Abstracts
Renal Society of Australasia 38th National Conference
Renal Society of Australasia Journal

Aim and Scope

The Renal Society of Australasia Journal is 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. The Journal provides a national and international forum for the exchange of ideas, practice and research. It is a vehicle for on-going education.

Articles are peer-reviewed by experts in the field of the submitted work. The Renal Society of Australasia Journal is a refereed journal and subject to blind review.

Articles contained in this journal are the opinions of the authors and not necessarily those of the Editor, Editorial Board or the Renal Society of Australasia.

The Editor welcomes the submission of articles, research papers, case reports, reviews and letters.

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Members of the Renal Society of Australasia receive the Journal as part of their annual membership. To receive a Renal Society of Australasia Journal you are required to join the Renal Society of Australasia.

The RSAJ will be published three times per year in March, July and November of each year.

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Conference Program
Renal Society of Australasia 38th National Conference
CARINS, QUEENSLAND
JUNE 3 - 5, 2010

Wednesday 3rd June 2010
9.00 - 17.00
RSA Board Meeting
Meeting Room 4 + 5
Pre-Conference Workshops
Meeting Room 2
Cairns Base Hospital
Meeting Room 8
9.00 - 12.00
“Teach the Teachers”
Sponsored by Amgen

SIM Man
Workshop 1
Vascular Access
Workshop 1
Sponsored by SonoSite

13.00 - 16.00
SIM Man Workshop 2
Vascular Access
Workshop 2
Sponsored by SonoSite

Thursday 3rd June
7.00 - 8.15
Breakfast Sessions
Meeting Room 4 + 5

CKD Management Strategies:
Meeting Room 2

8.30 - 9.15
Welcome Ceremony & Welcome to Country

9.15 - 10.45
“Opening Address”
Keynote Speaker
“Avril Henry”

10.45 - 11.15
Morning Tea
Sponsored by Fresenius

11.15 - 12.25
Concurrent Sessions

12.25 - 12.55
Lunch
Continues through Poster session 1

12.55 - 13.25
Poster Session 1

13.25 - 15.00
Concurrent Sessions
Plenary Hall A & B
Meeting Room 3 - 6 Hall D
Meeting Room 4 - 5

15.00 - 15.30
Afternoon Tea
Sponsored by Janssen-Cilag

15.30 - 16.00
Guest Speaker
“Murty Mantha”

16.00 - 16.30
Guest Speaker
“Jason Warnock”

18.00 - 19.30
“Welcome Reception”
Sponsored by Amgen

Friday 4th June
Breakfast Sessions
Meeting Room 4 + 5
Meeting Room 1
Meeting Room 8

7.00 - 8.15
PD Outcomes in Australia and New Zealand
Conference Program Continued...

8.15 - 8.30
Welcome,
Housekeeping

8.30 - 9.15
Keynote Speaker
“Lisa Burnapp”

9.15 - 10.15
RSA AGM

10.15 - 10.45
Morning Tea

10.45 - 11.15
Guest Speaker
“Carmel Hawley”

11.15 - 11.45
Keynote Speaker
“Lisa Burnapp”

11.45 - 12.15
Guest Speaker
“Bev Hamerton”

12.15 - 12.45
Lunch
Continues through Poster session 2

12.45 - 13.15
Poster Session 2

13.15 - 14.50
Concurrent Sessions
Plenary Hall A & B
Meeting Room 3 - 6
Hall D
Meeting Room 4 - 5

14.50 - 15.20
Afternoon Tea

15.20 - 16.55
Concurrent Sessions
Plenary Hall A & B
Meeting Room 3 - 6
Hall D
Meeting Room 4 - 5

19.00 - 23.30
GALA DINNER

Saturday 5th June

8.00 - 8.50
RSA Treasurer’s
Meeting

8.50 - 9.00
Welcome, Housekeeping

9.00 - 9.45
Guest Speaker
“Julie Hartley-Jones”

9.45 - 10.15
Keynote Speaker
“Simon Stewart”

10.15 - 10.40
Morning Tea

10.40 - 11.50
Concurrent Sessions
Plenary Hall A & B
Meeting Room 3 - 6
Hall D
Meeting Room 4 - 5

12.00 - 13.00
Lunch

13.00 - 13.45
Keynote Speaker
“Wendy Hoy”

13.45 - 14.15
Guest Speaker
“Stephen Oldham”

14.15 - 14.35
RSA 2011 Launch

14.35 - 14.45
RSA Awards

14.45 - 15.00
Conference Closing
A New Initiative: A Renal Palliative Care Clinic: 1

Shelley Tranter, St George Hospital

Context:
Over the last decade there has been a steady increase in the age of patients starting dialysis and most patients who start dialysis have two or more co-morbidities which ultimately effects mortality and morbidity. As these patients remain on dialysis and continue to age these problems may progress to where the patient is deteriorating despite dialysis. In addition, quality of life results for our dialysis patients reveal that scores are well below those for aged matched Australian norms.

Objectives:
It was concluded that introducing the Renal Palliative Care Clinic would be of great benefit to patients and their families as an adjunct to their renal care. The clinic commenced in March 2009 and is staffed by a palliative care consultant, renal registrar, nurse consultant and social worker.

The clinic provides management for patients; who have chosen a not for dialysis pathway; patients who are on dialysis and have other terminal conditions or are experiencing symptoms which are difficult to manage and patients on dialysis who need assistance in decision making regarding withdrawing or continuing with dialysis.

Key messages:
Palliative care has a lot to offer patients with advanced disease and can assist in reducing symptom burden. Renal patients and families can now develop a relationship with the palliative care team avoiding introducing a new specialty in the last days of life.

Conclusion:
This is a novel initiative and the outcomes are expected to be valuable in the identification of the benefits of this type of clinic across the country.
Katrina Duff, Queensland Health, Queensland
Mrs Jennifer Borg, Queensland Health

The shared Electronic Health Record (EHR) is a three way link between the Chronic Kidney Disease (CKD) Multidisciplinary Team, inclusive of the Nephrologist, the Client and the General Practitioner. The aim is to support the client in their understanding and self management of CKD whilst maximising communication between health care providers for the individual client, positively influencing optimal health outcomes and slowing progression of CKD.

The EHR allows the client to view uploaded data by any health care professional / service (nominated by the client to have access), while also being able to enter their own self management data, such as blood pressure, weight, signs and symptoms.

The EHR enables all of the health care professionals involved in the complex care of a client with CKD to be up to date with recent events, such as changes made to medications in a much more timely and streamline manner.

Development and incorporation of CKD Management Profile (based on Kidney Health Australia recommendations) within the EHR can then be individualized for the client ensuring that the health care professionals are aware of treatment targets, goals and algorithms to achieve set goals.

Team care arrangements within the EHR attest to which health care professional is responsible for the delivery / implementation of the management strategies aimed at slowing progression.

In conclusion the EHR has the ability to increase client participation in self managing their CKD as well as streamlining communication between health care professionals, ultimately improving health outcomes and slowing progression of CKD.

An Overview of the Latest Statistics on Chronic Kidney Disease in Australia: 3

Lynelle Moon, Australian Institute of Health and Welfare, Australian Capital Territory
Ms Frances Green, Australian Institute of Health and Welfare
Ms Claire Ryan, Australian Institute of Health and Welfare
Ms Simone Littlewood, AIHW

Background:
The National Centre for Monitoring Chronic Kidney Disease (NCMCKD) was established in 2007 and draws on a variety of information sources in order to monitor and provide timely information on chronic kidney disease (CKD) to stakeholders.

Aim:
To assess the burden of CKD in Australia.

Methods:
National data sources were analysed to assess the extent and impact of CKD in the Australian community covering prevalence, risk factors, health service usage, contribution to mortality, expenditure, trends over time and impact across population groups.

Results:
CKD is common and serious, affecting up to 1 in 7 Australian adults and contributing to around 10% of deaths and over 1.1 million hospitalisations annually. The number of patients receiving kidney replacement therapy is increasing, as is health care expenditure on CKD.

Risk factors for CKD are common, with some becoming more so.

CKD is especially common in Indigenous Australians, who are up to 11 times as likely as other Australians to be hospitalised for CKD, and more than five times as likely to die from it.

Conclusion:
CKD is a common and serious disease in Australia and it appears to be increasing. There are still gaps in the available information, particularly regarding prevalence of the early stages of the disease. The NCMCKD aims to address these gaps through data development, as well as promoting and applying uniform statistical standards, methods and definitions.
Dressing? What Dressing? What’s under the Dressing: 4

Kim Hughes,
Townsville Renal Unit
Prof Anne Gardner,
The Townsville Health Service District
and James Cook University
Ms Joleen McArdle,
Townsville Renal Unit

Background:
A literature review concluded that there was “an overwhelming lack of evidence” to support
to the current, non-transparent central venous catheter (CVC) dressing used for
dialysis exit sites in our tropical setting. A need for a randomised controlled trial (RCT) to
compare dressing types was identified but preparatory work was required to assist in the
initiation, design and setup of a RCT.

Aim:
To determine percentage of CVC dressings remaining intact between dialysis episodes
and whether intactness of dressings was associated with patient demographics or clinical
characteristics.

Method:
A prospective, observational design was used to audit exit sites of thirty six patients over a four
week period. We gathered information directly relating to demographics of the patient including
age, home town and ethnicity. An audit tool was used to record information about position and
type of catheter, catheter dressing intactness, and assessment of the exit site for infection at
each dialysis episode. To promote consistency of exit site assessment a modified Twardowski
scale was used.

Results:
Of 273 episodes, 107 presentations (39.2%) did not have a fully intact dressing at next dialysis
episode, 7 of 34 patients had a significant infection during the 4 week period and most
infections were associated with a non-intact dressing although this result was not statistically
significant.

Conclusion:
The high number of non-intact dressings indicated that further review of staff clinical practices
and dressings in use was required. These findings have been used to inform design of an RCT.

An innovation liferaft is needed for late presenters.
Results from the Australian PINOT audit: 5

Rachael Morton,
University of Sydney
Sydney School of Public Health
New South Wales
Dr Kirsten Howard,
The University of Sydney
Sydney School of Public Health
Dr Angela Webster,
Centre for Transplant and Renal
Research, Westmead
Millennium Institute
Dr Paul Snelling,
Department of Renal Medicine
Royal Prince Alfred Hospital
Sydney, Australia

Background:
Clinical guidelines recommend that patients and their families should be educated about
all treatment options for Stage 5 chronic kidney disease (CKD) in a ‘timely’ fashion.

Aim:
To assess the type and timing of information presented by Australian renal units to
new patients.

Methods:
A web-based survey was completed by pre-dialysis educators, CKD coordinators and
nephrologists about the information presented to new pre-emptive transplant, dialysis, and
conservatively managed patients between 1st July and 30th September 2009.

Results:
721 new patients were identified during the audit period. Initial treatment for 25 (3%) was
pre-emptive transplantation, 134 (19%) peritoneal dialysis, 12 (2%) home haemodialysis, 443
(61%) centre-based haemodialysis, 102 (14%) conservative management and 5 (1%) died of
other causes before starting planned treatment. 603 of 721 patients (84%) were presented
with information about their treatment options prior to commencing treatment (95%CI
80.7–86.2). Patients known to a renal unit for >3 months and those from small units were
significantly more likely to receive information prior to starting treatment (respectively p<0.0001,
p=0.02). Patients first received information about treatment options at mean eGFR 13.3mL/
min/1.73m² (95%CI 12.7-13.8) and mean creatinine 449µmol/L (95%CI 431-467). There was
no association between prior receipt of information and patient age, gender, insurance status,
language spoken at home, need for an interpreter, or geographical state.

Conclusion:
The 16% of patients not being informed prior to starting treatment might be targeted through
a wave of innovation aimed at late presenters to large units.
Help cari to help you improve the quality of care and outcomes for people with kidney disease: 6

Dr Deirdre Fetherstonhaugh, Australian Centre for Evidence Based Aged Care (ACEBAC) Ms Denise Campbell, Senior Project Officer, CARI Guidelines

Context:
Health care professionals have an increasing responsibility to ensure that their practice is based on the best available evidence of effectiveness and minimum harm. Locating the evidence, critically appraising it and developing clinical practice guidelines is labour intensive and requires specialist expertise and has not traditionally been the remit of individual health practitioners. Since 1999 CARI, together with many nephrology professionals, has sought to improve the quality of care and outcomes for people with kidney disease in Australia and New Zealand (and the Asia-Pacific region) by developing and implementing clinical practice guidelines based on the best available evidence in areas of renal practice. Medical, nursing and allied health professionals now have the opportunity to contribute to the implementation of evidence-based practice in nephrology.

Objectives:
This paper will discuss evidence-based nephrology practice and the CARI processes which operate to develop and implement clinical practice guidelines. This paper will enhance the understanding of nephrology care professionals of these processes so that they will know how they can contribute to the implementation of evidence-based practice in the specialist areas in which they work.

Key messages:
The key message from this paper is that all health professionals working in nephrology can contribute to the implementation of evidence-based practice.

Conclusion:
CARI has comprehensive and internationally recognised processes for developing and implementing clinical practice guidelines and nephrology health professionals from Australia and New Zealand are very welcome to contribute to these.

Kidney on Wheels - Need Driving Innovation: 7

Ms Gillian Gorham, NT Renal Services Department of Health and Families

Objective:
To determine the feasibility of providing a mobile dialysis service as an alternative to the model of reverse respite dialysis in select remote communities.

Background:
Indigenous people are over represented among renal clients in the NT and many have been permanently relocated from their home communities in order to access life saving treatment. Relocated renal clients suffer reduced disposable income, decreased quality of life and decreased life expectancy and many will not attain a sufficient level of independence in their treatment regimes enabling them to return home permanently. Further, opportunities to visit their communities are limited by distances to be travelled, transport options and related costs and time away from dialysis treatments.

Method:
An investigation of current mobile health services on a local, national and international level including mobile dialysis services was undertaken. Infrastructure requirements, establishment and recurrent costs were assessed. Comparisons were made with the reverse respite dialysis program currently providing short term dialysis for a specific group of people in Central Australia.

Outcome:
The study concluded that the reverse respite program was limited in its applicability and that the cost to replicate the model to other communities to enable all relocated dialysis patients the same opportunities would be prohibitive. The study noted that the establishment of a permanent mobile service to remote communities posed significant logistical difficulties in the NT environment but that a service delivered as a holiday program was economically viable and offered a greater number of people opportunities to maintain connections with their communities.
Home dialysis patient of Gold Coast Hospital Home haemodialysis at sea: 8

Mr Ian McKenzie,
Home dialysis patient of Gold Coast Hospital
Ms Louise Macleod,
Gold Coast Hospital
Home Haemodialysis Team,
Gold Coast Health Service District

Context:
Home haemodialysis can limit a person's travel and leisure options. This presentation demonstrates how one person and his wife managed to overcome the barrier of limiting home haemodialysis to home.

Objectives:
To demonstrate how one person successfully performed home haemodialysis on his boat for a one-month holiday.

This poster presents a case study whereby a Home Haemodialysis patient, with a passion for life and travel, decided to take his Haemodialysis machine to sea. He undertook modifications to his 11-meter power boat and set off on a holiday up the northern coast. The presentation/poster will give Ian's perspective on the modifications which he had to undertake to ensure a smooth trip, as well as some of the difficulties he faced.

Key Messages:
Supporting an inspirational idea from a person who uses the home haemodialysis service is very rewarding.

Conclusions:
Ian and his wife Julie are looking forward to planning more trips away on their boat. They aim to enjoy life to the fullest and to keep their life as normal as possible.

A nurse-led multidisciplinary round in the Haemodialysis Units, an innovative approach to patient management: 9

John Harkness,
Sydney South West Area Health Service
Ms Susana San Miguel,
Sydney South West Area Health Service
A/Prof Josephine Chow,
Sydney South West Area Health Service

Context:
Communication and cooperation amongst health professionals are pivotal in the delivery of quality patient-centred care. Evidence showed that improved communication and collaboration between health care professionals results in improved patient satisfaction, quality of care and outcomes. A multidisciplinary ward round enhances effective communication, teamwork, and a culture of safety amongst health professionals.

Objectives:
• To provide an avenue for multidisciplinary consultation in the haemodialysis units thus enhancing quality of care delivered.
• To ensure that care is delivered according to the best practice standard.
• To improve communication between staff by sharing information.
• To ensure patient-centred care with the patient involved in the decision-making process.
• To identify barriers to effective care delivery through collaborative review of patient care plan.
• To provide a mechanism for ongoing nursing and medical staff education

Methodology:
A regular multidisciplinary clinical round initiated by senior renal nurses commenced early 2009 across 6 haemodialysis units.

Outcomes:
This multidisciplinary round has allowed for interactive and contemporaneous exchange of information, thus creating a clear, concise treatment plan and goal for the patient. Satisfaction survey for the multidisciplinary team as well as patients was positive. Evidences were identified with improved clinical outcomes.

Conclusion:
Dialysis Rounds improve the patient journey ensuring that appropriate care is being delivered and patient-centred. This also has contributed to the improved communication between staff. This initiative enhances the patient journey through their health care experience as discussed in the New South Wales Government response to the Garling Commission's Report.
An Innovative Vascular Access Option for Haemodialysis Patients: 10

Ms Kathy Hill, Flinders Medical Centre
Helen Yee, Flinders Medical Centre
A/Professor Jeffrey Barbara, Flinders Medical Centre
Kirsten Passaris, Flinders Medical Centre
Professor Ian Spark, Flinders Medical Centre

Background:
Vascular access is necessary to perform haemodialysis. The preferred option for vascular access has been an upper limb arteriovenous fistula (AVF), followed by arteriovenous graft (AVG) and femoral or central venous dialysis catheter (CVDC). When these options are not available innovative options can be explored.

Case Study:
We present a case study of a person, suffering chronic kidney disease requiring dialysis, who had multiple vascular access complications. An innovative access was performed using a Polytetrafluoroethylene (PTFE) graft from the subclavian artery to the inferior vena cava. The graft was subcutaneously tunnelled and is accessible from beneath the breast to the lower abdomen, a length of some 20cm. This type of access has been rarely reported and was the first of its kind in our haemodialysis unit.

Results:
The patient and the dialysis staff’s experience with this access has been very positive. The PTFE graft is easy to cannulate and the patient reports being comfortable with the placement of the graft. The patient was relieved to have been offered this option on a background of multiple failed upper arm AVF/AVG and three episodes of line sepsis.

Clinical Implications:
CVDC use is associated with high morbidity and mortality. It is likely that renal nurses will become increasingly involved in caring for haemodialysis patients that have non-traditional AVG vascular access.


Ms Glenn Stewart, Concord Hospital
Ms Natalie Ko, Concord Hospital

Background:
Haemodialysis patients requiring Vascular Access are usually dialysed the day prior to planned surgery. Pre operative bloods are taken post dialysis to ensure electrolytes are within acceptable range for surgery to proceed. The current practice at a tertiary hospital is to collect bloods four hours post dialysis. There is little evidence to suggest that this is best practice.

Objective:
The aim of the study is to determine when electrolyte (mainly potassium) levels return to within normal range post haemodialysis.

Method:
Thirty patients were recruited and consented according to selection criteria and the study protocol. Blood samples were collected pre- and post haemodialysis, at 0 minutes, 30 minutes, one hour, two hour and four hour intervals via a Vascath or fistula and underwent biochemistry analysis.

Findings:
Findings indicated at pre dialysis, the mean K+ level was 4.3 and immediately post dialysis 3.2. At one hour post haemodialysis, the mean was 3.55, at two hours was 3.54 and at four hour the mean was 3.76 respectively.

Conclusion:
Potassium levels stabilize to within normal range at one hour post haemodialysis. Renal patients requiring surgery do not need to wait four hours for blood collection after undergoing haemodialysis. However, the study raises other questions, as to whether patients require blood collection on the day of surgery if the pre dialysis mean was also within normal range.
Trial of Tri Sodium Citrate DURALOCK-C: A review of haemodialysis catheter patency and catheter related bacteraemia at Southern Health: 12

Ms Mechelle Seneviratne, Southern Health, Monash Medical Centre

Introduction:
Tri Sodium Citrate (TSC) DURALOCK-C: A Review of haemodialysis catheter patency and catheter related bacteraemia (CRB) at Southern Health.

Background:
Tunnelled catheters remain the primary access for many of our patients requiring acute haemodialysis. DURALOCK-C was introduced in an attempt to improve catheter performance through an improved patency and reduction in incidence of catheter related bacteraemia. In March 2009 a trial of DURALOCK – C locking solution in all new tunnelled cuffed haemodialysis catheters was introduced at incentre haemodialysis unit.

Method:
In March 2009 interlock solution was changed from Heparin 5000 IU/ml to Trisodium Citrate (TSC) - DURALOCK – C in new tunnelled catheters. Prospective data collection on all new catheters to the end of the trial period in February 2010 to include patency, bacteraemia and Urokinase use.

Results:
An increase in catheter thrombosis is emerging, particularly at the arterial lumen of all blocked catheters.
The reduction in number of catheter days due to replacement and catheter bacteraemia.
An increased use and cost of Urokinase and catheter replacements.
Reduction in catheter related bacteraemia noted in DURALOCK – C locked catheters. New catheter (TITAN) introduced 2 months to the end of the Duralock trial with no change in results.

Conclusion:
Duralock – C solution has not improved our catheter patency rate with many catheters replaced. Minimal improvement in catheter related bacteraemia in DURALOCK – C catheters. Increased Urokinase use and cost since DUROLOCK – C introduced with continued use of DURALOCK – C to be reviewed after the trial period.

Buttonhole Cannulation: First randomized controlled trial: 13

Ms Glenda Rayment, Liverpool Renal Clinical Research Centre, A/Prof Josephine Chow, Sydney South West Area Health Service

Background:
A reliable vascular access is essential for life-sustaining haemodialysis. The native arterio-venous fistula (AVF) and saphenous vein graft (SVG) are the closest to a reliable access; however these tend to be subject to complications. Literature suggested the buttonhole method of cannulation may prolong the life of AVF and SVG access with fewer complications. To date, a randomized controlled trial has not been conducted to compare buttonhole cannulation with the rope ladder rotation technique.

Objective:
To compare the rope ladder rotation technique to buttonhole technique cannulation in new and established AVF and SVG.

Methods:
Haemodialysis patients with a patent AVF or SVG were consented and randomised to the buttonhole or control (rope ladder rotation) group. Subjects randomised to the buttonhole group were assigned one staff member to cannulate their fistula till tunnel development. Once developed, blunt needles were used for cannulation. Study duration was six months.

Results:
35 subjects were randomized to the buttonhole group and 35 subjects to the control. 29 subjects completed the study in the buttonhole group and 32 subjects in the control group. Cannulation pain, infection rate and cannulation proficiency were analysed. Preliminary analysis has indicated increased infection rate and decreased cannulation proficiency in the buttonhole group.

Conclusions:
The introduction of buttonhole cannulation into the dialysis units and was well received by staff. The study has shown that the buttonhole technique is a reliable method of cannulation for haemodialysis patients. However, this technique needs to be carefully monitored as a result of the increased infection rate.
Generating the Swell: Enhancing Access and Equity through Innovative Education Strategies: 14

Ms Kirsten Black,
Royal Hobart Hospital
Ms Wendy Gibson,
Penrith Community Dialysis Centre
Nepean Dialysis Inpatient Unit

Context:
Nephrology nursing is often conducted in isolation from other strands of health care because of its nature as a specialty nursing practice. This isolation generates a silo effect. In order to address this, various sub-specialties within nephrology, including anaemia management, vascular access and CKD co-ordinators, have or are trying to develop their own collegial networks designed to transcend geographical and organisational boundaries.

Key messages:
One such group, now in existence for over two years, is concerned specifically with nephrology education for all nurses. This group's focus includes nurses working outside the immediate specialty that may come into contact with or are caring for people with kidney disease throughout Australasia including in remote and disaffected communities.

Objectives:
This paper will discuss initiatives implemented in the past calendar year and report on current strategic priorities and the future trajectory of the group. The paper aims to generate ideas, engender interest in, and encourage feedback on the group's work.

Conclusion:
The formation of this collegial network has seen progress towards a national professional development framework for nephrology nursing. This has included establishing aims and objectives and devising a process strategy. The network has achieved many positive developments in the past calendar year. However, sustainability remains a priority in order to continue the progression of innovative and relevant educational strategies and resources for Australasian nephrology clinicians.

The Utilisation of E-learning in continuing renal nursing education in the management of Arteriovenous Fistula/Graft: 15

Ms Judith Ibister,
Sydney South West Area Health Service
Ms Maria Lidonni,
Sydney South West Area Health Service
Ms Susana San Miguel,
Sydney South West Area Health Service
A/Prof Josephine Chow,
Sydney South West Area Health Service

Context:
Long-term haemodialysis patients require a permanent vascular access to be able to perform haemodialysis, which can be in a form of either an arteriovenous fistula or graft (AVF/AVG). Utmost care of the access is imperative to prevent and minimize complications, thus allowing for sustainable haemodialysis. Traditionally, renal nurses are taught in the care and management of AVF/AVG through departmental face to face in-services and by following the department's policy and guidelines. This project is aimed to determine the effectiveness of e-learning as a supplementary teaching method in clinical setting.

Objectives:
• To develop and enhance the skill and knowledge of all renal staff in the care and management of AVF/AVG used for haemodialysis, thus enhancing longevity and patency of patient’s haemodialysis vascular access.
• To promote staff professional development.
• To provide a learning tool that is readily available and accessible by all staff.

Outcomes:
Staff education and training is paramount in achieving quality patient care. Innovative methods of delivering education must be developed and implemented without compromising patient safety. The e-learning method has been proven beneficial in meeting the staff's educational needs in the care and management of AVF/AVG. It offers flexibility in learning at a phase that suits individual staff and departmental needs.

Conclusion:
Information technology is now widely available and acceptable by our multigenerational workforce and should be utilized to its full potential in delivering quality health care through cost-effective staff education and training.
Partnership + Education = Support: The experience of building a consumer-driven support group through organisational Partnership and Consumer Education: 16

Ms Beth Richardson, Kidney Health Australia
Ms Bridget Aherne, Cairns Base Hospital Department of Nephrology

Background:
Gaining education and support from sources outside hospital settings has proven effective to enhancing self-management behaviours amongst persons with chronic illness. In remote regions it can be difficult for kidney consumers to access out-of-hospital services, as community non-government organisations (NGO’s) are often challenged geographically and/or financially to offer appropriate services to these areas.

Aim:
In January 2009, a national kidney-focussed NGO and a regional Queensland nephrology department partnered to launch an education forum for dialysis and transplant patients aimed at fostering sustainable consumer-driven support.

Method:
Consultation with local consumers informed the forum agenda, with new treatment developments and establishing a support group selected as major topics. The forum was advertised by the nephrology department, with the NGO coordinating speakers and funding. A centrally located venue away from hospital grounds was selected by consumers, with registration and meals offered free to participants.

Results:
62 people attended the Well on My Way: What’s New? Forum on June 16th, 2009. Participants represented the following consumer groups: 23% HD, 23% PD, 19% transplant recipients and 35% carers/family/other. No one had attended a similar forum in the past.

Of those completing an evaluation, 96% identified the presentations as “very useful” or “useful”. All participants indicated they would attend another forum. Following the forum, a 20 person consumer-driven support program was established and continues to operate.

Conclusion:
The partnership between the NGO and nephrology department (and the resulting education forum) proved successful in fostering sustainable educational and supportive activities which were both consumer-valued and consumer-driven.
Reused but not Discarded - Reusing Reverse Osmosis Reject Water: 17

Mr James Gerrish, North West Dialysis Service
Mr Tony Beeston, North West Dialysis Service
Victoria

Context:
Haemodialysis requires large volumes of water that has been processed by pre-filtration and reverse osmosis to achieve chemical and microbiological standards for dialysis. Significant volumes of clean reject water (i.e. water that does not meet dialysis standards but may meet potable standards) are generated and goes directly to sewer unless it is “captured” and redirected for a suitable purpose.

Objective:
A Victorian dialysis provider sought funding through the Victorian Government to achieve 2 objectives.

1. To assess the feasibility of reusing/recycling RO reject water (RORW) at its metropolitan and regional dialysis centres.
2. To create an industry “how to” manual suitable for use at any Australian dialysis centre.

Key Messages:
The feasibility study demonstrated differences between regional and metropolitan sites with regard to motivation to pursue water reuse initiatives. Regional sites indicated a higher priority for RORW in the watering of gardens and showed stronger need to display community leadership. Small volumes and lower cost of potable water limited reuse opportunities at some regional sites. Project costs and payback period were considered vital at all sites.

3. The developed manual is available through the dialysis provider and eventually the Victorian Government Smart Water Fund.

Conclusion:
Adopting a water hierarchy is important to capture the “low hanging fruit” of water savings. Performing a water audit is vital as is matching the volume of RORW to the intended reuse application.

The reference manual will provide the blueprint for other dialysis providers to pursue their own water saving initiatives.

Pre-Peritoneal Dialysis Assessment: Tackling the Issues Early: 18

Mrs Anna Claire Cuesta, St George Hospital
Ms. Susan Mwangi, St George Hospital
Ms. Elizabeth Josland, St George Hospital
Dr. Shelley Tranter, St George Hospital
Ms. Tracey Blow, St George Hospital
NSW

Background:
This paper provides an overview of the development and outcome of a four-month Pre-Peritoneal Dialysis Assessment pilot project initiated at our Peritoneal Dialysis (PD) Unit in 2009.

Aims:
This project aimed to assist the PD nurses to identify, understand and address the issues which may impede timely and effective PD home training.

Methods:
A structured tool was generated dividing the assessment into seven areas which were identified from previous experience as hurdles to PD training: language, reading/vision, hearing, social support, dexterity, physical strength, comprehension and acceptance. An action plan was developed following every patient assessment which allowed for appropriate planning/referrals. Upcoming patients were captured prior to the insertion of a PD catheter in collaboration with his/her respective nephrologist, Pre-dialysis and Vascular Access CNCs.

Results:
An evaluation was conducted on the issues identified, actions taken and the benefit of the project for both the patients and the PD nurses. Contrary to expectations, physical and social support issues were easier to address prior to PD training. The evaluation suggested PD acceptance and comprehension are profound issues that require ongoing intensified education and support. Additionally, it highlights the need to include mobility and occupation in the assessment criteria. Overall, the implementation of the assessments reduced the length of PD training by 20% and all training commenced on scheduled dates.

Conclusion:
This paper emphasises the importance of recognising the factors affecting the patient in his/her transition to home dialysis. It indicates proper planning and preparation promotes timely education and prevents poor performance/outcomes.
Peritoneal Dialysis in Refractory Congestive Heart Failure: A Fascinating Challenge: 19

Mrs Lisa Paquin, St Vincent’s Hospital
Mrs Monica Bexton, St. Vincent’s Hospital, Sydney
Mrs Marlene Vincent, St. Vincent’s Hospital, Sydney

In 1949 Scheneierson published the first report using Intermittent Peritoneal Dialysis in a patient with Congestive Heart Failure (CHF). Over the last 5 years the Peritoneal Dialysis Unit at our metropolitan hospital has seen a rise in the number of patients referred for treatment of Refractory CHF.

At the time of initiation of dialysis therapy, none of these patients were in end stage renal failure (ESRF), but all suffered severe heart failure, treatable only by means of cardiac transplantation. Use of peritoneal dialysis (PD) in this group has varied from once daily icodextrin therapy, to full automated PD prescriptions.

Our experience in treating this group has uncovered a cluster of issues from a nursing perspective not commonly seen in our ESRF population. We aim to detail these issues through a summary of our patients, highlighted with case studies.

While treatment of refractory CHF with peritoneal dialysis has been shown to be a promising option, they pose a fascinating challenge to the PD nurse along the way.

Gastrointestinal symptoms: Prevalence and impact on food intake in dialysis patients: 20

Mrs Karen Salamon, Southern Health
Mrs Julie Woods, Southern Health
Mr Eldho Paul, Southern Health Victoria

Background:
Malnutrition is a frequent finding amongst dialysis patients. Many studies have reported gastrointestinal (GI) disorders in the peritoneal dialysis (PD) population. Nurses working with this group of patients at our hospital reported frequent complaints about gastric symptoms such as nausea, vomiting, early satiety, poor appetite and constipation.

Aims:
To establish if PD patients experience more GI symptoms than haemodialysis (HD) patients and whether this impacts on food intake.

Method:
Experienced renal dietitians surveyed 122 PD patients and 172 HD patients regarding the incidence and impact of gastrointestinal symptoms.

Results:
Those on PD reported significantly greater incidence of nausea, vomiting, bloating, early satiety, diarrhoea, heartburn and fatigue than those on HD. They were also significantly more likely to report that the symptoms were related to the onset of dialysis. More patients on PD had noted a change in food intake, used nutritional supplements and attempted dietary changes to alleviate symptoms.

Serum albumin levels were significantly lower for those on PD. This group had lower body mass indexes at commencement of dialysis but this difference was not significant for current weight. Those on PD had dialysed for less average time than the group on HD. There was no difference in numbers of diabetics or those taking cinacalcet or sevelamer between the groups.

Conclusion:
PD patients report a significantly greater number and frequency of GI symptoms than HD patients, and that these symptoms result in decreased food intake.
Ms Amy Obad,
Southern Health
Victoria

Background:
Recruitment and retention of skilled staff, with commitment to high standards of service delivery were necessary for the success and sustainability of a new Brisbane haemodialysis satellite unit.

The evidence recommended that development of a positive workplace culture would lead to more successful achievement of team goals. The effective use of a framework known as the “FISH philosophy” was suggested as a means of engaging staff in adopting cohesive team practices. The unit undertook to apply the principles of the programme within a primary team model of care. This presentation will highlight the unit’s experience throughout implementation.

Aims:
This quality activity aimed to develop a collaborative team approach to enhance both patient and staff satisfaction, by applying the four key beliefs of “Fish”. Namely; Choose Your Attitude, Be Present, Play and Make Someone’s Day.

Methods:
A “Leader Fish” programme covering core concepts and application was completed by the senior nursing team. An audit of all staff’s beliefs on both positive and negative workplace behaviours followed. An acceptable behaviours standard was agreed. “Fish” behaviours were modelled by staff and ongoing implementation feedback gained through a variety of staff forums. Supporting educational resources were provided for both staff and patients. Ongoing staff and patient post implementation satisfaction surveys have been undertaken.

Results:
Workplace culture indicators e.g. survey results, absenteeism, attrition, vacancy rates and complaints all show evidence of high levels of satisfaction for both staff and patients.

Conclusion:
Committed implementation of the “FISH” philosophy has a positive impact on workplace culture.
Reducing the number of aggressive incidents on the haemodialysis unit by improving the patient’s experience of haemodialysis: 22

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St George Public Hospital, Kogarah
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Background:
The problem of aggression and anger in haemodialysis patients is anecdotally widespread throughout the haemodialysis community.

Aims:
This nurse-led quality project aims to reduce the number of aggressive incidents directed towards staff by patients attending a hospital haemodialysis unit. The premise of the study is that aggressive outbursts are the outward manifestation of patient concerns towards the haemodialysis experience. Therefore if steps could be taken to improve the patient’s haemodialysis experience, the number of aggressive incidents would be reduced.

Methods:
It was felt that aggression exists across a wide spectrum of behaviour. The Aggression Grading Record of Observation (AGRO) score was developed and nurses recorded a baseline of all aggressive incidents. As major stakeholders data was also sought from patients through patient stories and process mapping the patient journey.

Data were analysed and themed to identify common triggers to aggression. Based on these results, strategies were developed and implemented to improve the experience of haemodialysis for patients. The final phase will be to re-measure using the AGRO score and introduce steps to sustain effective changes.

Results:
The project is not complete. The baseline data showed that over 50% of incidents of aggression were related in some way to waiting times, and the associated problem of loss of control for the patient. Various strategies were developed to address this issue with mixed success.

Conclusion:
Aggression is experienced in haemodialysis units throughout the country and strategies developed to combat the problem are widely relevant.

A nurse’s personal journey through renal failure: 23

Ms Gerri Doogan,
Southern Health Care Network.
Ms Ann Conquest,
Southern Health Care Network

As professional nurses we should understand that it is a patient’s choice to accept or refuse treatment. The question is when a patient makes a choice regarding treatment do we truly respect it or do we let our own judgments and beliefs interfere? Through Gerri’s story we explore the reasons why haemodialysis was refused and the repercussions faced.

Practicing as an Emergency nurse, Gerri who was thirty-one at the time had preconceived expectations of dialysis. Such things as interference with lifestyle and general fear were major influences in her decision not to dialyse. Having made her choice and still suffering from a chronic illness, Gerri also had to face the opinions and attitudes of the health professionals around her. Attitudes ranged from support and understanding to what she felt as blatant disrespect and the use of scare tactics to encourage treatment.

Thankfully having received a transplant, Gerri no longer faced these challenges. Over the past 10 years since the transplant and now ironically working in a haemodialysis unit Gerri’s view towards dialysing has changed dramatically.

This change she believes is greatly due to her increased knowledge gained from working as a dialysis nurse. Ultimately the fear has subsided and if, in the future dialysis is required she would consider this option. However, that being said she would not change the past and still firmly believes, where possible, every person has the right to choose his or her own destiny.
The Impact of Fatigue on Daily Activity in People with Chronic Kidney Disease: 24

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University of Ballarat
Dr Marie Caltabiano,
James Cook University

Background:
Chronic Kidney Disease (CKD) is a complex and long-term disease in which people commonly experience fatigue and reduced levels of fitness; both of which impact on an individual’s ability to carry out routine activities of daily life.

Aims:
This study sought to compare physical activity and fatigue levels of people with CKD, and to compare whether being pre-dialysis or receiving different Renal Replacement Therapies (RRT) has any effect on fatigue and activity.

Methods:
Using a descriptive design, a convenience sample of 112 people in stages four or five of CKD from one Australian renal unit completed the fatigue severity scale and the human activity profile.

Results:
Participants were more fatigued and less active than the general population, with women significantly affected. Those with diabetes as the cause of CKD had higher levels of fatigue and lower levels of activity. Type of RRT had a significant impact on fatigue and the number of activities performed, with peritoneal dialysis patients being the most fatigued and the least active. Those who were prescribed an erythropoietin stimulating agent (ESA) were significantly more fatigued and less active than those not prescribed an ESA.

Conclusion:
There is a need for increased assessment to identify and monitor both fatigue and activity levels in people with CKD. In particular early detection of a person’s inability to engage in normal self-care, household and social activities, and independent exercise due to increasing levels of fatigue is necessary. Early detection would enable timely nursing interventions to optimise independent activity.

Characteristics of successful dialysis exercise programs: 25

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Mr Danwin Chan,
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Ms Lauren Potter,
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Background:
Exercise programs have been shown to improve cardiovascular risk, quality of life, physical function, muscle condition, dialysis efficacy, depression, inflammatory markers and mortality for people receiving dialysis. However, there has been little research focussed on the factors required to sustain a dialysis exercise program.

Aim:
To identify elements necessary for sustaining exercise programs for people receiving dialysis.

Method:
Literature searches for publications (January 1980 to February 2009) in Medline (OVID), PubMed, CINAHL (EBSCO), EBSCOhost EJS, ProQuest Central, Web of Science, Cochrane Library, Google Scholar, ScienceDirect, SpringerLink (Kluwer) and Wiley Interscience (Blackwell) were performed. Reference lists from relevant articles were hand searched for further publications. Criteria for inclusion included full-text primary research and review articles focused on exercise for adult hemodialysis patients.

Results:
One hundred and seventy one publications were found with a primary focus on exercise in hemodialysis. Of these, 28 primary research and 14 review articles addressed one or more aspects of sustainability of hemodialysis exercise programs.

Conclusion:
The eight factors contributing to sustainable exercise programs were: dedicated exercise professionals; encouragement to exercise intradialytically; dialysis and medical staff commitment; adequate physical requirements of equipment and space; interesting and stimulating exercise program; measured cost implications; individual prescription, and the conclusion that there is no age barrier to exercise on hemodialysis. Incorporation of these eight factors will contribute to a more sustainable dialysis exercise program.
Exploring older people’s views of choice & decision -Making in Chronic Kidney Disease (CKD) – A grounded theory study: 26

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Prof Stuart Parker,
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Background:
Chronic kidney disease (CKD) is seen as a disease of old age. Treatment decision-making is complex for older patients for whom treatment benefits may be uncertain. While patient input would seem important in the face of often uncertainty little is known about older people’s views of involvement in decision-making.

Aims:
This UK study aims to identify the core concerns of older people with CKD in making treatment decisions.

Methods:
Qualitative Grounded Theory study employing interviews, focus groups & non-participant observation.

To date 15 patients with either CKD stage 4 or 5 were recruited. Data collection involves interviews, observation of physician-patient consultation and nurse-patient consultation during pre-dialysis education sessions.

Results:
Constant comparative analysis resulted in five themes including decision-making under captivity, competence & confidence in self, vulnerability, informational uncertainty and decisional time; the study continues to develop the core main category.

Conclusion:
Ensuring patients have information to enable decisions to be made is vital. In this study, whilst patients valued involvement in decision-making few wished responsibility for making final decisions. Creating a climate for shared decision-making is essential as is ensuring patient education take account of the ageing process. Ensuring choices work for both patient and family requires information being provided in the right way at the right time. Developing decisional aids which provide information on risks, benefits and possible harms of treatment are needed if patients are to make effective choices.

Home therapies advice via the Simulation Room: 27

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Context:
Home Therapies staff strive to keep patients on dialysis in their home environment, often hundreds of kilometres from the inpatient facility, through high-quality training supported by outreach visits and telephone communications. When problems with home dialysis arise, staff are required to interpret information by telephone and instruct the patient, relative or health carer, how to deal with the problem. Information conveyed to the patient needs to be clear and concise, a complex skill not easily taught or acquired.

Objectives:
This initiative sought to make education practical and realistic by using a skills centre facility. The core work of our outreach team is to deal with home crises’ on a daily basis, an appropriate scenario was created for use in the skills centre. The scenario involved a haemodialysis patient encountering a crisis whilst dialysing, and phoning the home therapies staff who were then required to assist the patient. Scenarios were recorded.

Key messages:
In the 12 months that this approach has been used, several staff have participated in the skills centre scenarios. Using these scenarios we identified deficiencies in knowledge and skills, including staff confidence to instruct over the phone, accuracy of staff information and appropriateness of terminology. The ability to review the scenarios, the information they gave to the patient and the consequences of that advice, has been an effective teaching strategy.

Conclusion:
Use of a skills centre with review of filmed scenarios has been an effective teaching strategy and will improve service delivery to patients receiving home dialysis.
The Effectiveness of Nursing Interventions which promote self-management for people with End Stage Renal Disease (ESRD) undergoing Haemodialysis: A Systematic Review: 28

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Background:
Self-management of ESRD is important for patients as they encounter challenges including ongoing symptoms, complex treatments and restrictions, uncertainty about life and a dependency on technology, all impacting upon their autonomy particularly after commencement of haemodialysis. Benefits for patients who self-manage their haemodialysis include improved treatment outcomes, quality of life and physical wellbeing.

Objective:
The aim was to critically appraise and summarise the best available evidence relating to nursing interventions promoting self-management of haemodialysis for adult patients with ESRD in the hospital (satellite or outpatients department) or community setting.

Methods:
Primary research was considered for the review. Data sources searched included: the Cochrane Central Register of Controlled Trials; MEDLINE, EMBASE; CINAHL; PsycINFO. Web of Science and Digital Dissertations was searched for conference proceedings, and theses. References of studies meeting the selection criteria were checked. Outcomes relating to educational and psychosocial interventions were reported. The primary outcome was haemodialysis self-management. Other outcomes included compliance, depression, quality of life, social functioning, alienation, and health beliefs.

Results:
Five randomised controlled trials were found. A narrative summary was developed due to heterogeneity of the interventions. The findings include: group psychosocial therapy (GPT) increases confidence in self-care; two interventions (weekly telephone contact and a self-efficacy intervention) improved compliance; a patient empowerment programme improved empowerment, self-care self-efficacy, and decreased depression; an educational programme improved psychosocial skills and activities of daily living.

Conclusions:
The educational and psychosocial interventions included in this review proved effective strategies for nurses to promote self-management for people with ESRD undergoing haemodialysis.

Fatuga’ O Manuia: An education resource for the prevention of “sick kidneys” in the Samoan community: 29

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Griffith University

Our Health District, in southeast Queensland, Australia, has a large Pacific Islander population of around 21,000 people, a significant component of whom are first- to third-generation Samoans. In our clinical experience, the Samoan community exhibit a disproportionate rate of renal and related conditions (such as obesity and diabetes) compared to the general population.

A joint project, to promote renal health in the emigrant Samoan community, using the principles underpinning Fa’afaletui, began between the Hospital and the University. The objectives of the project were to first, develop an understanding of the factors contributing to this situation; and second, to work with the Samoan community to produce sustainable, culturally-appropriate resources that enable them to make informed choices with regard to their renal health.

After ethical approval was obtained, contact was then made with the matai, who expressed concern about the rate of renal failure in the Samoan community. Importantly, the matai was invested with the authority to speak for the community and refer us to the appropriate cultural informants. Sixteen key stakeholders subsequently participated in the project, all of whom were first- or second-generation Samoan emigrants. In keeping with Samoan cultural norms, no individual interviews were undertaken.

This project demonstrates how a culturally-sensitive framework, Fa’afaletui, guided our understanding of the factors contributing to the Samoan issues, and to the subsequent development of strategies to help prevent renal disease in the Samoan community. The most important lesson learned was the potential benefit of taking the message to the community in a form that is relevant for them.
Communicating with patients – when words are not enough: 30

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Mrs Julie Owen,
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Background:
Dealing with the frustration of a language barrier in a clinical environment at any time is a challenge for a Non English Speaking Patient (NESP). This may be exacerbated when you are also a dialysis patient. In particular, the inability to understand staff and difficulty in communicating symptoms and side effects which may result from the haemodialysis treatment, may lead to sub optimal patient outcomes. In order to address this situation, it was envisaged that a more formal and consistent option for communication should be investigated with input from our patient population.

Method:
Semi-structured patient interviews were conducted with 10 multi-cultural patients across each of our satellite centres, (to consider geographical variations of our patient population), to gain insight into the patient perspective on communications. Questions ranged from how the patient normally greeted people and if there were gestures or actions that they find offensive up to dealing with information transfer and potentially using family/carers to translate at medical appointments. We also delved in to the specifics of their treatments at dialysis with respect to both understanding staff and being able to convey their needs in return.

Results:
As a result of an investigation of our patient cultural background, we found there were 38 pts who were of a NESB.

Discussion:
A survey of all satellite patients is currently underway derived from results of the semi structured interviews. This survey will hopefully indicate the patient requirements for a tool to assist NESP with communication in the dialysis setting.

Interventional Nephrology Service – The continued success: 31

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Background:
Our Interventional Nephrology Team has continued to provide a comprehensive service since 2006 in the insertion of percutaneous dialysis catheters (PC) and to perform peritoneoscopic insertion of Peritoneal Dialysis (PD) catheters.

Service provision:
In 2009, there were 38 PD catheters, over 200 PC and over 120 renal biopsies performed. The waiting list for dialysis vascular access has been constant. There have been minimal adverse events, consistent with the rate expected for interventional procedures. There were increase clinic activities. The creation of a Renal Interventional Fellow position generated great interest amongst applicants for Advanced Trainee positions. This benefitted recruitment and retention of our Renal Registrar/Advanced Trainee medical workforce.

Benefits:
Benefits from the Interventional Nephrology Service included increase in revenue, saving in theatre sessions and reduction in bed days in addition to improving patient care, work flow and dialysis room efficiency.

Issues:
The Renal Unit identified another obstacle in dialysis access creation; a pattern of late referral of new patients to the surgeon for creation of first permanent access, resulting in over 31% patients needing to use a temporary PC at first haemodialysis. Strategies have been put in place to improve timely referral for permanent access creation.

Conclusion:
Renal Interventional Service can improve maintenance of viable and safe dialysis access. In addition to the clinical benefits, this kind of initiative also provides a tool for staff recruitment and retention, especially in light of ongoing shortages in this specialty workforce. Despite the barriers and challenges, the innovative changes described were managed well.
Outcomes of screening for sleep disordered breathing in a cohort of patients with chronic kidney disease stages three and four: 32

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50 – 70% of dialysis patients suffer from sleep disordered breathing (SBD), compared with only 2 – 4% of the normal population. The prevalence in earlier stages of chronic kidney disease (CKD) is unknown, although both diseases have common risk factors i.e. male gender, diabetes, and obesity. SDB is associated with resistant hypertension, stroke and accidental injury. As hypertension is the major risk factor for progression of CKD, consideration of secondary causes of high blood pressure remains an important aspect of patient assessment.

Thirty-two consecutive patients were randomised to the intervention arm of a prospective study investigating the impact of aggressive risk factor and lifestyle modification with nurse-led care in patients with CKD (eGFR 25 - 60ml/min/1.73m2). At their baseline assessment, patients completed an Epworth Sleepiness Score (ESS) questionnaire.

Twenty-five had ESS < 10 (normal), three had ESS 11- 15 (increased risk) and four had ESS 16 – 24 (high risk). Of five patients with a previous diagnosis of SDB, four reported using CPAP as prescribed and had ESS in the normal range. Therefore 11 / 32 patients had confirmed or possible SDB which is considerably higher than the normal population.

This paper will present the findings of this research and outcomes of referrals to the Sleep Clinic. The usefulness of ESS as a screening tool and issues arising when SDB is identified will also be discussed.

5% Dextrose Study Protocol – A prospective cross-over interventional study: 33

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Aim: The aim of this study is to compare the effectiveness of using 5% Dextrose for priming, wash-back of the extracorporeal circuit and treatment of intravascular volume depletion symptoms, against 0.9% normal saline amongst adult, non-diabetic haemodialysis population.

Objectives:

- To reduce/minimize patient’s interdialytic weight gain, thereby preventing rapid ultrafiltration during haemodialysis.
- To minimise symptoms of intravascular volume depletion during haemodialysis treatments due to rapid ultrafiltration.

Design: Multicentre, prospective, cross over interventional study.

Setting: Haemodialysis Units across South West Sydney.

Subjects: The study will include adult haemodialysis patients who are able to provide informed consent. Subjects must be on haemodialysis for a minimum of 6 months and have a permanent dialysis access (AVF/AVG). Patients will be excluded if they are receiving acute dialysis, Diabetics (IDDM or NIDDM) or on haemodialfiltration.

Methods: 50 subjects will be recruited and remain on using 0.9% Normal Saline for priming, wash-back of the extracorporeal circuit and treatment of intravascular volume depletion symptoms during haemodialysis treatments for the first 3 months. Subjects will then cross-over using 5% Dextrose for the following 6 months.

Main outcome measures: The measurement of treatment effects will be interdialytic weight gain, vital signs, and symptoms of intravascular volume depletion, Blood Volume Monitoring (BVM) during dialysis and blood sugar levels. Adverse events will be tracked, recorded and monitored. All hospital medical care will be recorded.

Conclusions: This multicentre study has been designed to provide evidence and assist renal clinicians in determining the optimal strategy for preventing rapid ultrafiltration during haemodialysis.
Antibody Incompatible Adsorbtion (ABOi) Column Treatment: 34

Context:
With rapid changes in technology, new and exciting opportunities are becoming available to increase the pool of available organs for live donor renal transplantation. One such change is the use of an antibody adsorbtion filter to remove anti-A and/or anti-B antibodies thereby making transplantation of ABO incompatible blood groups possible. Group O is the universal donor as cells do not express A or B antigens and donors can give to recipients of any blood group. However, a group O recipient can only receive a group O kidney due to the recipient having both anti-A and anti-B antibodies.

Historically group O recipients (46% of the population) have waited longer than other recipients for a kidney transplant. Part of the reason for this is that any potential donors who were not group O, were incompatible.

Key Message:
These patients can now consider more live donor options through ABO incompatible transplantation, using the combined approach of immunoadsorption column treatment, immunoglobulin administration and immunosuppression therapy to reduce the anti-A and/or anti-B antibody level in the recipient.

Objective:
In 2009 a large metropolitan hospital in Brisbane trialled the use of antibody specific immunoadsorption filters as a means of reducing antibodies levels in preparation for an ABO incompatible renal transplantation. This high cost treatment required intense monitoring and specialised customised training for the dialysis nurses.

Conclusion:
To date we have had experience with 40 treatments over a total of 6 patients. The nursing care, column treatment, educational strategies and monitoring of the treatments are discussed as well as the progress to date, of these patients.

Link Nurses - Linking dialysis to home: 35

Introduction:
The Home Dialysis Service (HDS) provides care for 150 home patients over a large geographical area. To provide enhanced support for 53 of these patients who live around 3 major Victorian regional centres, we introduced the concept of link nurse positions.

Method:
Three link nurses were funded part time via the regional health services to provide ongoing care and support for home haemodialysis (HD) and peritoneal dialysis (PD) patients. Training was conducted in Melbourne and key performance indicators (KPI's) were established to monitor the success of the positions.

Results:
Since the inception of the project feedback has been very positive on how the nurses have improved the care that the patients receive. It reduces the amount of travel patients need to do to Melbourne for preassessments N=27 and adequacy and peritoneal equilibration tests (PET) N=75. The Link Nurse position reduces the amount of travel Melbourne HDS staff attend in the regional areas, N=70 for annual home visits and enables more immediate, local crisis backup and support for home patients. The link nurses are also a valuable resource for the local nephrologists and hospitals.

Conclusion:
Enabling patients to dialyse at home when satellite dialysis spots are hard to find is a great asset to all involved: greater independence for the patients, improved quality of life and greater use of resources. The inclusion of the link nurse position has enhanced the care that our service can give our patients in the regional areas.
The Buoyancy of Clinical Data Management Systems in a Peritoneal Dialysis (PD) Unit: 37

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Mr Bengy Lau, Sydney South West Area Health Service
A/Prof Josephine Chow, Sydney South West Area Health Service
Ms Chi Nhan, Sydney South West Area Health Service
Ms Arun Kanti, Sydney South West Area Health Service
Ms Maureen Kerr, Sydney South West Area Health Service

Background:
Accuracy and quality of data is imperative for it to be useful. It is well known that PD Clinicians carry uniquely specialised dialysis knowledge that is not easily subsumed, thus when disruptions occur; data management becomes a secondary priority. Plausible, given that a Clinician's major priority is to maintain service and educate PD patients. It is not to be burdened by data systems that may be historically compromised, fragmented, duplicated, limited nor has benefit. Moreover, paperwork, software and hardware may be as equally contentious.

Aim:
To improve clinical data accuracy and quality inorder to optimise data usage, accessibility, storage, retrieval and analysis in the PD Unit.

Methodology:
To overcome data optimisation being compromised the analytical tool of “People – Purpose – Process – Data” Continuum was applied. Particularly, the Continuum places an emphasis on “People” and “Purpose”. It attempts to aid clinical areas to reduce data burden.

In February 2009, a Renal Data Manager (DM) was employed to assist the PD clinicians. The effect of the DM's intervention will be measured. The DM spent time with the PD Team building mutual understanding, respect and trust.

Outcomes:
The continuum is a dynamic process and has been applied over the past nine months. The intervention and data compliance measures will be presented in the poster.

Conclusion:
In the period of nine months, a quality functioning, patient focussed PD Unit mastering a useful data management system to overcome a cumbersome and onerous task. This initiative is sustainable and can be adopted by other PD Units.
To Keep Access Great – A Quality Improvement Project to Improve Monitoring & Documentation of Dialysis Patients Vascular Access: 38

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Ms Kimberley Trujillo,
North West Dialysis Service
Ms Jenny Beavis,
North West Dialysis Service
Mrs Jayne Amy,
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Background:
Preservation of healthy vascular access (VA) in dialysis patients is of great importance. Essential to this is effective assessment, monitoring and documentation of VA.

Aim:
The aims of this project were to encourage better assessment and monitoring of VA, and to improve documentation of VA complications in haemodialysis patients.

Method:
Following a literature search and staff survey, a retrospective audit of VA documentation was undertaken. This data was reviewed and a new VA documentation stamp, with assessment and VA complications was developed and implemented on individual dialysis treatment records. Simultaneously, posters were displayed and staff education was undertaken. Four weeks post intervention VA documentation was analysed, and staff were re-surveyed to assess their acceptance of the project.

Results:
Pre-intervention surveys found that 80% of staff agreed that improving VA documentation was essential.

11/698 (1.6%) of patient treatment records had documented VA complications pre-intervention; this increased to 79/446 (17.7%) post intervention. These results showed a 1006% increase in the documentation rates of VA complications within the trial unit.

Post intervention surveys indicated that 96% of staff found the stamp useful and supported the permanent introduction of a more thorough VA assessment section on patient run sheets.

Conclusion:
The introduction of a specific VA stamp has increased the rates of effective VA documentation, facilitating more accurate data collection and enabling better management of patients. Given this success so far, it is planned that, following further trials, the VA project will be incorporated into every practice across the service.
Managing Satellite Centres is Different than Incentre Hospital Units: 39

Dr Paul Bennett, Flinders University

Background:
In Australia more people receive dialysis care in community satellite dialysis units than in any other context. Nurses are major care providers in these units and frequently are major decision makers.

Aim:
To explore satellite dialysis nurses’ perceptions of quality nursing care in satellite dialysis units.

Method:
Critical ethnographic method which included non-participant observation over a 6 month period, 16 interviews with satellite dialysis nurses and analysis of dialysis unit documentation.

Results:
Nurses' perceptions of quality nursing care in this study were reflected in their views that satellite dialysis nursing was very different to hospital dialysis nursing. Satellite dialysis nurses perceived that person-centred care and intimacy were important in the satellite context. They perceived that quantitative measures of quality, such as Kt/V, dominated their practice but did not reflect meaningful measures by the people receiving dialysis.

Conclusion:
Although many of the technical skills and processes are similar in hospital and satellite contexts, the location, support structures and influences are often different. This results in contrasting nursing cultures as evidenced by features of the satellite nursing team. These features include: greater autonomy; more intimate nurse/patient relationships; more easily affected by adverse events; less access to evidence and concerns regarding access to acute medical services.

Implications:
Implications for clinicians, managers and educators include: the need for structured reflective nursing practice; innovative staff rotation models; nurse involvement in satellite unit design; increased web and database skills; increased use of educational technologies and the evaluation of advanced practitioner models.

Do iron guidelines translate into good clinical practice for Haemodialysis Patients: 40

Ms Margaret Morris, Sir Charles Gairdner Hospital
Ms Marianne Snedeker, Mrs Gail Read, Mrs Tracey Mandic

Background:
Administration of intravenous iron can improve anaemia control in haemodialysis patients. In Australia, there is significant variation in the implementation of iron guidelines. Our aim was to determine if intravenous iron guidelines and evidence translated into good clinical outcomes for haemodialysis patients.

Method:
Data from all haemodialysis patients were extracted from the Renal Anaemia Management database for 2007 and 2008. The Renal Anaemia Management database collects information on the outcomes of patients with chronic kidney disease at 20 centres in Australia.

Results:
There were 3,948 patients in the dataset that had information available for analysis. Patients were receiving epoetin alfa, epoetin beta or darbepoetin alfa. Iron information is available in 2,205 patients. Iron was administered, usually as intravenous iron polymaltose (98.2%). The mean amount administered was 149.5 ± 195.9 mg every 13.3 ± 9.5 days. Most patients were within CARI targets for haemoglobin, (40.3% below target, 46.2% within target, 13.6% above target; mean 112.8 ± 17.1). Most had ferritin over CARI targets (22.9% below target; 33.2% within target and 43.9% above target; mean 599.1 ± 593.5). Most were below CARI targets for transferrin saturation (64.9% below target, 19.5% within target, 15.7% above target; mean 28.4 ± 16.4).

Conclusion:
Iron protocols vary considerably between institutions. Just under 50% of patients are meeting haemoglobin targets. However, despite iron therapy Australian chronic kidney disease patients are not meeting targets for ferritin and transferrin saturation.
A/Prof Josephine Chow, 
Sydney South West Area 
Health Service
Ms Susana San Miguel, 
Sydney South West Area 
Health Service

**Aim:**
As a strategy to counter the current crisis in staff recruitment and retention in dialysis nursing, a new model of care was designed to introduce Assistants in Nursing (AINs) in the haemodialysis units. The aim of this project was to evaluate the introduction of AINs (who were completing their second and third year University undergraduate degree) in the haemodialysis units at a major tertiary Area Health Service in Sydney, Australia.

**Methods:**
All nursing staff from the participating dialysis units was asked to complete a baseline and follow-up survey to determine changes to their attitudes to the new skill mix model and their satisfaction with the new organisation of care delivery in their dialysis units.

**Results:**
Comparison of opinions about the introduction of AINs between the baseline and follow-up surveys in the paired data were favourable with nurses acknowledging that they would cope well with the introduction of AINs (p= 0.007), and they were more likely to disagree with the statement that their workload would increase after the introduction of AINs in the follow-up survey (p= 0.003).

**Conclusion:**
There was little difference in the workload of the dialysis units before and during the intervention. There was little difference in both the incidence of patient and nursed related adverse outcome events.

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**Chronic Kidney Disease Models of Care - The Canadian Experience:**

Ms Sonya Coleman, 
Royal Brisbane & Women’s Hospital
Ms Leanne Brown, 
Hervey Bay Renal Unit

Queensland has recently embraced the multidisciplinary (MD) management model for management of chronic kidney disease (CKD). The authors are from health service districts where these models of care have only recently been implemented. Even though this model of care has been in action at various centres in Qld for several years the authors felt they would benefit from visiting two sites in Canada who have been utilising the MD model of care over a longer time frame. These sites not only embrace the multidisciplinary model of care but also the early intervention and management of CKD from Stage 2 -3 and onwards. The centres were chosen for a variety of reasons such - as evidence of slowing the progression of kidney disease and also the embracement of the role of Nurse practitioner. During this oral presentation the authors will endeavour to cover the three key features that they felt facilitated the success of the programs in Canada. The three key features were:

- Multidisciplinary TEAM approach and multidisciplinary clinics
- Funding model for Renal services in various provinces in Canada
- Information management

The authors will give an overview of the highlights of each of these elements and their interpretation of the impact of these highlights in terms of patient satisfaction and outcomes. The presentation will also identify some of the areas that Australia can be proud of and also potential barriers to implementing the three key features identified.
It Takes All Sorts: A case study of ‘Candy’: 44

Mrs Michele Harvey,
Health Service District
Gold Coast

Context:
The author reports on the case of a 73 year old female with Chronic Kidney Disease (CKD) Stage 4 who experienced unexplained worsening hypertension, resistant to usual treatment. Differential diagnoses included: increasing haemoglobin, “white coat” hypertension, progressive CKD, excessive salt intake, medication interactions and/or non-compliance, hyperaldosteronism and renal artery stenosis. Each was considered and systematically evaluated through comprehensive assessment, monitoring and history taking.

Objectives:
This case presentation aims to demonstrate: 1. The benefits of a collaborative model of nurse practitioner care; 2. The benefits of a supportive patient self management approach; 3. The importance of comprehensive history taking; and 4. A food interaction which can cause hypertension and hypokalaemia.

Key messages:
Nurse practitioners are skilled in advanced clinical assessment and diagnosis. Patients are invaluable healthcare partners when skilled and supported in self management. Identifying the aetiology of unexplained signs and symptoms, will involve asking ‘allsorts’ of questions as part of a comprehensive assessment.

Conclusion:
In this case study, the aetiology for unexplained worsening of hypertension was revealed as a result of effective patient self management support and comprehensive history taking within a collaborative nurse practitioner model of care. The ‘sweet’ culprit will be revealed during the presentation.

Managing Hepatitis B effectively: one approach that works: 43

Mrs Barbara Harvie,
Canberra Hospital
Dr Krishna Karpe,
The Canberra Hospital

Background:
Hepatitis B (HepB) is a problem within dialysis environments. Universal precautions and vaccinations have reduced the incidence of HepB in the developed world. Within the local renal service, the management program for HepB surveillance and vaccination was suboptimal in the predialysis stage. Fortunately for us, no HepB positive patients have started dialysis in our service in the last five years. Additionally, there is no international consensus for Hepatitis B vaccination. Our current practice is Hepatitis B vaccine 40μg at 0, 1 and 6 months, with titre levels for seroconversion checked six weeks later.

Aims:
The primary aims were identified as:
• Improving the predialysis Hepatitis B surveillance
• Increasing the number of completed Hepatitis B vaccinations for those people approaching dialysis
• Developing a Hepatitis B database

Methods:
• Engage with primary stakeholders (nephrologists and nurses)
• Identify the HepB status of all patients in stages CKD 4 – 5
• Develop, implement and evaluate effectiveness of vaccination program
• Develop, implement and evaluate database

Results:
The HepB vaccination rate has increased due to surveillance. The database has been in existence for less than two months. It is user friendly and plans are now in place to extend this database across the renal service.

Conclusions:
Optimising Hepatitis B vaccination and seroconversion is important. This can be achieved by increasing awareness and surveillance among stakeholders.
Context:
The increasing burden of chronic disease in Australia has prompted a wave of innovation with respect to the way in which nurses are involved in healthcare delivery. Specialist nurse practitioners and/or clinical nurse consultants are taking a lead role in the establishment of multidisciplinary chronic disease management clinics in both hospital and community settings. Whilst many nurse-led clinics focus on specific diseases, such as heart failure, chronic obstructive pulmonary disease, diabetes and chronic kidney disease; our clients quite commonly have more than one of these diseases and share many common risk factors for disease progression. For this reason, a more collaborative model of care is required where formal links and processes are formed between the different specialty areas to prevent duplication of services and provide holistic patient-centred care.

Objectives:
1. To describe a multidisciplinary community health-based chronic disease program;
2. To describe the benefits of cross-specialty nurse collaboration;
3. To outline an innovative model of joint diabetes and CKD care.

Key messages:
Chronic disease programs require a multidisciplinary approach. Specialist nurse collaboration is necessary when managing patients with one or more chronic disease.

Conclusion:
The community health-based Chronic Disease HEAL (Health. Education. Activity. Lifestyle) Program, promotes ‘cross pollination’ in terms of management, education and training for specialist nurses and members of the multidisciplinary team. The commencement of a Joint CKD/Diabetes nurse practitioner-led clinic formalises our commitment to reduce duplication of services and provide holistic patient-centred care.

Ethical considerations in research using a vulnerable population of people with CKD: 46

Nephrology nurse researchers are required to consider the ethical implications when proposing to undertake nursing research using vulnerable populations. Vulnerability for people with chronic kidney disease comprises of two areas of concern. Firstly, uraemic cognitive impairment may affect autonomy and decision making thus impacting on the informed consent process and secondly gate keeping issues from vigilant nephrology health care professionals.

This literature review addresses the informed consent process and the principles of ethical review by Human Research Ethics Committees, Swanson’s Theory of Caring to firmly position the researcher within an ethical framework, benefits of performing nursing research, risk assessment in vulnerable populations, an explanation of cognitive impairment in CKD, the decision making process and finally strategies to increase this population's recruitment and retention in research studies.
Aim:
To review recent studies which identify the factors that contribute to stress, burnout and job satisfaction for nurses who are working in haemodialysis units.

Background:
Regardless of where nurses work, stress, job burnout and dissatisfaction are known to cause high rates of nurse resignations and for many of those to leave the profession entirely. Understanding factors that contribute to job satisfaction, stress and burnout could increase haemodialysis nurse retention and improve health outcomes for people receiving haemodialysis.

Evaluation:
Studies of job stress, burnout and satisfaction for nurses working in haemodialysis units published in English from January 2000 to December 2009 were identified. Specific inclusion criteria were developed resulting in eleven articles selected for this review.

Key issues:
Specifically for haemodialysis nurses' job stress and burnout was found to originate from two factors related to either patient care or organisations. Patient care factors included unrealistic patient expectations, progressive decline of a patient's health, and violence and verbal abuse from patients. Organisational factors included shortage of time to complete tasks, lack of resources and unsupportive work environments. Increased job satisfaction for haemodialysis nurses was due to having job security, freedom to use one's judgement and the quality of nurse/physician interactions.

Conclusion:
Job stress and burnout are problematic for haemodialysis nurses. Instituting strategies which prevent and/or ameliorate stress or burnout could result in improved job satisfaction and also the retention of highly skilled haemodialysis nurses.

Creating a Positive Workplace Culture: 48

Background:
Recruitment and retention of skilled staff, with commitment to high standards of service delivery were necessary for the success and sustainability of a new Brisbane haemodialysis satellite unit.

The evidence recommended that development of a positive workplace culture would lead to more successful achievement of team goals. The effective use of a framework known as the “FISH philosophy” was suggested as a means of engaging staff in adopting cohesive team practices. The unit undertook to apply the principles of the programme within a primary team model of care. This presentation will highlight the unit’s experience throughout implementation.

Aims:
This quality activity aimed to develop a collaborative team approach to enhance both patient and staff satisfaction, by applying the four key beliefs of “Fish”: Namely; Choose Your Attitude, Be Present, Play and Make Someone’s Day.

Methods:
A “Leader Fish” programme covering core concepts and application was completed by the senior nursing team. An audit of all staff’s beliefs on both positive and negative workplace behaviours followed. An acceptable behaviours standard was agreed. “Fish” behaviours were modelled by staff and ongoing implementation feedback gained through a variety of staff forums. Supporting educational resources were provided for both staff and patients. Ongoing staff and patient post implementation satisfaction surveys have been undertaken.

Results:
Workplace culture indicators e.g. survey results, absenteeism, attrition, vacancy rates and complaints all show evidence of high levels of satisfaction for both staff and patients.

Conclusion:
Committed implementation of the “FISH” philosophy has a positive impact on workplace culture.
What knowledge counts at the moment of Practice: Information Practices of Renal Nurses: 49

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Charles Sturt University
Dr Anne Maree Lloyd,
School of Information Studies,
Charles Sturt University

Background:
To build occupational knowledge requires renal nurses to develop effective information practices which enable them to reconcile evidence based practice with knowledge that is constructed through actual practice and through interaction with patients. This requires that renal nurses develop a way of knowing about modalities of information from which they can draw information that is relevant and appropriate.

Aims:
This paper presents findings from a study which sought to identify the information practices employed by renal nurses and how renal nursing knowledge is constructed.

Methods:
Situated in the concepts of Habermas’ communicative action and Schatzki’s practice theory, six registered nurses with varying lengths of renal nursing experience from two renal units attached to regional hospitals in NSW were sampled. Data was collected using in-depth interviews and thematically analysed.

Results:
Renal nurse’s information practices reflected the intersection of formal, informal and embodied information sources. They undertook a range of activities and skills that were conceptualised into four major themes. These were: i) the distinction between knowledge and information; ii) mapping the information landscape; iii) the information sources used for nursing practice; and iv) information skills.

Conclusion:
Renal nursing practice requires nurses to connect with a range of knowledge’s apart from their own nursing knowledge to: develop a holistic patient centre care approach; continue learning; and improve their specific practices. It is the informal and embodied information relationships, characterised by informal, tacit know-how forms of information which influence the ‘how’ of everyday renal nursing practice.
Riding the waves of high cost haemodialysis using high cut-off filters to treat Acute Renal Failure due to Multiple Myeloma: 50

Ms Erica Parker,
Launceston General Hospital
Mrs Rose Mace,
Renal Unit,
Launceston General Hospital,
Tasmania

The clinical challenge we faced: Treat a patient with Acute Renal Failure (ARF) from Multiple Myeloma (MM) cast Nephropathy using extended (8) hour haemodialysis sessions and Free Light Chain (FLC) High Cut-off (HCO) Filters.

MM is a cancer that results in an overgrowth of malignant plasma cells in the bone-marrow, resulting in an overproduction of FLC proteins. HCO protein permeable filters have the potential to significantly improve outcomes for MM patients with ARF. Shortening the time the patient’s kidneys are exposed to toxic serum FLCs can decrease the risk of developing permanent kidney failure.

Aim: Remove FLCs with HCO filters in combination with chemotherapy to reduce the number of malignant plasma cells and switch off production.

July 2009, our first patient presented with ARF – the diagnosis of MM came 2 days later. HCO therapy commenced 48 hours after that, in conjunction with intensive chemotherapy.

Considerations and logistics included access to:
Guidelines for the therapy;
Consumables – HCO 1100 filters @ $1260.00 (2 / session – in tandem), blood line adaptors and additives for dialysate;
Haemodialysis equipment for 8 hours / day for 5 days then second daily for 4 weeks;
A cuffed, vascular catheter;
Pathology – pre and post FLC bloods to Brisbane. Pre, during (4hr) and post biochemistry and haematology each session;
Experienced haemodialysis staff.

23 treatments later – patient is independent of haemodialysis with FLC levels less than 500mg/L. Our significant “investment” paid off.

January 2010, our second patient commenced HCO therapy – however, this patient presented differently – will the outcome be different?

When is big too big...The Big Issue: 51

Mrs Kathleen McNamara,
Prince of Wales Hospital
Mrs Debbie Pugh,
Prince of Wales Hospital
Randwick NSW

In Australia and NZ obesity (BMI > 30 kg/m2) is increasing in the general population. It is therefore likely that the prevalence of obesity in patients with End Stage Kidney Disease (ESKD) is also increasing. Renal transplantation is regarded as the best treatment for patients with ESKD, but many patients are not put on the transplant waiting list because of co-morbidities that are perceived to affect the outcome. One common co-morbidity, obesity, has been regarded as a relative contra indication to going on the transplant waiting list. We wanted to know when is big too big.

On a literature search we found there were no definitive guidelines in regards to acceptance of obese patients onto the transplant waiting list. Paradoxically our literature search showed there is a survival benefit for transplanting obese ESKD patients.

In this paper we will discuss the complication of obesity and how it relates to patients with ESKD both pre and post renal transplant. We will use case studies to illustrate our findings.
“Patient’s right to dialyse versus Nurse’s safety: a dialysis dilemma”: 52

Mrs Janice Kirkpatrick,
Counties Manukau District Health Board

Talk about making waves! How could one patient come to the attention of the renal consultants, Hospital Board Management, lawyers, Director of Nursing, Nurses Association, and occupational health?

This paper outlines the ongoing case study of a home trained patient’s descent into paranoid schizophrenia and the resulting complications when nurses became genuinely afraid of him. The rising tides of questions seemed more like a tidal wave.

At what point does staff safety outweigh the patient’s need for treatment and who is authorized to decide? Is it a legal question, a medical question, or an occupational health question? Can all staff on a shift choose not to dialyse a patient?

This paper tackles some of the issues we have faced as a unit in recent months and the challenges I have faced as one of the few nurses who chose to continue to dialyse this patient.

What lessons can we learn and what potential outcomes may assist others who find themselves in this situation?

Back to a future with Automated Peritoneal Dialysis: 53

Mr Waseem Khan,
North West Dialysis Service
Mrs Jo-anne Moodie,
North West Dialysis Service
Victoria

Introduction:
We present a case study of a young university student (CW) and the challenges faced by the patient and staff training her for APD whilst she lives in residential college accommodation with shared facilities.

Method:
A review of our training procedures and logistics was required resulting in a number of modifications including reversing our training schedule, adaptation of hand washing procedures to accommodate communal bathrooms, liaison with college management, more frequent supply deliveries and reconfiguring of her residential space.

Results:
CW commenced home PD in September 2009 learning APD followed by CAPD in the benchmarked time (25 contact hours). Stock storage was provided by the college in the nearby communal kitchen, and stock deliveries increased to fortnightly. To date, CW has remained infection free and is achieving good clearances, whilst being well enough to study and achieve her university goals.

Conclusion:
The flexibility of the staff to co-ordinate training and appointments around exams and social activities enabled CW to continue her university life with minimal interruption. In addition, accommodation of CW’s dialysis during the university breaks in her family home in another state demonstrated further flexibility in the provision of end stage renal failure services to our patients.
Nurses titrating ESAs using a treatment algorithm and clinical practice guideline: 544

Ms Jody Holmes, Peninsula Health Victoria

The development of a treatment algorithm has enabled a more streamlined approach to anaemia management – in particular the titration of ESA doses. In conjunction with the Consultant Nephrologists, a treatment algorithm and a set of clinical considerations has been developed and used to manage all of the haemoglobin levels in our Satellite Dialysis Unit. This has led to a significantly higher number of patients who reach and maintain a predetermined target haemoglobin level, fewer blood transfusions, a greater sense of patient wellbeing, and has the potential to increase the scope of practice of all registered nurses working in our dialysis unit.

Along with a set of evidence based clinical recommendations, an anaemia log was developed to track individual haemoglobin trends, iron parameters, ESA doses and other relevant clinical data.

It is anticipated that all Division 1 nurses working in the Satellite Dialysis Units of our health service will eventually be educated in the use of these documents through the development of a clinical practice guideline and education sessions. Nurses will be supervised by the Consultant Nephrologists and Nephrology Nurse Practitioners and begin to titrate their primary patients’ ESA doses according to the algorithm.

Primary Nurses are in an ideal position to monitor and dose adjust ESAs because they have a good understanding of their patients’ well being and co-existing conditions, can assess all of the factors associated with hyporesponsiveness, can easily and quickly access pathology, and make timely and appropriate dose adjustments without delay.

Is ESA frequency of dosing influencing Hb levels in Peritoneal Dialysis patients 2002 v 2008: 55

Ms Ann Kruger, Flinders Medical Centre
Ms Lyn Trowbridge, Renal Anaemia Coordinator Royal Adelaide Hospital
Ms Jane York, Nurse Practitioner Royal Perth Hospital

Background: 
In 2002 peritoneal dialysis patients received epoetin alfa 2 to 3 times per week. In 2003 other products became available which allowed for less frequent dosing. The aim of our study was to determine whether the change in frequency of dosing affected haemoglobin levels.

Method: 
Data from all haemodialysis patients were extracted from the Renal Anaemia Management database for 2002 and 2008. Linear regression analysis was used to determine whether year, frequency of dosing and ESA type influenced haemoglobin levels.

Results: 
Data from 1119 patients were available in 2002 and from 1010 in 2008. In 2002, most patients (715, 71.0%) were receiving epoetin alfa. In 2008, most were receiving darbepoetin alfa (389, 61.8%). In 2002, dosing occurred every 7 days (695, 88.1%). In 2008 it was either every 7 (316, 60.2%) or 14 days (145, 27.6%). Haemoglobin levels were 117.8 g/L (n=892) in 2002 and 113.2±16.1 g/L (n=771) in 2008. In 2002 compared to 2008, the haemoglobin levels were 123.3±16.1 g/L (n=771) in 2008. In 2002 compared to 2008, the haemoglobin levels were 123.3±20.2 cf 121.1±18.6 (not receiving ESA); 116.6±16.7 cf 115.0±15.7 (epoetin alfa); and 113.8±19.3 cf 111.6±5.5 (Darbepoetin alfa). With all other variables fixed, for every extra day between ESA injections, there haemoglobin levels increased 0.42 g/L (95% CI 0.20 to 0.63, p<0.001); compared to patients treated with epoetin alfa, patients treated with epoetin beta or darbepoetin alfa had lower haemoglobin levels (6.7±2.8 and 4.2±1.5 g/L, both p<0.01, respectively). There were no differences in haemoglobin levels by year.

Conclusion: 
Frequency of dosing and ESA type do influence haemoglobin levels in peritoneal dialysis patients.
Improving Hepatitis Serology monitoring in dialysis: 56

Ms Adele Donnelly,
Gold Coast Hospital
Mrs Prudence O’Connell,
Gold Coast Health Service District Renal Services
Ms Louise Maclead,
Gold Coast Health Service District Renal Services

Context:
Prevention of hepatitis transmission in the dialysis setting is an important part of best practice and to ensure patient safety.

An audit was conducted to evaluate the current practice for hepatitis B vaccination, serology testing and results for haemodialysis patients within our unit.

It was determined that the process lacked standardisation. As a result of this a project was undertaken. A survey was implemented to determine the nursing staff’s interpretation of results and process to manage hepatitis serology within the dialysis unit.

Objectives
To develop and standardise hepatitis serology management and hepatitis B vaccination within dialysis units to provide best practice across the service. An education algorithm was implemented to facilitate understanding of serology testing and results. A schedule was created to document the process of hepatitis B vaccinations for each client to provide a current record.

Key Messages:
Education is the key to successfully implement introduction of a new tool or process.
Evaluation of the changes implemented by resuming the surveying of staff and auditing the current change in practice.

Conclusion:
Primary nurses needed more education to effectively manage hepatitis serology within the dialysis setting. Tools are an effective method of monitoring and following a standardised process to ensure best practice when managing dialysis patient’s hepatitis serology.

Finding friends & fun: Assisting children with Kidney Disease to establish Peer Support Networks: 57

Ms Beth Richardson,
Kidney Health Australia

Background:
Research suggests children with kidney disease (KD) commonly experience psychological challenges which may impact socialization. Disease-related physical changes, medication effects, dialysis, and/or school absences can lead children with KD to perceive differences with school peers and experience isolation.

Aim:
In 2009, a national kidney-focused NGO and a Queensland children’s hospital coordinated a one-day social program for children with KD, aimed at evaluating the extent to which children would establish peer networks in a non-hospital setting.

Method:
The NGO coordinated a series of children’s team challenges (mini-golf, rock climbing, bumper-boats) at a Queensland fun-park at no cost to families. The children’s hospital advertised the event via a direct mail-out. Children were assigned to a mixed-age/ability team and received a t-shirt, prizes and a participation certificate.

Results:
31 children and 27 adults attended the Family Fun Day in November 2009. Children ranged from 20 months to 17 years old, with 9 years being the mean age. Children with KD represented the following groups: 40% dialysis, 40% transplanted, 20% KD without dialysis.

50% of children completing evaluation forms reported they made new friends, with 1/3 indicating they would remain friends. 100% of children noted they would attend a future Fun Day. 100% of parents indicated they would recommend the event to other families, with 86% strongly agreeing the event benefited their children.

Conclusion:
Providing non-threatening social activities away from the hospital setting appears effective in assisting some children with KD to establish peer networks which have the potential to further develop overtime.
This study is undertaken at a Nurse Practitioner (NP) led metropolitan chronic kidney disease (CKD) clinic in Brisbane. The care at the clinic is coordinated by the NP and provided by a multidisciplinary team, consisting of a NP, nephrologist, exercise physiologist, clinical psychologist and dietician. The aim of the CKD clinic is to increase patients’ wellbeing and delay the progression of their CKD and prevent associated complications, in particular reduce cardiovascular risk.

This paper will highlight patients’ expectation of the care along with their experiences of the care at the CKD clinic. Furthermore it will highlight their perception, after a 12-month period, of how well their expectations have been fulfilled.

The results show that patients attending the CKD clinic want to increase their knowledge about CKD. This knowledge has facilitated them to understand the importance of as well as to find motivation to undertake lifestyle modifications. This perceived knowledge has increased their willingness to be actively involved and participate in their own care as a way to increasing wellbeing.

These results support the use of a NP led CKD clinic as a suitable model to increase patients’ understanding about their own disease. Their preparedness to actively participate in their own care and take responsibility for life style modifications as a part of their self-management has increased. Disease specific education along with both group and individualised support for the patients has facilitated them to better adjust to and cope with their life situation, living with a chronic disease.

Finding Friends & Fun: Assisting Children with Kidney Disease to Establish Peer Support Networks: 59

The Kidney Health Program for the Darwin urban ATSI population commenced in May 2008. As part of the NT wide program for improving management outcomes for kidney disease, the program was developed in response to the needs of staff and clients of the community controlled PHC service as well as incorporating the key objectives of a renal case management process.

It was important to work as a team and not duplicate care or add another layer of care in developing this new model. Clinical auditing and a service wide systems analysis involving the majority of the staff at all levels of the organisation were important tools used in designing and future evaluation of the new program.

Key out comes have been increased engagement of clients with health services with more resources and time allocated to providing education geared to the Indigenous population, working through family meetings and allowing clients to come to made informed decisions about treatment options. Monitoring and management of the progression of Chronic Kidney Disease within the practice has improved through increased awareness amongst staff of Chronic Kidney Disease management. Improved communication and co ordination of care between tertiary and primary health care providers has re-established monthly nephrologist clinic on site and services working towards better GP involvement and management of renal clients receiving RRT
Clinical Training for Nephrology Nurse Practitioner Candidates: Developing a consensus statement: 60

Mrs Bettina Douglas, Princess Alexandra Hospital University of Queensland
A/Prof Ann Bonner, School of Nursing and Midwifery, Charles Sturt University

Background: The scope of practice for a Nephrology Nurse Practitioner (NNP) is beyond that of registered nurse and it is essential that a nurse who is being educated to practice at this level is given adequate support and opportunity to obtain the level of knowledge and skills required. Because the NNP role is relatively new most medical and nursing mentors are unfamiliar with the expectations of a NNP. In situations when limited evidence exists a Consensus Statement (CS), which is a systematically prepared document that represents the collective opinions of a convened expert panel, is commonly used.

Aims: This paper presents the processes and results used to develop a CS for clinical training of Australian NNP candidates.

Methods: A two stage research design was used. An initial group of 14 NNPs identified a list of important and frequent aspects of practice. The second stage used the Delphi technique that involved 30 NNPs from across Australia to refine the list and to develop the CS.

Results: Following three Delphi rounds, the final CS comprises four components which explains the role and membership of the mentorship team; setting and location of the NNP clinical training; learning strategies to support the NNP; and outcomes of NNP clinical training.

Conclusion: The CS will inform NNP candidates, university course providers and mentors about the expected extended nephrology specific clinical training. It is not prescriptive and will apply to NNP caring for patients regardless of the stage of chronic kidney disease and the practice setting.

Impact of Dialysis on rurally based indigenous (Māori) clients and their Whānau: 61

Mrs Li-Chin Shih, Northland District Health Board
Ms Michelle Honey, School of Nursing, University of Auckland

Background: End stage renal disease (ESRD) is related to lifestyle, genetic and environmental factors. New Zealand indigenous people (Māori) are at higher risk of renal disease which results in need for renal replacement therapy to sustain their lives. The continual demands of dialysis treatment are significant given the high proportion of indigenous having dialysis.

Aim: To understand the experience of New Zealand rural dwelling indigenous clients with ESRD who receive haemodialysis (HD).

Method: An interpretive study that explores the experiences of indigenous clients having HD as outpatients while living in a rural area of Northland. A purposive sample of seven indigenous clients and their whānau were interviewed in 2008. The interview was taped and transcribed, then analysed to formulate a number of themes that summarize the client’s perspective.

Results: Gained a deeper understanding of indigenous clients’ experience of having HD which provides an insight regarding those clients’ requirements. Despite their differing journeys, four basic themes were revealed:
1. Facing fear
2. Stress from HD
3. Learning, adjusting and changing attitude
4. Individual needs.

Conclusion: These findings indicate that indigenous clients’ experience of ESRD is related to educational factors, socio-economic status, beliefs and cultural influence. Improving indigenous health should concentrate on effective education in order to promote health management and quality of life. Early referral and intervention are shown to promote clients with chronic renal disease quality of life and able to be cost effective.
Complexities of prioritising VTE prophylaxis to high risk Renal Patients: 62

Venous thromboembolism (VTE) is a common and important complication for renal medical and/or surgical patients. Several evidence-based guidelines stratify a majority of hospitalised renal patients at high risk of VTE. The complexity of providing VTE prophylactic measures to this group of patients is difficult due to their risk of bleeding with anticoagulants, haemodialysis and the high incidence of peripheral arterial disease contraindicating them to mechanical compression. As part of whole VTE prevention program we studied the effect of a multidisciplinary VTE prevention program on VTE prophylaxis rates in renal patients.

All renal patients in a tertiary referral hospital have been independently assessed for VTE risk according to the Australian and New Zealand Guidelines and the type of prophylaxis prescribed.

The renal unit accepted the ANZ guidelines as unit protocol. Thereafter a dedicated VTE nurse practitioner in collaboration with a vascular physician implemented the following interventions: individual department audit result feedback, creation of hospital-wide VTE prophylaxis protocols, active provider education, provider reminders, assessment of patient VTE risk and prophylaxis prescription by clinical pathways, ongoing audit and feedback, clinical unit VTE advocates and education of patients. Repeat renal unit audits were conducted annually for the next four years to assess program efficacy and sustainability of the change. Appropriate prophylaxis included chemical and/or mechanical prophylaxis without contraindications and not receiving prophylaxis if contraindications existed.

Appropriate VTE prophylaxis rates in at-risk patients are significantly improved and sustained by implementing systematic changes by a dedicated VTE prophylaxis nurse specialist.

Clinical Training for Nephrology Nurse Practitioner Candidates: Developing a Consensus Statement: 63

The effectiveness of medications and long-term health outcomes depend on the person’s self-management of their prescribed medications. Multiple prescribers, comorbidities, frequent changes to medications, higher medication doses and coming from culturally and linguistically diverse (CALD) backgrounds increases the risk of medication mismanagement.

This paper presents preliminary results and key difficulties in conducting a randomised controlled trial designed to improve medicine self-management in older Greek, Italian and Vietnamese speaking people with kidney disease, diabetes and cardiovascular disease. The intervention was translated into the participant’s language and interpreters were employed for enrolment, delivery of the intervention and data collection. This study was funded by the Nurses Board of Victoria and a Renal Society of Australasia/Amgen 2009 Career Mobility grant. Participant recruitment and attrition were significant problems. Out of a possible pool of 243 patients from renal outpatient clinics of two metropolitan hospitals, 78 people verbally agreed to participate and 45 signed informed consent. 38 participants remain in the study at this time.

The study revealed that fourteen participants did not know they had kidney disease and two participants did not know they had diabetes. A lack of knowledge about what medicines were for, medicine side effects, and pill burden were evident. Organising interpreter services, intervention delivery and data collection was problematic. In particular, continuity of interpreters was difficult to maintain.

This work has highlighted communication gaps between health professionals and consumers affecting medicine self-management, and difficulties with conducting research into CALD groups using interpreting services. Strategies to overcome these difficulties are discussed.
Objective:
Australia’s commitment to home dialysis has been significant. At the end of 2008 31% of dialysis patients were on home dialysis, consisting of 22% on peritoneal dialysis (PD), and 9% on haemodialysis (HD). However, there is marked regional variation in the uptake of home dialysis, suggesting further scope for expansion.

Methods:
Between April and August 2009 dialysis nurses were invited to complete an online survey designed to investigate access to dialysis services, and the barriers to improving access to home dialysis. Thirty-five questions were asked covering demographics of the dialysis units, responders’ experience, adequacy of facilities and support structures, attitudes to the use of home dialysis and issues impeding an increased uptake of home dialysis.

Results:
262 surveys were received. 91% of nurses stated that Australia should be expanding home-based dialysis therapies. Only 51% of the respondents reported a free choice of therapy policy in their unit, and 24% reported they had a “PD first” policy. There was agreement for the adequacy of support for patients from renal physicians, social workers and in maintenance/water/equipment/industry areas. Areas of concern included psychiatry support, access to respite care and home visits, and lack of support from medical administration and government. The highest-ranking impediments to expanding home dialysis services were financial disadvantage for home HD patients, and lack of physical infrastructure.

Conclusion:
The survey identified strong support for the expansion of home dialysis in Australia and highlighted some of the barriers to improving access to these therapies.

Experiences of patients when training for Home-haemodialysis: 65

Mr Albert Robertson, MidCentral Health, New Zealand

Background:
The experiences of patients who are on HHD have been studied in many qualitative studies; no similar studies have been undertaken on the experiences of patients during their training process for HHD. However, the success of HHD depends on an effective HHD training programme, thus, the experiences of patients when training for HHD also needs to be explored and described.

Aims:
This study aims to explore and describe, from the patients’ perspective, the efficacy of HHD training, patients’ ability to dialyse at home, and to establish recommendations to improve HHD training based on the information obtained from these patients.

Methods:
Three male patients aged between 49-55 years, who were trained at the Renal Unit of this study, were recruited. Using a qualitative-exploratory-descriptive design, semi-structured interviews were recorded and then transcribed. Thematic analysis was the project methodology.

Results:
The themes that emerged from data analysis were: Learning of HHD, Anxiety, Motivation, Setting and Support. Recommendations were established both by the participants of this study and the researcher. The participants of this study recommended the provision of a Counsellor and a Community Haemodialysis Nurse. The researcher’s recommendations included the provision of a dedicated training area, dedicated nurse trainers and the need for a holistic approach to the training programme.

Conclusion:
The findings indicated from the participants’ perspective that overall HHD training at this Renal Unit was effective but there was room for improvement. This study has produced constructive results; therefore there is a great scope for this topic to be further investigated through extensive research in future.
Zeroing in on Blood Stream Infection rates in Haemodialysis Catheters: 66

Haemodialysis – associated blood stream infection (BSI) is a serious complication for dialysis patients. As part of its quality program, the haemodialysis unit of a large metropolitan private hospital in Sydney has been collecting and reporting specific haemodialysis – associated BSI indicators to the Australian Council of Healthcare Services (ACHS) on a six monthly basis. Data has been collected and reported since July 2007.

A trended rise in infection rates for centrally inserted dialysis lines was noted, with rates for cuffed dialysis lines peaking in the second half of 2008. In January 2009, a review of the results was undertaken and an action plan developed, with the goal of reversing the trend.

Consultation with the Infection Prevention and Control Department and Radiology Nursing Unit Manager commenced to identify best practice for insertion and ongoing management of the lines. The following trial was implemented for the first 6 months of 2009:-

- A chlorhexidine gluconate impregnated disc was placed at the catheter exit site and changed weekly
- Positive pressure displacement valves were used as catheter caps, reducing the need for sterile setup at connection and disconnection of catheter.

The results for both halves of 2009 have been excellent, resulting in zero infection rates for all types of haemodialysis centrally inserted access and a cost neutral dressing. The additional benefits to the nursing staff have included more efficient connection and disconnection from the catheter. This has directly influenced changes to the protocols supporting the management of centrally inserted lines within the department.

The development of an e-learning buttonhole cannulation tool to improve vascular access related outcomes: 67

Arteriovenous fistulae are first choice for haemodialysis vascular access due to low infection, reduced costs and better patency rates compared with grafts and central catheters. However, in the hands of the novice their use can be fraught with complications for both patient and cannulator. The buttonhole technique is gaining acceptance in practice and is proving to be more efficacious than other cannulation techniques. Challenges remain for units introducing this technique into their practice. This includes adopting best practice and minimizing complications. There is also an issue of access related sepsis anecdotally attributed to poor buttonhole site preparation. Enhanced knowledge and skills for nurses should prove crucial to enhancing patient comfort and improving vascular access outcomes in this area.

Knowledge and skill acquisition related to vascular access are often the focus of individual institutional education initiatives. No national evidence based learning programs for Nephrology Nurses currently exist in Australasia. A survey of Australasian Nephrology Educators’ identified the need for more effective and consistent delivery of clinical education for nurses using innovative, web based approaches that support the tenets of e-learning methodologies. This paper will discuss the development and implementation of an e-learning program for buttonhole cannulation that aims to provide free, equitable access for Australasian Nephrology Nurses. It will highlight the benefits of inter organizational partnerships and how they can facilitate positive change in teaching and learning practices aimed at improving patient outcomes. This project has unique characteristics that collectively provide value, distinction and innovation to patients, nurses, and renal departments across Australasia.
Making it Explicit: Workplace Strategies to Support Continuing Education and Professional Development for Nephrology Nurses: 68

Ms Kirsten Black, Royal Hobart Hospital
A/ Professor Ann Bonner, Charles Sturt University

Context:
Distance and time are factors that limit registered nurses’ (RNs) ability to engage in postgraduate education (PE). Many Australian nephrology RNs work in small non-metropolitan units, often distance education (DE) is the only option for these nurses.

Objectives:
This paper describes workplace supports RNs have identified as either essential or preferable to undertaking DE. The paper will apply these supports to nephrology RNs as they seek to increase their knowledge and experience through continuing professional development.

Key messages:
Literature suggests those RNs who study via DE report feeling isolated, and that studying by DE while concurrently working is problematic for maintaining a life/work balance. One of the ways to achieve a better balance is through accessing help or support from a variety of sources, however there is little evidence in the literature of workplace support strategies for RNs who study via DE.

A system of support must start at the level of workplace culture and look at the real benefits, which could lead to increased staff expertise, satisfaction and morale. Health managers seeking to improve recruitment and retention of experienced nephrology RNs could refocus on explicitly developing a culture that values and proactively supports RNs to undertake formal PE and continuing professional development, rather than through in-direct strategies contained within ‘values statements’.

Conclusion:
It is important for employers to be credible advocates of continuing professional development and there are simple and practical measures that can be taken to support nephrology RNs as they study via DE.
Background:  
The increasing prevalence of chronic kidney disease in Australia will require a large educated nephrology nursing workforce. Currently, there are national variations in the numbers of qualified advanced nephrology nurses.

Aims:  
1. Identify a progressive education path for nephrology nurses who have completed a post-registration nephrology nursing certificate (or equivalent).
2. Inform a framework for a flexible, adaptable advanced nephrology nurse education program.
3. Inform a flexible program to reflect the varying nephrology nursing roles.

Method:  
This paper will present the results of focused workshops involving forty-five industry stakeholders in order to inform the proposed Advanced Nephrology Nurse Education (ANNE) program.

Results:  
The results of the workshops provided the following recommendations that

1. The educational content will be clinically relevant and not simply a rehash of the novice nephrology graduate certificate.
2. The program will be affordable to nephrology nurses.
3. The program will be flexible and able to cater for the large variations in the roles of advanced nephrology nurses (traditional and non-traditional nephrology nurse roles).
4. The program will use manageable technology such as interactive virtual classrooms and web streaming.
5. The program will generate graduate attributes related to nephrology nurse competencies.
6. The workload will be achievable for nephrology nurses who are employed full time.

Conclusion:  
There is an acknowledged need for the educational development for nurses who have undertaken a graduate certificate. A framework will be presented describing the proposed Advanced Nephrology Nurse Education program.
Review of Collaborative Care for Haemodialysis Patients in Residential Aged Care Facilities: P1

Ms Sue Coppola,
North West Dialysis Service,
Melbourne Health
Ms Angela Lindsey,
North West Dialysis Service,
Melbourne Health

In 2007 our dialysis service recognised the often extensive needs of patients who reside in aged care facilities. Our dialysis staff identified the importance of collaboration to ensure that the care delivered by different providers was both consultative and complementary for each dialysis patient.

A working group explored the existing relationships, communication and mutual understanding between our metropolitan dialysis services and the ten residential facilities that accommodated our dialysis patients at that time.

A structured education and communication package was developed which included an information booklet, a dialysis power point presentation copied to CD and a communication booklet which travels with the patient.

Eighteen months later the success of the package has been reviewed. The review process consisted of:

- Examining the communication booklets for the relevance and frequency of the documentation. Although not completed on every visit to dialysis, important issues were noted.

- Consulting with dialysis staff regarding the effectiveness of the communication booklet. Staff found that occasionally, a follow up phone call to the facility was necessary.

- Conferring with the aged care facilities to ascertain the value of the education and communication package. A positive response to the package has led to annual education visits.

- Seeking patient’s opinion. Patients have taken responsibility for ensuring the communication book travels with them.

Preparations are underway to offer this service to our rural units who dialyse residents of aged care facilities.
Supporting Pathways to Palliative Care for people diagnosed with Chronic Kidney Disease: P2

Ms Sarah Challenor, Launceston General Hospital
Prof Robert Fassett, Renal Research, Royal Brisbane and Women’s Hospital, Brisbane, Queensland
Dr Iain Robertson, School of Human Life Sciences, University of Tasmania.
Mrs Rose Mace, Renal Unit, Launceston General Hospital, Launceston, Tasmania
Prof Rosalind Bull, School of Nursing and Midwifery, University of Tasmania, Launceston, Tasmania,

Background:
The increasing acceptance of the elderly onto dialysis programs has heightened the interest in and study of the process of end-of-life decision-making in ESKD, and the role of palliative care in the later stages of treatment. A medical history review was conducted as part of a wider research program to describe current clinical practice.

Aims and methods:
A medical history review of 45 CKD and dialysis patients who died in 2006-2008 in Northern Tasmania aimed to determine the associations between patient or family request, or actual withdrawal of RRT and/or referral for palliative care, and recorded potential predictors of withdrawal in the last 12 months of life. Qualitative and quantitative analysis was performed.

Results:
The presence of advanced health care directives, patients wish to die, and stroke were associated with family request for withdrawal. The loss of will to live, behavioural changes, severe pain, loss of ADL’s were associated with patient request for withdrawal. Expressed need to die, behavioural changes, loss of ADL’s and appetite were associated with actual withdrawal. There was a cycle of ambiguity as patient and families change their minds about treatment withdrawal. Who controls this process fluctuates from time to time. A limited range of language is used to express the recognition of the need to die.

Conclusion:
Loss of function, particularly from stroke, and severe pain are interpreted as representing levels of suffering which would justify the need to withdraw. The influence of patient, family and clinicians on this decision involves negotiation and equivocation.
Improving Patient Outcomes for the use of Haemodialysis
Central Venous Catheter: P3

Mrs Chari Mercado,
ACT Health
Ms Maxine Jordan,
ACT Health
Ms Anne Maguire,
Clinical Nurse Consultant
ACT Health
Ms Barb Hall,
Clinical Development Nurse
ACT Health

This paper presents results of a quality improvement project undertaken at an acute haemodialysis service.

Background:
In October 2008 the service noted an increase in blood stream infections resulting from haemodialysis central venous catheters (CVC).

Aim:
To reduce the incidence of blood stream infections (BSI) in haemodialysis central venous catheter.

Methods:
- Review of data from Bacteraemia Surveillance Program to identifying specific cases
- Review of the renal service haemodialysis CVC policy and procedures
- Identification of probable cause of BSI in haemodialysis CVC's
- Research evidence based guidelines and current best practices both in Australia and overseas
- Ongoing tracking of BSI rates by the hospital Infection Prevention and Control Unit
- Interventions
  - Commenced using 2% Chlorhexidine in 70% Ethyl Alcohol for care of all haemodialysis CVC
  - Changed technique for commencing and discontinuing haemodialysis and dressings for CVC
  - Commenced using Gentamycin and Citrate solution for CVC locks.
  - Credentialing tool developed and implemented for all staff

Outcomes:
BSI decreased from 66% in June 2008 to 25% in November 2009. New practices have been adopted service wide and interventions expanded to include commencing and discontinuing haemodialysis with AV access.

Conclusion:
The team demonstrated an ongoing commitment to quality improvement and patient safety, achieving measureable results that have impacted on haemodialysis patient outcomes.
Haemodialysis Patient Management: An example of inter-hospital collaboration: P4

Mr Jon Hosking,
Sir Charles Gairdner Hospital,
Perth, WA
Ms Lisa Burnette,
Royal Perth Hospital,
Perth, WA

Background:
The dialysis unit at a Western Australian (WA) tertiary Hospital identified a range of communication issues relating to the management of patient information as a direct result of the increase in patient numbers dialysing in-centre who usually had dialysis elsewhere.

Methods:
In August 2008 this in-centre unit contracted a developer to design a patient management database using the MS ACCESS program. The new ‘eDiary’ provided an electronic patient appointment record (with integrated handover notes) as well as a shift coordinator task management tool. After successful implementation, the limitations included lack of IT support to maintain and upgrade the system, and lack of interface with other systems.

Meanwhile development of a comprehensive nephrology database, a Microsoft (web-based) was occurring at another WA tertiary hospital encompassing all aspects of renal care. In 2009 work was commenced on the haemodialysis area.

Outcome:
The first hospital was in a position not only to co-contribute with the second to the haemodialysis database development for prescriptions, sessions, and adequacy but also to extend the database to incorporate the eDiary into the database's web-based format. In addition, collaboration between the two units resulted in a new state-wide Haemodialysis Waitlist in the database to track patients waiting for transfer out to the satellite dialysis units (managed by the tertiary units).

Conclusion:
By sharing the knowledge and experience of the two largest tertiary hospitals providing acute dialysis care in WA we have been able to implement some new initiatives to assist with electronic management of our patient group.

Intradermal hepatitis B vaccination - a single centre experience: P5

Mrs Karen Mills,
Redland Hospital,
Queensland Health
A/Prof David Mudge,
Queensland Health

Background:
Patients with chronic kidney disease on dialysis are known to have sub-optimal response to vaccination for hepatitis B virus. Some studies have shown improved seroconversion with intradermal compared to intramuscular vaccination but results are conflicting. We present the results of a single centre experience with intradermal vaccination for hepatitis B vaccine non-responders.

Aims:
The aim of this quality improvement activity was to improve the overall percentage of patients with hepatitis B immunity by utilising a different mode of vaccine administration - the intradermal route.

Methods:
All prevalent and incident haemodialysis patients were included and assessed for hepatitis B immunity. All patients with titres less than 10 were offered intradermal vaccination, irrespective of previous intramuscular vaccination. 10 micrograms of recombinant DNA hepatitis B vaccine was given, in 2 injections, into the volar surface of the forearm, weekly for 8 weeks. Response (by HbSAb titre) was assessed 4 weeks after completion of vaccination.

Results:
Seroconversion occurred in 60% of patients (n=15) 4 weeks post vaccination. Seroconversion may still occur in some of these cases and this will be assessed at 3 months post-vaccination.

Conclusion:
Intradermal vaccination for hepatitis B virus is efficacious in this population of intramuscular vaccine non-responders.
Six Years Experience With Button-hole Cannulation: P6

Ms Linda McGrail, Sydney Dialysis Centre

Our home training unit currently supports 155 haemodialysis patients. Of this cohort 28 dialyse for greater than 24 hours per week. Patients may elect to dialyse longer hours during the day, in the evenings or overnight. They also may select to dialyse anywhere between three times per week and up to seven times per week. The majority adhere to an alternate night routine.

While longer dialysis hours have always been encouraged, we have only recently developed a protocol to standardise the procedure. Our protocol separates patients into two groups: those who dialyse three times per week; and, those who dialyse more frequently than three times per week. Implementation of this protocol ensures all patients receive a standardised dialysis prescription which allows uniformity for data collection and surveillance.

This poster will present an outline our nocturnal haemodialysis protocol. Patient selection and training procedures will be discussed. Special requirements such as enuresis monitoring, dialysis access, changes to dialysate flow and concentrate, machine maintenance and water quality will be addressed as well as recommendations for medication prescription, diet regime, patient monitoring and target levels.

Electrical Safety in Home Haemodialysis – Progress in Victoria’s Regulations.: P7

Miss Megan Ruff, North West Dialysis Service

Background:
The Australian Standard for electrical installations in hospitals and patient treatment areas (AS/NZS 3003) was revised in 2003 to include all dialysis locations including home installations. Under Victorian law these standards are legal requirements. However, it was found that for home dialysis situations the regulations, originally designed for hospital and clinic settings, were often impractical.

Methods:
Since our last review in 2008, we along with representatives from other dialysis services have worked with electrical safety consultants Biomec Australia, electricians, plumbers and Energy Safe Victoria to produce new guidelines which more readily accommodate home dialysis situations.

Results:
Energy Safe Victoria has published a guide for installation of medical-grade power supplies for home dialysis, which simplifies the application of the standard. This guideline is set to be included in the 2010 revision of AS/NZS 3003.

There is still no allowance for exemptions or long-term variations in situations where variation may offer significant advantages to the patient.

It is still difficult to access qualified inspectors, particularly in rural areas. There has been no progress in regard to accessibility of appropriate training to qualify electricians, dialysis service technicians or biomedical engineers to conduct inspections.

Conclusion.
In 2010, some simplification of the electrical safety regulations has clarified the requirements that providers of home dialysis must adhere to. However, there is still some way to go in order to provide a system that is easily applicable to all potential home dialysis situations.
Incentre Haemodialysis Patients Utilisation of GP Services In The Community: P8

Mrs Paula McLeister,
Gold Coast Hospital
Mrs Grainne McDermott,
Gold Coast Hospital

Context:
A patient questionnaire was submitted to 100 in-centre Haemodialysis patients to ascertain their uptake of GP services and some of the barriers to attending their GP.

All communications with medical staff were examined over a two week period in the in-centre Haemodialysis units to ascertain if requests were made to medical staff which could have been aptly dealt with by a GP.

Objectives:
To highlight some of the barriers facing in-centre haemodialysis patients with regards to GP attendance, and also the communication aspects between the in-centre haemodialysis service and the community GP.

Key Messages:
We need to evaluate our communication within in-centre Haemodialysis and the patients GP’s and vice versa for a holistic approach to care. It is also important to take note of some of the barriers and examine some initiatives for a smoother process.

Conclusion:
Patients need to be better educated as to the importance of finding a GP with whom a relationship can develop over time. Primary nurses need to feel empowered to contact the GP’s and we need to be clearer as to what the hospital Registrars are responsible for and the GP’s cover.

The Impact of a Norovirus Outbreak on Staff and Patients in an Acute Renal Ward: P9

Mrs Maxine Jordan,
ACT Health
Ms Pat Tozer,
Clinical Nurse Consultant, Renal ward.
The Canberra Hospital
Ms Pam Drenkhahn,
Registered Nurse, Renal ward.
The Canberra Hospital
Ms Mia Collins,
Registered Nurse, Renal ward.
The Canberra Hospital

Context:
The journey began in August 2009 when the renal ward had a confirmed outbreak of the highly infectious Norovirus affecting both staff and patients. The outbreak led to the closure of the ward to all new admissions and limited transfer for seven days. Visiting was strictly limited and enforced. Infection control procedures were vigorously followed. Norovirus was a worthy adversary which caused great disruption and added to economic burden.

Norovirus caused a ‘tidal wave’ of diarrhoea and a ‘fountain of vomit’ in those infected. A lucky few got away with headaches, nausea and muscular pain. Many of the infected staff thought they were feeling ‘off’ and not knowing they had Norovirus had presented for work. Other staff at home were unaware of the Norovirus presence.

Objectives:
Document and share the experiential learning of this acute renal ward to help guide:
1. The development of future quality improvement
2. The development of education process
3. Management in future directives

Key Messages:
1. Effective communication and management is essential
2. Importance of a coordinated approach for staffing and other resources
3. Identification and development of a collaborative pathway with the hospital infection control team

Conclusion:
The renal ward has taken this Norovirus outbreak experience to provide an avenue for future learning and to develop strategies to decrease the potential risks associated for both patients and staff. We hope that from our experience we can provide some suggestions for other services.
Evaluation of Pre-dialysis education in a Queensland Renal Unit: P10

Mrs Lois Berlund, Cairns Base Hospital
Ms Bridget Aherne, Cairns Base Hospital
Queensland

Background:
Pre-dialysis education has become an important component of preparation for dialysis, yet there has been little consumer evaluation of this process.

Aim:
To determine satisfaction with the amount, relevance and delivery method of pre-dialysis education for patients with CKD stages 4-5.

Method:
A questionnaire was developed that included both multi-choice and open-ended questions. This gave respondents the option of choosing an appropriate response and the opportunity for expression in their own words. All patients commencing renal replacement therapy within a two-year period were eligible, and all patients surviving and remaining within this renal unit were included.

Results:
There was a 79% response rate from the 75 questionnaires distributed. Responses indicated that most people had sufficient information and were able to choose their mode of therapy, with many starting therapy on a scheduled date. The most useful dialysis information came from nurses, and face-to-face education and procedure demonstration were the preferred learning methods for most respondents. Most people indicated dialysis education should commence as early as possible. Of those who had received education, most responded that they understood the procedure and were unafraid when they commenced therapy.

Conclusion:
As the main providers of pre-dialysis education, nurses must seek feedback from their patients about the quality of this service, in order to tailor programs to individual needs. Results from this initiative can be used to determine strengths and gaps to improve local programs, and to assist planning studies to formally evaluate the value of nurses in pre-dialysis education.

Haemodialysis: How does Down Under compare to the Pearl of the Orient Seas?: P11

Mr Kristoffer Abeleda, Dandenong Dialysis Unit, Southern Health Network
Ms Lynda Brown, Moorabbin Dialysis Unit Southern Health Network, Melbourne Victoria

The relentless progression of Chronic Kidney Disease (CKD) continues despite the efforts of nephrology groups and community services throughout the world. At the end of 2008, 2.3 million patients were being treated globally for Stage 5 CKD (growth of 7% per annum). Among these, 1.5 million patients were being treated with Haemodialysis (HD).

Although progress has been made in the prevention and treatment of renal disease, the ability of each country to contribute towards innovations in healthcare for people with CKD and the procurement of HD is dependent on available resources.

Provision of monetary funds, location of dialysis units, access to caregivers and the efficiency of HD differs in each country and directly affects the clinical outcome for each patient. This can be seen when evaluating HD in Australia, a developed western country and the Philippines, a developing eastern country.

Understanding differences within the Philippines and Australia allows recognition of where there is an opportunity to make waves that will raise the “tides of innovation” in pursuit of better quality outcomes for people receiving HD. It allows greater appreciation of valuable positive attributes in each health care delivery system and enhances the ability to grasp the challenges faced by each of these nations.

The purpose of this presentation is to further nurses understanding of significant differences in provision of HD within two countries, to remind nurses of the value and importance of HD in Australia and the Philippines and to identify areas in HD that would benefit from new innovations.
Challenges of facilitating citrate anticoagulant locks into a new era of innovation: P12

Ms Nafeesa Ahmed,
Southern Health
Ms Joanne Kok,
Southern Health
Victoria

Maintaining patency in dual lumen dialysis catheters is an acknowledged challenge for both dialysis patients and nursing staff. In an attempt to improve catheter longevity and performance an acute haemodialysis unit in Victoria conducted a trial using a citrate based anticoagulation lock, also known as Durolock-C™.

During the trial period, nurses and patients faced several difficulties. The most significant of these was the lack of a reliable supply of medication. A self reporting method was used to examine the issues nurses faced, their experience with Durolock-C™ and their attitudes towards using trialling this new medication. The data collected identified the major problems that were encountered. This information was reviewed and measures were introduced to address the issues.

This presentation highlights the problems and issues that can be typically encountered with the introduction of new medication such as Durolock-C™. It also provides valuable information for those who are “moving with innovation” to facilitate the introduction of new medication into haemodialysis units.

A changing workforce: The Enrolled Nurse role in renal units: P13

Mrs Robyn Bailey,
Southern Area
Renal Clinical Network

The current shortage of nurses globally had been addressed by organisations in a strategic manner by introducing advanced practice positions such as Nurse Practitioners (NP) and Enrolled Nurses Advanced Practice (ENAP) into the Australian area of Nursing practice.

The ENAP role requires clarification to the scope of practice, role descriptions, models of care and skill mix numbers to assist the units willing to uptake this expanded role now and into the future.

A package has been created as a resource guide for the recruitment and training of ENAP’s in Renal Units by the Southern Area Renal Clinical Network. It is hoped this will assist units with the documentation and policies in a standardised resource package.

This presentation will discuss the ENAP role, the resource guide and how to introduce the position into your workplace.
Cultural Change: a patients perspective: P14

Ms Maria Barnett, NephroCare Australia
Ms Lorriane Jackson, NephroCare WA
Ms Janet Hayden, NephroCare WA

Background:
With the ever changing dynamics of our current healthcare system, many services are being tendered out to private companies, with satellite units becoming the way of the future for patients with ESRF requiring haemodialysis.

Aims:
We would like to look at the impact of cultural change when transferring patients from an established satellite dialysis unit to a purpose built centre in a different location. This has had a huge impact on the patient’s lives. We would like to share their experiences and perspective from their first dialysis treatment to the present.

Method:
By means of a patient survey, we will examine their experiences, expectations, apprehensions, first impressions and general comments. Examples of which:

At the beginning:
“Anxiety of attending a new unit and delay appointment times”
“Scare about the nurse’s skill of needling my fistula and experience in haemodialysis”
“Trust in new staff”
“Great parking”
“So close to all the takeaway places”
“Happy Staff”

5 months later:
“Offer patients HDF treatment”
“Dietician working for the company and reviewed in the unit”
“Dr’s clinics held at unit, don’t have to travel and find parking at parent hospital”
“Flexible appointment time so I can attend special family events, my work etc”
“Sense of belonging”
“Access to public transport outside the door”
“Access to holiday dialysis in other sister centres”

Results and Conclusion:
With this knowledge we hope to highlight some of the effects experienced by patients when change is forced upon them and which need to be addressed when establishing other centres.
Calcium, Phosphate and Parathyroid hormone challenge: P15

Ms Getzi Benedict,
Noosa Hospital
Dr Kumar Mahadevan,
Nephrologist/Noosa Hospital Renal Unit

My presentation is about the clinical challenges on calcium, phosphate, calcium x phosphate product and parathyroid hormone control. It is a retrospective study of calcium, phosphate, calcium x phosphate product and parathyroid hormone control on all haemodialysis patients attending Hospital dialysis unit, from 2006 till the present time. This study aims to look at the benefits of recently Pharmaceutical Benefits Scheme listed phosphate binders which include sevelamer hydrochloride and lanthanum carbonate in addition to parathyroid hormone analog cinacalcet and their efficiency on controlling the above mentioned clinical challenge to reduce and control secondary hyperparathyroidism.

Monthly blood works on calcium, phosphate and three monthly parathyroid hormone levels were performed as per CARI guidelines and Hospital policies. From 2006 individual patients’ serum levels for calcium, phosphate and calcium x phosphate products were recorded in the data and we then compared it in average levels for each parameter every month. Looking at the trends in the level with an introduction of the new phosphate binders and parathyroid hormone analog mentioned above, we could deliver quality haemodialysis for the patients and reduce surgical parathyroidectomy and its complications.

A significant change has been noted after the addition of lanthanum carbonate, with sevelamer hydrochloride and cinacalcet which has helped the patients on continuous haemodialysis in the battle of calcium, phosphate and parathyroid hormone control. Our collated data and graphs will clearly depict an improvement in calcium, phosphate and parathyroid hormone control which has enabled us achieve the goal according to CARI guidelines parameters.

Holiday Dialysis Konnections: A new initiative to facilitate holiday dialysis: P16

Dr Paul Bennett,
Flinders University of South Australia
Mr Steve Belz,
Flinders Medical Centre
Ms Teresa Taylor,
Kidney Health Australia
Mr Wayne Green
Kidney Health Australia

Background:
People living with chronic kidney disease receiving haemodialysis have major lifestyle restrictions. One major restriction is the inability to enjoy a holiday away from where they routinely receive haemodialysis.

Strategy:
In response to the holiday challenge, Kidney Health Australia (KHA) has developed a website to assist in connecting people receiving dialysis in order to facilitate people swapping dialysis facilities and enabling a holiday at another venue. The website has been called Holiday Dialysis Konnections.

Website:
The website, hosted by KHA, will provide a list of people who are interested in a holiday where there is an equivalent dialysis unit. Any person receiving haemodialysis can register on this site. KHA will validate. Contact information will be held by KHA Konnections Coordinator. A person wishing to travel to this area will be able to contact KHA who will provide details once confirmation of the application is undertaken. Ultimately a swap in dialysis units treating the swapped patients may occur, enabling two dialysis patients to enjoy a holiday. As is the normal case, each dialysis unit has to approve the swap through their normal holiday patient processes.

Implications for people on dialysis:
Although this website may only facilitate relatively small numbers of holidays we believe that any holiday for a person receiving dialysis has enormous benefit for quality of life. This presentation will describe the use and summarise the progress of this initiative.
Background:
Supporting undergraduates in clinical practice can enhance care for patients, encourage students to advance their practice, and aide in the professional development of supervising nurses. Contributions from undergraduates may also lighten the load for supervising registered nurses whilst helping students define their own role within the team. This paper discusses a clinical practicum model used in one nephrology department.

Discussion:
Integral to the model is recognition that performance in clinical nursing practice is guided by scope of practice, together with the development of individual competence and confidence. To achieve these both clinician and undergraduate students require an awareness of themselves, the team and patients. Strategies were designed to assist undergraduates to develop these aspects of performance during clinical practicum. A central activity occurred as students identified procedures they wished to learn, and tasks were set collaboratively for students to practice and master. Activities that build technical skills also build a sense of team membership and a capacity to interact effectively with patients.

Conclusion:
Within the framework of the clinical practicum model students build a sense of self and as team members. The mastery of skills within practice also provides students the opportunity to interact with and be nurtured by patients. The students define and expand their own scope of practice through developing key aspects of performance during clinical placement. The benefits to supervising nurses and the workplace, of nurturing undergraduates will be highlighted. Practical examples are provided of simple and effective methods to foster undergraduate development during clinical practicum.

PD (peritoneal dialysis) ...the way to go!: P18

The rapidly growing aging renal population is here! They are healthier, stronger, fitter and living longer than ever before. With Haemodialysis Unit capacity alerts being sent out daily to South East Queensland and the lack of available haemodialysis machines, peritoneal dialysis is fast becoming popular!

Choose PD and have the luxury of being able to organise your own dialysis routine to fit in with your lifestyle. Do not be tied to the hospital, locked into haemodialysis time slots and have to travel to and from the hospital 3 times a week for 5-6hr haemodialysis sessions.

Historically we steered patients who may do poorly away from peritoneal dialysis, ie. Patients with a history of abdominal surgery, adhesions or recurrent peritonitis. Now days we are encouraging PD.

Peritoneal dialysis combined with good hand hygiene allows the patient to remain independent and perform PD in the comfort of their own home. They can go anywhere any time, they can continue to work by day and dalyse while they sleep at night with the use of a modern computerised peritoneal dialysis machine.

As the renal population continues to age and peritoneal dialysis continues to grow in popularity the placement of these patients into hostels, nursing homes and palliative care facilities is becoming more difficult. More nursing homes and aged care facilities will have to learn PD and to facilitate their cares.

With the current haemodialysis machine shortages being experienced anyone who can do PD should be encouraged to do PD.
Ward off diabetes and help combat renal disease ... management of the renal diabetic: P19

Increased diabetes results in increased renal patients requiring dialysis. Primarily our aim is to prevent the progression of pre-diabetes to diabetes or to optimally manage the patient’s diabetes to prevent further complications.

Our wards approach to the management of diabetes in the renal patient focuses primarily on patient and family education. Our goal is for the patient and family to be able to independently monitor and manage their own diabetes with regards to diet, exercise, infections and medication. The longer we can ward off diabetes the longer we can preserve the patient’s renal function and postpone the commencement of dialysis.

Proving to be a growing problem is Type 2 Diabetes Mellitus either non insulin requiring or insulin requiring. The increasing numbers of Type 2 Diabetics is suggested to be directly related to our modern lifestyle of fast food and take aways, ie. diets high in fat and refined sugars.

Special attention is paid to the low GI (glycaemic index) diet, Insulin pen education, foot care, signs and symptoms of Hypoglycaemia, hyperglycaemia and DKA (diabetic ketoacidosis), monitoring BGLs (Blood Glucose levels) and care and calibration of the BGL meter.

Promotion of independence and compliance with the patient’s diabetes are critical to the success of keeping people at home and off dialysis machines. All renal diabetic patients are referred to the diabetic educator and dietitian for review.

Removal of free light chains using a high cut-off filter for a patient with Renal Failure Secondary to Multiple Myeloma: Outcomes and Management: P20

The principle cause of renal failure in patients with multiple myeloma is from cast nephropathy, a direct consequence of a high concentration of monoclonal free light chains.

The aim is to reduce free light chains and improve their renal function. The goal being to improve survival rate and maintain quality of life for the patient, by avoiding long-term dialysis.

Treatment is based on symptoms, pathology results and physical examination. The treatment of choice for the removal of free light chains is the use of a Gambro high cut-off protein-permeable membrane, in combination with cycles of chemotherapy, in a patient with multiple myeloma. The use of a single high cut-off 1100 filter providing 1.1sq mt surface area, clearing 15 – 45 Kda: Kappa 25kD, Lambda 50kD, is used on a patient receiving treatment three times a week for four weeks.

The case study presented will demonstrate the use of extended haemodialysis with a single high cut-off dialyser (HCO 1100) as opposed to using plasma exchange only and will discuss the nursing implications of this modality.

A target reduction rate of 89% of serum free light chain was achieved in the first 30 days, however, complete renal function was not achieved and the patient remains dialysis dependent.
Mean Arterial Pressure (MAP) measurement as an intradialytic assessment tool: a plausible and innovative adjunct to Blood Pressure (BP) monitoring: P21

Mrs Wendi Bradshaw, Southern Health.

Context:
The average age, debility and longevity of satellite haemodialysis patients increases with every year. It is essential that nurses are innovative in their assessment capacities utilising newer or revised intradialytic assessment processes as available. Calculation and consideration of patients’ mean arterial pressure (MAP) can assist in this.

Objectives:
This presentation will consider:
1. What MAPs actually mean within a physiological context and their relationship to standard blood pressure measurements
2. Calculating MAPs using the formula MAP = (systolic BP x 0.33)+(diastolic BP x 0.66)
3. MAP variance compared to systolic and diastolic blood pressures and accepted MAP ranges
4. Brief examples of MAP comparisons, following a retrospective examination of MAP calculations on patients who required clinical interventions while on satellite haemodialysis (as a quality activity).

Key Messages:
MAPs are quick and easy to calculate and reflect the patient’s current/imminent cardiovascular status. They offer supplementary information to the blood pressure which may assist in deciding upon dialysis treatment parameters.

Conclusion:
The utilisation of MAP calculations and principles can enhance understanding of the patients’ condition in relation to blood pressure. This quality activity indicated that individual patients tend to have individually consistent MAPs (irrespective of BP changes) during times of wellness which can be used as markers during times of illness and/or critical instability.

Evaluation of safety profile for iron polymaltose – a prospective observational study: P22

Ms Veronica Britos, Sydney South West Area Health Service
Prof Josephine Chow, Sydney South West Area Health Service

Background:
Anaemia is a common problem amongst patients with End Stage Renal Disease (ESRD), and iron deficiency is a major hypo-responsiveness factor to achieve anaemia targets. Intravenously iron replacement is an important part of renal anaemia management and essential for optimization of Erythropoietin Stimulating Agent use.

Aim:
To determine the safety of administration of iron polymaltose in ESRD population in a tertiary teaching renal service in Sydney.

Methodology:
This is a prospective observational study. All Chronic Kidney Disease (CKD) patients on Haemodialysis and Peritoneal Dialysis who were prescribed iron polymaltose in the dialysis units or in the ambulatory care units from May 2006 to May 2007 were studied. Any iron reactions were recorded on an iron reaction sheet.

Results:
685 iron infusions were given over a 12 months period. There were small and large dose infusions with minimal adverse events such as marked Hypotension, especially in the Haemodialysis group who received the large dose of iron. This accounts for less than 5% of adverse events.

Conclusion:
This study confirmed that the administration of iron polymaltose infusions were safe in CKD patients.
Mrs Nemesia Capelle, 
Nauru Haemodialysis unit.

Context: 
Dialysis patients admitted to the main hospital are frequently fluid overloaded with intravenous fluid and nursing staff unaware that dialysis patients require strict fluid monitoring. Dietary restrictions especially potassium are lacking during hospital admission.

Objective: 
A three monthly rotational program commenced in 2009 for nurses working in the main hospital for the purpose of broadening their scope of practice to include caring for dialysis patients.

Key Message: 
The education of nurses involved working in the dialysis unit and learning the skills of assessment, AV fistula cannulation, fluid and dietary restrictions, medications and the technical and operational scope of haemodialysis.

Conclusion: 
Since this program commenced the dialysis management team have found that a three monthly rotation needs to extend to six monthly or longer so that the rotation provides a comprehensive knowledge and experience for new staff. Management hope to seek support from the Director of Nursing to implement the extended rotation.

The Introduction of Assistants in Nursing in Haemodialysis Units: P24

A/Prof Josephine Chow, 
Sydney South West Area 
Health Service
Ms Susana San Miguel, 
Sydney South West Area 
Health Service
Ms Maria Lidonni, 
Sydney South West Area 
Health Service
Ms Judith Isbister 
Sydney South West Area 
Health Service

Background: Recruitment and retention of nurses remains a priority. The NSW Nursing Workforce Action Plan recommended a thorough review and research on workload, case-mix, skills mix and patient outcomes. As a strategy to counter the current crisis in staff recruitment and retention in dialysis nursing, a new model of care was designed by the introduction of Assistants in Nursing (AINs) in the haemodialysis units.

Aim: 
The aim of this project was to introduce AINs in the haemodialysis units at a major tertiary Area Health Service in Sydney, Australia.

Design: 
A self-directed learning package for haemodialysis was developed and introduced to the AINs. This project involved the development of job descriptions, recruitment and training in dialysis procedures in the haemodialysis units of the AINs.

Subjects: 
AINs completing their second or third year undergraduate nursing degree.

Outcomes: 
Fifty percent of the twelve AINs completed a program evaluation questionnaire towards the end of the program. Ninety percent of the respondents were satisfied with the content and the organisation of the program. All respondents reported that they received enough support from the nurse unit managers and nurse educators at all time. In general, the AINs reported a high level of comfort, satisfaction and confidence. In this presentation, the authors describe the design and implementation of an educational program for AINs practicing in specialised haemodialysis units.
Comparison of haemoglobin at death pre and post CREATE and CHOIR: P25

Mr Jamin Claes,
Queensland Health
Ms Suzanne Johnson,
Renal Anaemia Coordinator
- Illawara Health service
Ms Joy Ellis,
Renal Anaemia Coordinator
- Royal Darwin
Ms Fiona Rettie,
Renal Anaemia Coordinator
- Royal Darwin

Background:
Anaemia of Chronic Kidney Disease is common and linked to cardio-renal outcomes. Optimal haemoglobin concentrations are not well defined and practice targets are diverse. Studies known by acronyms CREATE and CHOIR, concluded that early correction and higher targets do ‘not reduce the risk of cardiovascular events’. CARI guidelines were consequently revised.

Aim:
Investigate haemoglobin levels at time of death, and compare whether patients were within targets according to the original and revised CARI guidelines.

Methods:
Data for patients who had died were extracted from the Renal Anaemia Management database between October 2000 and November 2009. Proportions of patients within each haemoglobin range were calculated for patients who died before and after the revision of CARI guidelines. Differences in the proportions were explored using Chi-squared tests.

Results:
Patients were categorised by their haemoglobin levels. 4,601 patients died prior to CARI guideline revision and 2,876 died post-revision. The proportions of patients who died prior to guideline revision were 31.0%, 22.7%, 19.7%, 13.7%, 8.2% and 4.7% for haemoglobins (g/L) of ≤100; >100 to 110; >110 to 120; >120 to 130; >130 to 140; and >140, respectively. In the patients who died post revision, these proportions were 35.7%, 21.3%, 19.0%, 13.9%, 6.3% and 3.8%, respectively. These proportions differed significantly (p<0.001).

Conclusions:
In comparison, differences existed in the proportion of patients within the appropriate haemoglobin range pre- and post-guideline change. Additionally, haemoglobins of <=100(g/L) at death increased and >130-140 decreased.

Intradialytic Parenteral Nutrition (IDPN): P26

Mrs Cathy Croucher,
Queensland Health,
Gold Coast Hospital
Mrs Jenny Mullenger,
Gold Coast Health Service
District Renal Services
Mrs Meri Manafi,
Gold Coast Health Service
District Renal Services
Mrs Linda Stockwell,
Gold Coast Health Service
District Renal Services

Context:
To safely establish introduction of intradialytic parenteral nutrition (IDPN) into the renal service for selected malnourished haemodialysis patients. A client’s case study will be outlined to identify the challenges and to enable planning to continue to safely administer intradialytic parenteral nutrition to renal patients requiring this treatment.

Objectives:
To establish the effectiveness of intradialytic parenteral nutrition to improve a patient’s nutritional status and outcomes. Considerations for prescribing and administration were paramount for this new form of therapy within our service.

Key Messages:
The effective communication between client, family, doctors, dietitian, pharmacist and nursing staff.

It was of prime importance to maintain vigilant monitoring of the client’s parameters. The client’s progress was closely documented while on intradialytic parenteral nutrition to evaluate the outcomes progressively.

Conclusion:
The importance of ongoing multidisciplinary team involvement is paramount to create and sustain best practice and outcomes for the client. The goal was to improve the client’s quality of life (physical, emotional and psychological wellbeing) by improving the nutritional status.
Evaluation of Education Material on Phosphate Binders: P27

Ms Mirella Curtale, Ms Susana San Miguel
Sydney South West Area Health Service

Background:
It has been established that confusion exists for most ESRD patients who have been prescribed phosphate-binding medications. A recent project conducted in a Sydney metropolitan dialysis service found that only 31% of patients could correctly identify their phosphate binders. Patient education has been key component in helping patients understand their medications and thereby improve compliance.

Aims:
• To determine the effectiveness of patient information leaflet on phosphate binders on phosphate levels of patients on haemodialysis.
• To further identify any gaps in patient education in regards to phosphate binding medications

Methods:
A retrospective audit on serum phosphate level for patients who received the patient information leaflet on phosphate binders.

Results
Forty-four out of 77 haemodialysis patients (70%) audited had a decrease in serum phosphate level 6 months post education with the information leaflet.

Conclusion:
It is unclear whether simply raising awareness of the role of phosphate binders has had any impact or if a deeper understanding of the patients’ own medications has been the catalyst for change. Other factors may include dietary compliance and better dialysis adequacies, which could have led to improved biochemical markers in these cases.

Nonetheless, patients and staff have commented on the usefulness of the education pamphlet and continuing education can only enhanced the patients understanding of their medications and compliance. In keeping with good clinical practice, the pamphlet will be edited to reflect the current literature regarding high phosphate levels and the increased risk of cardiovascular complications and mortality.

Evaluation of an innovative and alternative model of care: P28

Mr John Fanning, Ms Josie Skewes
Toowoomba Hospital

Multi User Self Care Haemodialysis is a model of care initially rolled out in 2001. Through a partnership developed between the Renal Unit and a rural hospital, a self care haemodialysis facility was installed for 2 patients that were in training at that time. Since 2001, as has been presented at previous RSA conferences, a total of 13 self care haemodialysis facilities have been commissioned across the south west corner of Queensland, decentralising access to self care haemodialysis.

The purpose of this presentation is to report on the effectiveness of the multi user self care haemodialysis model of care for the renal service. Evaluation to date has included utilisation per patient month, patient and family satisfaction, feedback from rural health care providers, acceptability towards the model, overall cost effectiveness, dialysis adequacy, water quality control, infection rates, feedback from BEHTS and physical accessibility.

The growing fiscal constraints placed on health care services along with the environmental and socioeconomic challenges faced by this Renal Unit has emphasised the value of this model of care, enabling patients to remain in their local community, maintaining the viability of the self care-home haemodialysis training program and providing safe and reliable patient and family centred care which is value added.
Patient Education/Support - An Innovative Approach: P29

Mrs Nicole Farquharson,  
Toowoomba Renal Unit  
Miss Rebecca Barton,  
Toowoomba Renal Unit  
Queensland  
Mrs Mills Elissa,  
Toowoomba Renal Unit  
Queensland

We all know too well, the significance of repetitive education delivery to prevalent chronic and dialysis patients. These rigorous educational and supportive demands which Renal nurses have historically undertaken, may have an element of ‘staleness’. In an endeavour to provide the essential support and appropriate, timely education to our patients, the Toowoomba Renal Unit strives to continually look at innovative educative delivery models.

The purpose of this presentation is to share this Unit’s recent experiences with new and innovative ideas which focus on family and centred care, support and education.

Current strategies to date include the quarterly production of the ‘Renal Rag’ newsletter and monthly report cards for haemodialysis patients. Routine face to face education as well as facilitated patient and family support meetings has been effective but predominately focussed to the in-centre haemodialysis population.

The Renal Unit service has increased in line with state trends to include all Renal delivery outpatient clinics and a formal Chronic Disease service. This expansion necessitated a communication model which incorporated the entire spectrum of patients.

Recently the unit has formally introduced a bi-monthly multi-disciplinary newsletter ‘Wee Matters’ with content relevant to all renal patients. A further exciting initiative is the introduction within the Peritoneal Service of a bi-monthly mail out education package aiming to refresh patients on such topics as correct hand washing, nutrition etc. This initiative is planned to be adapted across other sub-specialities within the unit.

Within our rapidly changing environment it is imperative that nurses continually strive to improve and adapt the communication strategies within our services to ensure timely, appropriate information/education is delivered.

Keeping Safety as a Focus in a Satellite Unit: P30

Ms Lisa Finch,  
Redland Dialysis Unit  
Mrs Megan Cunningham,  
Redland Dialysis Unit

Background:
This poster illustrates various methods of improving patient safety in a satellite unit. By introducing information sharing sessions, staff were given the opportunity to put forward their ideas from their extensive renal nursing backgrounds.

Aims:
To have uniformity within the unit and reduce the likelihood of errors occurring thus improving patient outcomes.

Methods:
Introduction of “safety scrums” on a daily basis with new topics weekly, identifies issues of concern for discussion. Regular team meetings allow staff to share their opinions with other members of the team. Patient “rounding” and double checking of each patients haemodialysis prescription enables potential errors to be identified early. Staff and patient newsletters keeps all members informed of changes.

Results:
The total number of reported incidents including reoccurrence declined in the following months. Part-time staff are better informed of recent events, documentation has improved as one of the focus topics highlighted the need for vigilance, and incident reporting has been reduced.

Conclusion:
By opening up the channels of communication staff are provided with an opportunity to implement change into the workplace. It also enables staff to come up with creative solutions to solve patient problems and provide continuity of care to primary patients.
Mr Harry Glynn,  
Royal Brisbane and Women's Hospital  
Ms Helen Redfern,  
Royal Brisbane and Women's Hospital, Brisbane  

One in seven Australians over 25 has Chronic Kidney Disease (CKD) which kills 40 Australians daily and is growing at an increasing rate. This presents considerable challenges to healthcare providers. At Royal Brisbane and Women's Hospital community based clinics have been introduced to provide early detection and intervention for CKD. These are nurse driven clinics with a multidisciplinary approach. A model of care for social work services has been introduced providing a continuity of psychosocial care across the hospital and community with core, targeted and specialised services and incorporating a patient self-management framework. The aim is to reduce hospital admissions across this patient group through early intervention and prevention strategies and the maintenance of healthier lifestyles. This involves key partnerships with the community sector particularly in addressing the needs of vulnerable populations such as the Aboriginal and Torres Strait Islander communities.

There have been considerable challenges to orientating hospital based social work services from an acute setting to a community setting. These include how to service the needs of a more well population, the adaptability of social risk screening tools developed for acute settings and developing workforce capability to address a changing client base.

This presentation will outline the challenges for social work service delivery to provide continuity of psychosocial care across the hospital and community and will highlight the need for community partnerships for effective service delivery to support a self-management focused model of care.

Mrs Dorte Goodger,  
Launceston General Hospital  
Miss Kate Parsons,  
Launceston General Hospital  
Mr Mathew Mathews,  
Launceston General Hospital  
Ms Lorraine Woods,  
Launceston General Hospital  

Calcium/phosphate imbalance and associated hyperparathyroidism often result in increased morbidity and mortality in End Stage Kidney Disease patients on haemodialysis. In the past, treatment options were limited to low phosphate diets, calcitriol, aluminium and calcium based phosphate binders and when all this failed, parathyroidectomy was the patient's only option. Since 2005, LGH haemodialysis patients have also had access to Cinacalcet (a calcimimetic) successfully reducing PTH levels in many of our patients. More recently there has also been increased use of non-calcium containing phosphate binders such as Lanthanum and Sevelamer.

With the introduction of the CARI (Caring for Australians with Renal Impairment) guidelines, specific targets were established and renal healthcare teams now strive to maintain these Calcium, Phosphate, Ca x PO4 product and PTH levels.

Despite prescribed medication regimes there is still a small group of patients that continue to have elevated PTH levels. Intermittent IV Paricalcitol, may be a potential option to help manage this group. During 2009 we had a small group of 6 patients receiving IV Paricalcitol 3 times a week with dialysis. This poster will show our results from this small study.

Hopefully, the knowledge we have gained from our experience can help shape future directions for management of Calcium/Phosphate homeostasis, reducing PTH levels and provide better patient outcomes.
The Renal Practitioner Role in an Acute Renal Ward: P33

Mrs Deying Guo,
34 South,
Monash Medical centre

One rising tide of change happening in renal nursing in Australia is the emerging role of nurse practitioners (NPs). Our health service has several NPs playing an important role between patients and nephrologists and promoting quality care to patients. However, these NPs are specialized in the areas of haemodialysis and peritoneal dialysis. At present, we do not have an acute ward NP. Our poster presentation will identify the main roles of NPs who keep their practice in an acute renal ward. Our focus will be on how an acute renal NP could create change by promoting education for staff and patient, improve our service to outlying renal patients, and other improvements our ward may experience by having this new and innovative role within our team.

A literature review is being conducted to research current acute renal NP’s scope of practice. With this information, a summary about the role will be written to educate staff on the acute renal ward about the NP role. A questionnaire is being created to ascertain staff perceptions about the renal NP and about current practices on the ward in relation to education, quality, and service. Qualitative research methodology is being applied to analyze the data. Our literature review with our survey study will form our discussion and results.

Our work will aim to identify whether a NP is of benefit to nursing staff and patients, meeting the rising tide of change in practice and innovating improvements in quality of care and service.

The Canberra Hospital Sally’s Story: A Lived Experience of Chronic Kidney Disease and Dialysis: P34

Mrs Barbara Harvie,
Mr Tim Keun,
Mrs Mary Ann Kilpatrick,
The Canberra Hospital

In 1986, aged 26, Sally* was a young professional working in the Public Service. She became unwell and was admitted to hospital, and was diagnosed with Chronic Kidney Disease (CKD). After some years, it was decided that Sally did not need ongoing renal reviews.

In 2008 Sally was advised she needed a knee replacement. Her pre-admission screening showed deterioration of her kidney function, and she re-entered the Renal Service. Sally and her husband were given individual CKD education and information on kidney treatment options. Sally chose Peritoneal Dialysis (PD) as her preferred treatment and started PD training in September 2008. This plan failed when she experienced pain and leaked into the abdomen. In November, PD was abandoned. Sally had a tunnelled central line placed and started haemodialysis. In December 2008, an AVF was formed.

One year later we capture Sally’s experiences. We reflect with Sally her experiences through her journey. We gain an insight of her experience of our Renal Service, from the fear of a combined Outpatient/Acute Haemodialysis Waiting area to the friendliness of the most important room in the Community Dialysis Centre, the waiting room. Sally’s story is one of determination and courage in the face of adversity. She strives forward with the support of her husband and family.

We outline some of the lessons we have learnt from Sally’s experience. We hope that it will encourage others to reflect on the meaning of person centred care. (*Name changed).
Transplantation in the Far North: Distance, Discoveries and Dilemmas: P35

Ms Bronwyn Hayes, Cairns Base Hospital

Background:
The Transplant Coordinator role was introduced to improve access to renal transplantation. Equity and access to transplantation have improved, with more people from the Torres Strait Islands (TSI) being placed on the renal transplant waiting list and proceeding on to transplantation. This has changed the lives of numerous people and enabled them to return to a functioning role within their local communities.

Purpose:
Increasing the number of TSI patients on the transplant list has involved overcoming language, geographical and cultural barriers that have previously precluded these patients being considered for renal transplantation.

Results:
An analysis of TSI patients listed for transplantation has resulted in a 300% increase in patients with a since the commencement of the Transplant Coordinator role in 2004. Transplant outcomes for this small group have surpassed similar cultural groups and this has been achieved through a passionate desire to see outcomes improved for this otherwise marginalised group.

Conclusion:
The role of renal Transplant Coordinator provides unique challenges. Language, culture and geography can be overcome to provide Torres Strait Islander patients with the opportunity to obtain a life changing renal transplant.

Three benefits of yoghurt: P36

Mrs Deslie Henley, Q Health Logan Hospital
Mrs Anne Dunn, Queensland Health, Logan Hospital

Patients on haemodialysis are often undernourished and susceptible to infection. Patients in our unit had previously been offered protein bars in to assist with under nourishment, but many found these hard to chew due to poor dental health.

Research carried out in 2005 by Manley, Fraenkel, Mayall & Power suggests that regularly eating yoghurt containing Lactobacillus rhamnaceous GG (LGG) may be a worthwhile treatment for VRE colonisation.

As a consequence our unit decided to offer patients yoghurt containing LGG whilst on dialysis in an attempt to improve their overall nutritional status and decrease risk of VRE colonisation. Patients have been offered 100gm of yoghurt each dialysis with over 95% of patients regularly eating yoghurt on dialysis. Nurses took the opportunity to educate patients on the importance of phosphate binders and when to take them as they gave out the yoghurt.

This poster will cover how the introduction of yoghurt has had a benefit to the patients' nutritional status, phosphate binder compliance and may have protected patients from VRE colonisation within our unit.
Free Light Chain Filter Treatment for Multiple Myeloma Patients with Renal Involvement – A Nursing Perspective: P37

Ms Angela Henson, Princess Alexandra Hospital

Context:
Although renal failure associated with multiple myeloma accounts for less than 2% of the dialysis patients nationally (ANZDATA 2008 Registry) the impact of the disease is an additional burden for patients with an uncertain future. Acute renal failure associated with multiple myeloma does not resolve with traditional haemodialysis often resulting in permanent commencement onto dialysis. Plasma exchange procedures have also shown minimal benefit in resolving this condition due to the inability to consistently remove the destructive kappa and lambda light chains.

Key Message:
The porous membrane of the High Cut Off Filter (HCO Free Light Chain) is proving effective in reducing levels of light chain deposition and provides hope that these patients may be independent of dialysis. This extended eight hour treatment regime is part of a combined therapy which also includes chemotherapy treatments administered by the oncology department.

Objective:
From a nursing perspective, the treatment schedule for five patients will be outlined in relation to the use of the free-light chain filter, the heparin and dialysate changes required during an extended treatment and the utilisation of cytotoxic precautions.

Conclusion:
It is hoped with appropriate guidelines, committed medical and nursing care, that patients with multiple myeloma may not have to commence or remain on long-term haemodialysis therapy.

Are Peritoneal Dialysis Patients with cumulative iron dosing achieving iron and haemoglobin targets?: P38

Ms Beverley Hiles, Lismore Base Hospital
Ms Sue Johnson, Wollongong Hospital, Illawara Health Service
Mrs Sue Sheehan, John Hunter Hospital, Hunter Area Health Service
Ms Avril MacLeod, RPA, Central Sydney Area Health Service
Ms Veronica Britos, Liverpool Hospital, South West Sydney Area Health Service

Background:
Peritoneal dialysis patients often require iron supplementation to maintain sufficient iron stores and adequate haemoglobin levels. Sufficient iron stores are required to ensure adequate haematologic response to erythropoietic stimulatory agents. The aim of this analysis was to find out what the cumulative iron doses are in peritoneal dialysis patients, and to determine whether we are meeting haemoglobin, ferritin and transferrin saturation targets.

Method:
Data from peritoneal dialysis patients were extracted from the Renal Anaemia Management database up to December 2009. The Renal Anaemia Management database is a database that collects information on the outcomes of patients with chronic kidney disease at 20 centres in Australia. Data on haemoglobin, ferritin and transferring saturation were categorised as below, within or above CARI guideline targets.

Results:
There were 128 peritoneal patients who had cumulative iron dosing data available. Most patients (98.6%) had cumulative iron doses between 50 and 8600 mg (median 1000mg). Haemoglobin data was available for 107 patients. It was below target in 64.5%, within target for 30.8%, and above target in 4.7%. Ferritin data were available for 34 patients. There were 15% below target; 23.5% within target and 32.4% above target. TSAT data were available in 111 patients. It was below target in 80.2%, within target for 16.2% and above target in 3.6%.

Conclusion:
The majority of peritoneal dialysis patients are not meeting the recommended targets for haemoglobin; ferritin and transferring saturation, despite being administered median cumulative iron doses of 1000mg.
The impact of the Western Australian Health Department’s Peritoneal Dialysis services reform on the nursing workforce in one of its largest tertiary hospitals: P39

Mr Jon Hosking,  
Sir Charles Gairdner Hospital  
Mrs Viki Link,  
Sir Charles Gairdner Hospital,  
Perth, WA  
Mrs Vivien Pereau,  
Sir Charles Gairdner Hospital,  
Perth, WA  
Ms Kylie Ward,  
Sir Charles Gairdner Hospital,  
Perth, WA

Background:  
In 2003, the Western Australian [WA] Department of Health tendered for Peritoneal Dialysis [PD] service delivery, proposing a fundamental change in how PD patients were managed in the state. PD patient nursing care was outsourced to a single private dialysis company: this company now trains, monitors and provides routine management of all home-based PD patients. The new model of care was implemented in May 2007 and is unique in Australia PD service delivery.

Impact on tertiary hospital PD nurses

• Morale. Perceived devaluation of clinical expertise, leading to increased resignations
• Loss. ‘Core-business’ was lost with the relocated services
• De-skilling. Patient training and follow up no longer part of tertiary hospital remit
• Role change. Emergency/sick inpatients remain hospital PD nurses’ responsibility
• Feelings of Disempowerment. Staff moving from public to private sector

Outcome of service redesign

• Reinvention. Changing attitudes/perceptions.
• Redesign. New clinical pathways
• Re-motivation. A challenge to clinical leaders
• Role re-delineation. Resource and consultative
• Re-engagement. Mending loss of confidence in management and ‘the system’

Conclusion – The way forward:  
Nobody in 2007 could have anticipated the full extent the DOH redesign would have on the hospital based PD nursing workforce. Bridges have needed to be built between the public and private sector, a reform of services adapted to, trust regained. Yet there is now a tangible sense of optimism. A ‘can-do’ attitude is re-emerging. This hospital’s PD nurses are optimistically rediscovering they still have an integral role to play in PD nursing services.

The Evolving Role of the Renal Access Nurse in Australia and New Zealand :P40

Mrs Sadie Jaeschke,  
Eastern Health  
Mrs Amanda McOrmond,  
Western Health

The role of the Renal Access nurse has become integral to most renal units throughout Australia and New Zealand. The challenges faced by Renal Access nurses are vast, particularly when given the task of setting up the role within a newly established renal service. The Renal Access nurse role has developed through the recognition that some patients were presenting to their first haemodialysis session without established permanent dialysis access.

It was thought that the implementation of a role that coordinated the different facets of access creation would help to ensure that temporary catheter placement remained at a minimum. Since its inception, the role has evolved into a problem solving position for problematic vascular access, however the question is: is there a requirement for two distinct roles to be introduced into renal units to ensure coverage of all vascular access issues facing haemodialysis patients?

This presentation will examine: the key components of the renal access role; the difficulties in meeting conflicting expectations of renal management versus dialysis nurses; tips for establishing network and support groups; and developing and maintaining professional relationships with key stakeholders involved in the renal care continuum.
Improving Patient Compliance: P41

Ms Caroline Letton, Diaverum Pty Ltd

Patient Compliance has been an ongoing and most challenging issue for all dialysis patients.

Education is considered to be the key to encouraging patient compliance with diet and fluid restrictions. Nurses traditionally have taken the small amount of time available, to educate patients while they are receiving their dialysis treatment. This usually includes one on one nurse to patient education, with a minimal effect on improving patient compliance.

Aim:
The aim of this study is to improve patient compliance, decrease hospitalisations and decrease mortality in haemodialysis patients.

Method:
Using adult learning principles and techniques, an innovative new interactive patient seminar was introduced to patients in our clinic. The Seminars ran for 1 hour were held quarterly and targeted patients who were new to dialysis or who were considered to be non-compliant with medication, diet and fluid regimes. The education techniques used incorporated various learning styles and were designed to actively involve the learner.

Results:
Patients who attended the seminars show improved intra-dialytic weight gains, phosphate levels and improved compliance with phosphate binding medications.

Health Are we there yet? : P42

Ms Kerry Linton, Southern Health
Ms Annette Bezzant, Nurse Practitioner Candidate/ Southern Health

The role of the Nurse Practitioner is now well established in the UK and US and has slowly found recognition in Australia over the last decade. Victoria has approximately 51 Nurse Practitioners, with two Dialysis Nurse Practitioners endorsed in 2006.

Our health care network, Victoria's largest health service provider, second largest provider of renal services and one of two national centres for Simultaneous Pancreas Kidney Transplantation, has recognized the innovative contribution that Nurse Practitioners can make in terms of improved patient outcomes and more streamlined and flexible service delivery.

Victorian Nurse Practitioner Project funding assisted in the development of the Nurse Practitioner (Renal Care) role in our organization and there is extensive organizational commitment to the establishment and ongoing viability of the role, with the Nurse Practitioners and NP Candidates also being supported by the Nurses Board of Victoria, the Victorian Renal Nurses Collaborative, and the developing network of Renal Nurse Practitioners across Australia and New Zealand.

To be involved in the evolution of the Nurse Practitioner role both within Victoria and in our organization is a fabulous opportunity. It is a career pathway for those nurses wishing to take their clinical skills to the next level, a role which will only expand with increased demands on the health care system. For anybody considering a Nurse Practitioner role, our advice as Candidates is to go for it, make waves, be innovative and follow your dream - it's an exciting journey and we can't wait to get there!
Journey of a pregnant woman with End Stage Renal Disease: P43

Mrs Gwen Lowah, NT Renal Services

This paper outlines the journey of a thirty year old Indigenous woman, CJ, who had been living in a remote community in the Northern Territory with her husband and three young children. CJ attended a community clinic as she thought she was eight weeks pregnant. Routine bloods collected at the time were consistent with stage five Chronic Kidney Disease. As a result CJ was urgently medivaced to Royal Darwin Hospital for management of her Kidney Disease and pregnancy. Initially our Renal Consultant believed that termination of the pregnancy would be the likely outcome. However the ultrasound of the foetus revealed gestation to be twenty five weeks therefore it was decided the pregnancy would most likely be viable.

From here begins a journey that is challenging for the Mother...apart from her family unit and home environment she was given a medical diagnosis that has been hard to deal with. The consequent feelings of disconnection and social isolation had significant negative impact and required empathetic and supportive relationships to be established.

The journey for medical and nursing staff also proved to be challenging as the mother required close supervision from multiple medical and nursing teams such as, Nephrology, Obstetrics and Neonatal specialists. The goal for therapy from a dialysis perspective was to optimise maternal health by managing hypertension, uraemic solutes, haemodynamic stability, correction of anaemia and adequate nutritional requirements.

Is Vitamin D deficient in our chronic kidney disease population: P44

Ms Avril Macleod, RPAH
Ms Susan Sheehan, John Hunter Hospital
Ms Bev Hiles, Lismore Base Hospital
Ms Sue Johnson, Wollongong Hospital

Background:
Evidence is emerging that Vitamin D deficiency is linked with progression of chronic kidney disease (CKD) to end-stage renal failure. Patients with CKD are particularly at risk of deficiency due to a reduced ability to convert vitamin D from its pre-cursor into the active form. We aimed to find out if there was vitamin D deficiency in our dialysis population and relationship to secondary parathyroidism.

Method:
Data from all patients were extracted from the Renal Anaemia Management database up to December 2009. The Renal Anaemia Management database is a database that collects information on the outcomes of patients with CKD at 20 centres in Australia.

Results:
There were 135 patients who had information available. Mean age 62.8 ± 13.0 and 55% were male. Most patients were of Caucasoid origin (74.2%), and were on haemodialysis (61.5%). 1,25-dihydroxy vitamin D levels were available in 16 patients and were 56.8 ± 45.0 pmol/L. 25-hydroxy vitamin D levels were available in 125 patients. They averaged 54.4 ± 24.3 nmol/L. Of these patients 7 (5.6%) were within normal range (>100 nmol/L); 54 (43.2%) were considered insufficient (50-100 nmol/L); 57 (45.6%) were mildly deficient (25-50 nmol/L); 6 (4.8%) were moderately deficient (12.5-25 nmol/L) and 1 (0.8%) was severely deficient (<12.5 nmol/L). Parathyroid hormone levels were 46.2 ± 72.4 (pg/mL), and calcium phosphate product was 4.0 ± 1.5.

Conclusion:
Vitamin D deficiency occurred in 94.4% of our dialysis population. Interventions to reduce the occurrence of Vitamin D deficiency are warranted.
Advancements in Nocturnal Dialysis: P45

Ms Linda McGrail,
Sydney Dialysis Centre
Ms Cheryl Hyde,
Sydney Dialysis Centre

Our home training unit currently supports 155 haemodialysis patients. Of this cohort 28 dialyse for greater than 24 hours per week. Patients may elect to dialyse longer hours during the day, in the evenings or overnight. They also may select to dialyse anywhere between three times per week and up to seven times per week. The majority adhere to an alternate night routine.

While longer dialysis hours have always been encouraged, we have only recently developed a protocol to standardise the procedure. Our protocol separates patients into two groups: those who dialyse three times per week; and, those who dialyse more frequently than three times per week. Implementation of this protocol ensures all patients receive a standardised dialysis prescription which allows uniformity for data collection and surveillance.

This poster will present an outline our nocturnal haemodialysis protocol. Patient selection and training procedures will be discussed. Special requirements such as enuresis monitoring, dialysis access, changes to dialysate flow and concentrate, machine maintenance and water quality will be addressed as well as recommendations for medication prescription, diet regime, patient monitoring and target levels.

Internet Learning – The future of Nurse Education: P46

Miss Marie McIntosh,
Western Health

With renal patient numbers on the rise worldwide, the need for adequately trained renal staff has never been so acute.

The use of an internet based learning platform has enabled flexibility of study hours for nurses to learn from home, facilitating not only the achievement of mandatory competencies, but also providing excellent tools for educators and unit managers.

Delivery of virtually all theoretical components of nephrology study can be achieved online. Educators can link course materials, video demonstrations, and assessment items, while students can liaise with teachers and other nurses in forums or via e-mail, to view their grades and check event calendars or assessments pertaining to their course. Managers are allocated ‘group teacher’ access that enables them to monitor usage, and grades of enrolled staff. The administrator of the site also has the ability to monitor and graph trends in assessment, to then tailor education needs to those specific areas as required.

Internet learning will never replace practical assessment, but is the best mechanism to deliver theoretical learning components which may otherwise be inaccessible for nurses who are unable to procure study leave. Uptake in online courses has initially been slow, but increasing familiarity with technology must also become the responsibility of the educator and unit manager. The most powerful tool of the 21st century - the internet - must become the cornerstone of nurse education.
Increasing Capacity by opening 7 days a week - Can it work?: P47

Ms Lynda McKelvie, Alice Springs Hospital

Renal Disease is continuing to increase in epidemic proportions in indigenous populations. Haemodialysis remains the most popular treatment in this clientele group and hence new and innovative methods of service delivery needed to be explored. We have recently implemented a model of dialysis which has increased capacity by 16.7% while also increasing benefits for staff including an improved work life balance due to the absence of split days off.

Traditionally dialysis units have run a six day service; however by opening the doors on a Sunday, we have been able to provide more options of dialysis regimes to patients, allowing them to choose days which most suit their lifestyle and family routines.

The seven different combinations of days are listed below.

- Monday, Wednesday, Friday
- Tuesday, Thursday, Saturday
- Wednesday, Friday, Sunday
- Monday, Thursday, Saturday
- Tuesday, Friday, Sunday
- Tuesday, Thursday, Sunday
- Monday, Wednesday, Saturday

Dogs in Dialysis ... “A Therapeutic Approach”: P48

Mrs Sharon Morrow, Southern Health

Nursing staff working in an outer suburb haemodialysis unit in Melbourne are certainly making waves that will contribute to the rising tide of innovative therapies that are designed to improve the quality of care provided to their patients.

Using a divisional therapy approach pet therapy was introduced in September 2009. Wellington, an 8 year old Collie, and Zacchary, a 2 year old Bernese Mountain Dog, now visit our unit on a regular basis.

A survey will be designed to explore the impact on the psychological and physical well being of our patients during their haemodialysis treatment. This survey will be given out to 20 patients and 15 staff members within the unit. Results of the survey will also include any issues or concerns that staff or patients may have relating to hygiene and suggestions on how to overcome such issues.

The findings of qualitative and quantitative studies from around the world support the use of pets as an important adjunct to the care of many patients. After studying the data supplied by these studies nursing staff will be promoting pet therapy as a new innovated practice with the aim to improve patients psychological and physical well being during haemodialysis treatment.

Nursing staff working in this outer suburb haemodialysis unit in Melbourne recognise that pet therapy is becoming more and more accepted within the health care setting and will continue to implement new and innovated therapies to improve the quality of care delivered to their patients.
Developing a Supportive Care Booklet
- Resource for Patients, Carers and Families: P49

Mrs Jacqui Moustakas,
Sydney South West Area Health Service (Eastern Zone)
Ms Jane Nicholson,
SSWAHS (Eastern Zone)
Miss Helen Zisos,
SSWAHS (Eastern Zone)
Ms Jem Askew,
SSWAHS (Eastern Zone)

Context:
The number of patients presenting with end stage renal failure in Australia (and the Western world) is growing at a rate of 10% per annum, with a large number of these patients being elderly, dependent and having multiple co-morbidities. Many will choose not to have dialysis but need to know that they will be treated in a supportive environment with a multidisciplinary approach. They will not be ‘forgotten’.

Objectives:
To increase our patients knowledge about Supportive Care.
To address a need for our patients.

Key Messages:
In 2008 when our Renal Nurse looked for information to give these patients, carers and families in regards to ‘supportive management’, a deficit was identified. Our renal social workers and Renal Nurse in collaboration with our multidisciplinary team, palliative care nurses then commenced work on preparing a booklet about Supportive Care, to give to our patients. With many meetings, feedback and evaluations it was successfully completed in 2009.

Conclusion:
The finished booklet was produced for our Area Health Service. However, we believe it can be easily adjusted for use in any renal service. Our plan is to formally evaluate it in 2010, make any necessary changes and to also have it translated into many languages.

Value Adding - A Nurse Run CKD Clinic: P50

Mrs Jacqui Moustakas,
Sydney South West Area Health Service (Eastern Zone)
Ms Jane Nicholson,
SSWHAS (Eastern Zone)

Context:
In the past patients with chronic kidney disease received most of their education regarding their options from their Nephrologist, who informed them they would be starting dialysis! Slowly with the importance of patients being involved in the decision-making and Nephrologists not always having a lot of time, the role of educating patients was incorporated into the role of many of the senior renal nurses roles.

Objectives:
To demonstrate how the CKD nurse run clinic has enhanced the education opportunities for our patients.

Key Messages:
At our large metropolitan hospital, education of CKD patients (stages 4&5), was done by the renal case manager. The renal case manager would see patients when they were referred by Nephrologist and/or at the regular patient education days. In 2007, our hospital employed a CKD nurse – the role was part time and across 2 campuses. The aim of the position was to develop a CKD pathway incorporating a CKD nurse run clinic for patients whose eGFR <20.

Some of the clinic aims included:
- Individual education / follow up
- Social worker: psycho / social assessment if necessary
- Dietary assessment
- Commence Hep B vaccination process
- Input from the home therapies staff

Conclusion:
The CKD clinic has therefore enhanced the education opportunities for our patients by giving them choices to suit their needs. The poster will present the evolution of the clinic and the results to date.
Patients behaving badly - the development of a program to manage difficult behaviour: P51

Mrs Pauline Nicholas,
Renal Service,
Royal Brisbane and Womens Hospital

We’ve all got them: patients who are unable to operate within the bounds of good society, from attention seeking tantrums to threats of physical assault against fellow patients or the staff caring for them. It appears that aggression is increasing in our hospitals, and for the provision of dialysis, this is a challenging problem, as we have to continue providing the therapy, despite the behaviours.

This presentation will explore some of the reasons patients behave as they do and outline the program that was developed to manage difficult behaviour within our service.

A working party built from the multidisciplinary team within our service developed a set of guidelines, and a Terms of Agreement between patients and staff to empower decision making in difficult situations. In addition to these documents, the nursing staff was given training in assertive skills and de-escalation techniques and in-service from clinical psychiatry and the Renal psychologist.

The all of service approach to finding a solution, as well as providing the tools, skills and knowledge to support those on the front line with managing aggression and difficult behaviour has resulted in a calmer environment, firm boundaries and solidarity.

Schistosomiasis: an interesting case study: P52

Ms Amy Obad,
Southern health
Ms Kerry Linton,
Southern health

Schistosomiasis is a parasitic disease most commonly found in developing countries within Africa, South America, southeast Asia, the Middle East and the Caribbean. The urinary form of the disease can lead to chronic illness, causing kidney failure or even bladder cancer. This poster discusses an interesting case study about a Sudanese lady on Peritoneal Dialysis who initially presented with what was thought to be peritonitis, but was eventually diagnosed as urinary Schistosomiasis. The pathophysiology of the disease is discussed, the signs and symptoms the patient exhibited as well as the treatment she had received. This unusual case is not frequently observed in Australia and highlights the need for health professionals to consider alternative diagnoses when treating patients that are immigrants to Australia.

The Multidisciplinary role of the dialysis nurse in the private sector:
A multiskilled taskforce: P53

Ms Suleen Rautenbach,
NephroCare QLD
Ms Trudy Bell,
NephroCare QLD
Mrs Justine Cripps,
NephroCare QLD

The primary nursing model of care adopted at private dialysis clinics ensures the entire needs of their clients are catered for.

The skills required of the Registered and Enrolled nurses of private dialysis clinics are unique in the provision of holistic nursing care. The nursing staff are not only clinicians in the specialty of Dialysis Nursing but the point of contact and referral for a multitude of issues relating to the total care of their clients.

A multidisciplinary approach to health care needs is essential to ensure exceptional care provision and superior outcomes for the dialysis population. As allied practitioners are not as readily available to address the ongoing day-to-day interventions required by the renal clients, it is the responsibility of the nursing staff in private dialysis units to ensure all needs are met in a timely manner and priority based.

Several of the roles the nursing staff include the transport officer, the social worker, the welfare worker, the dietician, the diabetes educator the medication assessor, the infection control co-ordinator, the OH&S educator, the interhospital liaison officer, the travel agent and the vascular access educator whilst also attending to their primary role of the provision of dialysis therapy.

The multiskilled taskforce at Private dialysis units, without doubt, utilise all available allocated time to ensure the entire and somewhat complex needs of the dialysis clients are met.
The trials and tribulations of a novice educator: Innovation required: P54

Mr Tarquin Robinson,
Department of Health and Families NT

The sole Renal Educator of the top end is responsible for an area of approximately 400,000 square kilometres. Within this area there are five staffed renal units with a total of approximately 70 staff, including registered nurses, enrolled nurses, patient care attendants and aboriginal health care workers.

The educator currently works under 2 managers, one in the outpatient setting and one for the in-patient setting, with each area trying to accommodate their own staff and keep them educated. It is challenging covering such a large area and trying to meet everyone demands. To help in providing education to all the different areas we have started to develop regular in-service programs which are being run in-house with the role of the educator being the occasional overseer. An in-service coordinator role is also another idea that has been floated.

A temporary position is also currently running for a stand alone peritoneal dialysis educator this position has helped with providing ongoing education and up-skilling of new and regular staff in PD nursing skills and has taken a large work load away from the current educator and allowed them to concentrate more on the other nephrology areas, an area that previously may have sometimes fell by the wayside due to the long list of other jobs to complete. Job satisfaction is limited at times due to being unable to complete all tasks however it is still a position that is enjoyed even with the headaches.

Knowledge for the future: Providing education to staff in regional dialysis units associated with The North West Dialysis Service (NWDS): P55

Mrs Annette Rose,
Melbourne Health

Background:
Staff in rural and isolated areas have difficulty with accessing education; particularly in a specialty area such as Nephrology. Unless staff undertake formal courses they often cannot obtain education and information to improve their knowledge to enhance patient care. The NWDS Regional Nurse Educator (RNE) provides this education by travelling to these rural and often isolated Victorian dialysis units.

Aim:
To improve the knowledge and understanding of Regional dialysis nurses in caring for patients with high PTH levels.

Methods:
A patient in an isolated unit in Regional Victoria was suffering gross secondary hyperparathyroidism which was not resolving with medication. The staff were inexperienced in advising the patient how to correctly take their medication. The RNE visited the unit to provide education to the patient and staff on the disease process and the importance of taking the medication as prescribed. This was followed up by frequent telephone support.

Results:
After staff and patient education the parathyroid hormone (iPTH) level decreased from >201 pmol/L to 89 pmol/L.

Conclusion:
Staff are confident in dealing with patient issues now they are armed with education and information. They are able to help their patients achieve better outcomes for themselves but also instil confidence in the patient that they have the knowledge to manage their day to day care effectively.
Mr Jamie Rutherford, 
North West Dialysis Service

The Royal Melbourne Hospital commenced performing incompatible ABO (ABOi) transplants in 2005. However, while our experience is large in Australia it is small compared with Japanese units where ABOi has been the mainstay of their transplant programme since the 1980’s.

In 2009 I was awarded the Lynley Atkin Scholarship which enabled me to visit a major Japanese teaching hospital in Nagoya. This trip gave me an opportunity to observe some of the dialysis procedures in a major Japanese hospital and how the dialysis unit prepares its patients who are to undergo ABOi transplantation. Shintoism (the main religion in Japan) opposes the concept of brain death therefore cadaveric transplantation is common practice. For this reason Japanese transplant surgeons and nephrologists sought an alternative organ source. ABOi transplantation was pursued although other countries believed that crossing ABOi barrier was a risky procedure with poor outcomes.

There are few satellite centres in Nagoya, consequently the haemodialysis unit is large compared to Australian hospitals, it has 50 dialysis stations and is physically split into two -one area is exclusively for in- patients and patients receiving therapies other than haemodialysis, the other area is for patients receiving 3 times a week haemodialysis as an out patient. The unit has the ability to perform Haemodialysis, Plasma exchange and Double Filtration Plasmapheresis (DFPP).

DFPP reduces ABO antibodies and prevent hyperacute rejection and is used in recipient pre transplant workup.

Mr Maahir Khaja Hussain Saheb, 
Auckland City Hospital Clinical

The demand for Clinical Dialysis Technicians both in New Zealand and worldwide has dramatically increased over the past 10 years. Nursing shortage in the world and with a growing number of nurses signalling their intention to leave New Zealand amidst an already depleted nursing workforce, the role of a Clinical Dialysis Technician is evolving.

Clinical Dialysis Technicians are more cost effective in comparison to nursing staff and also provide consistency and continuity within the renal services.

Clinical Dialysis Technicians are sharing the responsibilities with dialysis nurses to perform haemodialysis treatment on patients with end stage renal failure, acute renal failure, training patients for home dialysis and to provide technical expertise, equipment monitoring and maintenance within the haemodialysis units.

A Clinical Dialysis Technician’s career path may lead to senior roles including Team Leader, Professional Leader, Haemodialysis Adviser, Haemodialysis Educator, Staff Trainer, Patient Trainer and Coordinators within the renal service.

Clinical Dialysis Technicians are recommended to complete the certification exam from the Board of Nephrology Examiners Nursing and Technology (BONENT). The New Zealand Board of Dialysis Practice (NZBDP) is the professional body that maintains certification, training and licensing of Clinical Dialysis Technicians in New Zealand. NZBDP also develop the scopes of practice and competences.

This presentation will explore the model of care and the Clinical Dialysis Technician contribution to renal services in New Zealand.
The Use of Blood Volume Monitoring (BVM) in Assessment of Patients’ Target Weight (TW) and Fluid Status: P58

Ms Susana San Miguel, Liverpool Health Service
Ms Sunila Raj, Liverpool Hospital
Ms Imelda Alberto, Liverpool Hospital
Ms Binbin Yi, Liverpool Hospital
Ms Rana Hussein, Liverpool Hospital

Background:
Although clinical assessment has been the mainstay for estimating patient’s target weight, it is sometimes unreliable when the patient only develops subtle signs and symptoms of fluid overload or dehydration. Recent advent in technology, such as BVM, together with clinical assessment, can assist dialysis nurses in effectively and objectively assessing patient’s target weight.

Aim:
To determine the efficacy of BVM in assisting the nurses in the assessment of patients’ target weight and fluid status.

Methodology:
Observational prospective quality project for 3 months, utilizing BVM as an added tool in assessing patients’ TW & hemodynamic response to dialysis and ultrafiltration (UF). Outcome Measures: Number of patients with target weight altered vs. total number of patients assessed with the use of BVM.

Subjects:
Maintenance haemodialysis patients (>6 months on dialysis) in a major tertiary referral hospital in Sydney.

Results:
Over the 3 month period, a total of 88 patients from 4 dialysis units had their IBW assessed using BVM: 56 patients have their IBW altered, (either decreased or increased); 7 patients have other parameters altered, such as wash-back volume, maximum UF & UF profile, to enhanced fluid removal without causing discomfort to the patient.

Conclusion:
This project has been beneficial in improving staff’s knowledge in assessing patient’s target weight, and UF response. Most of all, it aided in making dialysis as comfortable as possible to the patient by preventing intravascular volume depletion such as cramps, hypotension and sudden unconsciousness during haemodialysis.

The Symbiotic Benefits of Having a Single Unit as Our Preferred Training Venue for Regional Staff: P59

Mrs Elaine Sanders, North West Dialysis Service

Our Dialysis Service has an active training program for regional nurses conducted at a Satellite Dialysis Unit (SDU). The aim of this study is to investigate any benefits in having a single training unit for regional staff. It will explore the benefits to the Nurse Consultant, the new dialysis nurse, the SDU staff and the patients.

Method:
A survey was distributed to SDU staff to assess the advantages and disadvantages of using their unit as a training facility. All regional staff who have trained between July 2009 and September 2009 were given a training evaluation form at the end of their training and again in January 2010.

Results:
SDU staff: 6 staff completed the survey. Of these 4 agreed that there were advantages to having SDU as our preferred training venue. 5 of the 6 nurses who responded were unsure if the patients were happy to have the new dialysis nurses looking after them during the training period.

Regional Staff: 6 staff completed the initial evaluation and 4 completed subsequent evaluation. The 4 responses show that the nurses attending for training felt that it was beneficial to come to SDU for training. Some changes have been implemented to the training as a result of the responses from both the SDU staff and the regional nurses.

Conclusion:
That there are symbiotic benefits of having a single unit for regional staff training.
Renal Access Surgery in Remote Australia - A Quality Initiative: P60

Mrs Monique Sandford, Royal Perth Hospital

Western Australia has the lowest incidence and prevalence rates of renal access in Australia. In 2007, 33% of patients commenced haemodialysis with an arterio-venous fistula (AVF) or graft (AVG) and 77% of prevalent patients had a functioning AVF/G.

The author is part of a multi-disciplinary team that provides a renal access service to metropolitan, rural and remote regions of Western Australia.

An initiative to develop a renal access service in a remote town commenced in October 2008.

This initiative was developed as a result of identifying barriers in providing timely, quality care to patients from this remote region. This included high cancellation and ‘did not attend’ rates, patient dislocation from family/community, lack of access to accommodation and dialysis in Perth.

Development of this service has led to bi-monthly visits with a Vascular Surgeon and Renal Access Nurse Practitioner. Each visit comprises a theatre list, out-patient clinic, dialysis unit access review and on-going education of staff.

Achievements to date include an increase in the number of prevalent patients on haemodialysis with a functioning AVF, weekly visits by a vascular sonographer and the introduction of a surveillance program using access flow measurement. Future plans are to pursue peritoneal dialysis options, develop a chronic kidney disease education program and conduct a patient satisfaction survey.

The Renal Access Service in this remote town has proven to be a great success. Improving the incidence and prevalence of patients on haemodialysis with a functioning AVF/G will reduce mortality and morbidity in this remote area patient group.

Challenges in Vitamin B12 Management in the Community Setting: P61

Mrs Susan Sheehan, John Hunter Hospital

Background:
Vitamin B12 plays an important physiological role in red blood cell production and DNA synthesis in addition to maintaining healthy neural myelin, blood vessels. CARI guidelines recommends screening prior to commencement of Erythrocyte Stimulating Agents, and annually thereafter.

Aim:
To review if any clinical variation occurred in vitamin B12 levels in relation length of time on haemodialysis.

Method:
We retrospectively reviewed data from two satellite units to determine frequency of testing, changes in Vitamin B12 levels over time on dialysis, types of Vitamin B supplementation, Haemoglobin and ESA dosing, using data extracted from Renal Anaemia Management Database (RAM)

Discussion:
Serum Vitamin B12 levels appear to decrease over time in patients receiving haemodialysis. Not all patients who were Vitamin B12 deficient demonstrated low haemoglobin and the development of macrocytic red cells is a very late sign of Vitamin B12 deficiency.

Conclusion:
The measurable effect of adequate Vitamin B12 levels on Haemoglobin, occurs over time and continued surveillance is required to ensure timely reduction in ESA dosing and prevent overcorrection of Haemoglobin.
Hypertension – the result of complication of Chronic Kidney Disease: P62

Mrs Bing Shi, 
Monash Medical Centre

As Chronic Kidney Disease (CKD) continues to grow in Australia, nurses working in the general nephrology area are required to understand the many causes of renal failure along with its multiple complications. Recent statistics from ANZDATA have shown that CKD secondary to hypertension accounted for 15% of new diagnoses of renal failure in 2008.

The most common cause of secondary hypertension is renal hypertension. It is also recognized as one of the most common co-morbidities of renal disease. Therefore, new nurses in this area should be provided with necessary information about the relationship between hypertension and renal disease to help them provide the best possible care for their renal patients.

This poster will provide such information for new or junior staff members working in the renal unit to help them to better understand the causes and effects of hypertension and the relationship between renal disease and hypertension. This poster will focus on the cause of hypertension, how hypertension causes the CKD and the basic treatment options. It will also provide a basic overview on what is the CKD and types of the CKD: acute, chronic and end stage CKD.

Managing chronic liver disease in an ESRF patient: P63

Mrs Joanne Smith, 
Ms Lauren Bromell, 
Mildura base Hospital,

Case study:
An interesting case study following the impact of co-morbidities on Mrs. X. who commenced Haemodialysis in March 2008. Her end stage renal failure was caused by long term Salazopyrine use required to treat ulcerative colitis.

In early 2009, Mrs. X. began to complain of abdominal discomfort along with obvious distension. On examination, an umbilical hernia was diagnosed and surgically repaired shortly after. Her abdominal distension persisted and investigations showed gross free fluid in the abdominal cavity. This was thought to be caused by inadequate and insufficient dialysis. Dialysis time, dialyser size and blood flow rate were increased with no improvement evident.

Several abdominal paracenteses were required. After numerous hospitalisations, a diagnosis was made - Chronic liver disease of unknown aetiology with portal hypertension, oesophageal varices and ascites. Inevitably, multiple surgical procedures and abdominal taps were required involving several 10 hour bus trips to Melbourne for specialist attention.

In addition to the frequent invasive procedures, Mrs. X. has struggled to cope with her altered body shape, debilitating symptoms, financial pressures, constant ill health and feelings of isolation.

From a dialysis perspective, Mrs. X has proven to be quite the clinical challenge. Frequent episodes of hypotension making fluid removal almost impossible despite collections of up to 10 litres of fluid in her abdominal cavity. Her hypoalbuminaemia also contributing to the difficulty of Ultrafiltration.

At this point in time, alternative options in medical treatment for Mrs. X. are being pursued.
The Private Sector in Queensland - A unique experience?: P64

Mr Mathew Sullivan, Ramsay Health

The challenges that the private sector has differ from the public sector in Queensland in a number of areas. These include funding arrangements with the various health funds right through to the accreditation process and the demands placed upon it from the public system.

The Queensland Private Hospital Group was formed in 2007 as a breakaway from the Queensland Nephrology Nurses Network. The purpose of the group is to be the formal Committee through which clinical performance outcomes can be monitored and evaluated and appropriate actions implemented. As well as to act as a forum for disseminating information between Private Renal Dialysis Units.

Some of the outcomes have included a review of performance in the following areas such as KPI’s, inter / intra state benchmarking and patient satisfaction. As a result further work in this area has highlighted points for improvement and has created an avenue for which change and innovation can be implemented in an effective and meaningful way.

This presentation will discuss the outcomes achieved since the group’s creation right through to the present.

The low down of high cut off membranes: P65

Miss Marie Topouzakis, St Vincent's Health Melbourne
Ms Debbie Gregory, Nurse Unit Manager/St Vincent Dialysis Unit Melbourne

We began using the Free Light Chain – High Cut Off membrane therapy with limited notice and warning. Whilst this therapy had been used overseas and had success in many cases, the Australian experience was limited to two centres with no success when we decided to treat our first patient.

Despite limited experience, our dynamic Director of Nephrology was keen to work in collaboration with our Oncology colleagues at the Cancer Institute close by to implement this treatment with the aim of achieving dialysis independency.

This paper will step through the trials and tribulations – or the highs and lows of implementing a new technology, being mindful that we were to be the first unit in Australia to use the double filter process.

We will discuss the implementation process, the protocol development, the lessons learned by the staff and the end outcome – which has been a successful state wide collaborative program with us as the lead hospital in Victoria.
A Nurse Practitioner Model of Care for Home Therapies: P66

Mrs Wendy Washington, Health Service District Townsville

While renal services have been quick to embrace the Nurse Practitioner (NP) role, most are working in Chronic Kidney Disease (CKD) services with few NPs providing services within community dialysis. Increasing availability of Home Dialysis requested by services to decrease costs. With increasing numbers it will be important that the NP develops a model that is sustainable.

This paper looks at the ongoing Development of the Model of Care for Home Therapy to introduce the N.P. role. It provides insight into the change management process, the barriers and risks as well as the outcomes over the first 12 month period.

The model aims to demonstrate that nurse practitioners will approach the provision of patient care from a nursing rather than medical perspective. It looks at the important issues to the team eg. that the NP avoid simply carrying out tasks that doctors are too busy to do. To ensure there was not simply a replacement or replication of medicine, but rather enhanced renal health care availability to home therapy clients from an expanded nursing perspective.

Looking back over the processes involved, it discusses what was learnt and how others may look to replicate this new role into their service.

Extended high cut off dialysis without the use of mainstream anticoagulant, due to heparin induced thrombocytopenia(Hits) “ A Clinical Challenge”: P67

Ms Kathleen Webster, St. Vincents Hospital.
Ms Marianne Giang, St. Vincents Hospital, Melbourne Victoria

Introduction:
A 65 year old male newly diagnosed multiple myeloma (MM) developed dialysis dependent ARF caused by cast nephropathy. The treatment included removal of free light chains using the High Cut Off 1100 dialyser (HCO1100). In conjunction with this treatment, chemotherapy is also used to reduce the free light chain load and to improve the outcome of renal failure in MM.

The patient developed Heparin Induced Thrombocytopenia (Hits) after the 3rd HCO1100 dialysis treatment. Heparin was discontinued. However, anticoagulation was required to ensure continuation of the 8 hour dialysis treatment with minimal clot formation. As daparanoid sodium was unavailable, the renal unit had to source other available alternatives. The renal physicians discussed several options. Ultimately, Lepirudin was selected as the drug of choice for this patient.

Method:
After extensive literature search, the unit developed a protocol. Together with the hospital pharmacy guidelines and under guidance from clinical orders, a 24hr infusion of lepirudin was made up and administered. The infusion was titrated according to APTT result.

Results:
The successful use of lepirudin was indicated by the normalisation of platelet count after 24 days. Pre lepirudin use was 51x10^9/L. Platelet count rose to 182 x 10^9/L post used.

No clots were observed within the extra corporeal circuit during the 8 hr dialysis. Patient access remained patent.

Conclusion:
Lepirudin can be used as an alternative anticoagulant for patients diagnosed with Hits, when daparanoid sodium is unavailable. We conclude that lepirudin is a safe and effective treatment for patients requiring FLC- HCO dialysis, providing APTT is closely monitored.
Staff workload in satellite haemodialysis units (SDU): A comparison of dialysis tasks and patient demographics between 2006 and 2009: P68

Ms Anthea White, North West Dialysis Service

The worldwide trend is for haemodialysis patients to be older and have complex co-morbidities, such as diabetes. The affect of patient care workload on staff working in dialysis is important as workload has been reported as a contributing factor to staff stress and retention rates.

In September 2006, patient care task audits measuring 25 different parameters were performed on every patient in four metropolitan SDU. In November 2009, these audits were repeated. The results from 160 audits in 2006 and 147 audits in 2009 were compared to investigate any changes in workload. Overall, the audit results were similar which was unexpected given changing patient demographics. Hypotensive episodes occurred in 16% of treatments in 2006, compared with 17% in 2009. Between 2006 and 2009 the median age of the patients increased from 65 years in 2006 to 67.5 years in 2009. The diabetes rates also increased from 39% in 2006 to 43% in 2009. The patient turnover rate over this four year period was 45%, with 33% of patients dying.

There was significant change in the patient population between 2006 and 2009 but staff working in these four SDU have not reported an increased patient care workload. The staff retention rate between 2006 and 2009 was over 97% and therefore the workforce as a whole became more experienced. The patient care workload of staff must be monitored to ensure the well-being of dialysis staff, especially as patient demographics change and current trends continue.

Use it or Lose it! Why exercise should be routine in Renal Units: P69

Ms Yvonne White, Charles Darwin University

Context:
The complexity of end stage chronic kidney disease makes the care of individuals challenging. Even more so in the present day because of associated comorbidity such as diabetes mellitus, (the leading cause of ESCKD for new patients commencing dialysis programs), and cardiac related conditions (the leading cause of death in dialysis patients). The severity of ESCKD has major implications for the individual’s mortality risk, health related quality of life and emotional well-being; and also costs to the Health Care sector.

Objectives:
To present findings from current and relevant research in relation to the effectiveness of exercise programs for those with ESCKD. Further, challenges to the implementation of exercise programs and strategies to overcome these will be discussed.

Key messages:
• Regular exercise has many positive effects for those with ESCKD.
• There have been no unexpected adverse effects of exercise programs in those with ESCKD.
• What the current recommendations are for exercise programs for those with ESCKD are.
• The vital role that multidisciplinary and academia can have in the promotion of exercise for those with ESCKD.

Conclusion:
With the abundance of evidence to support the positive effects of regular exercise programs, which promote a health benefit, these should be a regular part of care for the person with ESCKD.
‘SIT ON IT’ - An Innovative Approach to Pressure Ulcer Prevention in the Haemodialysis Client: P70

Mr Matthew Wise, Toowoomba Renal Unit Queensland
Mrs Yvonne Thomas, Toowoomba Renal Unit Queensland

Haemodialysis patients are at risk of developing pressure ulcers due to the nature of their treatment, as well as the impact of uraemic co-morbidities which exacerbate this problem. It’s highlighted that the acuity of our chronic in-centre patients is increasing with the push to promote out of hospital treatment modalities.

Historically patients brought in their own cushions of varying size and shape.

Following a number of patients’s emphasizing the point that “sitting in dialysis chairs for 4 - 5 hours can be cruel”, we noted that there was no formal Pressure Ulcer Prevention (PUP) risk assessment process in place.

Following attendance at a PUP Education Forum the author was inspired to look at the availability of sourcing specific PUP dialysis chair cushions.

Upon investigation it was discovered that ‘foam is just not foam’, one practically needed a ‘foam degree’ to develop a specific product which facilitated optimal utilisation within the Haemodialysis setting. A subsequent trial of the prototype was undertaken with the initial feedback from patients being positive.

The unit proceeded to purchase 15 Pressure Cushions, 3 Foot wedges and a 2 Pressure Mattress’s at a cost of $4,780. This purchase was facilitated through fundraising and community support.

Ongoing patient feedback has continued to be positive, with patients noting the negative comfort comparison when being treated at other tertiary facilities. There have also been enquiries from other Renal Unit’s in relation to this quality initiative which facilities the provision of optimal PUP prevention whilst undertaking Haemodialysis.

Moving Reflections: P71

Mrs Wendy Yarram, Central Gippsland Health Service

Background: This oral presentation focuses on the development of the renal dialysis unit at a health service in East Gippsland, Victoria. A brief description of the history of the unit’s inception will be given, with the first haemodialysis treatment taking place in 1996. The issues which led to the building of the new unit will be outlined, including the growth in demand for renal services and numerous safety concerns.

These safety concerns include –
- inadequate space around each chair
- poor storage facilities
- manual handling issues
- poor water quality
- no privacy

Aims:
The aim of the presentation is to demonstrate a qualitative approach to problems arising as a result of relocating into a new unit.

Methods:
A quality survey was undertaken to identify any problems and to enable a plan to be devised for addressing these areas of concern.

Results:
The results of the survey will be discussed and the outcomes of the quality activity will be viewed in terms of what has been learnt from the relocation by those involved.

Conclusion:
Some areas for future direction have been developed from this quality activity and the process has been both a trying and an interesting phase in the growth of the unit.
Anaemia Management: A role for the Nurse Practitioner: P72

Mrs Jane York, Royal Perth Hospital

A Nephrology department was designated as a site for Nephrology Nurse Practitioners (NP) by the Office of the Chief Nursing Officer (OCNO) in November 2007. It had been identified that renal anaemia would be an excellent opportunity for management by a NP and on the 16th November 2009 one was appointed. This was the first NP position in Australia with an advanced scope in anaemia management.

The role will focus on the extended scope of the NP including the development of Clinical Practice Guidelines (CPG) to enable prescribing, referral to other specialties, ordering of pathology and investigations and case management of patients.

The NP identified that promotion of this new role was an essential component in its development. This included wearing a uniform designed only for NPs, development of a NP website and an article in the monthly hospital wide newsletter.

The Nephrology NP - Anaemia role is responsible for the monitoring and adjustment of Erythropoietin Stimulating Agent (ESA) therapy, timely management and treatment of iron deficiency in renal disease, ordering and interpretation of monthly pathology tests and patient education. Patients looked after include Stage 3-5 CRF, ESRF on dialysis and renal transplant patients, from metropolitan rural and remote areas.

This new and evolving role in the specialty of nephrology is envisaged to improve the access and continuity of care for patients receiving renal anaemia management. After 12 months, evaluation of the service will include episodes of care and Key Performance Indicators on biochemical targets and ESA therapy.
<table>
<thead>
<tr>
<th>Authors</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abeleda, Kristoffer</td>
<td>P11</td>
</tr>
<tr>
<td>Ahern, Bridget</td>
<td>16</td>
</tr>
<tr>
<td>Ahmed, Nafeesa</td>
<td>P12</td>
</tr>
<tr>
<td>Alberto, Imelda</td>
<td>P58</td>
</tr>
<tr>
<td>Amega, Beth</td>
<td>59</td>
</tr>
<tr>
<td>Amy, Jayne</td>
<td>38</td>
</tr>
<tr>
<td>Askew, Jem</td>
<td>P49</td>
</tr>
<tr>
<td>Arvanvindan, Ananthakrishnapuram</td>
<td>31</td>
</tr>
<tr>
<td>Bailey, Robyn</td>
<td>P13</td>
</tr>
<tr>
<td>Barabara, Jeffrey</td>
<td>66</td>
</tr>
<tr>
<td>Barnett, Maria</td>
<td>86</td>
</tr>
<tr>
<td>Barton, Rebecca</td>
<td>P29</td>
</tr>
<tr>
<td>Beavis, Jenny</td>
<td>38</td>
</tr>
<tr>
<td>Beeston, Tony</td>
<td>17</td>
</tr>
<tr>
<td>Belz, Steve</td>
<td>P16</td>
</tr>
<tr>
<td>Bell, Trudy</td>
<td>P53</td>
</tr>
<tr>
<td>Benedict, Getzi</td>
<td>P15</td>
</tr>
<tr>
<td>Bennett, Paul</td>
<td>25 39</td>
</tr>
<tr>
<td>Berlund, Lois</td>
<td>P10</td>
</tr>
<tr>
<td>Bexton, Monica</td>
<td>19</td>
</tr>
<tr>
<td>Bezzant, Annette</td>
<td>P42</td>
</tr>
<tr>
<td>Black, Kirsten</td>
<td>14 68</td>
</tr>
<tr>
<td>P17 67</td>
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<td>Blokker, Cornelis</td>
<td>25</td>
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<td>Blackett, Tony</td>
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<td>Blow, Tracey</td>
<td>18</td>
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<td>Bond, Christine</td>
<td>62</td>
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<td>P18</td>
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<td>P19</td>
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<tr>
<td>Bonner, Ann</td>
<td>24 47 49 60 68</td>
</tr>
<tr>
<td>Borg, Elaine</td>
<td>P20</td>
</tr>
<tr>
<td>Borg, Jennifer</td>
<td>2</td>
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<td>Boys, Jennifer</td>
<td>28</td>
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<td>Bradshaw, Wendi</td>
<td>P21</td>
</tr>
<tr>
<td>Breugelmans, Leo</td>
<td>25</td>
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<td>Britos, Veronica</td>
<td>P22</td>
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<td>P38</td>
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<td>Bromell, Lauren</td>
<td>P63</td>
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<td>Brown, Leanne</td>
<td>42</td>
</tr>
<tr>
<td>Brown, Lynda</td>
<td>P11</td>
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<td>Buckley, Martine</td>
<td>30</td>
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<td>Bull, Rosalind</td>
<td>P2</td>
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<td>Burnette, Lisa</td>
<td>P4</td>
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<td>Burns, Tania</td>
<td>22</td>
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<td>Byrne, Pauline</td>
<td>36</td>
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<td>Deirdre</td>
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<td>Caltabiano, Marie</td>
<td>24</td>
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<td>Campbell, Denise</td>
<td>6</td>
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<tr>
<td>Campbell, Sandra</td>
<td>46</td>
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<tr>
<td>Capelle, Nemesia</td>
<td>P23</td>
</tr>
<tr>
<td>Carpenter, Sally</td>
<td>34</td>
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<td>Challenor, Sarah</td>
<td>P2</td>
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<td>Chan, Ilan</td>
<td>25</td>
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<td>Chang, Anne</td>
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<td>Chow, Josephine</td>
<td>9 13</td>
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<td>Collins, Anne</td>
<td>23</td>
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<td>Conquest, Ann</td>
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<td>Coppola, Sue</td>
<td>P1</td>
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<td>Cottingham, Sharon</td>
<td>48</td>
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<td>Cripps, Justine</td>
<td>P53</td>
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<td>Croucher, Cathy</td>
<td>P26</td>
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<td>Cuesta, Anna Claire</td>
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<td>Cunningham, Megan</td>
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<td>Curtale, Mirella</td>
<td>P27</td>
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<td>Davis, Timothy</td>
<td>38</td>
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<td>de Sousa, Fiona</td>
<td>66</td>
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<td>Donnelly, Adele</td>
<td>56</td>
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<td>Doogan, Gerri</td>
<td>23</td>
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<tr>
<td>Douglas, Bettina</td>
<td>32 60</td>
</tr>
<tr>
<td>Drenkahn, Pam</td>
<td>P9</td>
</tr>
<tr>
<td>Duff, Katrina</td>
<td>2</td>
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<td>Dunn, Anne</td>
<td>P36</td>
</tr>
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<td>Eliss, Mills</td>
<td>P29</td>
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<td>Ellis, Joy</td>
<td>P25</td>
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<td>Ellis, Lorraine</td>
<td>26</td>
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<td>Ellis, Mills</td>
<td>P29</td>
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<td>Fanning, John</td>
<td>P28</td>
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<td>Farquharson, Nicole</td>
<td>P29</td>
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<td>Fassett, Robert</td>
<td>P2</td>
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<td>Fetherstonhaugh, Deirdre</td>
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<td>Finch, Lisa</td>
<td>P30</td>
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<td>Fox-Young, Stephanie</td>
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<td>Fraser, Doug</td>
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<td>35</td>
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<td>Gardner, Anne</td>
<td>4</td>
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<td>Goodger, Dorte</td>
<td>P32</td>
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<td>Goodwin, Sally</td>
<td>28</td>
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<td>Gorham, Gillian</td>
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<td>Green, Frances</td>
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<td>Green, Julianne</td>
<td>66</td>
</tr>
<tr>
<td>Green, Wayne</td>
<td>P16</td>
</tr>
<tr>
<td>Guo, Deying</td>
<td>P33</td>
</tr>
<tr>
<td>Hall, Barb</td>
<td>P3</td>
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<td>Hall, Jennifer</td>
<td>28</td>
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<td>Harkness, John</td>
<td>9</td>
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<td>Harvey, Michele</td>
<td>44 45</td>
</tr>
<tr>
<td>Harvie, Barbara</td>
<td>43</td>
</tr>
<tr>
<td>Hawley, Carmel</td>
<td>64</td>
</tr>
<tr>
<td>Hayden, Janet</td>
<td>P14</td>
</tr>
<tr>
<td>Hayes, Bronwyn</td>
<td>47</td>
</tr>
<tr>
<td>Henson, Angela</td>
<td>34</td>
</tr>
<tr>
<td>Hiles, Beverley</td>
<td>P38 P44</td>
</tr>
<tr>
<td>Hill, Kathy</td>
<td>10</td>
</tr>
<tr>
<td>Holmes, Jody</td>
<td>54</td>
</tr>
<tr>
<td>Honey, Michelle</td>
<td>61</td>
</tr>
<tr>
<td>Hosking, Jon</td>
<td>P4 P39</td>
</tr>
<tr>
<td>Howard, Kirsten</td>
<td>5</td>
</tr>
<tr>
<td>Hughes, Kim</td>
<td>4</td>
</tr>
<tr>
<td>Hussein, Rana</td>
<td>P58</td>
</tr>
<tr>
<td>Hyde, Cheryl</td>
<td>P45</td>
</tr>
<tr>
<td>Ibister, Judith</td>
<td>P24 15</td>
</tr>
<tr>
<td>Ind, David</td>
<td>69</td>
</tr>
<tr>
<td>Isbel, Nicole</td>
<td>32 58</td>
</tr>
<tr>
<td>Jackson, Lorriane</td>
<td>P14</td>
</tr>
<tr>
<td>Jaeschke, Sadie</td>
<td>P40</td>
</tr>
<tr>
<td>Johnson, Sue</td>
<td>P38 P44</td>
</tr>
<tr>
<td>Johnson, Suzanne</td>
<td>P25</td>
</tr>
<tr>
<td>Jordan, Maxine</td>
<td>P3 9</td>
</tr>
<tr>
<td>Josland, Elizabeth</td>
<td>18</td>
</tr>
<tr>
<td>Kanti, Arun</td>
<td>37</td>
</tr>
<tr>
<td>Karpe, Krishna</td>
<td>43</td>
</tr>
<tr>
<td>Kerr, Maureen</td>
<td>37</td>
</tr>
<tr>
<td>Keun, Tim</td>
<td>P34</td>
</tr>
<tr>
<td>Khan, Waseem</td>
<td>53</td>
</tr>
<tr>
<td>Kilpatrick, Mary Ann</td>
<td>P34</td>
</tr>
<tr>
<td>Kirkpatrick, Janice</td>
<td>52</td>
</tr>
<tr>
<td>Ko, Natalie</td>
<td>11</td>
</tr>
<tr>
<td>Kok, Joanne</td>
<td>P12</td>
</tr>
<tr>
<td>Kotas, Kim</td>
<td>30</td>
</tr>
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<td>Kruger, Ann</td>
<td>55</td>
</tr>
<tr>
<td>Lau, Bengy</td>
<td>37</td>
</tr>
<tr>
<td>Launder, Lydia</td>
<td>64</td>
</tr>
<tr>
<td>Letton, Caroline</td>
<td>P41</td>
</tr>
<tr>
<td>Lidonni, Maria</td>
<td>P24</td>
</tr>
<tr>
<td>Lindsey, Angela</td>
<td>P1</td>
</tr>
<tr>
<td>Link, Viki</td>
<td>P39</td>
</tr>
<tr>
<td>Linton, Kerry</td>
<td>P42 P52</td>
</tr>
<tr>
<td>Littlewood, Simone</td>
<td>3</td>
</tr>
<tr>
<td>Lloyd, Anne Maree</td>
<td>49</td>
</tr>
<tr>
<td>Lowah, Gwen</td>
<td>P43</td>
</tr>
<tr>
<td>Ludlow, Marie</td>
<td>64</td>
</tr>
<tr>
<td>Mace, Rose</td>
<td>50 P2</td>
</tr>
<tr>
<td>Macleod, Avril</td>
<td>P38 P44</td>
</tr>
</tbody>
</table>

Renal Society of Australasia Journal // Volume 6 / Supplement 1 / June 2010 81
<table>
<thead>
<tr>
<th>Authors Index continued…</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macleod, Louise</td>
<td>56</td>
</tr>
<tr>
<td>Maguire, Anne</td>
<td>P3</td>
</tr>
<tr>
<td>Mahadevan, Kumar</td>
<td>P15</td>
</tr>
<tr>
<td>Manafi, Meri</td>
<td>P26</td>
</tr>
<tr>
<td>Mandic, Tracey</td>
<td>40</td>
</tr>
<tr>
<td>Manias, Elizabeth</td>
<td>63</td>
</tr>
<tr>
<td>Mathew, Timothy</td>
<td>64</td>
</tr>
<tr>
<td>Mathews, Mathew</td>
<td>P32</td>
</tr>
<tr>
<td>McArdle, Joleen</td>
<td>4</td>
</tr>
<tr>
<td>McCarthy, Alexandra</td>
<td>29</td>
</tr>
<tr>
<td>McDermott, Grainne</td>
<td>P8</td>
</tr>
<tr>
<td>McGrail, Linda</td>
<td>P6</td>
</tr>
<tr>
<td>McIntosh, Marie</td>
<td>P46</td>
</tr>
<tr>
<td>McKelvie, Lynda</td>
<td>P47</td>
</tr>
<tr>
<td>McKenzie, Ian</td>
<td>8</td>
</tr>
<tr>
<td>McLeister, Paula</td>
<td>P8</td>
</tr>
<tr>
<td>McNamara, Kathleen</td>
<td>51</td>
</tr>
<tr>
<td>McNeill, Liz</td>
<td>25</td>
</tr>
<tr>
<td>McOrmond, Amanda</td>
<td>P40</td>
</tr>
<tr>
<td>Mercado, Chari</td>
<td>P3</td>
</tr>
<tr>
<td>Mills, Karen</td>
<td>P5</td>
</tr>
<tr>
<td>Moodie, Jo-anne</td>
<td>35</td>
</tr>
<tr>
<td>Moon, Lynelle</td>
<td>3</td>
</tr>
<tr>
<td>Morris, Margaret</td>
<td>40</td>
</tr>
<tr>
<td>Morrow, Sharon</td>
<td>P48</td>
</tr>
<tr>
<td>Morton, Rachael</td>
<td>5</td>
</tr>
<tr>
<td>Moustakas, Jacqui</td>
<td>P49</td>
</tr>
<tr>
<td>Mudge, David</td>
<td>P5</td>
</tr>
<tr>
<td>Mullenger, jenny</td>
<td>P26</td>
</tr>
<tr>
<td>Mwangi, Susan</td>
<td>18</td>
</tr>
<tr>
<td>Nebbia, Vicki</td>
<td>27</td>
</tr>
<tr>
<td>Nhan, Chi</td>
<td>37</td>
</tr>
<tr>
<td>Nicholas, Pauline</td>
<td>P51</td>
</tr>
<tr>
<td>Nicholson, Jane</td>
<td>P49</td>
</tr>
<tr>
<td>Obad, Amy</td>
<td>21</td>
</tr>
<tr>
<td>O’Connell, Prudence</td>
<td>P52</td>
</tr>
<tr>
<td>O’Connor, Jayne</td>
<td>66</td>
</tr>
<tr>
<td>Oliver, Veronica</td>
<td>32</td>
</tr>
<tr>
<td>Owen, Julie</td>
<td>30</td>
</tr>
<tr>
<td>Parday, Deborah</td>
<td>58</td>
</tr>
<tr>
<td>Parker, Erica</td>
<td>50</td>
</tr>
<tr>
<td>Parker, Stuart</td>
<td>26</td>
</tr>
<tr>
<td>Parry, Judy</td>
<td>35</td>
</tr>
<tr>
<td>Passaris, Kirsten</td>
<td>10</td>
</tr>
<tr>
<td>Pereau, Vivien</td>
<td>P39</td>
</tr>
<tr>
<td>Petchey, William</td>
<td>32</td>
</tr>
<tr>
<td>Potter, Lauren</td>
<td>25</td>
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On behalf of the SA/NT Organising Committee we invite you to join us in Adelaide, South Australia for the 39th Annual Renal Society of Australasia Conference. Festivals and food, arts and culture, shopping and sports, Adelaide is the city where something is always on. Adelaide is the centre of South Australia’s booming wine industry, with the annual Sea and Vines Festival held on the June long weekend in McLaren Vale, 40 minutes South of Adelaide CBD. The festival will start on the Sunday following the conference and will provide an opportunity for delegates to share in the unique experience of Adelaide food and wine.

The theme for the conference, Exploring New Territory: Transforming Renal Health offers an opportunity where presenters can share ideas and knowledge that will guide renal health to 2011 and beyond.

We encourage everybody to take up the challenge and submit an abstract, and share the rewarding experience of presenting a paper during the conference.

We look forward to seeing you in Adelaide in June 2011.

Tiffany Whittington
Co Convener
Pamela Wood
Co Convener

Who Should Attend?

- Practitioners
- Researchers
- Experts
- Nurses
- Technicians
- Social Workers
- Dieticians
- Unit Managers
- Transplant Coordinators
- Healthcare professionals working with patients with kidney disease

Key dates

Call for Abstracts Open
3 September 2010
Registration Open
3 December 2010
Call for Abstracts Close
2 February 2011
Author Notification
30 March 2011
Author Acceptance Close
8 April 2011
Early Bird Close
22 April 2011