nursing organisations, the Australian Association of Stomal Therapy Nurses^{xxxix}, and the Gastroenterological Nurses College of Australia^{xl} currently requiring this as part of the credentialing process. Most other programs continue to use various combinations such as meeting pre-determined post graduate education requirements, length of time and/or recency of practice in the specialty area of practice together with provision of evidence by peers and demonstration of continuing professional development activities related to the area of specialist skills.

Interestingly, credentialing processes in North America which were reviewed in 2011 for the CoNNO project were found to almost exclusively report the use of written examinations to award credentialing status. Literature for this review has found evidence in the US of a shift from 2012 towards credentialing by portfolio assessment. Examples include certification to become a Public Health Nurse, Forensic Nursing, Emergency Nurse Practitioners, and Genetics Nursing^{xli}. It has not been possible to identify the drivers for this change, although literature relating to the portfolio assessment process is described as being as robust as the examination process.^{xlii}

6. Developing specialist practice standards

In Australia, work undertaken by the N3ET (2006) to explore specialisation^{xliii} noted that evidence based competency standards are an important indicator of specialist knowledge and skill sets. This was later supported in the ICN Framework for Nurse Specialists (2009)^{xliv}. However, at the time of the development of the Framework, the N3ET chose to emphasise

the importance of good governance structures *per se* within specialty nursing organisations, noting that *ideally (but not essentially) there is evidence of governance processes for [competency standards] development and maintenance* (p.17). Later work by CoNNO^{xlv}, as previously noted, emphasises the importance of practice standards when defining credentialing. A search, however, of specialty nursing websites, and revisiting information contained in the CoNNO literature review (2011) indicate that there are still several specialty groups in Australia which do not have (or at least do not publicise or make accessible) their own evidence based practice standards – thus creating a potential barrier to the implementation of a credentialing process.

There is no doubt that the development of evidence based specialist practice standards may be viewed as a major barrier to implementing credentialing, being both time consuming and requiring skills in undertaking research. This is highlighted in a recent paper by O’Connell and Gardner (2012)^{xlvi} who describe a pilot study undertaken as the first step to develop specialist competency standards for emergency nurse practitioners in Australia. The study tested data collection processes, and concluded that utilising a mixed methods research methodology which included a focus group workshop and use of a Delphi technique was an appropriate approach when qualitative data is required to inform a quantitative measurement of an activity or phenomenon.

One publication which may assist organisations in developing their own evidence based practice standards is the International Council of Nurses (2009) *Framework of Competencies for the Nurse Specialist*.^{xlvii} This document provides a generic approach to developing specialist competencies and emphasizes specialist nursing practice as being based on a core body of nursing knowledge that is being continually expanded and refined by research, with mechanisms existing to support, review, and disseminate research.

As previously noted above, *CRANApplus* has recently developed its own standards for practice as part of its project to introduce a credentialing process for remote area nurses and midwives. The methodology utilised was based on a review of existing generic health and professional standards which were mapped to produce draft standards for nurses and

midwives. These were then piloted and evaluated by a team of experts to achieve consensus.

Regardless of what process is adopted, specialist nursing standards in Australia must articulate with and build upon the suite of professional nursing standards endorsed by the Nursing and Midwifery Board of Australia, including the National Competency Standards for the Registered Nurse (2006)^{xlviii}, which are currently under review. Specialist organisations will also need to be cognisant of other standards related to the area of specialty, and include reference to these when designing their own standards. The methodology used by CRAN*Aplus* noted above illustrates the importance of this.

7. Education requirements

The importance of undertaking formal education as part of the requirements to credential in a specialist area of practice was emphasised in the International Council of Nurses Framework for Nurse Specialities (2009),^{xlix} yet there appears to be little evidence of consistency across the profession in terms of the level of formal education required. Some specialty organisations do not specify any formal post graduate education, whilst others, such as the Australian College of Mental Health Nurses (ACMHN)^l require a minimum of a post graduate diploma. The scan of specialist organisations with credentialing programs which was undertaken for the development of the CoNNO Framework (2011) uncovered a lack of criteria for assessing the academic quality or rigor of courses with a focus on specialist areas of practice. Whilst at that time some courses were endorsed or accredited by Royal College of Nursing, Australia, others were not. The Framework emphasises the importance of courses being formally accredited, and suggest that this may be a role for the Australian Nursing and Midwifery Accreditation Council (ANMAC), although ANMAC currently only accredits programs leading to registration or endorsement of registered nurses, enrolled nurses, nurse practitioners and midwives^{li}.

The problem of identifying consistency in educational requirements for credentialed nurses was highlighted in work undertaken by the ACMHN in 2012 to inform its review of the Credential for Practice (CPP) program. The College undertook a scan of postgraduate mental health nursing programs^{lii} which identified a plethora of courses claiming to provide

specialist mental health content. Since specialist mental health nursing education is included as a key criterion for the CPP, it was considered critical that education providers and the ACMHN should collaborate to review and define the tiers of postgraduate training available in Australia.

8. The cost of credentialing

One of the issues raised in recent literature relates to the responsibility for meeting the cost of certification/credentialing. As noted in the CoNNO review, this was perceived by many nurses as a barrier to applying to become credentialed. Fleischman et al (2011)^{liii} reviewed best practices in certification in the US, and concluded that an important factor in promoting a culture of certification was the availability of fiscal resources to support nurses to undertake the necessary study and meet other costs associated with certification. Fleischman et al concluded that since health care facilities benefit from having a highly skilled certified health workforce, health care leaders should consider investing in the process by funding some costs associated with certification.

Also in the US, the ANA now sponsors a Certified Nurses Day^{tmiv} on 19 March each year, the date being selected to celebrate the birthday of the late Margreta Styles, the renowned expert who actively promoted the introduction of nurse credentialing in North America. The purpose of Certified Nurses Daytm is described as being to promote an annual day of recognition for and by healthcare leaders dedicated to nursing professionalism, excellence, recognition, and service. Health services are encouraged to profile the day and to offer awards, including financial sponsorship, to celebrate nursing excellence through certification.

In Australia, a recent project in Queensland led by the Office of the Chief Nurse has resulted in specialist mental health nurses being encouraged to become credentialed by the Australian College of Mental Health Nurses, with associated costs in obtaining their initial credential being met by the Office of the Chief Nurse^{lv}. The purpose of the project is to assist in the successful implementation of the Queensland Health Service Directive: Credentialing and defining the scope of clinical practice (Health Service Directive # QH-HSD-034:2013). The twelve month project, which commenced in 2013, established a cohort of Credentialing

Ambassadors who became local champions for Credentialing. Each Ambassador undertook training with the ACMHN for their role, and then ran credentialing forums in their local region. At these forums, mental health nurses were instructed and were assisted in completing their Credentialing applications. Nurses who attended the application forums were not required to pay the Credentialing Application Fee. As this program is ongoing, data relating to the numbers of credentialing applications received as part of this project is not currently available.

9. Consumer participation and 'person centred' approaches to credentialing

Partnering with patients is a key approach being promoted by health services and health departments internationally and in Australia. This approach is viewed as *transforming services to include patients and family as care team members and improve consumer engagement to promote safety & quality in health care*^{vi}.

Within the credentialing literature, no studies were able to be identified that specifically addressed consumer engagement in the credentialing process. However, drawing on literature which supports partnering with patients, consumer engagement was identified in the CoNNO Credentialing Framework as an important element in promoting credentialing, and potentially impacting on patient outcomes. Resource paper 3 in the CoNNO Credentialing Framework Toolkit provides examples of how consumers may be engaged in the credentialing process.

The CRAN*plus* credentialing framework, (2013)¹ also illustrates the importance of consumer engagement, describing this as one of the key pillars of clinical governance, and explains the various ways that consumers may participate and engage in improving health outcomes in remote and isolated areas.

Conclusion

This review of the literature builds on the work undertaken by CoNNO in 2011. It has identified some developments which have occurred in the field of specialist nursing practice and nurse credentialing, which may assist specialist organisations in Australia in adopting a model for credentialing which reflects the changing health landscape.

¹ CRAN*plus*. (2013). A clinical governance guide for remote and isolated health services in Australia. <https://crana.org.au/advocacy/professional-issues/a-clinical-governance-guide-for-remote-and-isolated-health-services-in-aust/>

In particular, contemporary definitions for credentialing have been clarified, and the importance of consistent post graduate specialist education requirements and evidence based specialist standards for practice has been established.

Costs relating to credentialing have been explored – with one model in Australia illustrating how support from the profession may assist in promoting credentialing in the workplace.

Moves to take a ‘person centred’ approach to credentialing are also reported in the literature, and may impact on future frameworks for credentialing.

Importantly, this review has also been able to provide some recent evidence of a link between care provided by credentialed nurses and improved patient outcomes.

Whilst there are still only limited numbers of nursing specialties in Australia which have formal credentialing processes in place, evidence is growing that credentialing provides confirmation to patients, employers and the profession of an individual nurse’s specialist skills and knowledge in a defined area of practice, and may be of significance in future workforce planning and management of safety and quality concerns.

Bibliography

The following table lists some relevant literature relating to credentialing since 2009, and provides a summary of key points. Not all these are referenced in the body of the literature review, but are included here as additional reading and for interest. It is not intended to be an inclusive list.

Reference	Country of origin	Peer reviewed Y/N	Description
RCN. (2010). Specialist nurses, hanging lives, saving money. <i>Royal College of Nursing Publications</i> . www.rcn.org.uk/_data/assets/pdf_file/0008/302489/003581.pdf	UK	No	Report prepared by the RCN as part of the 2010 UK General Election, to outline the importance of the role of specialist nurses in improving patient outcomes and saving money.
Wade, C. (2009). Perceived effects of specialty nurse certification: a review of the literature. <i>AORN Journal</i> . 89 (1).	USA	Yes	Review of literature between 1980 – 2008 relating to available evidence on the effect of nurse certification on patient outcomes, other health professionals and on the individual nurse. Key finding supports literature from the CoNNO review, that whilst certification has intrinsic value, most studies rely on descriptive and self reporting research, providing limited evidence of the benefits on patient outcomes.
Lundmark, V., Hickey, J., Haller, K., Hughes, R., Johantgen, M., Koithan, M., Newhouse, R., and Unruh, L. (2012). A national agenda for credentialing research in nursing. <i>American Nurses Credentialing Center</i> .	USA	Unclear	A report resulting from a summit convened by the American Nurses Credentialing Center (ANCC) to develop a national research agenda for credentialing in nursing. The report presents a conceptual model and provides questions for investigating the impact of credentialing on health care outcomes for nurses, patients and organisations.

<p>Kendall-Gallagher, D., Aiten, L., Sloane, D. and Cimiotti, J. (2011). Nurse specialty certification, inpatient mortality, and failure to rescue. <i>Journal of Nursing Scholarship</i>. 43 (2) 188 – 194.</p>	<p>USA</p>	<p>Yes</p>	<p>The purpose of the study was to determine if deaths of surgical inpatients following a major complication were affected by the certification status of nurses in the surgical units. The study reviewed data from all adult acute care hospitals in California, Florida, New Jersey and Pennsylvania. Analysis indicated that there was a decreased risk of inpatient mortality and failure to rescue associated with more highly qualified and educated nurses and with specialty certification. The number of years of experience of the nurse was not a predictor of patient mortality. Findings from the study suggest that certification of nurses who have undertaken higher education may be a promising investment for improving patient outcomes.</p>
<p>Holloway, K. (2012). The New Zealand Nurse Specialist Framework: clarifying the contribution of the nurse specialist. <i>Policy Politics Nursing Practice</i>. Accessed 8 May 2014 at http://ppn.sagepub.com/content/13/3/147.</p>	<p>New Zealand</p>	<p>Yes</p>	<p>Presents an overview of the NZ Nurse Specialist Framework which has been adopted by some specialist nursing groups to provide consistency and to assist workforce planning. The paper explores taxonomical differences and difficulties, and discusses the distinction between competence and capability as applied to nursing. The paper argues that competencies are measured against standards and reveal what an individual knows or can do, whereas capability identifies the extent that individuals can adapt to change, generate knowledge and continuously improve their performance. It argues that capability is an integral part of specialist expertise. The framework includes role development as being implicit and considered within the overarching context of patient/health care needs, and provides a means of considering nursing skill mix and workforce planning. It also assists nursing specialty groups to identify and articulate their contribution to patient care.</p>

Lakeman, R., and Bradbury, J. (2013). Mental health nurses in primary care: quantitative outcomes of the Mental Health Nurse Incentive Program. <i>Journal of Psychiatric and Mental Health Nursing</i> . 21 327 – 335.	Australia	Yes	The paper describes a study which explored the effectiveness of the Mental Health Nurse Incentive Program – a funding scheme in Australia that enables credentialed mental health nurses to work in primary care settings for as long as necessary to assist patients suffering complex mental health problems. The methodology of the study consisted of reviewing 64 completed case studies in which Health of the Nation Outcomes Scales (HoNOS) scores on admission were compared with the last completed rating to assess clinical outcomes. Whilst the authors identified limitations in the study, they concluded that the research suggests that the MHNIP does contribute positive and significant outcomes for some people – especially those with highly complex needs. The authors refer to other studies of the MHNIP which also support their findings with identified outcomes being reduced hospitalisations, and reduced demand for specialist health services.
Drenkard, K. (2013). Nurse credentialing research – a huge step forward. <i>Journal of Nursing Administration</i> . 43, (1), 4 – 5.	USA	Unclear	A perspective which describes the importance of the establishment of a national credentialing nursing research agenda in the US. Specifically, the American Nurses Credentialing Centre has established a committee in conjunction with the Institute of Medicine to address emerging priorities for credentialing research, methodologies and measures to assess the impact of credentialing, how credentialing has affected healthcare performance, quality and outcomes, and strategies for moving the credentialing research forward.
Author unknown. (2013). Certified Nurses Day Honours Nurse Specialists. <i>PR Newswire</i> . 14 March.	USA	No	Press release reporting on the 2013 Certified Nurses Day, established on March 19 following the death of Dr. Margretta Styles in 2005. The report, whilst focusing on certified infusion nurses, notes that the day honours the contributions of all certified nurses in advancing the profession and leading to better outcomes for patients. It notes that studies have demonstrated that certification empowers nurses, leads to greater job satisfaction, increased responsibilities and a role as mentors to others.

Royal College of Nursing, Australia. (2011). <i>Submission to the International Council of Nurses Credentialing Forum – Country paper, Australia.</i> www.icn.ch Accessed 7 May 2014.	Australia	No	Australian country report for the ICN Credentialing Forum, 2011. The paper provides an historical overview of credentialing, and the desire to develop a nationally consistent credentialing process for advanced practice nurses in line with the National Registration and Accreditation scheme introduced in 2010.
Alleman, K., Houle, K. (2013). Advanced Practice Registered Nurse Certification. <i>Nephrology Nursing Journal.</i> 40 (3). 219 - 222	USA	Yes	The paper describes the importance of certification for nephrology nurses and the components of the national Advance Practice Registered Nurses (APRNs) Consensus Model, introduced in 2006. This model includes four elements: licensure, accreditation of certification programs, a description of certification as being the formal recognition of the specialist and/or advanced knowledge skills and experience demonstrated by achievement of standards, and formal education (acronym 'LACE').
Kendall-Gallagher, D., Blegen A. (2009). Competence and certification of registered nurses and safety of patients in intensive care units. <i>American Journal of Critical Care.</i> 18 (2). 106 - 113	USA	Yes	This study explores the relationship between the number of certified nurses in intensive care units and reductions in adverse events. The study analysed data using linear modelling of 48 intensive care units to examine the relationships between unit certification rates, organizational nursing characteristics (magnet status, staffing, education, and experience), and rates of medication administration errors, falls, skin breakdown, and 3 types of nosocomial infections. Results indicated that specialty certification and competence of registered nurses are related to patients' safety.
Fitzpatrick, J. (2012). The case for certification and certification research. <i>Nursing Education Perspectives.</i> 33 (6).	USA	No	An editorial, which acknowledges the known professional and personal benefits of certification, but emphasises the need for additional research to identify the effects of nurse certification on patient outcomes.
Ashley, C. (2013). Review of credentialing literature. Unpublished. Southern NSW Local Health District.	Australia	No	Overview of 21 published articles in the literature relating to credentialing, with a specific focus on credentialing policies developed by health services in Australia.

Speech Pathology Association of Australia (2009). Credentialing Position Statement. http://www.speechpathologyaustralia.org.au/index.php?option=com_content&view=article&id=291&Itemid=131 Accessed 7 May 2014.	Australia	No	A position statement which provides a background to credentialing, with a focus on allied health. It links competency based specialist and advanced practice with credentialing at a local level by employers/organisations to ensure safe practice for patients. For review in 2014.
Ministry of Health, NZ Government. (2010). <i>The credentialing Framework for New Zealand Health Professionals</i> . http://www.health.govt.nz/publication/credentialing-framework-new-zealandhealth-professionals	New Zealand	No	An extensive document which includes definitions and key terms, principles of credentialing, the credentialing process, credentialing of medical practitioners, and future directions for credentialing nurses and allied health professionals
Australian Asthma and Respiratory educators Association Inc. Credentialing Program for Respiratory Educators – Asthma and COPD – Overview. www.area.org.au . Accessed 6 May 2014.	Australia	No	Description of multidisciplinary credentialing process for health professionals working as Respiratory Asthma and/or COPD educators. Document identifies 3 levels of credentialing based on ability to meet standards of practice and competency standards, and relationship of levels to individual professional disciplines.
NSW Health. (2012). <i>Statewide credentialing and scope of clinical practice project background paper</i> . www.health.nsw.gov.au/.../credentialing/pdf/background_paper.pdf . Accessed 8 May 2014.	Australia	No	Background paper released to support the development of state wide credentialing and scope of clinical practice processes for doctors and dentists. Aim of the project is to produce 2 deliverables: 1. Comprehensive electronic credentials and scope of clinical practice information system 2. Consistent set of guidelines for LHDs to use regarding scope of clinical practice of senior practitioners. Plan is to link electronic data with eRecruit and AHPRA to avoid duplication
ACHS. (2012) <i>EQiP National Standard 13</i> . Workforce Planning and Management. ACHS. http://www.achs.org.au/publications-resources/equipnational/ . Accessed 12 May 2014.	Australia	No	Reference to the requirement for health professionals to be credentialed found in Standard 13 of the 2012 ACHS EQiP National.

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