



# **New Zealand Nephrology Nursing Knowledge and Skills Framework**

A submission to the National Nursing  
Consortium for Specialty Standards  
Endorsement

1 September 2012

**Nursing Advisory Group  
Renal Society of Australasia (NZ Branch)**  
[www.renalsociety.org](http://www.renalsociety.org)

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# 1. Foreword

## 1.1 Background

The 1999 Competency Standards for the New Zealand Renal Nurse (National Renal Qualification Working Party, 1999) first defined Nephrology nursing as a specialised area of nursing practice in New Zealand.

In 2006 a National Renal Advisory Board (NRAB) scoping paper identified that the training of "skilled nephrology nurse specialists/practitioners for the future" required an "agreed strategy" (National Renal Advisory Board, 2006, p18). However a workforce survey commissioned by the Renal Society of Australasia (RSA) reported that only 21% of Registered Nurses working within New Zealand Renal Units held any renal post graduate qualifications (Bennett, McNeill & Polaschek, 2009). This led the NRAB to highlight the importance of progressing work on specialty competencies for renal nursing to both ensure a skilled workforce and further develop the specialty (National Renal Advisory Board, 2009).

Thus, in 2008 the RSA New Zealand (NZ) Branch Nursing Advisory Group (NAG) responded to this need, commencing a project to draw up a professional development framework for nephrology nursing within New Zealand. The establishment of endorsement criteria and processes by the National Nursing Consortium in February 2009 provided the platform upon which to complete the framework.

## 1.2 Renal Society of Australasia (NZ Branch)

Formed in 1972, the RSA is the professional body for nephrology nurses within Australia and New Zealand. The society currently has approximately 1400 members divided between branches in New Zealand and each of the Australian states. The purpose of the RSA is to achieve excellence in the dissemination of knowledge in renal replacement therapies throughout Australasia (Renal Society of Australasia, n.d.) This is achieved through provision or support of numerous educational activities including annual national and international conferences and an internationally peer reviewed scholarly journal. Collaborative links (both formal and informal) exist between the RSA and equivalent international professional nephrology nursing bodies such as the European Dialysis and Transplant Nurses Association and the American Nephrology Nurses Association.

The New Zealand branch of the society has approximately 100 members and is an incorporated society under New Zealand law. The branch's Nursing Advisory Group (NAG) has provided professional nephrology nursing leadership to its members in New Zealand since 1995 with a primary focus on the establishment of national standards of practice and a professional development model for nephrology nursing in New Zealand.

## 1.3 Development process

A review of the original 1999 Competency Standards for the New Zealand Renal Nurse by the NAG saw them initially modified into standards of practice. These were then separated into organisational standards (Nursing Advisory Group, 2012) and the knowledge skills framework. Following extensive consultation with and endorsement by professional nephrology nurses from across New Zealand District Health Boards, the New Zealand Nephrology Nursing Knowledge and Skills Framework was developed. The framework was underpinned by Dr Kathy Holloway's model for development of a specialist nursing framework (Holloway, 2011).

In December 2011 the New Zealand Nephrology Nursing Knowledge and Skills Framework (NZNNKSF) was piloted by nephrology nursing services in two District Health Boards. Feedback from this process was incorporated into the final framework. Further feedback was received during a formal consultation stage during April/May 2012, from the individuals and groups listed in Appendix Two.

Feedback has underlined the need for an implementation phase following endorsement. The NAG expects to produce and distribute resources to support and assist nephrology services and individual nurses to incorporate the framework into existing professional development processes, including Professional Development and Recognition Programmes.

## 1.4 Consultation process

### 1.4.1 National engagement with nephrology nurses

The project has been implemented by the RSA (NZ Branch) Nursing Advisory Group (NAG) over a period of 4 years. Membership of the NAG is designed to ensure maximum involvement by nephrology nurses from all geographical regions, as well as the various service types (such as tertiary, secondary, rural, metropolitan). At each stage of development, each NAG member has sought feedback from nephrology nurses in their area, which has been brought back to the next group meeting to inform the next stage of development.

During the consultation phase, further feedback was sought from each member of the RSA (NZ Branch).

The framework project was outlined and endorsed at the RSA (NZ Branch) Annual General Meeting in November 2011.

### 1.4.2 Engagement with Māori

During consultation, feedback related to the framework's responsiveness to Māori was sought (see Appendix Two).

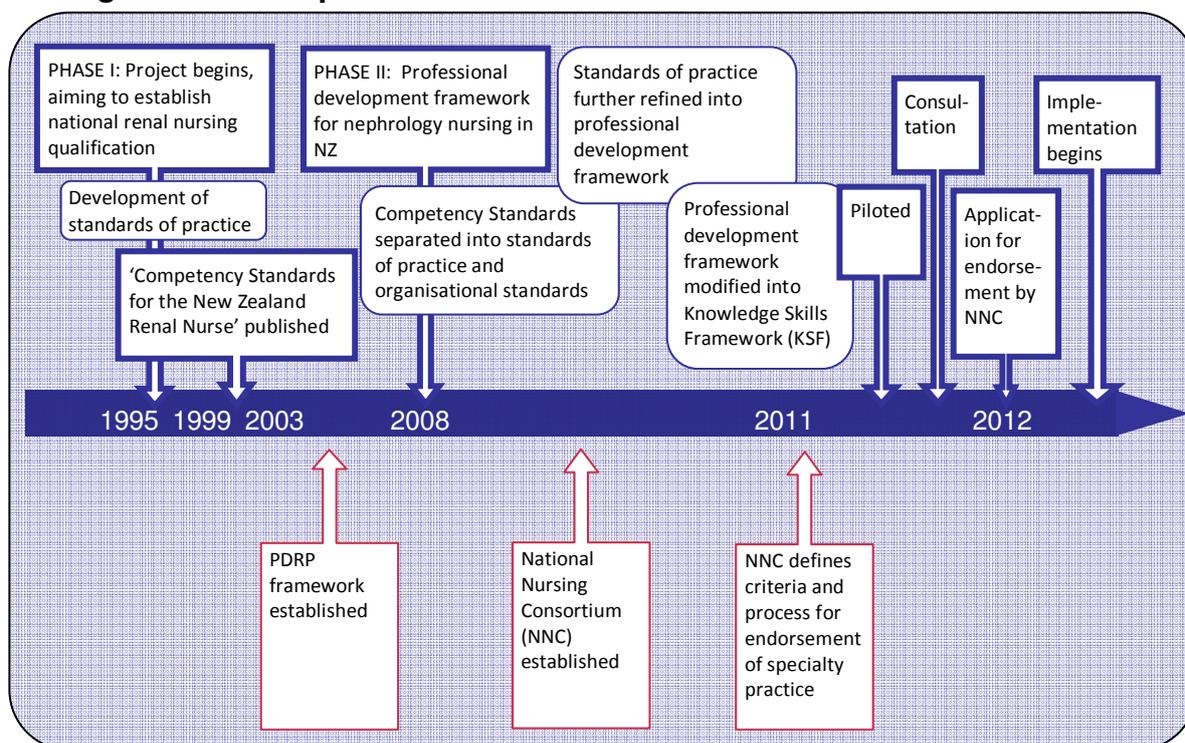
The NAG understands that Te Kaunihera O Nga Neehi Māori o Aotearoa (National Council of Māori Nurses) is a member of the NNC, and anticipates their feedback as part of this submission process.

### 1.4.3 Consumer perspectives

During consultation, feedback was sought from consumers (see Appendix Two).

There is a growing body of good quality research relating to people's experiences of CKD and its treatments. This evidence has been used to inform the framework, especially concerning self-management of CKD and its associated treatments (references available on request). In particular, the work of Dr Nick Polaschek on the experiences of New Zealanders on dialysis is acknowledged.

**Figure 1: Development of the NZNNKSF**



## **1.5 Development team**

The RSA (NZ Branch) NAG members who have been involved in the development of the NZNNKSF are:

Karin Norman (Chairperson)  
Clinical Nurse Manager, Rotorua Satellite  
Dialysis Service  
Lakes District Health Board  
(formerly Clinical Nurse Educator, Regional  
Dialysis Service  
Waikato District Health Board)

Kay McLaughlin (Secretary)  
Clinical Nurse Co-ordinator  
Renal Service  
Capital and Coast District Health Board

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Amanda Dalton  
Clinical Nurse Educator – Renal  
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Educator  
Canterbury District Health Board

Philip Jarvis  
Clinical Nurse Manager – Renal Service  
Northland District Health Board

Lynette Knuth  
Clinical Nurse Specialist  
Pre-dialysis Nurse Specialist  
Taranaki District Health Board

Maree McDonald  
Charge Nurse Manager, Pre Dialysis  
Educator, Renal Nurse Educator  
Renal Service  
Southern District Health Board

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Auckland District Health Board

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Renal ward one  
Counties Manakau District Health Board

Gillian Treloar  
Nurse Manager, Renal Service  
MidCentral District Health Board

Rachael Walker  
Nurse Practitioner – Adult/Older Adult -  
Renal  
Hawkes Bay District Health Board

## **1.6 Future review and development**

The NZNNKSF will be reviewed three years after its endorsement in line with the process for recognition as a specialty outlined by the Nursing Consortium (National Nursing Consortium, 2011).

## **1.7 Acknowledgements**

The development of the NZNNKSF has been made possible by support and funding from the RSA (NZ Branch).

The NAG acknowledges the valuable assistance received from Dr Kathy Holloway, whose model for specialist nursing recognition underpins this framework. She has guided and challenged the group's work over several years, providing mentorship, feedback, and critique.

Thanks to Nephrology Services at Hawkes Bay District Health Board and Canterbury District Health Board for piloting this framework.

The development team also thanks Janine Palmer and Noreen McCallan (Renal Service, Hawkes Bay District Health Board) for their contributions.

## 2. Introduction

### **2.1 Role Legitimacy: Defining Nephrology nursing as a distinct specialty using the N<sup>3</sup>ET criteria (2006)**

#### **2.1.1 There is both a demand, and a need for the specialty service from the community.**

Chronic Kidney Disease (CKD) is the progressive decline of kidney function over months or years, eventually resulting in End Stage Kidney Disease (ESKD). At this point renal replacement therapy (RRT) is required to sustain life. The most common cause of ESKD in New Zealand is diabetes mellitus, affecting 51% of new patients in 2010. Type II diabetes is the major cause of diabetic nephropathy (Grace, Hurst, & McDonald, 2011).

Kidney disease (both chronic and end stage) is a growing healthcare problem in New Zealand. In 2009 there was a 14% increase in new patients with ESKD and the number of new patients entering dialysis programmes is projected to grow by around 6% per year for at least the next 10 years (National Renal Advisory Board, 2006). The prevalence of CKD is around 12% and growing, mainly due to the increasing incidence in type 2 diabetes mellitus (Collins, 2010). Rates of CKD for Māori and Pacific people are substantially higher than for non-indigenous people. (Grace et al., 2011). It is imperative that nephrology nursing services respond to this growing crisis by addressing the health needs of Māori and Pacific people at high risk of diabetic kidney disease.

Renal replacement therapies (RRT) include extracorporeal therapies (such as haemodialysis), peritoneal dialysis, and transplantation. These can be carried out in secondary level hospitals, predominantly by nephrology nurses, or self-managed by patients and/or whanau in the home setting.

In New Zealand, renal replacement programmes have become well established since they first began in the 1960s. Of particular note is the predominance of home-based therapies, an area where New Zealand is internationally recognized as a world leader (Agar, 2009).

Since this time, in response to the complex healthcare needs of nephrology patients, nephrology nursing has evolved in New Zealand as a distinct nursing specialty. Historically nephrology nurses have coordinated and managed care within the secondary and tertiary healthcare settings for those with ESKD requiring RRT. In addition nephrology nurses are providing the education, support and care coordination that enables patients to self-manage their treatment in primary care community settings.

Within the last two decades, studies have shown that early detection and intervention in CKD can slow or prevent the progression of kidney disease (Chadban et al., 2010). Nephrology nurses have turned their attention to the management of early CKD, establishing and leading multi-disciplinary programmes which have been shown to delay the progression of kidney disease (Barrett et al., 2011; Campbell & Bolton, 2011; Wu et al., 2009).

The establishment of the nurse practitioner role provides an opportunity for advanced practice nephrology nurses to make a valuable contribution to improving care for these patients. In addition, these roles provide opportunities to develop links to the primary health sector, dealing with the early stages of CKD as part of a comprehensive package addressing chronic disease in general (incorporating cardiovascular disease and diabetes in particular).

At the time of writing, an internet search of healthcare vacancies revealed that there were currently seven nursing vacancies which stipulated a requirement for registered nurses with specialty nephrology knowledge and skills.

#### **2.1.2 The specialty defines itself and subscribes to the overall purpose, functions, and ethical standards of nursing and midwifery.**

Standards for New Zealand nephrology nursing practice were first defined in 1999 (National Renal Nursing Qualification Working Party, 1999). The specialty encompasses a number of subspecialty areas, including general nephrology, vascular access, renal anaemia, pre-dialysis, haemodialysis, peritoneal dialysis and renal transplantation. There are well established Clinical Nurse Specialist positions in these renal subspecialty areas in all New Zealand renal services with a clear pathway available to advance to Nurse Practitioner.

### **2.1.3 The specialty is a distinct and defined area of nursing practice which requires an application of specialty focused knowledge and skill sets.**

Nephrology nursing specialization has evolved to ensure patients with kidney disease are provided with the best outcomes (Bonner, 2003). Nurse specialists are a valuable asset providing care for this complex group of patients. It has been suggested that there is too much involved in this care for it to be left solely to the nephrologist, and that the “nurse-patient relationship is unique...this complicated patient population requires more time than a physician can offer, making knowledgeable nephrology nurses a valuable asset” (Compton, Provenzano, & Johnson, 2002, p. 331). Constanini et al. (2008) state that to effectively meet the needs of patients with kidney disease it is imperative to involve uniquely trained nurses to manage and support the needs of this complex patient group.

### **2.1.4 The specialty practice is based on a core body of nursing knowledge which is being continually expanded and refined.**

There are books about the specialty (published bodies of literature and research), peer reviewed literature in journals, journals about the specialty, research grants available to New Zealand nephrology nurses and national and international conferences to discuss and disseminate knowledge about the specialty.

A literature search conducted in February 2012 using the terms “renal nurs\*”, “dialysis nurs\*”, and “nephrology nurs\*” separately as keywords identified 17,181 books and journals pertaining to the nephrology science subject for nursing. Databases searched included CINAHL, Pubmed, Index NZ, MD Consult, Medline and Google Scholar.

Collaborative links (both formal and informal) between the Renal Society of Australasia and equivalent international professional nephrology nursing bodies such as the European Dialysis and Transplant Nurses Association and the American Nephrology Nurses Association encourage sharing and dissemination of international best practice and innovation. These links are evidence that nephrology nursing is recognised as a specialty internationally.

The Renal Society of Australasia Journal is a peer reviewed Australasian journal, published quarterly, and described as “the peak scholarly journal for nephrology nurses and associated professionals to share their ideas and their research to promote evidence-based, high quality care for persons living with renal disease.” (Renal Society of Australasia, n.d.) The Journal provides a national and international forum for the exchange of ideas, practice and research. It is a vehicle for on-going education, is refereed and subject to blind review. The journal's editorial board comprises eminent nephrology nursing practitioners and academics from New Zealand and Australia (Bennett, 2012). Submissions include research reports, articles on innovative nephrology nursing practice, guest editorials, educational supplements, and book reviews, all pertaining to the science of nephrology nursing.

### **2.1.5 Specialty expertise is gained through various combinations of experience, formal and informal education programmes, including but not limited to continuing education and professional development.**

Teaching and learning for specialty nephrology nursing practice has moved over the last 10 years from hospital to university-based education. Currently post graduate education in specialty practice nephrology nursing is available at the University of Auckland (University of Auckland, 2012). Other tertiary education institutes incorporate nephrology nursing into their Post Graduate and Masters programmes, primarily through links with chronic disease management.

In contrast, clinical training for specialty nephrology nursing is currently provided on an ad hoc basis from within renal services and there is no nationally agreed clinically-based curriculum for this training. Consequently, the quality and quantity of training is variable between centres. The NZNKSF will provide an important foundation to ensure high quality and consistency for locally-provided clinical education.

The Nephrology Educators Network (NEN) is the education sub group of the RSA, and promotes a standardised, evidence based approach to nephrology nursing education that aims to avoid duplication of resources while encouraging knowledge sharing between organisations. The NEN conducts a monthly on-line journal club, and have recently introduced a comprehensive suite of e-learning programmes which “provide ... the tools, skills, knowledge

and resources to safely and effectively perform ... as you care for people with kidney disease” (Nephrology Educators Network, 2012).

Current examples of nephrology nursing conferences held in New Zealand and Australia include:

- RSA Annual Federal Conference
- RSA (NZ Branch) Annual Conference
- New Zealand and Australia Annual Home Therapies Conference
- Biennial Nephrology Educators’ Network (NEN) Symposium
- Annual Australasian Baxter Nephrology Nurses PD Conference
- Annual New Zealand Fresenius Home Therapies Conference
- Annual national meetings of pre-dialysis educators
- Annual national meetings of vascular access co-ordinators

### **2.1.6 Nephrology nursing is national in its geographic scope**

Nephrology nurses practise their specialty in all New Zealand regions, with Renal Units in Northland, Auckland, Counties Manakau, Waitemata, Waikato, Taranaki, Hawkes Bay, Palmerston North, Wellington, Christchurch, and Dunedin. In addition, there are satellite dialysis units and nephrology specialty practice nurses employed by DHBs such as Bay of Plenty, Lakes, Tairāwhiti and Nelson, who care for people with kidney disease in smaller urban and rural areas, with the support and guidance of the tertiary Renal Units. Nephrology nurses work within multi-disciplinary teams, and in several centres they also work closely with clinical dialysis technicians.

## ***2.2 The need to increase Māori and Pacific participation in nephrology nursing***

Māori and Pacific people are over-represented in CKD statistics (Grace, Hurst, & McDonald, 2011). The Ministry of Health and District Health Boards have recognized the need to increase the number of Pacific Island and Māori nurses as a priority for improving equitable health outcomes (DHB-NZ, 2006; Ministry of Health, 2006; Ministry of Health, 2010). Yet despite this, Māori and Pacific remain under-represented in the nursing workforce (DHB-NZ, 2009; Nursing Council of New Zealand, 2011), and this shortfall is also reflected in nephrology nursing. The NZNNKSF acknowledges this gap in our nursing workforce, and offers a clinical pathway that aims to contribute to the development and growth of Māori and Pacific nurses working in nephrology services across NZ.

The NAG believes that a specialist nephrology Māori and Pacific workforce could have a significant influence on health promotion and prevention of kidney disease, and recognizes the importance of delivering a service to Māori and Pacific people that reflects their cultural needs and expectations.

The NAG sees an opportunity to improve outcomes for nephrology patients by attracting and retaining Māori and Pasifika nurses. The NZNNKSF will provide a way for the NAG and other organizations to promote nephrology nursing as a professional career pathway for those nurses.

## **2.3 Using the New Zealand Nephrology Nursing Knowledge and Skills Framework**

### **2.3.1 Purpose and use**

The New Zealand Nephrology Nursing Knowledge and Skills Framework (NZNNKSF) published in this document (see page 12) describes the knowledge and skills required by nurses in order to practice in a specialty nephrology role. It will benefit nephrology patients, nurses and health providers by:

1. Informing best practice guidelines for optimal patient outcomes
2. Providing a tool that may be used in the development of career pathways, job descriptions and appraisals
3. Articulating expected behaviours and capabilities that may be used in the assessment and evaluation of the quality of individual and collective nephrology nursing practice
4. Providing a framework for nephrology nursing training programmes
5. Clarifying the nephrology nurse's role to administrators, consumers and other health care professionals
6. Providing a platform for nurse-led nephrology care

### **2.3.2 Components**

The NZNNKSF describes:

1. Aspects of care: the core concepts and interventions specific to nursing practice within nephrology specialty areas. These are identified within the NZNNKSF along with the nursing management aim as:
  - a) Chronic Kidney Disease (CKD) Stages 1-5
  - b) Complications of CKD
  - c) Self Management of CKD and RRT
  - d) Renal Palliative Care
  - e) Extracorporeal Therapies
  - f) Peritoneal Dialysis
  - g) Kidney Transplantation
2. Levels of practice, along with the knowledge and skills required to deliver nephrology nursing care at each level of practice.
  - a) All nurses - All RNs who care for patients with nephrology care needs. It is expected that nurses who meet the competency requirements set by the Nursing Council of New Zealand (NCNZ) for Registered Nurses will be capable of providing this level of care for all nephrology patients. For this reason the 'All nurses' level of care is not seen as specialty practice, and therefore is included in the NZNNKSF as a reference only. It is expected that competence at this level of practice will be assessed by the NCNZ competencies and not by the NZNNKSF.
  - b) Many nurses – Those RNs who provide routine, non-complex care for patients with specialised nephrology care needs. These are defined as Specialty<sup>1</sup> Nephrology Nurses. In addition to relevant clinical practice, these nurses will be working academically towards a minimum of Post Graduate Certificate. This level of practice is likely to be aligned with 'Proficient' level in a PDRP.
  - c) Some nurses – Those RNs who provide care for patients with increasingly complex, unpredictable specialised nephrology care needs; providing expert support to other members of the healthcare team in managing nephrology

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<sup>1</sup> New Zealand Nurses Organisations. (2009). *Glossary of Terms*. Wellington, New Zealand: Author

patients and leading nephrology nursing practice and service development. These are defined as Specialist<sup>1</sup> Nephrology Nurses. In addition to relevant clinical practice, these nurses will be progressing academically through a Post Graduate Diploma towards Masters qualification. This level of practice is likely to be aligned with 'Expert' level in a PDRP.

3. NCNZ competency domains relevant to each piece of knowledge or skill. The four domains of competence for Registered Nurses are cross-referenced by the NZNNKSF in brackets after each statement of capability to demonstrate that specialty nephrology nursing practice remains within the Registered Nurse scope of practice, and to facilitate cross referencing with PDRP tools.

### 2.3.3 The framework as a tool for assessment using the PDRP

The NZNNKSF is a tool which can be used to express levels of practice for nephrology nurses across various clinical settings. The intention is that it be used as evidence of competency within currently existing Professional Development and Recognition Programme (PDRP) portfolio processes.

Aspects of the framework which are relevant to the particular area or level of nephrology nursing clinical practice being examined at that time will be used for assessment purposes, whilst those areas not currently relevant will be omitted. Table 1 shows an example of how the framework might be used as evidence within the PDRP process.

A toolkit will be developed to assist individual nurses use the framework to provide evidence for PDRP processes. There will be an assessment template comprising a column for the nurse's self-assessment, and a column for an assessor to write whether the competency has been met, along with supporting comments.

Depending on individual PDRP processes, it is likely that the 'Specialty' level of practice will align with 'Proficient' and 'Specialist' will align with 'Expert'.

Table 1: Case study showing example of use of the NZNNKSF

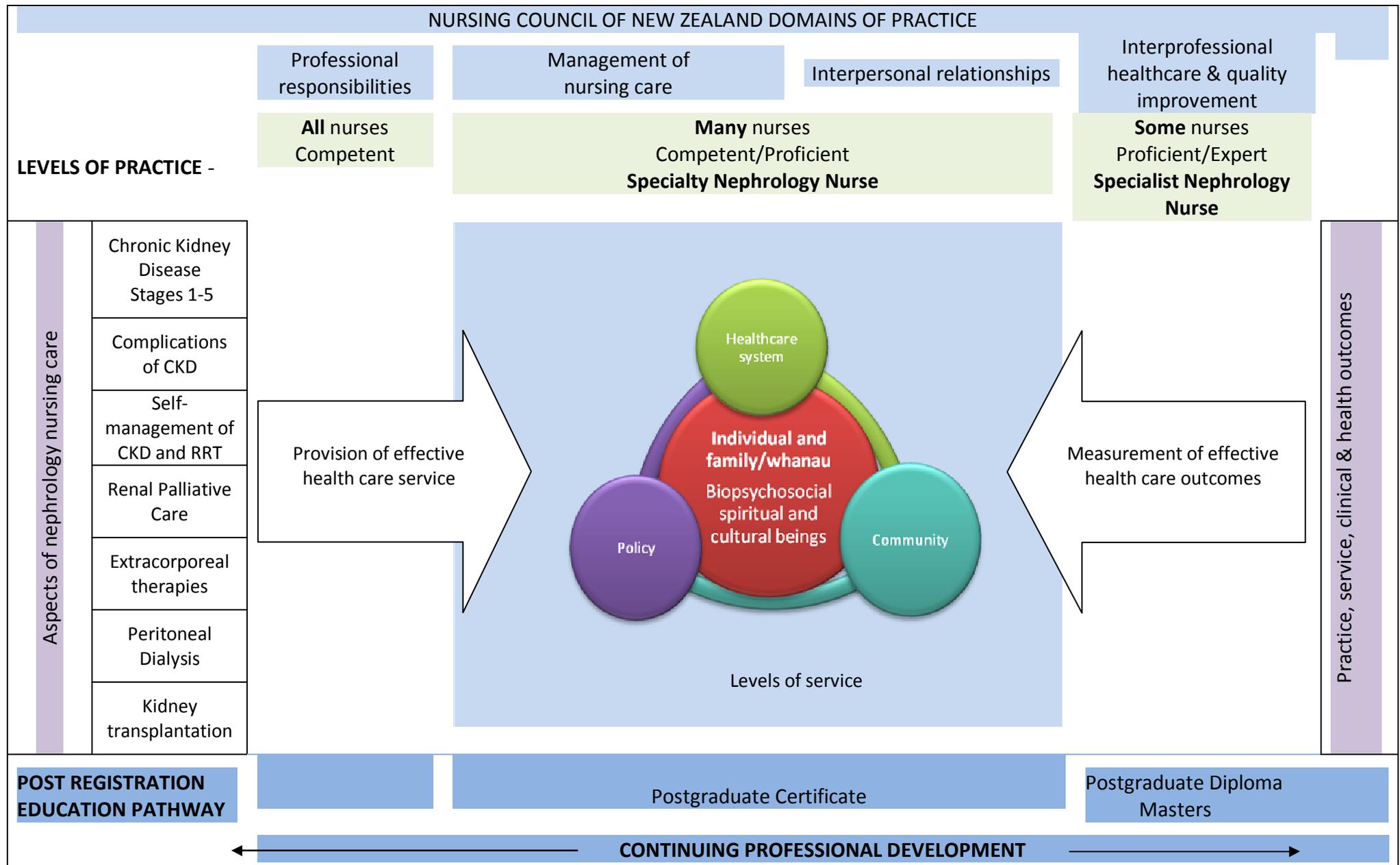
A nephrology nurse has been practising for 5 years in a home haemodialysis training facility. Previous experience includes 2 years in a home peritoneal dialysis training facility and 1 year in a nephrology ward. In order to show evidence for a PDRP assessment this nurse might use the following sections of the NZNNKSF:

<b>Level of practice</b>	<b>Aspect of care</b>
Specialist Nephrology Nurses:	Extracorporeal therapies Self-management for CKD and RRT Complications of CKD
Specialty Nephrology Nurses:	Peritoneal Dialysis
All nurses:	Chronic Kidney Disease Renal Palliative Care Kidney Transplantation

### 2.3.4 Registered Nurse Prescribing

At the time of this submission, the RN Prescribing Project Pilot evaluation has just finished, with positive findings. A managed roll-out to diabetes nurse specialists is about to begin. The NAG has considered RN prescribing as a potential development for the future, and expects that nephrology nurses who wish to be designated RN prescribers would be operating at specialist level and these skills would be augmented by specific prescribing education and experience (as determined by NCNZ).

# New Zealand Nephrology Nursing Knowledge and Skills Framework -



Adapted from National Nursing Consortium, 2011.

### 3. New Zealand Nephrology Nursing Knowledge Skills Framework

The framework provides guidance for nurses in each of the defined levels of nursing practice against the delineated aspects of care (including desired patient outcomes).

**ALL NURSES** - All Registered Nurses who care for patients with nephrology care needs

**MANY NURSES** are *Specialty* Nephrology Nurses: Nurses who provide routine, non-complex care for patients with specialised nephrology care needs

**SOME NURSES** are *Specialist* Nephrology Nurses: Nurses who care for patients with increasingly complex, unpredictable specialised nephrology care needs; provide expert support to other members of the healthcare team in managing nephrology patients; lead nephrology nursing practice and service development

#### Aspects of Care

Chronic Kidney Disease (CKD) Stages 1-5

Complications of CKD

Self-management for CKD and RRT

Renal Palliative Care

Extracorporeal Therapies

Peritoneal Dialysis (PD)

Kidney Transplantation (recipient)

## ALL NURSES - All Registered Nurses

Capability at this level of practice will be assessed by the NCNZ RN competencies and not by the NZNKSF. This section is included here for reference only.

### Chronic Kidney Disease (CKD) – Stages 1-5

*Prevention or delay of progression of kidney disease: There will be a delay or decrease in the rate of progression of CKD*

- Explains biochemical assessment of kidney function
- Understands the difference between acute kidney injury and chronic kidney disease

### Complications of CKD

*Anaemia management: The patient will achieve and maintain haemoglobin and iron levels within the targeted range*

- Describes medications used in CKD for anaemia management

*Cardiovascular risk management: The patient will show a reduction in modifiable risk factors for CVD*

- Understands the increased risk of CVD for patients with CKD
- Educates patients how to modify lifestyle-related risk factors for CVD

*Bone and mineral disorder management: The patient will remain free from disability related to renal bone disease*

- Describes medications used in CKD for management of mineral and bone disorder

### Self-management for CKD and Renal Replacement Therapy (RRT)

*Assessment for self-management capacity: The patient will achieve optimal level of self-care*

- Assesses self-management capacity, with reference to their nephrology treatment regimen

*On-going monitoring and support for self-management: The patient will successfully incorporate self-care treatment into their lifestyle*

- Encourages and supports patients to self-manage specialised nephrology treatments

### Extracorporeal Therapies

*Assessment, planning and treatment: The patient will receive an individualised, safe, effective and appropriate dialysis treatment*

- Documents accurate fluid balance data
- Prevents and treats symptoms and complications of extracorporeal therapies

*Vascular access: The patient's vascular access will be free of complications and will provide a blood flow rate adequate to achieve the dialysis prescription*

- Recognises vascular access for dialysis, and protects it from complications

### Peritoneal Dialysis (PD)

*Assessment, planning and treatment: The patient will receive a safe, effective and appropriate dialysis treatment*

- Performs and reports accurate fluid balance assessment
- Prevents and treats symptoms and complications of peritoneal dialysis

*PD access: The patient's PD access will be free of complications and will provide a flow rate adequate to achieve the dialysis prescription*

- Protects peritoneal dialysis access from complications

### Kidney transplantation (recipient)

*Pre-operative care: The patient will be prepared to receive a kidney transplant*

- Prepares patients pre-operatively for kidney transplant

*Post-operative care: The patient will receive a successful kidney transplant*

- Assesses and manages fluid balance post-operatively

*On-going monitoring and support: The patient will be supported to achieve optimal self-management following kidney transplantation*

- Promotes and supports self-management for patients following kidney transplantation

**MANY NURSES** are *Specialty* Nephrology Nurses  
**NZNNKSF for Nurses who provide routine, non-complex care for patients with specialised nephrology care needs**

**SOME NURSES** are *Specialist* Nephrology Nurses  
**NZNNKSF for Nurses who care for patients with increasingly complex, unpredictable specialised nephrology care needs; provide expert support to other members of the healthcare team in managing nephrology patients; lead nephrology nursing practice and service development**

*NB The KSF builds across the levels of practice with specialist nurses encompassing the capabilities of the specialty nurses*

Aspect of Care	Patient Outcome	Specialty Nephrology Nurse NZNNKSF (NCNZ Domain)	Specialist Nephrology Nurse NZNNKSF (NCNZ Domain)
Chronic Kidney Disease (CKD) Stages 1-5	<p><b>Prevention or delay of progression of kidney disease</b>            Patient outcome: There will be a delay or decrease in the rate of progression of CKD and associated risk factors/complications</p>	<ol style="list-style-type: none"> <li>1. Can identify and explain risk factors for the progression of kidney disease (2)</li> <li>2. Monitors and reports markers for risk of progression of kidney disease (2)</li> <li>3. Provides effective health education to improve understanding of kidney disease, risk factors and healthy lifestyle (2)</li> <li>4. Encourages and supports patients and whanau to actively self-manage their kidney disease (2,3)</li> <li>5. Identifies the factors that contribute to over-representation of Māori and Pacific people in CKD statistics (1,4)</li> <li>6. Consults with diabetes services to optimise management of diabetes-related disease (2,3,4)</li> </ol>	<ol style="list-style-type: none"> <li>1. Monitor assess and manage progression of CKD, including pharmacologic therapy (2)</li> <li>2. Establish a CKD care plan with the patient, which maximises self-management capacity to make lifestyle changes (2,3)</li> <li>3. Request laboratory tests and diagnostic studies in collaboration with the MDT to enable comprehensive assessment and monitoring of progression of CKD (2)</li> <li>4. Collaborates with primary health, diabetes, and other appropriate health care providers to improve early detection and treatment of CKD (2,3,4)</li> <li>5. Provides education to patients, whanau and other health care providers about the risk factors, treatment and complications of CKD (2,3)</li> <li>6. Addresses adherence issues and applies appropriate education and interventions to improve adherence (2,3)</li> <li>7. Engages in and leads activities designed to reduce inequalities in CKD outcomes (1,3,4)</li> </ol>
	<p><b>Preparation for CKD Stage 5</b>            Patient outcome: The patient will be prepared to commence an appropriate renal replacement therapy, or conservative treatment, at the optimal time.</p>	<ol style="list-style-type: none"> <li>1. Assesses and identifies rate of progression to end stage kidney disease (2)</li> <li>2. Assesses patient knowledge regarding RRT options (2)</li> <li>3. Encourages and promotes transplantation (2,4)</li> <li>4. Follows treatment plan to support patient and whanau to make choices about RRT options (2,3)</li> <li>5. Identifies resources and refers on to others to assist patient with selection and adjustment to RRT or conservative treatment (4)</li> </ol>	<ol style="list-style-type: none"> <li>1. Assesses patient's suitability for specific RRT modalities (2,3)</li> <li>2. Educates and supports patient and whanau to make appropriate choices about specific RRT or conservative modalities (2,3)</li> <li>3. Collaborates with patient and multidisciplinary team to formulate a RRT treatment and teaching plan (2,3,4)</li> <li>4. Monitors patient for signs and symptoms of progression to ESKD and need to initiate RRT (2)</li> <li>5. Advocates on behalf of the patient regarding their chosen treatment (2,3)</li> <li>6. Refers patient for timely dialysis access placement and dialysis initiation (2,4)</li> </ol>

Aspect of Care	Patient Outcome	Specialty Nephrology Nurse NZNNKSF (NCNZ Domain)	Specialist Nephrology Nurse NZNNKSF (NCNZ Domain)
<b>Complications of CKD</b>	<p><b>Anaemia management</b> Patient outcome: The patient will achieve and maintain haemoglobin and iron levels within the targeted range.</p>	<ol style="list-style-type: none"> <li>1. Explains the pathophysiology of renal anaemia (2)</li> <li>2. Assesses patients with kidney disease for signs, symptoms and potential causes of anaemia (2)</li> <li>3. Educates the patient to self-manage erythropoietin administration (2,3)</li> <li>4. Monitors on-going status of renal anaemia and effectiveness of treatment (2,4)</li> <li>5. Identifies instances and causes of non-responsiveness to treatment and refers appropriately (2)</li> </ol>	<ol style="list-style-type: none"> <li>1. Assesses patient's current knowledge level, self-management abilities, and anaemia management strategies (2)</li> <li>2. Develops a plan in collaboration with the patient and health care team to achieve anaemia targets and improve functional ability (2,3,4)</li> <li>3. Develops and implements anaemia management protocols (2)</li> <li>4. Audits key indicators of quality of anaemia management for groups of patients over a range of time and compares to best practice guidelines (2,4)</li> <li>5. Identifies researchable anaemia management practice issues (4)</li> </ol>
	<p><b>Cardiovascular risk management</b> Patient outcome: The patient will show a reduction in modifiable risk factors for CVD.</p>	<ol style="list-style-type: none"> <li>1. Describes the risk factors for CVD that are related to CKD (2)</li> <li>2. Educates and reinforces chronic kidney disease self-management strategies to reduce modifiable risk factors for CVD (2,3)</li> </ol>	<ol style="list-style-type: none"> <li>1. Assesses cardiovascular risk factors associated with kidney disease, using a range of diagnostic tools (2)</li> <li>2. Develops and implements a plan, in collaboration with the patient and MDT, to address risk factors associated with CKD-related cardiovascular disease (2,3,4)</li> <li>3. Evaluates and modifies treatment for CKD-related risk factor reduction (2)</li> </ol>
	<p><b>Bone and mineral disorder management</b> Patient outcome: The patient will remain free from disability related to renal bone disease.</p>	<ol style="list-style-type: none"> <li>1. Describes common bone and mineral disorders associated with CKD and their management (2)</li> <li>2. Assesses for signs and symptoms associated with bone and mineral metabolism disorders and refers appropriately (2)</li> <li>3. Educates the patient self-management strategies to prevent and treat bone and mineral disorders associated with CKD (2,3)</li> </ol>	<ol style="list-style-type: none"> <li>1. Monitors and evaluates patient response to bone and mineral metabolism therapy and refers appropriately (2,3)</li> <li>2. Request laboratory tests and diagnostic studies to assess patient's response to treatment for bone and mineral disorders (2)</li> </ol>

Aspect of Care	Patient Outcome	Specialty Nephrology Nurse NZNNKSF (NCNZ Domain)	Specialist Nephrology Nurse NZNNKSF (NCNZ Domain)
Self-management for CKD and RRT	<p><b>Assessment for self-management capacity.</b> Patient outcome: The patient will achieve optimal level of self-care.</p>	<ol style="list-style-type: none"> <li>1. Assesses nephrology patients' current and achievable level of self-care and communicates this to the nephrology multidisciplinary team (MDT) (2,4)</li> </ol>	<ol style="list-style-type: none"> <li>1. Develops, applies and evaluates evidence-based self-management strategies for people with kidney disease (2,3,4)</li> <li>2. Maximises independence for every patient on RRT (2,3)</li> </ol>
	<p><b>Education for self-management.</b> Patient outcome: The patient will perform self-managed treatments safely.</p>	<ol style="list-style-type: none"> <li>1. Incorporates specialised teaching for CKD self-care into nephrology nursing care plan, using the principles of adult learning and chronic disease self-management (2,3)</li> <li>2. Educates patient and whanau about specialised self-care treatments for CKD (2,3)</li> </ol>	<ol style="list-style-type: none"> <li>1. Creates evidence-based tools and programmes to teach specialised self-care treatments for CKD (2,4)</li> </ol>
	<p><b>On-going monitoring and support for self-management.</b> Patient outcome: The patient will successfully incorporate self-care treatment into their lifestyle.</p>	<ol style="list-style-type: none"> <li>1. Creates an environment that empowers patients and families to incorporate CKD and its therapies into their home situation and lifestyle (2,3)</li> <li>2. Ensures the infrastructure required for return to community with on-going treatment for CKD is in place (2,3,4)</li> <li>3. Ensures expert nephrology support is available to the patient at all times (2,3)</li> </ol>	<ol style="list-style-type: none"> <li>1. Develops systems to enhance on-going communication and interaction between the patient, whanau and nephrology health care team (3,4)</li> <li>2. Promotes the advantages of home therapies (1,2,3,4)</li> <li>3. Educates staff to optimise renal patients' self-care outcomes (2,3,4)</li> </ol>
Renal Palliative Care	<p><b>Supportive care</b> Patient outcome: The patient will receive appropriate symptom management and psychosocial support throughout their CKD experience.</p>	<ol style="list-style-type: none"> <li>1. Assesses the patient for signs and symptoms related to kidney disease and its complications (2)</li> <li>2. Implements strategies to optimize comfort and quality of life, anticipating the likely impact of kidney disease (2,3,4)</li> <li>3. Describes nephrology supportive care available and appropriate nephrology palliative care management and medications (4)</li> <li>4. Confidently initiates, facilitates and participates in ACP conversations (2,3)</li> <li>5. Initiates referral to palliative care or hospice in collaboration with the individual and/or whanau living with kidney disease (2,3,4)</li> </ol>	<ol style="list-style-type: none"> <li>1. Assesses readiness to participate in discussions about end-of life care and introduces concepts of advance care planning in CKD when appropriate (2,3)</li> <li>2. Regularly reviews health status, treatments for kidney disease and progress ensuring informed decision-making regarding ongoing care (2)</li> <li>3. Acts as advocate promoting and respecting the patient's autonomy regarding treatment choices for kidney disease, including the right to change decisions (1,2,3,4)</li> <li>4. Assesses the palliative care needs of the patient and whanau throughout the continuum of kidney disease (2,3)</li> <li>5. Supports the healthcare team with ethical decision-making regarding patient autonomy to make treatment choices (1,3,4)</li> </ol>

Aspect of Care	Patient Outcome	Specialty Nephrology Nurse NZNNKSF (NCNZ Domain)	Specialist Nephrology Nurse NZNNKSF (NCNZ Domain)
Extracorporeal Therapies	<p><b>Assessment, planning and treatment.</b> Patient outcome: The patient will receive an individualised, safe, effective and appropriate dialysis treatment.</p>	<ol style="list-style-type: none"> <li>1. Explains the properties of dialyser membranes and the difference between convective and diffusional therapies (2)</li> <li>2. Describes the theory and principles of solute and water transport across membranes (2)</li> <li>3. Performs and documents a holistic and comprehensive pre-treatment assessment to identify the patient's current health status with specific regard to fluid balance and metabolic/biochemical function (2)</li> <li>4. Interprets pre-treatment assessment findings and reports to appropriate person if outside the expected range or if unsure about interpretation (2)</li> <li>5. Describes infection control principles which are specific to extracorporeal therapies (2)</li> <li>6. Assesses machine safety prior to beginning treatment (1,2)</li> <li>7. Confirms and adjusts treatment parameters to achieve prescription (1,2)</li> <li>8. Monitors patient during treatment for signs of complications (2)</li> <li>9. Describes appropriate management of emergencies during treatment (2)</li> <li>10. Performs and documents a post-treatment assessment and evaluates outcomes (2)</li> <li>11. Uses assessment data to identify aspects of treatment that need adjustment to improve future outcomes, and refers appropriately (2)</li> <li>12. Administers medications safely during extracorporeal treatments (2)</li> <li>13. Assesses quality of treatment using a range of evidence-based quality indicators to achieve an optimal outcome from the patient's perspective (2,4)</li> </ol>	<ol style="list-style-type: none"> <li>1. Assesses needs of complex patients requiring extracorporeal therapies (2)</li> <li>2. Provides a timely and comprehensive clinical assessment of patient fluid status (2,4)</li> <li>3. Monitors and adjusts treatment parameters according to on-going patient assessment to prevent/treat complications, or to improve treatment outcome (2,4)</li> <li>4. Request laboratory tests and diagnostic studies to assess treatment adequacy in collaboration with the MDT (2,4)</li> <li>5. Sets and audits key indicators of good quality extracorporeal therapy and compares to best practice guidelines (2,4)</li> <li>6. Identifies researchable extracorporeal therapy practice issues (4)</li> <li>7. Leads on-going evaluation of patients and groups of patients to ensure adequacy of extracorporeal therapies (2,4)</li> <li>8. Safely and effectively manages more complex, unpredictable, or less common intradialytic complications (2,4)</li> <li>9. Acts as a consultant regarding extracorporeal therapies for other healthcare providers (2,4)</li> <li>10. Leads the development and review of extracorporeal treatment policy and procedure, maintaining currency and evidence base (2,3,4)</li> </ol>

Aspect of Care	Patient Outcome	Specialty Nephrology Nurse NZNNKSF (NCNZ Domain)	Specialist Nephrology Nurse NZNNKSF (NCNZ Domain)
Extracorporeal Therapies	<p><b>Vascular access</b> Patient outcome: The patient's vascular access will be complication-free and provide a blood flow rate adequate to achieve the dialysis prescription.</p>	<ol style="list-style-type: none"> <li>1. Describes the anatomy and physiology of the different forms of vascular access for extracorporeal therapies (2)</li> <li>2. Educates the patient on the care of their vascular access (2)</li> <li>3. Assesses vascular access and demonstrates good cannulation technique (2)</li> <li>4. Identifies and manages (or refers) complications associated with arteriovenous fistula and grafts (2)</li> <li>5. Assesses and uses central venous access for extracorporeal treatments (2)</li> <li>6. Identifies, prevents and or manages complications associated with central venous dialysis catheters (2)</li> <li>7. Describes perioperative care of vascular access for extracorporeal therapies (2)</li> </ol>	<ol style="list-style-type: none"> <li>1. Intervenes to protect vascular access from potential complications (2)</li> <li>2. Initiates and monitors pre-emptive interventions and screening to prevent or reduce vascular access complications (2)</li> <li>3. Provides support and education to patients, whanau and healthcare providers for complex vascular access issues (2,3)</li> <li>4. Assesses, monitors and cannulates complex vascular access (2)</li> <li>5. Diagnoses actual or potential vascular access complications (2)</li> </ol>
	<p><b>Anticoagulation</b> Patient outcome: Safe use of anticoagulation during treatment to prevent blood loss.</p>	<ol style="list-style-type: none"> <li>1. Administers routine anticoagulation during extracorporeal treatment (2)</li> <li>2. Monitors and manages clotting and/or bleeding during extracorporeal therapies (2)</li> </ol>	<ol style="list-style-type: none"> <li>1. Describes complex anticoagulation regimens and identifies when and why they would each be used (2)</li> </ol>

Aspect of Care	Patient Outcome	Specialty Level Nurse NZNKSF (NCNZ Domain)	Specialist Level Nurse NZNKSF (NCNZ Domain)
Peritoneal Dialysis (PD)	<p><b>Assessment, planning and treatment.</b> Patient outcome: The patient will receive a safe, effective and appropriate PD treatment.</p>	<ol style="list-style-type: none"> <li>1. Describes the anatomy of the peritoneal membrane and explains how it functions as a dialysis membrane (2)</li> <li>2. Describes the differences and indications for the various types of PD fluid (2)</li> <li>3. Describes the different modes of PD therapy (2)</li> <li>4. Describes and manages common complications associated with PD (2)</li> <li>5. Performs and documents regular patient assessment to identify the patient's current health status with specific regard to fluid balance and metabolic/biochemical function (2)</li> <li>6. Interprets assessment findings and reports to appropriate person if outside the expected range or if unsure about interpretation (2)</li> <li>7. Performs peritoneal dialysis procedures safely and effectively (2)</li> <li>8. Monitors patient and PD fluid for signs of complications (2)</li> <li>9. Performs specialised interventions or procedures to treat or prevent PD complications</li> <li>10. Uses assessment data to identify aspects of treatment that need adjustment to improve future outcomes and refers appropriately (2)</li> <li>11. Assesses quality of treatment using a range of evidence-based quality indicators (2,4)</li> </ol>	<ol style="list-style-type: none"> <li>1. Assesses needs of complex patients requiring PD therapies (2)</li> <li>2. Provides a timely and comprehensive clinical assessment of patient fluid status (2,4)</li> <li>3. Monitors and adjusts PD treatment parameters according to on-going patient assessment to prevent/treat complications, or to improve treatment outcome (2,4)</li> <li>4. Request laboratory tests and diagnostic studies to assess PD treatment adequacy in collaboration with the MDT (2,4)</li> <li>5. Sets and audits key indicators of good quality PD treatments and compares to best practice guidelines (2,4)</li> <li>6. Identifies researchable PD therapy practice issues (4)</li> <li>7. Leads on-going evaluation of patients and groups of patients to ensure adequacy of PD treatments (2,4)</li> <li>8. Safely and effectively manages more complex, unpredictable, or less common PD complications (2,4)</li> <li>9. Acts as a consultant regarding PD for other healthcare providers (2,4)</li> <li>10. Leads the development and review of PD treatment policy and procedure, maintaining currency and evidence base (2,3,4)</li> </ol>
	<p><b>PD access.</b> Patient outcome: The patient's PD access will be free of complications and will provide a flow rate adequate to achieve the dialysis prescription.</p>	<ol style="list-style-type: none"> <li>1. Describes perioperative care for patients with newly implanted PD catheters (2)</li> <li>2. Assesses PD catheter exit site using a recognised assessment tool (2)</li> <li>3. Performs appropriate catheter exit site dressing and associated care according to assessment findings (2)</li> <li>4. Educates the patient on the care of their PD access (2,3)</li> </ol>	<ol style="list-style-type: none"> <li>1. Intervenes to protect PD catheter and exit site from anticipated complications (2)</li> <li>2. Performs specialised procedures to assess, manage or prevent PD access complications (2)</li> <li>3. Identifies and manages actual or potential PD access complications (2)</li> <li>4. Initiates pre-emptive interventions to prevent or reduce PD access complications (2)</li> </ol>

Aspect of Care	Patient Outcome	Specialty Level Nurse NZNKSF (NCNZ Domain)	Specialist Level Nurse NZNKSF (NCNZ Domain)
Kidney Transplantation (recipient)	<p><b>Pre-operative care</b> Patient outcome: The patient will be prepared to receive a kidney transplant.</p>	<ol style="list-style-type: none"> <li>1. Educates about and prepares patient for the process of kidney transplant surgery (2,3)</li> <li>2. Describes the therapeutic and adverse-effects and precautions of immunosuppressant medications for kidney transplantation (2)</li> </ol>	<ol style="list-style-type: none"> <li>1. Co-ordinates the MDT's pre-transplant suitability assessment process (2,3,4)</li> <li>2. Develops a pre and post-transplant education plan (2,3)</li> <li>3. Requests and co-ordinates tissue typing studies according to local policy (2)</li> <li>4. Promotes a team approach to transplant-related ethical issues (1,2,3,4)</li> <li>5. Directs and monitors pre-operative nursing care to ensure CKD and transplant-specific needs are met (2,4)</li> </ol>
	<p><b>Post-operative care</b> Patient outcome: The patient will receive a successful kidney transplant.</p>	<ol style="list-style-type: none"> <li>1. Explains the significance of optimal graft perfusion in the post-operative period (2)</li> <li>2. Assesses and interprets fluid balance, cardiovascular, and biochemical status, and promptly reports to appropriate person if outside expected range or if unsure regarding interpretation (2)</li> <li>3. Administers and monitors immunosuppressive therapy (2)</li> </ol>	<ol style="list-style-type: none"> <li>1. Initiates pre-emptive interventions in anticipation of unfamiliar, complex or unpredictable post-operative complications (2)</li> <li>2. Accurately assesses and interprets sudden, complex or unpredictable changes in post-operative patient condition and intervenes appropriately (2)</li> <li>3. Collaborates and co-ordinates MDT and community services to optimise patient's transition to self-care after discharge (2,4)</li> <li>4. Co-ordinates post-operative education plan to prepare patient for self-management (2,4)</li> </ol>
	<p><b>On-going monitoring and support.</b> Patient outcome: The patient will be supported to achieve optimal self-management following kidney transplantation.</p>	<ol style="list-style-type: none"> <li>1. Educates patients about self-management following kidney transplantation, including medications, complications and psychological adjustment and importance of regular follow up with nephrology MDT (2,3)</li> </ol>	<ol style="list-style-type: none"> <li>1. Monitors for and identifies complications related to kidney transplantation and intervenes appropriately (2)</li> <li>2. Develops a plan in collaboration with the patient to address knowledge deficits, concerns and barriers regarding self-management following kidney transplantation (2,3)</li> <li>3. Manages transplant monitoring regimens for groups of patients, over a range of time (2)</li> <li>4. Sets and audits key indicators of good quality kidney transplant care and compares to best practice guidelines (2,4)</li> <li>5. Identifies researchable transplantation practice issues</li> <li>6. Leads the development and review of kidney transplantation policy and procedure, maintaining currency and evidence base. (2,3,4)</li> </ol>

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## 5. Appendix One – Glossary and Abbreviations

CKD	Chronic Kidney Disease																		
	<table border="1"> <thead> <tr> <th>GFR (mL per minute per 1.73 m<sup>2</sup>)</th> <th>Stage</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>≥ 90</td> <td>1</td> <td>Kidney damage with normal kidney function</td> </tr> <tr> <td>60 to 89</td> <td>2</td> <td>Kidney damage with mildly decreased kidney function</td> </tr> <tr> <td>30 to 59</td> <td>3</td> <td>Moderately decreased kidney function</td> </tr> <tr> <td>15 to 29</td> <td>4</td> <td>Severely decreased kidney function</td> </tr> <tr> <td>&lt; 15 (or dialysis)</td> <td>5</td> <td>End stage kidney failure</td> </tr> </tbody> </table> <p style="text-align: right; font-size: small;">(Kidney Health New Zealand, 2009).</p>	GFR (mL per minute per 1.73 m <sup>2</sup> )	Stage	Description	≥ 90	1	Kidney damage with normal kidney function	60 to 89	2	Kidney damage with mildly decreased kidney function	30 to 59	3	Moderately decreased kidney function	15 to 29	4	Severely decreased kidney function	< 15 (or dialysis)	5	End stage kidney failure
GFR (mL per minute per 1.73 m <sup>2</sup> )	Stage	Description																	
≥ 90	1	Kidney damage with normal kidney function																	
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30 to 59	3	Moderately decreased kidney function																	
15 to 29	4	Severely decreased kidney function																	
< 15 (or dialysis)	5	End stage kidney failure																	
ESKD	End Stage Kidney Disease																		
Extra-corporeal therapies	A group of procedures in which blood is taken from a patient's circulation for wastes and excess water removal before it is returned to the circulation. Examples include haemodialysis, haemodiafiltration and haemofiltration																		
MDT	Multi-disciplinary Team																		
NAG	Nursing Advisory Group																		
NCNZ	Nursing Council of New Zealand																		
NEN	Nephrology Educators Network																		
Nephrology specialist nurse	Nurses who have specialised in nephrology nursing, caring for patients with increasingly complex, unpredictable specialised nephrology care needs; provide expert support to other members of the healthcare team in managing nephrology patients; lead nephrology nursing practice and service development																		
Nephrology specialty nurse	Nurses who work within a nephrology specialty practice setting, providing routine, non-complex care for patients with specialised nephrology care needs																		
NRAB	National Renal Advisory Board																		
NZNNKSF	New Zealand Nephrology Nursing Knowledge and Skills Framework																		
PD	Peritoneal dialysis																		
PDRP	Professional Development and Recognition Programme																		
RRT	Renal replacement therapies. Encompasses life-supporting treatments for kidney failure, including extracorporeal therapies, peritoneal dialysis, and kidney transplantation																		
RSA	Renal Society of Australasia																		
Self care	Personal health maintenance. Activities of an individual, family or community, with the intention of improving or restoring health, or treating or preventing disease																		
Self management	Interventions, training, and skills by which patients with CKD can effectively take care of themselves and learn how to do so																		

## 6. Appendix Two – Consultation and Feedback

In addition to input from members of the NAG and their local focus groups, feedback was received during consultation from the following individuals and groups:

Carmel Gregan-Ford	Education Manager Kidney Health New Zealand
Adrian Buttimore	Service Leader, Renal Services Canterbury District Health Board
Lorna Bingham	Nurse Practitioner Candidate, Diabetes Service Capital and Coast District Health Board
Jenny Beavis	RSA President, Victoria branch ESA Coordinator, RMH Kidney Care, Melbourne, Australia
Blair Donkin	Registered Nurse, Dunedin Dialysis Unit Nephrology Educators Network, NZ branch
Devin Mynett	Pre-dialysis Clinical Nurse Specialist Auckland District Health Board
Jean Dufus on behalf of senior renal nursing team	Nurse Advisor Neurology, Urology, Transplant, Renal, ORL & Neurosurgery Auckland District Health Board

Confirmation of no further feedback was received from the following individuals and groups:

Denise Beechey on behalf of senior renal nursing team	Pre-dialysis and Renal Anaemia Clinical Nurse Specialist Counties Manukau District Health Board
Trish Valentine, on behalf of senior renal nursing team	Renal Clinical Nurse Specialist Waikato District Health Board
Dr Paul Bennett	Associate Professor: School of Nursing and Midwifery, Deakin University, Melbourne, Australia Adjunct Associate Professor: School of Nursing and Midwifery, Flinders University, Melbourne, Australia Editor: Renal Society of Australasia Journal
Dr Nick Polaschek	Acting National Programme Manager, Sector Capability & Implementation Ministry of Health
Dr Mark Marshall	Clinical Head, Department of Renal Medicine, Counties Manakau District Health Board Chairperson, National Renal Advisory Board

Māori perspective feedback was received from:

Na Tahu Potiki Stirling	Manager, Whanau Care Services Capital and Coast District Health Board
Cheryle Kiwi	Renal Service Manager Northland District Health Board

## Pacific perspective feedback was sought from:

Tafale Maddren	Pre-dialysis Nurse Specialist Northland District Health Board
Sera Tapu-Taala	Diabetes Nurse Specialist, Diabetes Service Capital and Coast District Health Board

## Consumer perspective feedback was sought from:

Michael Papesch	Consumer Advocate National Renal Advisory Board
Nora Van der Schrieck	Executive Director Auckland District Kidney Society
Robin Howarth	President Wellington Regional Kidney Society
Dr Kelvin Lynn	Medical Director Kidney Health New Zealand

## Feedback was also sought from the following individuals during the consultation phase:

Dr Anne Bonner	Professor of Nursing Queensland University of Technology, Brisbane, Australia
Nicolette Sheridan	Associate Professor of Nursing Auckland University
Fredric Doss	Chair, New Zealand Board of Dialysis Practice Haemodialysis Educator, Renal Services Auckland District Health Board
Jane Chittenden	Medical Services Manager Lakes District Health Board
Brenda Clune	Manager, Renal Services Auckland District Health Board
Jo-Anne Deane	Clinical Director, Renal Service Waikato District Health Board
Debbie Eastwood	Service Manager, Renal Service Counties Manukau District Health Board
Annette Gohns	Operations Manager, Renal Services Waitemata District Health Board
Mary Mallon	Manager, Renal Services Capital and Coast District Health Board
Mandy Robinson	Service Manager, Renal Services Hawkes Bay District Health Board
Kirsten Passaris	Chairperson, Renal Society of Australasia Clinical Service Coordinator, Dialysis Services Flinders Medical Centre, Melbourne, Australia
Fiona Donnelly	RSA President, South Australia & Northern Territory branch
Anna Lee	RSA President, NSW/ACT branch Nurse Practitioner, Renal Services, Shoalhaven District Memorial Hospital, NSW, Australia
Rose Mace	RSA President, Tasmania branch Nurse Unit Manager, Renal Unit, Launceston General Hospital, Tasmania, Australia

Andrea Rolfe	RSA President, QLD branch
Jane York	RSA President, WA branch Nephrology Nurse Practitioner, Royal Perth Hospital, WA, Australia,
Angela Barnes	Manager, Projects and Policy for Māori Health Auckland District Health Board
Suzanne Trim	Professional Officer New Zealand Nurses' Organisation
Jane O'Malley	Chief Nurse Ministry of Health
Peter Sinclair	Chair, Nephrology Educators Network Lecturer, School of Nursing & Midwifery, University of Newcastle, NSW, Australia