

Competency based standards for advanced practice in nephrology nursing

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Summary

The purpose of this paper is to present the outcomes of a nationwide nursing research project in Australia. Utilising the Delphi technique, ninety-four clinically based nephrology nurses reviewed a series of competency based standards documents. The purpose of this research was to reveal the ways in which nephrology nurses practice at an advanced level. The results will facilitate the way in which advanced practice nephrology nursing is understood and inform nursing curricula development.

Key words

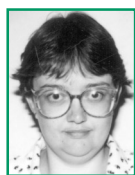
- Advanced practice
- Competency based standards
- Delphi technique

UNTIL RECENT TIMES much of what nurses know and how they practice has gone unrecognised. This fact has hampered the way in which specialisation in nursing practice has developed over time and has resulted in a rather haphazard approach to the understanding of specialty nursing practice. This is nowhere more apparent than in nephrology nursing. Nephrology nurses are both practical and versatile and practice within and across a broad range of subspecialties within acute, community and more isolated settings. The complex range of knowledge, skills, attributes and management abilities they develop over time create therefore, innovative, insightful, reflexive, highly skilled practitioners.

Because of its complex nature, articulating advanced practice within this specialised field of nursing has always been problematic. This paper documents the results of a national nursing research project undertaken by the Renal Society of Australasia (RSA). The purpose of the research was to uncover the ways in which nephrology nurses in Australia practice, at an advanced level and to develop a competency based instrument. As the competency based approach to advanced nursing practice has developed in Australia, this instrument represents the benchmark by which the performance of advanced level nephrology nursing practice is measured.

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Background

In 1987, the International Council of Nursing (ICN) argued for a more orderly, collaborative approach to what is understood about specialist nursing knowledge. The Council argued that there are four essential elements required in order to develop and maintain nursing specialties; that is, education, experience, performance and advanced competence (1). It was suggested by the council that by establishing and maintaining these essential elements, nursing specialties would be able to explicate specific competencies at an advanced level. This notion was further developed and clarified to Australian nurses in 1991 by Dr. Margretta Styles (2,3). Dr. Styles explained for the first time that in order to integrate these elements, specialty nurses must first of all understand how to define their specialty, then identify service demand and client group, develop minimum competency standards and establish systems of professional credentialing. Competency standards have the potential to optimise patient outcomes in a very real way and they also provide an appropriate system of measurement with which to rationally and strategically influence the educational, workforce and skill mix requirements in the workplace.

In 1994 the Australian Nursing Council Incorporated (ANCI) produced competency standards (4) which represented entry-level practice for newly registered nurses in Australia and are the point of reference from which the Competency Standards for the Australian Advanced Practice Nephrology Nurse have been developed. In 1996, the RSA established a national working party to produce, 'a national system of competency based assessment for nephrology nurses practising at an advanced level, in Australia' (5).

The philosophical foundation on which the competencies have been developed hinges on the following beliefs:

- Nephrology nursing is diverse and complex,
- Nephrology nursing goals are directed towards facilitating

- the patient's transition through an acute and/or chronic illness towards optimum health and independence,
- The advanced practice nephrology nurse demonstrates expert knowledge, skills, experience and leadership,
 - The advanced practice nephrology nurse is accountable and responsible,
 - The advanced practice nephrology nurse co-ordinates services, thereby facilitating both patient care, education and rehabilitation,
 - The advanced practice nephrology nurse practices in an ethically responsible way to protect and defend the rights of patients and their families (5).

The scope of the project has been to fill the gap between the ANCI entry level competency standards and those expected of the nephrology nurse who practices at an advanced level. Of equal importance, this project also provided the framework for specialist postgraduate nephrology nursing curricula in Australia and the opportunity to make recommendations regarding both assessment and credentialling of the advanced practice nephrology nurse.

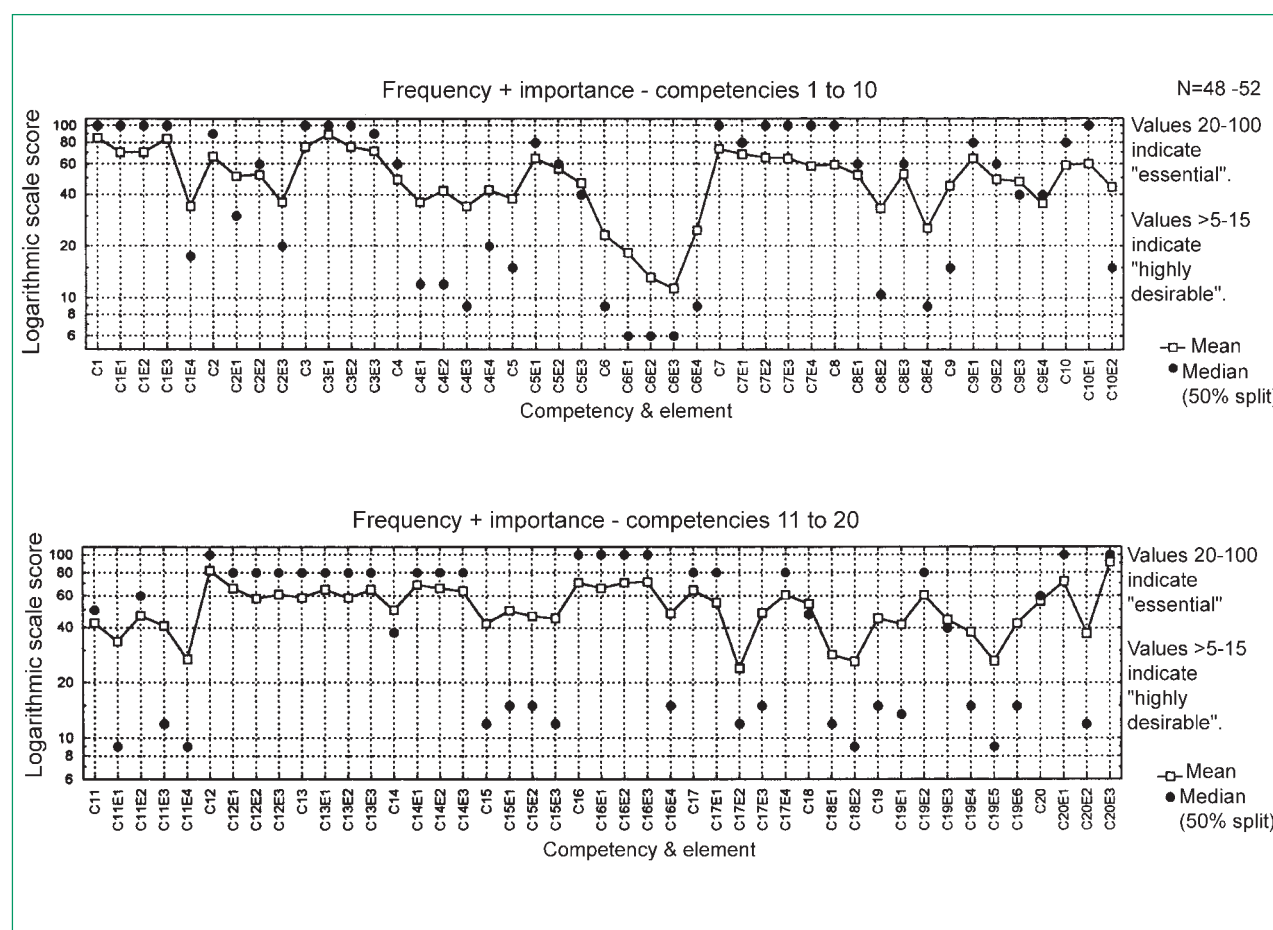
Research design

The research method chosen for this project was the Delphi

technique, which incorporates a survey approach (6). A group of experts formulate a draft document (competency standards) which is then circulated to other experts (who are not part of the original group). Respondents critique the document, which is then returned to the expert panel who collate the responses and formulate a revised document for recirculation. This process is repeated several times until consensus is reached (7). The advantages of this research technique are that a structured format is required, responses are coordinated, high quality ideas are generated, there is minimum peer pressure and the whole process takes place over three or four rounds of data collection and analysis (8).

The project commenced in 1996 and involved:

- Convening a nine member expert panel representing each state/territory in Australia who developed and reviewed each round,
- Establishing a ninety-four member, national clinical review team who were purposively sampled, who also agreed to participate in the study, met the selection criteria, which was modified from previous competency based research (9) and represented the diverse nature of nephrology nursing practice (see Table I),
- The development, analysis and refinement of the document



Graph 1: Frequency and importance scale

- Currently practising in the specialty, with at least three years clinical experience.
- Has attended renal in-service/workshops/conferences etc. in the last 12 months.
- Committed to continuing professional education.
- Seen to be a role model.
- Available to review written documents during a 12-month period.
- Respected by peers and others.
- Supports less experienced staff.

Table 1: Selection criteria for clinical review team

by the expert panel as it progressed through three consecutive rounds.

Results

Round 1

The clinical review team rated each domain, competency statement, element of competency and performance criterion using a 4-point Likert scale ranging from 'strongly disagree' to 'strongly agree'. The team were also free to provide other comments, corrections and suggestions. Sixty-eight reviewers (72%) completed this round and the descriptive analysis for Round 1 revealed an overall mean of 3.49, median response of 3.95 and a standard deviation of 0.50. In other words, most reviewers rated 'strongly agree' for most items in round 1 (5).

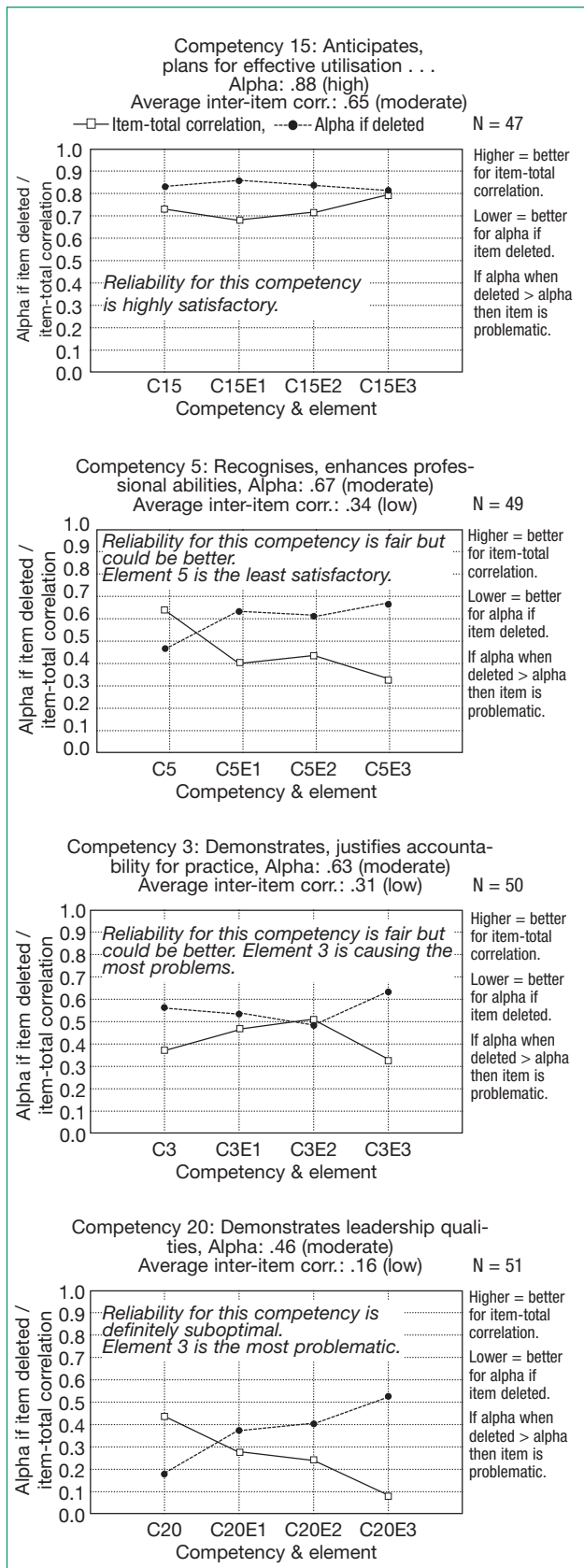
Round 2

On the basis of this analysis and with the added comments offered, the expert panel revised the document and included two new rating scales, 'frequency' and 'importance' for round 2. The frequency rating scale referred to how often each clinical reviewer believed she/he actually performed the competency or element of competency, at an advanced level. The importance scale referred to how important the clinical reviewer believed it was for the advanced practice nephrology nurse to be able to demonstrate the competency or element of competency (5).

Fifty-two clinical reviewers (55%) returned the round 2 document. Scores from both 'frequency' and 'importance' scales were combined but extra weight was given to those competency standards and elements of competency that the reviewers considered to be either 'essential' or 'highly desirable' for advanced practice (see Graph 1). This meant that the combined frequency and importance scale scores ranged from:

- 20 to 100 for an 'essential' rating,
- 6 to 19 for a 'highly desirable' rating and
- 1 to 5 for a 'desirable' rating.
- Those rated as 'never' occurring, automatically scored zero (5).

In Graph 1 the vertical axis has been re-drawn to exaggerate the lower section (a logarithmic scale). This enables closer inspection of low scores on the graph. It is readily apparent that a wide range of scores was achieved on this scale. The highest median was 100 (occurring 20 times) and the lowest was 6 (occurring 3 times) (5).



Graph 2: Reliability for selected competencies

In Graph 2 (Competency 15), the value of alpha is high, a good thing in this case. The remaining 3 competencies (3, 5 and 20) emphasise the importance of establishing a strong relationship between each competency standard statement and its associated elements. This analytical process was conducted for every competency standard and demonstrated that the relationship between Competency 20 (Leadership) and its associated elements was the most difficult to establish. This appeared to indicate that the clinical review team held very diverse opinions about the role of leadership in advanced practice (5). The results from round 2 suggested a high level of congruence in the way the clinical reviewers prioritised the competencies in terms of their frequency and importance for nephrology nurses practising at an advanced level. There was less agreement about competencies 6 and 20. The expert panel then undertook an extensive revision of competencies 6 and 20 prior to circulating the document for the third and final round (5).

Round 3

Twenty-five clinical reviewers (27%) responded with final comments. In fact there were very few comments and the limited response by the clinical review team appeared to indicate that the majority had either no further comments to make or had lost interest. Whilst this could be seen as a limitation in terms of poor response to round 3, the expert panel considered, in consultation with the statistician, that round 2 had exhausted the availability of new information in the form of competency statements or elements.

The expert panel therefore decided that further rounds would not generate any new information and that sufficient consensus had been reached (5).

Discussion

Several nursing competencies standard documents were already in existence in Australia at the beginning of the research project (4,10,11). The structure of these documents included the identification of areas of practice (domains), and the development of:

Domain 1: Professional practice 1. Functions in accordance with legislation and common law affecting nephrology nursing practice. 2. Actively protects the rights of individuals and groups. 3. Demonstrates and justifies accountability for nephrology nursing practice. 4. Contributes to effective ethical decision making relevant to nephrology nursing practice.	Domain 4: Clinical problem solving 12. Holistically manages complex, therapeutic renal interventions. 13. Develops and manages a plan of care to achieve predicted outcomes and considers implications for ongoing care. 14. Anticipates and plans for effective and efficient utilisation of resources.
Domain 2: Reflective practice 5. Recognises and enhances own professional abilities and level of clinical competence. 6. Incorporates evidence-based research into nephrology nursing practice.	Domain 5: Teamwork 15. Effectively manages and Co-ordinates the care of a variety of individuals and groups with renal impairment. 16. Collaborates as an active member within the renal health care team to achieve optimal outcomes. 17. Creates and maintains a supportive, collegial working environment.
Domain 3: Empowerment 7. Establishes and maintains a physical and psychosocial environment which promotes safety, security and optimal health. 8. Actively enhances the dignity and integrity of individuals and groups. 9. Protects the individual's rights to autonomy and facilitates informed decision-making. 10. Establishes and maintains open lines of communication with individuals and groups. 11. Assists the individual and/or group to plan for future lifestyle changes associated with chronic renal impairment.	Domain 6: Leadership 18. Provides leadership within nephrology nursing.

Table 2: Competency standards for the Australian Advanced Practice Nephrology Nurse

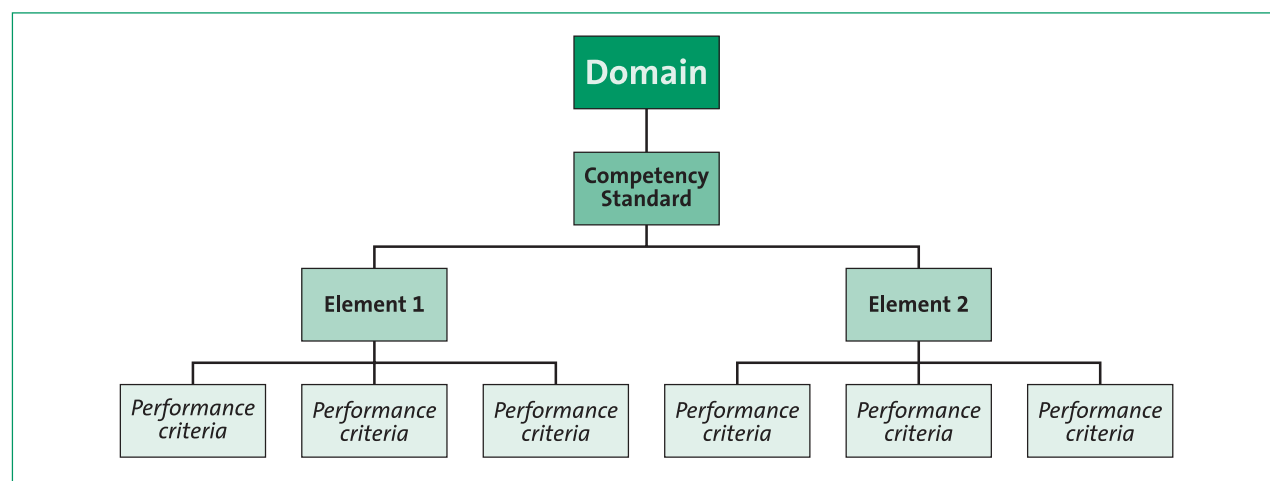


Figure 1: Structure of Competency Standards Document

- (a) competency standard statements unique to each domain,
 - (b) elements of practice which describe each competency standard and
 - (c) performance criteria which provide specific, concrete examples of the expected level of nursing practice (see Figure 1).
- By utilising the Delphi technique, broad areas of clinical practice (domains) within which nephrology nurses work, were revealed. Six (6) domains were identified (see Table 2) each of which illustrate the range, scope and diversity of advanced practice nephrology nursing. The eighteen competency standard statements (see Table 2) contained within these domains, describe the knowledge, skills and attributes of the advanced practice nephrology nurse (5).

Each competency standard consists of a group of elements and is an active statement of 'what' the advanced practice nephrology nurse does (10). The research identified sixty four elements of competency which explore the ways in which ('how') the nephrology nurse demonstrates advanced practice within that particular competency standard (10). A detailed

description of the competency standards and their related elements and performance criteria can be found in 'Competency Standards for the Australian Advanced Practice Nephrology Nurse' (5).

Conclusion

The benefits arising from this project are far reaching. The meaning of competence for the advanced practice nephrology nurse has now been established in all its complexity and diversity. Nephrology nurses have the opportunity to examine their practice against a validated, well-researched, clinically relevant performance tool. In addition, this document serves as a catalyst for the future development of a system of credentialling (which will recognize advanced practice knowledge and skills at a professional level) and for the accreditation of postgraduate educational courses. Furthermore, the overall outcomes of this research project have clarified for employers, consumers, educators and other health professionals at a national level, the role of the advanced practice nephrology nurse in Australia.

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