## DATA & PRESSURE LIMITS

<table>
<thead>
<tr>
<th>Length (mm)</th>
<th>15G</th>
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<tr>
<td>Flow Rate (ml/min)</td>
<td>Arterial Pressure (mmHg)</td>
<td>Flow Rate (ml/min)</td>
<td>Arterial Pressure (mmHg)</td>
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<tr>
<td>38 mm*</td>
<td>450</td>
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Notes: Arterial Pressure should not exceed care provider guidelines. Results shown above achieved using 3-4cP Glyverin/Water Solution. The extracorporeal circuit includes devices in addition to the fistula cannula: observe the lowest flow rate for all devices within the system.

* The longest cannula was tested to represent the worst case scenario.
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### SOLACEA™  
HIGH FLUX, ATA™ FIBER DIALYZER

**What is the prevalence of allergic reactions?**

- **4 out of 100,000** treatments were reported with anaphylactic reactions.
- The relative risk of hypersensitivity reactions was **10 to 20 times higher** with synthetic membranes than with cellulose membranes. The prevalence of a severe reaction was 0.25% for the total population on dialysis, with 0.5% in patients treated with a synthetic membrane.
- In another study, which analyzed the hypersensitivity reactions in **1536 patients** from 30 dialysis centers (122,694 sessions), the yearly incidence rate was 0.17 per 1000 sessions with semi-natural membranes versus 4.2 per 1000 sessions with synthetic membranes.

**References**

Catheter lock solutions are instilled into central venous access systems to have certain effects in this location. These access systems can be either dialysis catheters, Hickman-type lines or port-a-cath systems. The latter are used mainly in parenteral nutrition and for the administration of medication in oncology patients. These access systems are approved as medical devices and are CE marked. The central venous access is inserted in the subclavian, jugular or femoral veins.

The use of Antimicrobial Lock Solutions have been recommended in the “Hygiene Guideline complementing the German Dialysis Standard” and in the Position statement of European Renal Best Practice (ERBP)”. Pure heparin solutions containing no antimicrobial agent do not meet this criterion. Antibiotics are associated with the development of resistancy which is a major drawback. Highly concentrated citrate solutions and taurolidine-citrate solutions are therefore conceivably useful in this application.

Highly concentrated citrate solutions (30% and 46.7%) cause major adverse effects such as cardiac arrests and embolism that are a significant risk for the patient. TauroLock™ as an antimicrobial lock solution has proven useful in dialysis, oncology and parenteral nutrition for many years and has meanwhile become established in the prevention of catheter-related infections.

TauroLock™ is safe: TauroLock™ is biocompatible and non toxic. In contrast to highly concentrated citrate there is no protein precipitation if using TauroLock™****.

TauroLock™ prevents catheter infections:

The requirements of antimicrobial catheter lock solutions:

What should they do and what can they do?

Highly concentrated citrate solutions (30% and 46.7%) cause major adverse effects such as cardiac arrests and embolism that are a significant risk for the patient. TauroLock™ as an antimicrobial lock solution has proven useful in dialysis, oncology and parenteral nutrition for many years and has meanwhile become established in the prevention of catheter-related infections.
3. Peritoneal dialysis risk assessment and management pathway

Anna Claire Cuesta¹

¹ St George Hospital

Context: An ethics approved study was conducted from 2014 to evaluate the transition from PD process for a metropolitan hospital. The study determined that patient transfer from PD to haemodialysis or renal supportive care were often not planned/timely. Given PD is a transitory therapy, transfers must be anticipated and planned for through a pathway that includes: early identification of PD failure, patient education and timely referrals.

Objectives: To develop a risk assessment and management (RAM) pathway using established PD failure indicators/predictors with a structured support process.

Methods: Evaluation methods were used to assist in the RAM pathway development: 1) A retrospective analysis, case review and audit of dialysis transfers over five years categorising “predictable” and “unpredictable” causes of PD failure 2) A literature review that underpinned the audit findings; and 3) Patient transition stories.

Results: For 2009-2013, 191 patients commenced PD treatment with 127 patients failing PD and a yearly average dialysis transfer rate of 21%. More than half of PD failure cases fall under the predictable causes such as membrane failure, peritonitis and self-care deficit, however, only 5% were planned transfers. Patient stories revealed the need for additional education and support throughout the dialysis transition phase.

Conclusion: These findings contributed to the RAM pathway development, now embedded in the newly approved transitioning from PD protocol. It involves a risk stratification process of patients on PD for 2 years and over with clinical indicators/predictors of PD failure, list of remedial clinical actions, structured referral process and staged support program including increased educational resources.
4. Diabetes and low socioeconomic status – the next ‘tsunami’ of chronic kidney disease?

Kathleen Hill

1 University of South Australia

**Background:** Disparities in health status are known to be associated with socioeconomic status and there is increasing interest in understanding the relationship between low socioeconomic status and the prevalence of type 2 diabetes mellitus. Given that diabetes is the leading cause of kidney disease in Australia increasing rates of diabetes may lead to increasing rates of chronic kidney disease.

**Aim:** This study sought to demonstrate an association between socioeconomic status and diabetes prevalence in the Australia population and explore the implications for future health care planning.

**Methods:** A retrospective observational study using data stored by the National Diabetes Services Scheme of the prevalence of diabetes in the Australian population. Socioeconomic status was determined using the Australian Bureau of Statistics socioeconomic indexes for areas.

**Results:** There is a strong and uniform social gradient with diabetes prevalence increasing incrementally as socioeconomic status decreases (Spearman’s rho = .765 p < 0.001). Populations with low socioeconomic status have more than double the prevalence of diabetes (7.34%) than high socioeconomic populations (3.38%).

**Conclusion:** The increasing incidence of diabetes is markedly seen in populations with low socioeconomic status who are most vulnerable to low levels of health literacy and potentially at increased risk of developing chronic kidney disease. A rise in comorbid chronic diseases is likely to increase both the burden of morbidity and mortality and the economic strain on the health care system.
5. A successful nurse navigator program supporting chronic kidney disease patients with complex care needs

Maxine Rose¹
Leanne Brown¹

¹ Wide Bay Hospital and Health Service

**Context:** Nurse Navigator roles have recently been incorporated into the Queensland Public Health system. Underpinning these roles are four key principles: coordinating patient centred care, creating partnerships, improving patient outcomes, and facilitating systems improvement. These roles address the complexities associated with the specific healthcare needs of patients with CKD by reducing fragmentation, educating and empowering patients, mitigating barriers and coordinating patient care.

**Objectives:** To report on key outcomes of a Nurse Navigator program that has managed 17 referrals of patients with advanced CKD between May 2017 and December 2017. Key outcomes include: reduction in hospital presentations, reduced avoidable admissions, reduction in readmissions within 28 days of discharge, improved health literacy and initiation of discussions around Advanced Care Planning (ACP).

**Key messages:** In order to be included within the cohort, patients need to demonstrate chronicity, complexity and be identified as either having fragility and/or intensity of care. The implementation of the Nurse Navigator role has enabled integration across the continuum of care as demonstrated by a reduction in hospital presentations, improved health literacy and an increase in documentation of ACP.

**Conclusion:** The Nurse Navigator role compliments the services already established for these patients, as they navigate the complex healthcare system and move between the continuum of care. The Nurse Navigator acts as a puzzle master providing a central point of contact for patients and the multitude of services involved in their care.

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6. Developing specific haemodialysis nurse sensitive indicators: Results from a Delphi study

David McIntyre¹
Ann Bonner¹ and Fiona Coyer¹,²

¹ School of Nursing, Queensland University of Technology
² Intensive Care Unit, Royal Brisbane and Women’s Hospital

Background: Nurse sensitive indicators (NSIs) are a way to quantify and evaluate those aspects of care that are directly attributable to the actions of the nurse. There is, however, a lack of NSIs specifically for haemodialysis nursing care.

Aims: This study aimed to identify nursing interventions or actions that are appropriate structure, process and outcome indicators for haemodialysis nursing.

Methods: The study used a Delphi iterative research process to attain consensus from an expert panel drawn from the membership of the Renal Society of Australasia (RSA). The panel rated the importance and frequency of NSIs using online surveys. Qualitative feedback was also sought. Results of each round shaped subsequent rounds. Consensus was set at ≥70.0%.

Results: There were 38 participants with a mean age of 47 years (SD 8.86), median haemodialysis nursing experience was 17 years (IQR 8.5-22) and 89% had attained a specialist renal qualification. Round 1 assessed the suitability of 38 NSIs. Those failing to achieve consensus were retested and removed after round 2 (n = 12). Round 3 assessed a modified list of 26 NSIs with all achieving consensus. The fourth round sought qualitative feedback on the NSIs with all achieving agreement. The final list of haemodialysis NSIs comprise 4 structural, 8 process and 14 outcomes indicators.

Conclusion: Haemodialysis NSIs could offer a meaningful way to measure nursing care, and could contribute to improving the continuity and quality in patient care. Further studies are required to test their validity, reliability and feasibility.
7. Waste for wildlife: Redirection of discarded materials

Wendi Bradshaw

Monash Health

Context: Satellite dialysis treatments require a dressing pack for the commencement and conclusion of the session, for each patient. Due to infection control standards, left-over contents cannot be kept or used for other patients. Unused, good quality surplus are usually discarded into unit waste, adding unnecessary burden to landfill, at considerable cost.

Objectives: To reduce unnecessary land-fill by redirecting discarded materials for secondary use. To reduce clinical waste disposal costs; and to improve general sustainability awareness through novel recycling practice.

Key messages: Following establishment of a dialysis unit environmental sustainability working group in January 2016, one initiative is the organised collection of surplus materials for donation to carers affiliated with AWARE (Australian Wildlife Assistance Rescue and Education). Such collection is enthusiastically encouraged by patients, and community volunteer staff assist in checking and bundling stock for collection.

Conclusion: Redirection of redundant supplies has reduced one unit’s waste by an average 5kgs per week - an estimated 260kgs per year - with associated cost reductions. Secondly the endeavour provides materials for the benefit of injured indigenous species, which has increased unit awareness of, and enthusiasm for environmental sustainability issues, in a community minded spirit.

STARTING A PATIENT ON DIALYSIS IS SERIOUS. SO IS CALCIFICATION.

WHEN DIALYSIS STARTS, SWITCH TO RENAGEL®

1. Monash Health

**PBS Information: Authority required (STREAMLINED).** Refer to PBS Schedule for full authority information.
8. 0800 KIDNEY - The help line lighting the path to enlightenment, for all things renal

Carmel Gregan-Ford

1 Kidney Health New Zealand

**Background:** For the past fourteen years Kidney Health New Zealand has provided a 24 hour free phone help line. This has been managed by a renal nurse with more than 20 years’ experience in the area of nephrology medicine.

**Content:** With almost 1000 calls a year the service has continued to grow, for many *lighting the path to enlightenment* as they negotiate their way through the journey of kidney disease. This presentation will provide insight in to some of the myriad of questions asked, and information given to people, media organizations and medical professionals seeking advice and support. Some calls are a little incredulous, some sad, and some very funny.

I see this role as a resource for people wanting advice, information and sometimes just someone to listen. I am sure this presentation will have many nodding their heads in recognition and also shaking them in frustration.

**Conclusion:** This helpline provides an invaluable link to the community and has given me an insight into the difficulties people have negotiating the health services and google! An important component of the role is remembering I am only hearing one side of their story and their interpretation of the conversation they have had with their Doctor. I worry about the people I haven’t heard from!!
9. Breaking down barriers to home haemodialysis – Facilitating uptake to home haemodialysis program

Susana San Miguel¹
Glenda Rayment¹

¹ Liverpool Hospital

Background: Evidence-based guidelines recommend patients suitable for haemodialysis (HD) have a permanent vascular access created at least 6 months prior to therapy commencement. However, dialysis may be required prior to access maturation necessitating the need for a “bridging access” such as tunneled vascular catheter (TVC). One unit extended the criteria for acceptance into the home HD training program to include patients with “bridging” access to ease the burden on hospital-based dialysis facilities and facilitate the uptake and sustainability of home HD.

Aims/Objectives: To sustain the uptake of home haemodialysis program. To prevent dialysis access infection and maintain patient safety at home

Context: This is a five year review of vascular access at commencement of home HD training. Hospital policy and protocol was amended and implemented to include the use of TVC in the home setting. The training manual was revised to include training patients with TVC focusing on prevention of TVC-related infection and patient safety.

Key messages: Patients without a permanent or mature vascular access can be successfully included in the home program using a “bridging” access. Success of the program is reliant on maintaining patients’ safety in their home environment.

Conclusion: The Renal Home Therapies Unit has successfully trained 81 patients over the five-year period, with ten patients commencing dialysis at home using a TVC as “bridging” access. One patient utilizes a TVC safely as permanent access. All ten patients with “bridging” access have successfully transitioned to using their arteriovenous fistula as their permanent dialysis access.
10. Approaches for sustaining improvements to evidence based practice: A good MAP can help

Wendi Bradshaw1
Catherine Steenholdt1

1 Monash Health

**Context:** Meaningful patient monitoring is necessary to ensure the wellbeing of patients undergoing haemodialysis. Previous research has demonstrated that monitoring blood pressure (BP) changes according to altering mean arterial pressure (MAP) values can assist in the early detection of asymptomatic hypotension so symptomatic episodes may be averted. However encouraging this practice adaptation requires several, concurrent and interlinking strategies.

**Objectives:** To institute and sustain multifaceted strategies that encourage assessment and monitoring of MAP to become a routine element of safe fluid removal. To confer the significance of changing MAP values at each stage of patient care. To combine all translational elements for optimal patient wellness.

**Key Message:** Translating evidence to practice requires a number of interrelated approaches, in line with several NSQHS national standards, from patient assessment (Standard 2: Consumer partnership), to medical direction, clinical guidelines and nurse education (Standard 1: Governance), handover (Standard 6: Clinical handover), and optimal patient wellness (Standard 9: Recognising and responding to clinical deterioration in acute health care).

**Conclusion:** Sustenance of clinical improvement measures in regard to fluid removal and BP monitoring occur only if each approach is actively considered, discussed and implemented, with respect to the others. Translational strategies for patient wellness through optimal fluid removal require active integration: a good MAP will help.
11. Point of care ultrasound use in haemodialysis access: A feasibility and pilot study

Monica Schoch¹
Judy Curry¹, Liliana Orellana¹, Paul N. Bennett¹, Vicki Smith² and Alison M. Hutchinson¹

¹ Deakin University
² Barwon Health

Background: Cannulation complications, particularly in relation to area puncture and extravasation are common and lead to poor outcomes. Studies using point of care (POC) ultrasound guidance in peripheral and central vein cannulation have shown improved cannulation accuracy and decreased adverse events. At present, there is a lack of published evidence related to the outcomes from use of POC ultrasound in haemodialysis units.

Aims: The overall aims of this project are to examine the feasibility of the use of POC ultrasound guided cannulation and to promote successful needle insertion for patients undergoing haemodialysis.

Methods: This project is being conducted in a regional satellite haemodialysis unit in Victoria, Australia, using a random crossover research design. Ten nurses and 20 patients will be recruited. To measure cannulation success, data will be collected regarding miscannulation, damage to the vessel, needle manipulation, and location of the needle tip relative to vessel walls on a printed ultrasound image. To assess patient and nurse satisfaction with the procedure, surveys of demographic characteristics and satisfaction levels, along with individual and focus group interviews will be conducted. Quantitative data will be descriptively analysed; interview data will be thematically analysed. The combined results will provide data regarding feasibility of the research design.

Conclusion: The results will have implications for both practice and research. The study results will inform future large-scale, multi-site research powered to test the effectiveness of ultrasound guided cannulation in haemodialysis access. Importantly, from a practice perspective, key data regarding the operationalisation of POC ultrasound will be revealed.
12. Exploration of social support for people receiving haemodialysis in Vietnam: A study overview

Van Lan Hoang¹
Ann Bonner¹ and Theresa Green¹,²

¹ School of Nursing, Queensland University of Technology
² Neuroscience Unit, Metro North Hospital and Health Service

**Context:** Haemodialysis is the most frequently used form of kidney replacement therapy for End Stage Kidney Disease (ESKD). However, for people undergoing haemodialysis there are many burdens. Social support is associated with improved treatment adherence, quality of life and survival. However, the role of social support in ESKD in Vietnam is unknown.

**Objectives:** To describe the protocol for a study that aims to 1) examine the impact of social support on health in people having haemodialysis; and 2) explore patients’, family caregivers’, health professionals’ perspectives of social support for those receiving haemodialysis in Vietnam.

**Key messages:** First the importance of a systematic review and a theoretical framework integrating the stress-buffering model of social support within a social network model to guide the research are outlined. The design of a convergent parallel mixed methods two-phase study, conducted at a large haemodialysis unit with over 600 patients, and the techniques of data collection involving patients, family, nursing and medical staff are detailed. In this mixed methods study, data are analysed separately and then integrated (‘mixed’) for a deeper and more complete understanding of support provided to the ESKD people having haemodialysis from different aspects.

**Conclusion:** The outcomes of this study provide an original contribution to the understanding of the structural and functional social support provided in a complex chronic disease population - ESKD. The study may provide suggestions to assist family caregivers and health professionals in providing support for people receiving haemodialysis in Vietnam.
13. Social support, depression and quality of life among people receiving haemodialysis in Vietnam

Van Lan Hoang¹
Ann Bonner¹ and Theresa Green¹,²

¹ School of Nursing, Queensland University of Technology
² Neuroscience Unit, Metro North Hospital and Health Service

Background: People undergoing haemodialysis for end stage kidney disease (ESKD) are required to make substantial life-long adjustments due to the impact of their disease and treatment. Social support from family members could be a buffer to the negative health effects of chronic illness although there is little research among the ESKD population receiving haemodialysis.

Aim: To describe depression, anxiety and stress levels, health-related quality of life (HRQoL), and social support available among Vietnamese people receiving haemodialysis.

Methods: Using a cross-sectional design, 121 patients completed the Medical Outcomes Study - Social Support Survey (MOSSS), the Depression Anxiety Stress scale 21-item (DASS-21), and the HRQoL 36-item short form (SF-36) survey. Demographic characteristics were also collected.

Results: Most were female (62.8 %), between 45-65 years of age (70.1 %), and had received haemodialysis for a mean of 6 years (range 3 months-18 years). A third of participants reported having no-one to hug them (28.9 %). One in five had no-one to get together with for relaxation (18.2 %), no-one to talk with about their problems or to keep their mind off things (17.4 %). Participants had moderate levels of depression (7.4 ± 5.09), severe anxiety (7.87 ± 4.9) and mild stress levels (7.91 ± 5.23). The HRQoL physical and mental health scores were 36.44 (SD ± 8.47) and 38.81 (SD ± 10.49), respectively.

Conclusion: While similar to other haemodialysis patient populations, we found considerable anxiety and a lack of social support. Support from close persons and healthcare staff could improve health outcomes in this specific population.
14. Improving dialysis patient information management through an integrated software system: A satellite unit experience

Vincent Nicolas¹

¹ St. John of God Bunbury

We are living in a health care era where data can be used to justify strategy, support current practice, effect change and ultimately have impact on patient outcome. In 2017 our satellite dialysis unit invested in the configuration, installation and implementation of dialysis specific software package. For the first time in Australia, we have access to use of a module called Therapy Support Suite that enabled real time access to patient information and treatment data for analytical auditing.

To move towards creating a paperless documentation process whilst improving access to accurate data facilitating a more meaningful measurement of clinical Key Performance Indicators in line with established auditing and quality improvement processes.

Our key insights from the integration of this software system in our unit includes, but not limited to the following:

- Treatment data can be captured directly from the dialysis device with relative ease and complete accuracy
- Patient treatment prescription and information can be managed securely by nursing staff
- Nursing notes can be established and maintained electronically
- Any information recorded in the system can be reported upon using a unique real time query for easy comparison.

We envisage that in 12 months’ time we will have collected in this one single database a significant amount of patient information, treatment parameter data and unit practice criteria. To which the unit will be in a much better position to document its achievements and identify areas for improvement, with confidence in the consistency that this data has been collected in impacting change.
15. Prevalence and clinical predictors of sleep-disordered breathing in haemodialysis

Ginger Chu¹

¹ Hunter New England Local Health District

Background: Studies suggest sleep-disordered breathing (SDB) and excessive daytime sleepiness are common in haemodialysis patients; however this is infrequently assessed in practice. Our aim therefore was to evaluate the prevalence, and the association of SDB and clinical factors in haemodialysis patients.

Methods: We examined the presence of SDB using the STOPBANG, Epworth Sleepiness Scale (ESS), nocturnal oximetry and polysomnography in 100 haemodialysis patients. An oxygen desaturation index (ODI) of ≥5 was classified as abnormal. A STOPBANG score ≥ 3 and or an ESS score ≥ 10 were used as a risk indicator for SDB.

Results: An abnormal ODI and STOPBANG were found in 67% & 88% of participants, respectively, but only 16% had an ESS≥10. Univariate analysis showed that high BMI (OR: 1.11, p=0.006), large neck circumference (OR: 1.13, p=0.002), poor dialysis adequacy (OR: 0.12, p=0.01), low haemoglobin (OR: 0.92, p=0.01) and history of cardiovascular disease (OR: 3.5, p=0.009) were independently associated with the presence of SDB.

Conclusion: The prevalence of SDB in haemodialysis patients is high. Although patients are not presenting with symptoms of daytime tiredness as reflected in the ESS score; other risk factors such as an abnormal STOPBANG and large neck circumferences were common. Diagnostic testing of SDB using polysomnography can be expensive, ODI, STOPBANG and neck size are highly correlated to polysomnography in our study and may be useful indicators to screen for SDB. Considering sleep is often complained by dialysis patients, routine screening using these indicators should be part of health management in this cohort.
16. Prevention and management of intradialytic hypotension in haemodialysis adult patients from a nurses’ perspective

Laura Lunardi¹
Richard Le Leu²

¹ Royal Adelaide Hospital - CNARTS
² Central Northern Adelaide Renal & Transplantation Service

**Background:** It is acknowledged that IDH is an unpleasant and frequent HD complication. IDH can result in premature termination of HD and may contribute to inadequate dose dialysis and/or fluid removal, which may lead to an increase of patient mortality rate.

**Objectives:** This critical appraisal of evidence aimed to gain insights into IDH in adult HD patients and how nurses can better manage it. The rationale is to reduce the number and severity of IDH in patients with chronic kidney disease undergoing HD.

**Methods:** A comprehensive literature search was performed utilising databases focusing on “healthcare” to find information related to “How to prevent IDH in HD patients”. Publication dates from 2006 to 2017 were searched. Databases searched were CINAHL, PubMed, Medline and PubMed Central because those focus on publications related to a renal patient in a nursing and medical discipline.

**Results:** The search strategy identified 2960 records, of which 2157 were selected but only 41 studies met inclusion criteria. From those 38 studies, only 27 articles were identified as relevant to answer the research question.

**Conclusion:** Even though IDH is multifactorial and influenced by a patient’s health condition and HD prescription factors, several procedures can be implemented aiming to reduce the number and severity of IDH episodes in adult chronic HD patients. Although several preventive interventions have been identified, IDH is still occurring with alarming frequency. Prevention of IDH requires considerable innovation and challenges, especially for renal nurses as the patient’s immediate professional care providers within the entire HD settings.
17. Expansion of a satellite dialysis unit: A nursing experience

Francina Gomes¹
Norie Jaine Lacuesta¹ and Nafeesa Shaikh¹

¹ Monash Health

Context: Our satellite dialysis unit is located in the southeast suburb of Melbourne. Due to the gradual growth in demand for haemodialysis services in the local vicinity there was a need to expand our services. Thus, the number of chairs in our unit was increased from nine to 21 gradually over 18 months. This process brought about many challenges for staff working in our unit.

Objectives: Ensure a smooth transition to a larger unit with minimal disruption to service provision. Holistic care delivery ensuring patient and family-centred services. In addition, recognise and overcome challenges and maintain skills and competence of nurses.

Key messages: The expansion of services requires immaculate planning and open communication between management and the multidisciplinary team. Dissemination of information to all staff working in the unit is crucial.

The organisation of, and transition to a new and expanded unit can be easily facilitated when there is optimal communication and thorough organisational planning between all multidisciplinary members. Additionally, trouble-shooting needs to occur in-the-moment, with flexibility for awareness of issues and solutions as they arise.

Conclusion: The expansion of the unit from nine chairs to 21 resulted in patient number increase from 36 to 84 patients occurred gradually over 18 months. The support provided by the tertiary hospital ensured appropriate and continuous management of these patients safely. Good leadership from managers in hiring qualified staff and providing training courses ensured a smooth transition.
18. Risky business - Empowering individuals to take control of their health; recognising risk factors related to chronic kidney disease.

Leanne Palaster¹
Sharyn Hellier¹

¹ Peninsula Health

Background: Health promotion engages and empowers individuals and communities to make lifestyle changes with the aim of reducing the risk of developing chronic diseases and other morbidities. Chronic Kidney Disease (CKD) is a major health problem affecting approximately 1.7 million Australians (1 in 10) aged 18 years and over, with diabetes and hypertension being the most common causes. Kidney Health Australia promotes Kidney Health Week each year, inviting health care facilities to participate in kidney health awareness and disease prevention.

Aim: Promoting kidney health awareness by educating visitors and staff at a major metropolitan hospital about the risk factors associated with CKD.

Methods: Renal Nurses set up displays within the foyers at the two hospital campuses, where visitors and staff were invited to participate in an education and awareness program. A one-on-one session was undertaken with participants to establish any potential risk factors for developing CKD such as diabetes, elevated blood pressure, and high BMI, utilising a risk assessment data collection form.

Results: 441 participants were seen during Kidney Health Week in 2016 and 2017. Data was collected and various risk factors were identified and collated. Participants with multiple risk factors were advised to consult with their General Practitioner.

Conclusion: This screening and the information given to participants helps empower people to make significant lifestyle changes that may reduce the risk of developing CKD and other morbidities. The overall responses for this programme were very positive, with participants expressing gratitude for this CKD awareness screening and education experience.
19. Haemodiafiltration: Exploring techniques to enhance dialysis treatment outcomes - A case study utilising mixed-HDF

Laura Diaco

1 Epworth HealthCare

**Context:** The advent of high-efficiency haemodiafiltration (HDF) has inspired ample discussion and research, enabling the realisation of its ability to achieve greater middle-molecule solute clearance, in comparison to conventional haemodialysis (HD). Although debatable, the advantages of convection applied during HDF are said to improve mortality rates and enhance haemodynamic stability.

It is exciting to consider the potentially unknown capabilities of HDF beyond the limitations imposed by pre or post dilution alone, through the application of mixed-HDF. In August 2017, a metropolitan satellite unit saw the first patient commenced on mixed-HDF in Victoria, resulting in numerous positive outcomes, including a drastically improved quality-of-life.

**Objectives:** The anecdotal outcomes of this patients’ experience will be presented, coupled with an independent review of the literature discussing comparative outcome data of HD and HDF modalities, with a focus on mixed-HDF.

**Messages:** Optimised convection applied during HDF, has been shown to result in superior clearances of a range of solutes, which is hypothesised to be associated with uraemic/cardiovascular complications and mortality. Whilst mixed-HDF has been shown to ensure comparable clearances to post-HDF, mixed-HDF works to better preserve crucial dialyser membrane characteristics.

**Conclusion:** The broadly-accepted realisation of the potential advantages of HDF over HD are challenged by inadequately powered studies, a complex study population and vulnerability to ample confounding variables. However, considering the preliminary evidence that does exist and the compelling insights from a single case-study, it is certainly inspiring to challenge existing procedures, and learn how we can optimise treatment outcomes for all of our patients.
20. A randomised control trial of a self-management intervention people with chronic kidney disease

Thi Nguyet Nguyen¹
Ann Bonner¹ and Clint Douglas¹

¹ School of Nursing, Queensland University of Technology

**Background:** Globally chronic kidney disease (CKD) is a major problem and in Vietnam it is increasing rapidly. A self-management education program is an effective strategy to enhance an individual's involvement in taking care of themselves and which is known to slow CKD progression. However in Vietnam minimal patient education is provided.

**Aim:** To test the effectiveness of a CKD self-management intervention.

**Methods:** Using a pragmatic randomised control trial design conducted in Vietnam, participants with CKD (stages 3-5, not receiving dialysis, age ≥ 18 years) were randomly allocated into either the intervention or control group. The intervention group received self-management education from a nurse in the outpatient clinic and two telephone support calls. Outcomes were CKD knowledge and CKD self-management assessed at baseline, 8 and 16 weeks later.

**Results:** A total of 135 participants completed this study (68 intervention and 67 usual care). Mean age was 48.90 ± 13.78 years across both groups. At baseline there were no significant differences in demographic characteristics, knowledge and self-management behaviours between groups. At week 16, compared to usual care, the intervention group had significantly improved knowledge (mean change = 7.43, \( p < .01 \), Cohen’s \( d = 2.86 \), 95% confidence interval [CI] 6.50, 8.36) and self-management behaviours (mean change = 18.13, \( p < .01 \), \( d = 1.69 \), 95% CI 13.14, 23.11).

**Conclusion:** The self-management intervention benefits patients in the earlier stages of CKD in Vietnam. The intervention is brief and could delivered by nurses as part of discharge education or in the outpatient clinic.

Thi Nguyet Nguyen¹
Ann Bonner¹ and Clint Douglas¹

¹ School of Nursing, Queensland University of Technology

**Background:** Chronic kidney disease (CKD) is rising in both developed and developing countries. Self-management education programs have been shown to prevent further deterioration of kidney function. However, limited patient education is provided by nurses in Vietnam.

**Aim:** To determine the effectiveness of a nurse provided CKD self-management intervention.

**Methods:** Using a pragmatic randomised control trial 135 patients aged ≥18 years with CKD stages 3-5 (not receiving dialysis) were randomly allocated into either the intervention (n = 68) or usual care group (n = 67). The intervention involved face-to-face education and a CKD booklet. Study outcomes were self-efficacy, health-related quality of life (HRQoL; SF-36) and blood pressure (BP) measured at baseline and week 16.

**Results:** Half of the participants were male (50.4%) with a mean age of 48.90 ± 13.78 and in either CKD stages 3b (35.6%) or 4 (31.9%). At baseline there were no significant differences between groups on outcomes. By study end, compared with the usual care, the intervention group showed a significant improvement in the level of self-efficacy (mean change = 1.43, \( p < .01 \), 95% confidence interval [CI] 0.90, 1.96). For HRQoL both the physical (mean change = 6.91, \( p < .05 \), 95% CI 1.22, 12.60) and mental health (mean change = 7.83, \( p < .05 \), 95% CI 1.88, 13.78) significantly improved. No significant differences in either systolic or diastolic BP were found.

**Conclusion:** Self-management education benefited patients in Vietnam by improving self-efficacy about CKD treatment. The intervention is brief and can be delivered by nurses.
22. Introduction of a haemodialysis ultrasound clinical competency program – A district renal service experience

Katrina Gordon

1 Illawarra Shoalhaven Local Health District

**Background:** The use of ultrasound for assessment and cannulation is becoming more common in the haemodialysis setting. Ultrasound technology for cannulation was introduced into this unit in an attempt to assist nurses with difficult cannulation issues. Education on the use of ultrasound was not extensive enough to ensure all nurses were competent and using the equipment to its fullest capacity.

**Aim:** To provide all HD nurses across the area health service with formal training and ongoing support in the use of ultrasound assisted cannulation

**Method:** We introduced a formal full day ultrasound workshop, including formalised clinical competencies for all HD nursing staff. Education packages were developed for 3 stages of learning; beginner, intermediate and advanced. Education sessions were facilitated by the renal educator, vascular access coordinator and a senior sonographer.

**Results:** Increased use of ultrasound assisted cannulation has occurred in all HD units within the service. Nurses are at various stages of their education and competency packages.

**Conclusion:** The introduction of a competency based education program, including a face to face workshop has improved the confidence of staff in the use of ultrasound equipment for assessment and cannulation. Senior staff that were already using the ultrasound prior to attending the workshop all reported benefits from participating in a structured training program. This program has been embedded into our health service and has become mandatory for all haemodialysis staff across the district.
23. Sensipar® instead of Surgery. Is it a sensible option?

Huan Zhang¹
Carla Scuderi¹, Jesseca Eglington¹, Toni Broadbent¹, Scott Jones¹ and Andrew Mallett²

¹ Royal Brisbane and Women’s Hospital
² Royal Brisbane and Women’s Hospital, University of Queensland

Aim: To compare the financial cost of hospital stay post-parathyroidectomy to the cost of Sensipar® (Cinacalcet) for the management of hyperparathyroidism in end-stage renal disease.

Background: Cinacalcet is a calcium mimetic used to treat hyperparathyroidism, which since Pharmaceutical Benefits Scheme delisting (August 2016) its use has declined and parathyroidectomy surgeries have increased. Complications of parathyroidectomy include Hungry Bone Syndrome (HBS), severe and prolonged hypocalcaemia, can extend hospitalisation resulting in significant expenses.

Methods: A retrospective audit of end-stage renal disease parathyroidectomy patients between 2015-16 and 2016-17 in a Metropolitan Teaching Hospital. Comparing the number of parathyroidectomy surgeries performed, the length of stay post-surgery and the incidence of HBS. Estimating the total cost of hospital stay versus the cost of cinacalcet therapy for 3.5 years (approximate waiting time for kidney transplant).

Results: For the 2016-17 financial year 14 parathyroidectomy patients were reviewed. The average length of a patient’s hospitalisation was 11 days and a rough cost of $25,146 was estimated including cost of general ward inpatient stay, the cost of any ICU stays, surgery and theatre costs and pathology costs. An estimated cost of Cinacalcet therapy based on a price of ~$400/month for 3.5 years is ~$16,800.

Conclusion: Surgical management of hyperparathyroidism is a significant cost to hospital funders and bears patient risk of HBS leading to lost productivity and increased morbidity through a lengthy hospital stay. It may be beneficial to include Cinacalcet therapy on hospital formularies.
24. What the fat! Chronic chylous effusion in peritoneal dialysis

Annemarie Desai¹
Matthew Harvey¹ and Louis Huang¹

¹ Eastern Health

Context: Chyle is an alkaline, milky, odourless fluid that contains mostly protein, and lipid. Chyle leaks are relatively rare and tend to occur after injury to the intra-abdominal lymphatics. Patients experiencing on going chyle losses are at risk of severe nutritional deficiencies. We describe the case of a peritoneal dialysis patient who experienced a chronic chylous effusion (>18 months).

Objectives: To outline the importance of nutritional care in the management of chylous effusion. In particular to explore the micronutrient deficiencies and the consequences of chronic malnutrition in this setting.

Key Messages: Successful management of patients experiencing chronic chyle requires constant surveillance and partnership between patient and caregivers. Key nutrients zinc, ascorbic acid, selenium and Vitamin A should be measured at regular intervals and supplemented if deficient.

Conclusion: Cylous effusion is a rare complication of peritoneal dialysis. This case highlights the importance of nutrition therapy and regular patient monitoring for patients suffering from prolonged chyle losses.
25. Early detection of diabetic ulcers for preventing foot complications in haemodialysis patients.

Francina Gomes

1 Monash health

Introduction: Haemodialysis patients with diabetes are at an increased risk of foot complications. The psychological and social implications of foot complications include significant administration costs totalling $13,000 per foot ulcer and $26,000 per amputation, and decreases quality of life.

Method: Patients who are at high foot ulceration risk can be identified early by monthly foot checks. Patients with wounds on their feet are assessed on a regular basis and escalated as high-risk patients for further investigations.

If any complicated foot wounds are identified by staff, GP and endocrinologist referrals can be made immediately, depending on wound severity. Nursing homes or family involvement is encouraged to monitor for the presence of foot wounds.

Key Message: The effectiveness of foot care prevention programs for reducing ulceration and amputation in dialysis patients have shown promising results, with increased quality of life. Educating patients and their family regarding foot care and weekly follow up reduces costs, improves comfort and increases awareness of potential complications.

Conclusion: Detecting diabetic related wounds at an early stage and taking immediate action can reduce complication incidence and severity for patients and lead to a reduction in health care costs.
27. Helping put dialysis patients in control of their own medication lists: USB medication charts.

Dianne Pierce¹
Cheryl Heywood¹

¹ Austin Health

Background: Satellite dialysis patients often have multiple comorbidities, receiving care from multiple medical specialties. Dialysis unit staff reported ongoing difficulties with compiling accurate patient medication lists for monthly renal reviews. It was felt this problem could be addressed by giving patients a way of real time tracking their medications and changes made by all treating doctors.

Aim: To have access to accurate patient medication lists by providing all dialysis patients with their medication chart on a USB, to be used to facilitate real time updating, and recording by all treating medical professionals.

Method: A Microsoft word medication chart was developed and renal medical and nursing staff educated. Fourteen patients in three satellite dialysis units each received education and their own USB loaded with a medication list. Post six-month trial, patients and dialysis staff were surveyed.

Results: All patients reported liking the medication list and that they kept the USB with them constantly. They found it easy to use. Concerns from some doctors were reported; mainly fear of computer virus transmission when using the USB.

Responses from dialysis unit staff were mixed. Most found it easy to use, but computer access and the change in workflow were concerns.

Conclusion: Dialysis unit and medical staff concerns are thought minor with strategies being developed to address these.

Given the overwhelming positive patient response and success of the project in providing increased empowerment over healthcare coordination, project roll out to all patients is in progress.
28. Accreditation, safety and haemodialysis: Meeting the challenge

Debbie Fortnum1
Jose Ireson1 and Tonya Francis1

1 Sir Charles Gairdner Hospital

Background: Haemodialysis (HD) units in hospitals have to comply with the National Safety and Quality Health Service Standards (NSQSH) to successfully pass accreditation. Hospital HD patients are usually classified as inpatients so standard admitted patient rules apply. Prior incidents in our unit demonstrated there was inadequate handover and confusion about when to initiate MET calls for clinical deterioration. Documentation did not meet NSQHS standards.

Aims: To ensure that all policy and forms met the NSQHS standards, and that nurses had clear guidelines on managing clinical deterioration.

Methods: A review of all related hospital policy was undertaken in relation to every NSQHS standard. Where a gap was identified forms were reviewed. Consent, patient identification, handover and clinical deterioration were all identified for improvement. Consent forms, a name band system, a new handover process and new dialysis treatment forms that included a track and trigger component for MET were all introduced over 6 months.

Following implementation a compliance audit was conducted on the new forms. A nursing survey was conducted regarding clinical handover. Repeat audits are planned during 2018.

Results: Compliance with documentation on all areas of the treatment form ranged from 56% (recording respirations) to 100% for multiple components (mean 92.6%, SD 11.7). Integrated notes were appropriately written for 86% treatments. The handover survey found that 100% of nurses felt better informed. Four episodes of clinical deterioration were managed confidently and appropriately.

Conclusion: Policy and forms that meet accreditation standards can be successfully implemented into HD units to improve patient safety.
31. Art in dialysis - Celebrating innovative person centered care

Sandra MacDonald

Peninsula Health

Art in Dialysis is an opportunity for dialysis patients to be creative, stimulated and socially engaged while receiving dialysis treatment.

Qualified art therapists provide art materials, advice and inspiration to patients in a weekly 2 hourly session. We have 2 long standing groups running Tuesday and Friday afternoons at Frankston and recently started a Wednesday afternoon session at Rosebud.

Peninsula Health Art in Dialysis Program was seeded in 2011 when discussion between a patient and nurses identified that patients wanted “something to occupy their time”. The program was started with the support of the nurses and collaborative partnerships with the community in the guise of Frankston Arts Centre. Art in Dialysis has had many diverse and valuable benefits:

- Enhanced quality of service being provided for patients
- Providing innovative patient focused care by delivering in direct response to the needs of the patients
- Engaging clients intellectually, creatively and socially.

It has contributed to the wellbeing of our artists;

- by distracting thoughts away from illness and promoting positive identity.
- enabling self-expression and providing means of overcoming restrictions imposed by illness on lifestyle
- providing opportunity for socialisation between clients, and clients and staff.
- opens opportunities to develop these interests further outside of the healthcare setting.

Now in its seventh year, Art in Dialysis continues to grow in participants and artistic output. Art projects include exhibitions, calendars, and also artists involved in community projects.

Projects planned for this year include a post card initiative that we hope to involve fellow dialysis units.
33. Tracking patient-reported symptoms in people undergoing dialysis: The LEOPARD study

Lorraine Bublitz1
Balaji Hiremagalur1, Louise Purtell2, Marcin Sowa3,4, Kerri Gillespie5 and Ann Bonner5

1 Renal Service, Gold Coast Health Service
2 Queensland University of Technology
3 NHMRC Chronic Kidney Disease Centre of Research Excellence, University of Queensland
4 Centre for Business and Economics of Health, University of Queensland
5 School of Nursing, Queensland University of Technology

Background: People receiving renal replacement therapy (RRT) for end stage kidney disease experience a heavy burden of difficult-to-address symptoms, and changes in diseases trajectory can be associated with worsening symptoms or new symptoms emerging. Education and upskilling of renal nurses to perform timely and regular assessment of patient-reported outcomes and experiences can inform effective disease management strategies.

Aims: This study aimed to determine the feasibility of routinely assessing symptom burden of people receiving RRT and assess changes in symptom burden over time.

Methods: Data were extracted from patients’ medical records. All patients were undergoing either haemodialysis or peritoneal dialysis. Data were analysed descriptively. Symptom burden (POS-S renal) was assessed 3-monthly and demographic characteristics were collected from medical records at baseline.

Results: 235 patients were included (31% female, 69% male). Median age was 67 (range 17–94); 82% of patients were undergoing haemodialysis and 18% peritoneal dialysis. The most common symptoms at baseline were weakness (70%), poor mobility (53%), itching (51%) and pain (51%); these were also the most severe symptoms. Mean total symptom score was 12.3. Among those who were followed for at least 12 months (n=84), 51% reported improvement in symptom burden over this period. The greatest improvement was seen in those with the highest symptom scores at baseline.

Conclusion: Nursing staff routinely and rigorously collecting patient-reported assessments from people receiving RRT is feasible in renal in-centre and home therapy units and can be used to tailor treatment strategies.
34. Nephrology nurse practitioner led renal supportive care home-based model of care in South Australia

Laura Lunardi1

1 Royal Adelaide Hospital - CNARTS

Context: Differing models of RSC are emerging across the world. In S.A., the RSC Service is led by the NNP who works autonomously, in coordination with patients’ nephrologist and other health professionals, to provide patient-centred care for patients with end stage kidney disease (ESKD) following conservative management. The home-based model, core of the RSC NNP role, is an effective evidence-based strategy for improving outcomes aiming to a greater emphasis on quality of life (QOL), active symptom management, informed choice and care planning for patients with ESKD. This approach ensures accessibility of our Renal Service to all renal population.

Objectives: This paper provides information of the RSC Home-based model and the strategies used by the RSC NNP to enhance appropriate decision-making focusing to improve QOL for patients facing ESKD.

Key messages: RSC home-based model provides a greater understanding of the health needs of an individual and their family through increased awareness of the context of their home situation. It also permits acknowledge the critical importance of socio-cultural, community, family and individual aspects. This model facilitates:

- increased time with patients & family to discuss concerns,
- more comfortable environment for the patient and their family,
- a comprehensive clinical assessment for future reference/medication/blood test timely/nutritional advice,
- more control over the community services,
- reinforcement of comfort and QOL
- discussion prognostication and advance care planning

Conclusion: The emergence of the NNP conducting a RSC home-based model is the more appropriate, cost-effective, and beneficial for the overall health of patients with ESKD following conservative management with heavily burdened symptoms.
35. Against the odds: A patient’s determination to travel around Australia

Isabelle Renaudin

1 St. Vincent’s Hospital Melbourne

Context: Peritoneal dialysis (PD) is encouraged as one of the best modalities to maximise a patient’s quality of life and independence. One such advantage is portability and the ability to travel. Often this requires problem solving and modifications to overcome any difficulties which may arise, as experienced by a patient who was determined to travel whatever the obstacles.

Objectives: To document the progress of a patient on PD who travelled around Australia with his wife in their motorhome, despite severe heart disease. His resourcefulness and the innovative solutions found to the problems encountered will be illustrated.

Key messages: Heart Failure on top of Diabetic Nephropathy with no residual renal function made fluid management difficult for this patient. Despite knowing the risks, he was prepared to take whatever measures necessary to travel. This involved changing from haemodialysis to peritoneal dialysis, then from CAPD to APD. Each change and clinical challenge encountered required modifications to his motor home and his lifestyle. Strategies adopted by the patient, his wife, and a team of nursing and medical show how this journey was made possible.

Conclusion: With good teamwork, determination and flexibility, many obstacles can be overcome to enable dialysis to be performed even in arduous conditions. Our patient has demonstrated how home dialysis can be used to pursue dreams against the odds and enhance quality of life.
36. Linkage of health and community data of dialysis patients – Resource implications of different dialysis models of care in the Northern Territory

Gillian Gorham1
Kirsten Howard2, Paul Lawton1, AM Shamsir Ahmed1, Jaqui Hughes1, Sandawana William Majoni3, Samantha Togni1 and Alan Cass1

1 Menzies School of Health Research
2 University of Sydney
3 Top End Health Services NT Department of Health

Background: Indigenous people from remote areas in the NT have the highest rates of kidney disease in Australia with the majority compelled to relocate to access dialysis treatment. Relocation impacts not only on the individual and their family but also on the broader community in both remote and urban areas. The Dialysis Models of Care (DxMoC) Project will determine the resource implications of different dialysis treatment models.

Aims: To identify the relationship between DxMOC and

- Health utilisation (treatment attendance and overnight hospitalisations)
- Demand for urban housing
- Impact on urban school resources.

Methods: Longitudinal data of two NT cohorts: adults receiving dialysis between 2000-2014 and children of those adults, were linked. Data sets included the Australian and New Zealand Dialysis and Transplant Registry, NT Departments of Health, Housing and Education. Adults were allocated to a DxMoC (urban satellite, regional, remote, community controlled and self-care – HD/PD) according to the majority of time spent in each 30 day period.

Results/Discussion: The study identified 2799 adults receiving acute or maintenance dialysis from one or more of the five DxMoC. Out of this cohort, 604 required housing in the urban area and 416 adults were linked to 894 children in the education data set. Analysis of health data identified no statistical difference in treatment attendance between Indigenous and non-Indigenous patients at urban facilities. Attendance at rural and remote facilities averaged 145.7 treatments per year compared to 133.3 treatments in urban facilities. Overnight hospitalisations were higher for people attending urban services.
37. Cost benefit of centralising coordination of a renal outpatient program – Case study

Gillian Gorham¹
Nadarajah Kangaharan², Natasha Freeman¹, Jeannie Devitt¹, Sichit Simon¹, Asanga Abeyaratne² and Kelum Priyadarshana²

¹ Menzies School of Health Research
² Top End Health Services NT Department of Health

Background: Outreach services are intended to increase access to specialist care for underserved populations. For tertiary services with large catchment areas of sparsely populated remote regions, this is a high-cost and resource intense activity. Low patient uptake combined with excessive staff travel costs and time spent away, reduces potential benefits and threatens sustainability. In 2015, renal services received time-limited funding to improve coordination of the outpatient program and demonstrate cost efficiencies.

Objectives: To identify the benefits of additional resources of a dedicated renal Outreach Coordinator and administration officer on:

- staff travel (fares, accommodation, backfilling requirements)
- patient travel (fares to urban area, accommodation)
- patient uptake of services.

Methods: An external evaluation using a mixed methods approach undertook ‘before and after’ analysis of activity data from 2014-2017. Data sets included travel and clinic activity of clinicians and patients. Findings were validated through primary health staff (17), renal service (13) and stakeholders (2) interviews. Triangulation of activity data occurred wherever possible.

Results/Discussion: Improved coordination, reduction (48%) in outreach clinics yet increase (51%) in patients reviewed (outpatient, outreach and telehealth) were key findings. Compared to 2014, staff and patient travel significantly reduced. Reduction in outreach days (58%), staff backfilling (38%), patient travel to urban area (42%) and patient accommodation (31%) were noted. Overall patient travel costs reduced by 44%. Cost trade-offs were evident: Staff travel by air while more time-efficient was costlier than travel by car. However, when combined, the savings outweighed the additional resources required to analyse, plan and coordinate the outpatient program.
38. Path to Infection becomes path to success - Creation of a vascular access assessment document

Jennifer Connor¹
Amanda Chakurangeyi¹

¹ Western Health

**Context:** In the setting of an in depth case review of a fistula related blood stream infection, we found an inconsistency in vascular access documentation. There were 3 documentation entry points which made it very difficult to monitor the progress of a patient’s vascular access. The renal patients vascular access is their life line - therefore clear and consistent documentation is paramount in monitoring of the access and prevention of complications.

**Objective:** To create a single renal vascular access assessment form as a central point of documentation for all vascular access

**Key Messages:** We identified with dialysis staff that there was an issue with the way in which vascular access assessment is currently documented

Analysed other vascular access assessment documents available then developed a document specific to our unit

Undertook staff education, 3 month trial of the document and staff evaluation

Staff feedback has been incorporated into revised document which is ready to be re trialed

**Conclusion:** With a team approach we have made an improvement to the care of our renal patients vascular access. By simply streamlining vascular access documentation we have improved ongoing monitoring, management and early intervention of vascular access related issues.
39. Making decisions and preparing advance care plans: Outcomes from a kidney supportive care program

Ann Bonner¹
Ilse Berquier², Helen Healy²,³ and Louise Purtell¹,²,³

¹ School of Nursing, Queensland University of Technology
² Kidney Health Service, Metro North Hospital and Health Service
³ NHMRC Chronic Kidney Disease Centre of Research Excellence, University of Queensland

**Background:** People with advanced chronic kidney disease (CKD) face difficult decisions, including whether to start or continue with kidney replacement therapy (KRT), end of life care, etc. Kidney supportive care (KSC), an integration of renal and palliative care in a multidisciplinary team, is a structured care pathway within which patients, regardless of CKD stage, are supported to make these complex healthcare decisions.

**Aim:** To examine the type of decisions patients are making in a KSC program (KSCp) and whether advance care plans are documented.

**Methods:** Prospectively we followed adults attending the KSCp. Data were extracted from medical records. Comorbidities scores were assessed using the Charlson Comorbidity Index.

**Results:** Over a two year period, 220 patients (46% female), mean age 71 years, attended the KSCp with 44 (20%) making a decision around treatment pathway. Of these, 23 decided not to start KRT and 18 to withdraw from KRT, with 2 opting to commence KRT and 1 changing from a peritoneal to an in-centre haemodialysis treatment pathway. Those making decisions were older (mean age 77 vs 70, p<0.001) and had more comorbidities (8 vs. 6, p<0.001) than those who did not change pathways. For, patients with more than one KSCp appointment in the first 12-month period (n=105), 58% had advance care documentation recorded and 14 of 18 deaths occurred at patients’ preferred final place of care.

**Conclusions:** The KSCp team works from a tailored, person-centred paradigm that promotes alignment of patients’ and their carers’ decisions with their goals, beliefs and preferences.
40. Streamlining discharges on day of haemodialysis – one unit’s experience in reducing bed days and patient length of stay

Gwen Still¹
Belinda Cary¹, Amber Mccullagh¹, Melissa Stanley², Patricia Noonan¹, Nuala Barker², Donald Chu¹ and Frank Ierino¹

¹ St Vincent’s Melbourne
² St. Vincent’s Health

Context: The increasing complexity of patients with kidney disease often results in long hospital admissions for acute care. The average length of stay (LOS) for nephrology patients in Victoria is 7.34 days. Our hospitals’ LOS was significantly longer than the state average at 9.55 days. A working party was convened to investigate causes and implement effective strategies for discharge planning.

Objectives: To report on a program aimed at evaluating barriers to patient discharge with the aim of decreasing hospital LOS and increasing bed savings for the acute sector.

Key messages: Only 2% of nephrology patient discharges occurred between 8am and 10am with over 80% being discharged at or after 3pm. 48% of nephrology patients received haemodialysis on the day of discharge. There were potentially an extra 49 bed days to be made available annually if stable patients from a select criteria were discharged prior to their haemodialysis appointment. Patients meeting the criteria for direct discharge were identified early in admission and a check list was completed by the medical staff prior to the planned discharge date.

Conclusion: The discharge of nephrology patients prior to haemodialysis has been successfully implemented in our acute medical service with improved timely bed availability. There have been no re-admissions required post haemodialysis at this time but ongoing evaluation continues.
41. Assessment of breathlessness in adults with end-stage kidney disease receiving renal replacement therapy: A systematic review.

Maria Chilvers¹
Marie Williams¹, Kylie Johnston¹, Katia Ferrar¹ and Carole Gibbs¹

¹ University of South Australia

Background: The symptom burden from chronic kidney disease (CKD) strongly impacts a person’s quality of life and functional status. Distress with breathing (dyspnoea) is a common symptom associated with CKD. Renal replacement therapies target fluid overload, however, dyspnoea persists for many patients despite being dialysed to euvolemia due to complications related to CKD, hemodialysis or coexisting morbidities. While there are a range of breathlessness assessments, the current American Thoracic Society (2012) dyspnoea statement recommends this troubling symptom be assessed across multiple domains (sensory-perceptual experience, affective distress, or symptom/disease impact or burden).

Aims: To describe breathlessness assessments in adults with end-stage renal disease (ESRD) receiving renal replacement therapy (RRT).

Methods: Using a predetermined protocol (submitted to Prospero), a range of electronic databases will be searched for primary studies in the adults with end-stage renal disease receiving renal replacement therapy reporting any form of assessment for breathlessness. Two independent reviewers will extract data from each eligible studies and tabulate descriptive summaries. Breathlessness assessments methods/instruments will be summarised by commonality and 1) classified according to American Thoracic Society (2012) recommendations for breathlessness domains, 2) rationale for assessing breathlessness, and 3) context where breathlessness was assessed.

Results: This systematic review is underway and will be completed by June 2018—an updated abstract will be provided.

Conclusions: The type, rational and context for assessments of breathlessness in adults with end-stage renal disease will be presented as a basis for considering whether current practice addresses the recommendations for both clinical practice guidelines for CKD and dyspnoea.
43. Evidence-based practice supports mid-run intradialytic blood pressure assessment over of close BP monitoring in haemodialysis patients

Suzanne Wang¹

¹ Barwon Health

Background: Haemodialysis patients may experience symptoms resulting from dialysis itself. Ideally, patients’ blood pressure (BP) should be closely monitored in the prevention of symptoms. However, in order to achieve the best balance between patients’ safety and patient’s comfort, the timing of BP assessment remains controversial. There are no evidence-based studies to support the feasibility of only mid-run BP assessment in Satellite units.

Aims: To identify the sufficiency of conducting only mid-run intradialytic BP assessments in Satellite patients.

Methods: A longitudinal study on the adequacy of mid-run intradialytic BP assessment on 59 patients in a Satellite unit over 6 months. Also, 23 regular and 4 casual RNs in the unit have been interviewed.

Results: Together with UFR control of no more than 800mls/hour, findings show that conducting only mid-run intradialytic BP assessment was satisfactory. Only on rare occasions of abnormal BP or symptoms being noted, were patients’ BP checked more frequently. Staff who have worked in the Satellite unit for periods of ten, to thirty years stated that they have never encountered problems conducting only mid-run BP assessment. Casual staff said they cannot see the benefit of more frequent BP checks.

Conclusion: Satellite unit patients are regular and generally stable. They are known to staff with respect to their BP range and fluid tolerance. They need not be managed as sick patients, and can afford to have their BP checked less frequently than acute units patients. There is limited added value in checking their BP more frequently than the mid-run assessment.
44. Eliminating hypersensitivity symptoms in haemodialysis: Case study reviews

Maree Uhe¹
Joanne Kok¹ and Siew Eng Foo¹

¹ Monash Health

Context: Dialyser hypersensitivity syndrome is a known occurrence in the haemodialysis population. The presentation of the symptoms can range from severe (Type A), acute anaphylaxis to mild allergic reactions (Type B). Symptoms may appear after commencement of dialysis, or occur months later. Allergic reactions have been attributed to either dialyser sensitivity or ethylene oxide reaction. The adverse symptoms can affect the quality of dialysis and patients’ dialysis experience.

Objectives: To present case studies on the management of hypersensitivity symptoms of three home haemodialysis patients.

Key messages: Patients have different responses to dialyser hypersensitivity. The responses may not appear immediately after dialysis has commenced. Some symptoms may appear to be similar to other dialysis related symptoms. Dialyser hypersensitivity symptoms can significantly affect the quality of dialysis and the patients’ quality of life. Changing dialysers may be the key to reducing dialyser hypersensitivity.

Conclusion: The patients in the case studies experienced different hypersensitivity symptoms with one type of dialyser. There were reduced symptoms after changing the dialyser type. The change has improved the quality of dialysis and their quality of life.
45. Structural differences between arterio-venous fistula geometry and vascular flow, with and without tourniquet application: A comparison

Wendi Bradshaw
Michelle Mor, Tracie Barber, Eamonn Colley and John Carroll

1 Monash Health
2 University of New South Wales

Background: Expert opinion (level five evidence) overwhelmingly recommends the light application of a tourniquet to the upper arm at time of arterio-venous fistula (AVF) cannulation. However, there is scant evidence at other levels to suggest the significance of this, or the effects of either on fistula geometry or vascular flow.

Aims: This preliminary study of a two-part study, aims to ascertain differences in vascular flow, AVF geometry and vessel displacement in fistula models when tourniquet is in-situ, compared to when tourniquet is not in-situ.

Methods: Five patients will have initial ultrasound scans performed, using the University of New South Wales’ (UNSW) developed method to obtain three-dimensional (3D) geometries and computer generated flow data, to obtain baseline measurements to indicate differences in geometry, vessel tautness and flow turbulence, both with and without light tourniquet application.

Results: The results will allow the difference in geometric shape and flow field to be compared between cases with and without tourniquet application. Computationally generated flow data will provide a comparison between local velocity and shear stress, allowing a visual representation of the effect of the tourniquet. These results will then be compared with scans performed during cannulation, with and without tourniquet application, in a subsequent study.

Conclusion: Identification of elements of significance, based on differences in structural parameters will be used for comparison to fistula cannulation, with and without tourniquet application. These results may confirm best practice recommendations in support of tourniquet use.
46. A study using a very low calorie diet as a weight loss method in home haemodialysis patients: Results and experience from a home haemodialysis unit

Maree Uhe¹, Joanne Kok¹, Siew Eng Foo¹, Julie Woods¹ and Leanne Linehan¹

¹ Monash Health

**Background:** Very Low Calorie Diets (VLCD) are used to achieve rapid and significant weight loss in obese people without kidney disease. However, there is no published evidence on the use of very low calorie diets in home haemodialysis clients.

**Aim:** The aim of the study was to determine effectiveness of a very low calorie diet (VLCD) program in home haemodialysis patients.

**Methods:** 9 home haemodialysis clients with BMIs >30 were placed on a VLCD of 600-800 kcals. Patients were monitored weekly for 4 weeks, and fortnightly for the remainder of the study period (12 weeks in total). Baseline measurements were collected. Pre and post dialysis weight, intradialytic fluid gain, biochemistry, ketones, and compliance with the VLCD plan were monitored each visit by nursing staff and dietitians. Dialysis prescriptions and medications were altered by a renal physician. Nutritional assessments, quality of life surveys, waist measurements, transthyretin and HbA1c were collected at baseline and completion of the study.

**Results:** Mean weight loss was 14.2kg (range 4.8kg to 23.1kg). Mean percentage weight loss was 10.9% (range of 4.3% -15%). There were reductions in waist measurements ranging from 5cm to 12cm.

**Conclusion:** The VLCD is a safe and effective method of weight loss in clinically monitored and supervised home haemodialysis clients. The study is currently being implemented across the satellite units of the hospital network.
47. It’s all about me – The consumer speaks

Susan Robertson¹

¹ CNARTS, Royal Adelaide Hospital

Context: Historically decisions have been made about the care of our consumers without their engagement. The tide is turning, our consumers are in the best position to help design their own care. Fortunately, the opportunity arose to help redesign the haemodialysis training programme within the home therapies unit and the immediate thought was ‘what do the consumers want’?

Objectives: Through consumer interaction, individually and in group settings, consumers new and old, from metro and city, via teleconferencing, face to face and telephone - a consumer led training programme and media outlets will be developed. Meeting the differing needs of our clientele were addressed which will lead to the creation of training videos, personal journey stories, flip charts, cheat sheets and a consumer training diary.

Accessing media platforms such as a home therapies facebook page and website were discussed and enthusiastically welcomed: consumers will be able to access others’ stories, learn about social events, watch training videos and receive professional advice.

Key messages: Liaising with our consumers should be the starting point of any new programme that involves the very people we are looking after. To do anything else but to consult with those we care for, who will experience the end project, is madness.

Conclusion: The interaction with the consumers enabled a valuable insight in to their learning needs and styles. This was integral to the development of the training programme; enhancing their quality of life and longevity in the home therapies area.
48. Going Strong- Two Years into Implementation of a Taping Policy and Strength Testing

Scott Dobson

1 Illawarra Shoalhaven Local Health District

Background: In 2015, a haemodialysis needle taping policy was introduced into our renal service. Venous Needle Dislodgement (VND) had been witnessed and was considered as a serious and potentially fatal complication of haemodialysis. We identified our patients had inconsistent needle taping techniques. Literature searches demonstrated best practice and recommendations. This led to the creation of our policy, “Venous Needle Dislodgement (VND): Taping haemodialysis needles to prevent VND”. After two years of implementation we conducted a review.

Aims:

- Audit and confirm uniform taping technique across the service
- Ensure zero VND in our renal service
- To provide further education

Methods: A recent photo audit of cannulation taping practice was undertaken across four clinical areas. Furthermore, managers of each area were interviewed and questioned about VND episodes. Strength testing was undertaken to confirm the safety of the taping policy and a three minute video was produced to reinforce education. This short video will be displayed at the end of the presentation.

Results: Since the policy was introduced in July 2015 there have been no reported VND. All areas demonstrated one hundred per cent compliance with the taping policy. The video demonstrated the strength of different taping techniques.

Conclusion: This policy has ensured VND was absent in our haemodialysis population. With clear policy and education we can make VND non-existent.
49. Clinical challenges of peritoneal dialysis in the aging population: Our experience of transition from home to aged care facility.

Helen Charles-Jones¹
Robyn Facchini²

¹ The Canberra Hospital
² NSW Health

Context: As life expectancy increases complex health issues arise. Our client on peritoneal dialysis (PD) suffered a decline in functional state, and she was no longer able to perform her own PD exchanges. She was commenced on haemodialysis however she did not cope due to frailty and the burden of long distance travel. She transitioned into an aged care facility at this time and although not able to manage her own PD she was not ready to cease dialysis. Management issues were both compounded and facilitated when undertaking this ladies care in a rural setting with a cross-border renal agreement.

Objectives: Our client could no longer live independently and perform her own dialysis therapy. Our aim was to respect our clients choice to continue PD and a training program for a rural aged care facility was implemented.

Key Messages: Good communication and teamwork with an aged care facility, tertiary hospital, rural outreach and multi-disciplinary health team enabled our client to maintain her treatment choice. Despite demographical barriers, this patient-centric approach respected our client’s wishes, overcoming barriers of poor functional state and frailty.

Conclusion: There is increasing demand to maintain an independent lifestyle in the home environment. When this is no longer possible creative thinking can enable clients to continue with their desired therapy. Close collaboration with aged care nurses, individualised planning and an adaptable teaching program ensures clients receive high quality care resulting in favourable outcomes. Critically, this means that clients do not withdraw from dialysis for the wrong reasons.
50. Ultrasound - Why now? - a unit experience

Elizabeth Fleming¹

¹ SESIAHS

**Background:** Vascular access is a challenge in the haemodialysis setting. The use of ultrasound guidance for cannulation, needle direction and positioning is now widely used and recommended by international guidelines. In an attempt to preserve vascular access and limit unwanted outcomes of multiple failed cannulation attempts, our service introduced ultrasound technology into all Haemodialysis units across the service.

**Aim:** To improve the confidence and skill level of all haemodialysis staff in the use of ultrasound. Ultimately decreasing the incidence of multiple cannulation attempts and poor outcomes for patients.

**Method:** An ultrasound policy and procedure document and a full day training workshop to teach staff how to use the ultrasound for assessment and cannulation at the bedside was developed. This was followed up with a clinical competency program to consolidate learning and develop advanced skills. Patients requiring the use of ultrasound were tracked with the reasons for use and outcome logged.

**Results:** Staff have reported increased confidence in the use of ultrasound. There has been increased use of ultrasound for fistula assessment and cannulation with a decrease in the number of missed cannulation, improving the patients experience and outcomes.

**Conclusion:** Introduction of ultrasound into the haemodialysis setting combined with an education program has increased the use of ultrasound for fistula assessment and cannulation. Staff report feeling more confident in the use of ultrasound. The increase in successful cannulation of new or difficult access has improved patient experience and outcomes.
51. Kidney supportive care: Does it meet patient and carer needs?

Ilse Berquier¹
Ann Bonner², Helen Healy¹ and Louise Purtell³

¹ Metro North Kidney Health Service
² School of Nursing, Queensland University of Technology
³ Queensland University of Technology

Background: Gauging the perspectives of consumers is aligned with the quality and safety standards expected of Australian healthcare providers. Kidney supportive care (KSC) provides an integration of renal and palliative care teams for those with advanced stages of chronic kidney disease regardless of treatment pathways who need help with symptom management, advance care planning and/or complex decision-making around treatment options.

Aim: To determine the satisfaction of patients and carers with a new KSC program (KSCp).

Methods: Using mixed methods research, patients (n = 10) and carers (n = 5) separately completed a brief self-reported instrument after attending the KSCp for at least two occasions. Then 15 semi-structured interviews collected information about their perceptions of the program and whether it was meeting their healthcare needs. Interviews were thematically analysed.

Results: KSC patients and carers were highly satisfied with the program (96% and 91% satisfaction, respectively). 83% of patients were satisfied with how their family were included in treatment and care decisions. Qualitative themes were feeling supported, alleviation of symptoms, having time for detailed discussions and receiving personalised care tailored to their circumstances.

Conclusions: Patients and carers believed that the KSCp focused on their overall wellbeing rather than biochemical markers, fluid status or dialysis prescription which was typical of other interactions with the renal team. The different skill set of the renal and palliative care clinicians at the KSCp was more conducive to making decisions about treatment, preparing advance care plans, and discussing end of life needs.
52. End of life planning in dialysis: A survey

Michelle Ovenden¹
Laura Lunardi¹

¹ Royal Adelaide Hospital - CNARTS

**Background:** Advance Care Directives (ACDs) are particularly relevant in dialysis because of the high mortality in this population. ACDs enable competent adults to write down their future health care instructions and appoint substitute decision-makers. Unfortunately, in many programmes worldwide, ACDs are not widely implemented for patients undergoing dialysis.

**Aim:** This survey aimed to identify the percent of dialysis patients with ACD documentation in place, identify knowledge gaps and identify the willingness to complete the ACDs. The broader purpose of this project is to improve patients’ awareness of ACDs and encourage end of life planning.

**Method:** Following ethical approval, a structured eight-item questionnaire was administered to all chronic haemodialysis and peritoneal patients in a metropolitan and regional dialysis programme.

**Results:** From 458 surveys, 250 surveys were returned (response rate = 55%). The major findings were:

- Over 80% of patients reported end of life planning was important for them
- 80% had not discussed ACD with a health professional
- 70% of patients did not have ACDs in place
- 65% would have liked information to complete an ACD

**Implications for clinical practice:** Of the patients surveyed there was low completion of ACDs. Increased prioritisation of resources is required to increase ACD conversations and documentation in the dialysis population. The implementation of a programme informing all dialysis patients of how to complete the ACD form, and training of dialysis nurses, may facilitate the increased end of life planning for dialysis patients.
53. Development, implementation and evaluation of a pilot peer support group for renal supportive care patients

Jackie Taylor¹
Jenny Burman²

¹ Concord Hospital, Sydney, Australia
² Concord Hospital, Sydney

Background: Many RSC patients indicated they felt isolated as their disease progressed and found decision-making in relation to their future treatment difficult, including processing the psychological impact of these decisions. Patients surveyed demonstrated they were open to connecting with others in similar circumstances. Online research indicated that no RSC clinics offered a support group for patients.

Aim: To offer complementary support in addition to RSC clinic consultations. Empower patients using a framework of mutual aid support, incorporating psychoeducation on a range of associated issues, through patient participation in a structured 6 session support group program.

Method: The RSC Social Worker and Clinical Nurse Consultant co-facilitated the group, with a core theme for discussion in each session, including mindfulness & relaxation, diet, exercise, relationships, advance care planning and emotional well-being & self-care. Questionnaires were distributed and completed by patients prior to session 1 and at the conclusion of session 6. These include Kidney Disease and Quality of Life questionnaires; KDQOL-36 & KDQOL-SF1.3, Existential Anxiety Scale, Hope Scale, EQ-5D Health Survey and Outcome Rating Scale (ORS).

Results: Analysis of the complete results, with a comparison of individual experiences and patient outcomes will be evaluated and reported. Feedback from patients using the Group Session Rating Scale (GSRS) gives an early indication of high levels of satisfaction with the content and process and a desire to continue with future group attendance.

Conclusion: This innovative initiative expands the RSC service by offering patients an environment which validates their individual experiences by connecting with other patients.
54. When does infection risk outweigh the benefit of intravenous iron administration to haemodialysis patients? A narrative review

Julia Jones¹

¹ MRRH Taree Renal Services

The guidelines that serve to suggest and recommend upon the safe and beneficent use of intravenous iron in Australia in the setting of haemodialysis are in need of new evidence to bolster the confidence of the professionals who dose and administer iron daily. In the case of concomitant infection or heightened infection risk, studies previous to 2007 did not sufficiently address the subject with enough strength to generate strong recommendations. Without firm evidence to inform practice, renal nurses are often making decisions steeped in cognitive dissonance. The studies completed between January 2007 and October 2017 were individually appraised, and grouped mainly by study type in this paper, being mostly prospective or retrospective observational studies, and a few trials. This narrative review revealed heterogeneity in study methods and outcomes in the scant number of studies retrieved. Overall, study outcomes are more supportive of maintenance dosing than bolus dosing, and less supportive of high cumulative doses of intravenous iron, to reduce the risk of infectious outcomes in haemodialysis patients. Most studies showed an association between iron and infection. There is still a clear need for well-designed further research.
55. Hepatitis B vaccination in the Chronic Kidney Disease population - One Unit’s experience

Annette Wilson1
Jane Waugh1 and Helen Lesslie1

1 Sunshine Coast Hospital & Health Service

Background: Increasing Hepatitis B immunity in the CKD population is considered best practice. Hepatitis B vaccination is thought to be more effective in patients with better renal function, resulting in improved seroconversion rates.

Aim: To compare the response to Hepatitis B vaccination between patients with CKD stages 4 and 5.

Method: Patients with CKD stages 4 and 5 planning renal replacement therapy commenced the Hepatitis B vaccination protocol. Renal function was documented on commencement of the Hepatitis B vaccination protocol. Antibody titres (HBsAb) were measured at least four weeks after the final dose.

Results: 110 patients completed the Hepatitis B vaccination protocol prior to commencing dialysis. Patients with CKD stage 5 had a 74% seroconversion rate (49 of 66 patients) compared to only 66% of patients with CKD stage 4 (29 of 44 patients). Males were less likely to seroconvert compared to females (68% vs 77%) and patients aged above 70 years were also much less likely to seroconvert compared to their younger counterparts (62% vs 78%).

Conclusion: Though patient numbers were small, this data did not support the belief that Hepatitis B vaccination is less effective in patients with lower GFR. It does suggest that vaccination of patients with CKD stage 5 is beneficial as seroconversion rates are reasonable. Younger age seemed to be a stronger predictor of seroconversion than renal function, though this requires further study in a larger CKD population.
56. Reducing dialysis waste: A seven year journey towards making a difference

Anthea White

1 Melbourne Health

Context: Waste production in haemodialysis is disproportionately high compared to other areas of healthcare. There are now just over 10,000 people receiving haemodialysis in Australia, with each producing 1.5 – 8 kg waste per treatment, depending on machine and consumable choice. There is growing realisation across the healthcare sector that the amount of waste produced, along with the associated environmental and financial costs, must be addressed.

Objectives: To assess the impact of staff and patient education on appropriate waste segregation and the introduction of polyvinyl chloride (PVC) recycling on waste generation and disposal.

Key Messages: Monitoring of clinical waste commenced in July 2010. Following intensive education of staff and patients about appropriate waste segregation, clinical waste was reduced by almost 49% per dialysis treatment. In the quarter September – December 2017, 1.25kg clinical waste was produced per dialysis treatment which is as low as can be practically achieved given the consumables currently used. Furthermore, recycling of PVC has resulted in 70kg of waste per month being diverted from landfill. Together, these waste management strategies from 2013 – 2017 have resulted in savings of 32,500kg of waste, equivalent to approximately $29,000.

Conclusion: Marked reductions in clinical and general waste volumes are possible through appropriate waste segregation and PVC recycling. Intensive and ongoing education and motivation of staff and patients are vital for success. Given the cost savings and environmental benefits that ensue, development and implementation of a waste management strategy should be considered by all dialysis units.
57. Renal biopsies: A clinical audit

Dana Cotton¹

¹ Royal Adelaide Hospital

**Background:** Renal biopsies are a day procedure activity commonly used to diagnose kidney disease, and inform treatment and clinical practice. Booking processes are vital to ensure the efficient management of renal biopsy day procedures. Complications of renal biopsies are rare but can be severe.

**Aims:**

1. Improve the booking process and ensure the patient was appropriately prepared for renal biopsies, and
2. Provide an indication of the renal biopsy complication rates

**Methods:** Using a plan, do, study, act (PDSA) quality improvement framework, all booking forms from October 2016 to October 2017 (196 forms) were examined to determine if the form was being used appropriately, had made a difference to clinical practice and could be used to identify a complication rate for biopsy procedures.

**Results:** The clinical audit identified a complication rate of 8.1% however only 1% of patients required hospital admission for complications with the most common complication documented being haematuria

**Implication for clinical practice:** The audit raised questions regarding the use of the form as a referral and challenges with duplication and incomplete clinical documentation. The audit further identified needs to improve the provision of patient information regarding the biopsy procedure and follow up care. A further audit is planned for October 2018.
58. Clinical outcomes in older dialysis patients

Jenny Beavis¹
S.G. Holt² and Nigel Toussaint²

¹ Royal Melbourne Hospital
² Royal Melbourne Hospital, University of Melbourne

**Background:** The increasing longevity of our population is reflected in the dialysis population who are older and who have greater comorbidities. Frailty is more common in patients >65 years and 70% start dialysis with ≥1 comorbidity, most frequently heart disease or diabetes. Older CKD patients are at higher risk for mortality, not only from underlying diseases but from treatment complications.

**Aim:** To assess relationships between mortality and dialysis access at commencement of renal replacement therapy in older CKD patients (>65 years).

**Method:** We performed a single-centre retrospective cohort study and identified 905 incident dialysis patients over a 5-year period (2011-2016), with 503 (56%) aged >65 years. After exclusion of patients needing acute dialysis and from other networks, we studied 325 patients (mean age 70 ±7 years). Data was analysed to determine number of comorbidities, access at start of dialysis and number of days until death.

**Results:** 61% had permanent access at commencement of dialysis; 22% had central venous catheters. Mean comorbidity number was 3±1.6, with 123 (37.8%) having >3 comorbidities. Over the 5-year period, there were 167 (51.4%) deaths (mean age 72±7, 72% male), with a median (IQR) time to death from starting dialysis of 564 (219-954) days. Initiation of dialysis with a dialysis catheter was associated with greater comorbidities, and increased mortality for those aged 65-80 years old.

**Conclusion:** Many elderly comorbid patients will start dialysis. Permanent dialysis access in patients aged 65-80 at initiation was associated with reduced mortality, but also fewer pre-dialysis comorbidities and therefore may be indication bias.
59. Integrated dialysis learning and education portal

Sarah McMahon

1 Malvern Dialysis Unit

Context: Renal staff have struggled with the relationship between diet, binders and their implications. Understanding these interactions has demonstrated a gulf in explaining to renal patients the importance of medication compliance. Patients and carers who understand their treatment and medication are more likely to have positive outcomes.

Objectives: The portal is designed to increase compliance with phosphate binders required for effective renal nursing. Pathophysiology and medications are covered. It has the potential to be shared with high functioning patients and carers. The material has been written by an experienced nursing staff member, using interactive and simple to understand language. Initial feedback has been very positive with compliments received from professional staff (including nurses and dieticians) and patients.

Key measures: Staff have reported significant gains in their knowledge regarding key areas such as renal bone disease, pathophysiology and the relationship between phosphate and calcium after reading the material. There was an increase in staff abilities to explain renal treatment issues. Future plans are to extend accessibility beyond the current unit.

Conclusion: The availability of integrated information to Australian Dialysis patients has been an issue. Much information is sourced from America where there are significant differences in protocols. The portal has the ability to fill this gap in a way that can be understood by staff. The portal also can be utilized for CPD hours and self-directed learning, is easily available and increases the compliance of patients as they gain further understanding of the role of phosphate binders.
60. Characteristics of Indigenous Australians who attend a kidney supportive care program

Ann Bonner1
Louise Purtell1,2,3, Ilse Berquier2 and Helen Healy2,3

1 School of Nursing, Queensland University of Technology
2 Kidney Health Service, Metro North Hospital and Health Service
3 NHMRC Chronic Kidney Disease Centre of Research Excellence, University of Queensland

**Background:** Aboriginal and Torres Strait Islander (ATSI) people are four times more likely than non-ATSI Australians to have indicators of end-stage kidney disease (ESKD), and they have substantially higher rates of dialysis and mortality. Kidney supportive care (KSC), integrating renal and palliative care teams, can be beneficial for people with ESKD, but delivery of KSC to ATSI people has not yet been reported.

**Aim:** To compare the characteristics of ATSI and non-ATSI patients referred to a KSC program (KSCp) in Queensland.

**Methods:** Using data extracted from clinical records, we compared indigenous status, age, gender, co-morbidities (Charlson Co-morbidity Index), functional performance (Resource Utilisation Groups – Activities of Daily Living (RUG-ADL) scale), symptoms (IPOS-Renal), and treatment pathway.

**Results:** Among 220 patients referred to the KSCp from 2016–2018, nine (4.1%, 3 female, 6 male) were Aboriginal and one (0.5%) was a Torres Strait Islander. ATSI patients were considerably younger than non-ATSI patients (median [range] 53 [43–84] vs. 75 [27–90]; p=0.03). ATSI patients had a significantly lower mean co-morbidity score than non-ATSI patients (4.4±1.9 vs. 7.2±2.2; p<0.01) and significantly lower mean RUG-ADL score (4.8±1.7 vs. 1.2±0.4; p=0.02). 70% of ATSI patients were undergoing dialysis, compared to 50% of non-ATSI patients. The most common symptoms for ATSI patients were pain, shortness of breath and itching.

**Conclusion:** ATSI people referred to the KSCp were younger than their non-ATSI counterparts and had fewer co-morbidities. Early referral of ATSI people with ESKD for KSC may be advantageous in addressing their symptom burden and quality of life.
61. The importance of initiating renal supportive care at time of diagnosis, rather than in later stages of kidney disease in elder population

Elma Muminovic¹

¹ Monash Health

**Context:** Kidney disease is a devastating disease, especially when discovered in older population. Due to its slower progression at initial stages, symptoms at times might not appear until it’s too late, therefore diagnosis can be made at stage 5 of CKD or even end-stage renal disease. For majority of people involved in one’s care, initial aim is to commence treatment, unaware of other options, and what would be more suitable for their quality of life.

**Objective:** The aim of this paper is to provide the importance of providing and educating each person who is suffering from renal disease, on renal supportive care, especially those in late stages of life.

**Key message:** To provide strategies for healthcare workers, mainly dialysis nurses, on how to incorporate renal supportive care for elder population suffering from end-stage renal disease. For this decision to be made, the patient himself including the family members involved in their care and decision-making, need to be provided with valid information on the prognosis, the quality of life when patient is on dialysis and different options for supportive care.

**Conclusion:** Kidney disease can become a debilitating disease, once end-stage renal failure is reached, especially for those who are elderly, and have many other co-morbidities. With many options that are available at this point of time, each person should be approached differently, as every case is different. Providing valid and concrete information, and educating each person, on different treatment options, could potentially improve their quality of life.
62. Use of the Body Composition Machine (BCM) in the fluid assessment of patients undertaking haemodialysis

Lisa Tienstra¹

¹ Concord Repatriation General Hospital

**Context:** Fluid removal and the achievement of a euvoletic state in haemodialysis patients can be a difficult process. The reasons a patient does not tolerate fluid removal is multifactorial. A haemodialysis nurse needs to use different tools to be able to adequately assess a patient’s fluid balance so they can achieve their dry weight asymptotically (DW).

**Objectives:** A BCM was introduced into the haemodialysis unit to assist nurses assessing patients who were having difficulty achieving their DW. In consultation with their nephrologists, an assessment with the BCM was performed prior to the mid-week dialysis session. BCM results were correlated with a formal fluid assessment by the Dialysis Resident. To date 6 patients have had BCM’s performed with a resultant increase in the DW of 4 patients and the remaining with a decrease. Ongoing monitoring shows patients’ improvement with fewer symptoms documented.

**Key Messages:** Dialysis nurses understand the intricacies of their individual patients and their concerns about a patient’s fluid status are valid. Nurses need different tools to assess patients and optimize dialysis when traditional tools are unsuccessful. The BCM has been introduced as a new tool in assisting nurses to more comprehensively assess their patient.

**Conclusion:** The BCM has been shown to be a useful tool in assessing the fluid status of patient undertaking haemodialysis. The findings of the BCM have been found to correlate with fluid assessments by medical staff.
64. A remote monitoring system for patients on home haemodialysis: A field test of co-presence-enhanced design

Mary Ann Nicdao1
Na Liu2, Jinman Kim3, Younhyun Jung2, Adani Arisy2, Mary Mikaheil4, Tanya Baldacchino5, Mohamed Khadra3 and Kamal Sud6

1 Home Therapies Unit, Western Renal Services (Western Sydney and Nepean Blue Mountains Local Health Districts), Sydney New South Wales Australia
2 School of Information Technologies, University of Sydney
3 School of Information Technologies, University of Sydney; Nepean Telehealth Technology Centre, Nepean Hospital, Kingswood, Sydney, Australia
4 Home Haemodialysis Unit, Western Renal Services (Western Sydney and Blue Mountains Local Health Districts), Sydney New South Wales Australia
5 Nepean Telehealth Technology Centre, Nepean Hospital, Kingswood, Sydney, Australia
6 Department of Renal Medicine, Nepean Hospital, Kingswood, Sydney, Australia; Sydney Medical School (Nepean Clinical School), The University of Sydney, Sydney, Australia

Background: Patients on home haemodialysis (HHD) may suffer from isolation and anxiety due to limited contact and feedback from health care professionals regarding their dialysis treatments. A digital application which allows patients to remotely feel the “presence” of their nurses may promote feelings of “connectedness”.

Aim: This study presents an information system design aimed at enhancing HHD patients’ perceived “co-presence” with their nurses.

Methods: A “co-presence” perception was designed and implemented through a digital logbook that was remotely viewed by nurses, emotion-sharing via emoticons and sending feedbacks. The six-month study included 3 nurses and 74 patients. A mixed method design was used for evaluation, including surveys, interviews, and analysis of system data.

Results: There were 2757 dialysis treatments entered during the study period, showing 492 “Very Happy”, 2167 “Happy”, 56 “Neutral”, 18 “Unhappy” and 24 “Very unhappy” emotional icons. Nurses prioritised reviews of entries that showed “Very unhappy” and “Unhappy” icons. Those with negative emotions had a higher proportion of additional notes sent as compared to the entries with positive and neutral emotions.

Patients comfortably shared their emotions with their nurses, evident in the 989 short notes sent with treatment data entries. The qualitative data showed that patients’ feelings of connectedness improved. Nurses reported satisfaction with the “co-presence” enhancement features. A high level of satisfaction was also reported on the usability of the system.

Conclusions: The co-presence design promoted patients’ feelings of connectedness to their nurses, and demonstrated easing of their feelings of isolation and anxiety on HHD.
65. Patient experiences of training and transition to home haemodialysis (HHD): A mixed-methods study

Mary Ann Nicdao¹
Camilla Hanson², Jeremy Chapman³, Jonathan Craig⁴, David Harris⁵, Lukas Kairaitis⁶, Mary Mikaheal⁶ and Allison Tong⁷

¹ Home Therapies Unit, Western Renal Services (Western Sydney and Nepean Blue Mountains Local Health Districts), Sydney New South Wales Australia
² Sydney School of Public Health, The University of Sydney; Centre for Kidney Research, The Children’s Hospital at Westmead
³ The University of Sydney Centre for Transplant and Renal Research, The Westmead Institute for Medical Research Sydney New South Wales Australia
⁴ The University of Sydney School of Public Health Sydney New South Wales Australia
⁵ Westmead Hospital Department of Renal Medicine Sydney New South Wales Australia
⁶ Home Haemodialysis Unit, Western Renal Services (Western Sydney and Blue Mountains Local Health Districts), Sydney New South Wales Australia
⁷ Sydney School of Public Health, The University of Sydney, Sydney New South Wales Australia

Background: Research evaluating HHD training programmes is limited, and little is known about patient’s experiences of learning and commencing HHD.

Aim: This study aims to describe patients’ perspectives on training and transition to HHD.

Methods: Three sequential semi-structured interviews were conducted with 20 patients during the transition to home haemodialysis at an Australian renal unit. Transcripts were analysed thematically. Participants completed a satisfaction questionnaire after commencing home haemodialysis.

Results: We identified six themes: persevering despite trepidations (diminishing intimidation of machinery, acquiescing to fatal risks, reconciling fears of cannulation, dispelling concerns of neglect and tolerating necessary concessions); optimizing the learning pathway (practising problem solving, learning from mistakes, grasping technical complexity, minimizing cognitive overload and progressing at own pace); developing confidence (believing in own abilities, adapting to independence, depending on caregiver partnership and faith in crisis support); interrupted transition (lacking individual attention, language barriers, installation delays, interfering illness and acclimatizing to new conditions); noticing immediate gains (reclaiming lifestyle normality, satisfying self-sufficiency, personalizing treatment and thriving in a positive environment); and depleting resources and energy (exhaustion with gruelling routine, confronting medicalization of the home, draining financial reserves and imposing family burden). Fewer than 30% of respondents indicated low satisfaction with staff availability domains, staff interpersonal domains or technical domains.

Conclusion: Home haemodialysis training fosters confidence in patients; however, many patients experience stress because of medical isolation, treatment responsibilities, family impositions and financial difficulties. Addressing patient’s on-going psychosocial concerns may alleviate burdens on patients and their families during training and transition to home haemodialysis.
66. Overcoming barriers for Indigenous Australians gaining access to the kidney transplant waiting list

Amy Atkinson¹
David Goodman¹

¹ St Vincent’s Hospital Melbourne

**Context:** Indigenous Australians represent 11.3% of the Australian dialysis population but very few Indigenous patients receive kidney transplants. A study of all Indigenous Victorian dialysis and transplant patients in one renal service was undertaken to identify barriers to transplantation.

**Objectives:** A hospital funded research study was undertaken involving Victorian Indigenous patients in one renal service. Twelve dialysis (n=12) and seven transplant patients (n=7) were included in the study. Information was derived from medical records to provide patient journeys of those transplanted. Semi-structured interviews of current dialysis patients were conducted, providing an opportunity for their journey to be told through story-telling. Discussions with hospital health workers also provided further insight into the patient experience.

**Key messages:** Medical co-morbidities and psycho-social issues were the main barriers to being accepted onto the waiting list. Data demonstrated a common theme that transplanted patients either accessed local Aboriginal Health Services and/or had supportive family members to assist. Despite the small numbers of Indigenous patients transplanted (2.8%) at this centre since 2006, once on the waiting list, transplants proceeded within 4 months on average with the exception of one patient who waited 6.5 years.

**Conclusion:** Efforts to provide a culturally appropriate support system to Indigenous patients through hospital workers, Aboriginal Health Services/GPs and family involvement may allow more Indigenous patients to be listed. Once listed, the current organ match system appears to provide equal access to kidneys for all Australians.
67. Innovation for Holiday Haemodialysis – Big Red Kidney Bus

Ling Wei1, Cheryl Hyde1, Amanda Lister1, Yvonne Shen1, Marie Ludlow2, Jacinta McMahon2, Peter Ken3 and Lesley Ross3

1 Royal North Shore Hospital
2 Kidney Health Australia
3 Monash Health

Context: People on haemodialysis wishing to travel away from home can receive dialysis from hospital based units, but dialysis chairs are not always available. Patients often report it is too difficult to plan a holiday. Barriers include: finding a unit with availability; complex booking processes; and, significant travel time to the dialysis unit. Patients generally spend three days of their holiday away from family dialysing in a hospital based environment.

Objectives: A unique model, whereby people needing haemodialysis can choose to holiday at a range of popular tourist destinations, has been implemented in Victoria and New South Wales (NSW), Australia. Haemodialysis services are provided on a fully commissioned mobile bus that visits popular holiday areas for periods of up to ten weeks. People are able to receive haemodialysis care at their holiday location. This publically funded service is available to all Australian residents and countries which Australia has reciprocal health care agreements with.

Key Messages: The launch of the Big Red Kidney Bus (BRKB) holiday haemodialysis service in NSW took place on 1st May 2017. This new service was made possible by a partnership between Kidney Health Australia and The Royal North Shore Hospital.

Conclusion: Although the NSW BRKB has only been operational for nine months, patient feedback suggests this new service offers a valued opportunity for patients, families and carers to have a break and enjoy a holiday where dialysis is integrated and easy to access. Future research will address patient-reported outcomes of both the NSW and Victorian BRKB.
68. Who cares? We do

Angela Arndt
Sue Angus

1 Royal Brisbane & Women’s Hospital

**Context:** In a large Queensland metropolitan renal service, a small group of clinicians incorporating a transition to end stage kidney disease management performs case management of patients at stage 5 not yet on dialysis and those new to haemodialysis.

The Transition Unit is more than just stabilising the patients and pushing them forward on their dialysis journey, it is the empowerment of patients to make informed decisions through a supportive, encouraging environment and the provision of individualised education.

The Transition Unit pride themselves with the ability to support patients to feel more in control of their life and that quality of life is possible.

**Objectives:** The case management approach incorporates a dedicated multidisciplinary team which evaluates the patients mental, psychosocial and cognitive status in addition to supporting the patients to navigate the complex maze of information, diagnostic tests and appointments by promoting independence in partnership with their team.

**Key messages:** Transition overcomes problems by being in an off-campus, quiet environment with a dedicated team of nurses to allay patient fears, concerns and misinterpretations by building rapport and trust between patients and the multidisciplinary team, assisting them towards appropriate modality decision making and regaining a sense of independence and autonomy.

**Conclusion:** The Transition service for case management of ESKD towards implementation of their chosen modality has demonstrated an increase of patients choosing a home therapy or supportive care. This is supported by remaining on their modality of choice at 6 and 12 months as reported by the key performance indicators.
69. Modern methods of dietary phosphorous management

Kate Wood¹

¹ Women’s and Children’s Hospital

**Context:** There is strong epidemiological evidence showing significant association between elevated serum phosphate levels and cardiovascular disease risk in those with reduced renal function. With increasing intake of processed foods, attention has turned to the highly bio-available inorganic phosphates found mostly as food additives and the effects on serum phosphate levels. Innovative new approaches to improving phosphate control are warranted.

**Objectives:** To provide an update on recent work in the area and provide practical tips for identifying sources of phosphorus and inorganic phosphates in the diet.

To discuss bio-availability of dietary phosphorus, protein to phosphate ratios, the varying contribution they have on serum phosphate levels and relevance to nutritional management of renal patients across the lifespan.

Recognise the challenges of phosphate management for renal patients and promote innovative new approaches to improving phosphate control.

**Key Messages:** When reviewing dietary phosphorus intake it is important to acknowledge that not all dietary phosphorus will affect serum phosphate levels equally. Practitioners should be aware of inorganic phosphate sources in the diet and assist patients in identify these sources. Additionally attention to bio-availability of dietary phosphorus, protein to phosphate ratios and the varying contribution they have on serum phosphate levels will avoid unnecessary dietary restrictions.

**Conclusion:** Nutritional management of elevated serum phosphate has changed in recent years due to identification of sources of hidden phosphate intake, awareness of protein to phosphate ratios and the bio-availability of dietary phosphorus - now key components of patient education and serum phosphate management.
70. Successful management of refractory restless legs syndrome for a haemodialysis patient with non-pharmacological measures

Melissa Stanley¹
Nuala Barker¹, Jennifer Weil¹, Hilton Gock¹ and Kathryn Ducharlet¹

¹ St. Vincent’s Health

Context: Restless legs syndrome (RLS) is a common and debilitating symptom present in up to 80% of Haemodialysis patients. Treatment strategies with proven efficacy are both pharmacological and non-pharmacological.

Objectives: To report on a complex case of refractory restless legs syndrome. Using patient reported outcome measurement (POS-S renal) and the RLS rating scale it was identified that the patient described ongoing severe RLS despite maximal pharmacological therapies and increased dialysis hours. We aim to describe the clinical challenges around treatment, including a multidisciplinary approach and non-pharmacological strategies.

Key Messages: This is a case report of a 78 year old man who had been on peritoneal dialysis for 12 months and haemodialysis for 4 years. Over this time he trialled and poorly tolerated benzodiazepines, gabapentinoids, dopamine agonists with initial improvement in symptom severity which then returned after several months necessitating changing treatment regimes. In attempts to self-treat his RLS the patient took increasing doses of gabapentin and pramipexole which contributed to blood pressure instability, ataxia, falls with loss of consciousness and 5 admissions to an inpatient setting in 6 months. This resulted in review in the Renal Supportive Care Multidisciplinary meeting, ceasing pharmacological agents and trialling psychological therapies and recumbent cycling during dialysis sessions.

Conclusions: This case report describes the multifactorial implications of RLS and its treatment for a patient on dialysis. We also describe the utility of using patient reported outcome measures and multidisciplinary management to monitor and treat refractory, complex and disabling symptoms for dialysis patients.
71. 3D printing fistulas for educational use

Tracie Barber¹
Eamonn Colley¹, John Carroll¹, Anne Simmons¹, Ramon Varcoe²,¹ and Shannon Thomas²,¹

¹ UNSW
² Prince of Wales Hospital

Background: In a conventional fistula ultrasound examination, a series of 2D ultrasound images are mentally combined by the operator to form a subjective impression of the 3D anatomy and pathology. Being able to see and hold a range of patient fistula models may assist renal nurses in the future visualization of patient access.

It is also well known that some patients feel emotionally unprepared for vascular access and poorly informed about it. By demonstrating to patients in an easy to visualize 3D printed format, they may be able to understand the purpose of the access and gain much greater insight into any intervention needed.

Aims:

- Obtain a database of 3D geometries of patient fistulas;
- Create a series of 3D printed fistulas, with relevant de-identified patient data, for use in nurse education;
- Create a small set of 3D printed fistulas, for use in patient education.

Methods: A weekly clinic run at a local hospital has been used for collecting data. Under appropriate ethics clearance, we scan patients who come through this clinic. 3D prints are made in-house, and de-identified data is collected into an appropriate format.

Results: We have produced a set of fistula geometries, covering healthy, functioning access through to those needing immediate intervention.

Conclusion: Fistula geometries vary greatly and can be difficult to visualise with 2D ultrasound. 3D printed fistulas give clinical staff and patients the opportunity to clearly see the different types of fistula, and understand any interventions or dysfunction that may occur.
72. Bridging the gap of renal services to improve patient support and health outcomes using electronic medical record

Julie Voutos\(^1\)

\(^1\) Canberra Hospital ACT Health

**Context:** In 2012 a large metropolitan Renal Service introduced a renal electronic medical record eMR to record patient data and health information. At the rollout, Doctors and Nurses were the only users. In 2016 A regional Local Health District joined and began to use the eMR enabling patients to have one record when moving across the Renal Network to improve cross border care. Allied Health services had no access to the eMR in from the regional or at metropolitan Satellite haemodialysis units.

**Objectives:** Replace ineffective paper based records, phone calls and inability to track referrals because old fashioned paper and faxing systems often did not work. Introduce eMR to allied health services to bridge the information gap with the renal service.

**Key messages:** Allow Allied Health professionals to access The eMR, minimise loss to follow up, and improve communication of patient information across the Network.

**Conclusion:** By the end of 2017 Allied health staff across The Renal Network all have access to eMR and are able to receive referrals, assess, document and be informed on patient care which is auditable and reduce loss to follow up.

Improvements made have been:

- Nutritional Input by referrals, with assessments and documentation available for all uses to review.
- Aboriginal Liaison Support available to patients on admission and able to help with better support services on discharge
- More social work support available and planning on discharge with electronic referrals, assessments
- Supportive care assessments, referrals and reviews
- Pharmacy use for dispensing of medications quickly and efficiently
73. Reasons for dialysis catheter insertion – Real time data from the REDUCTION project

Lisa Tienstra1
Sradha Kotwal2, Kevan Polkinghorne3, Nicholas Gray4, Girish Talaulikar5, Alan Cass6, Stephen McDonald7 and Martin Gallagher2

1 Concord Repatriation General Hospital
2 The George Institute for Global Health
3 Monash Health
4 Sunshine Coast Hospital and Health Service
5 The Canberra Hospital
6 Menzies Institute for Medical Research
7 Royal Adelaide Hospital

Aim: As part of a prospective national project (Reducing the burden of dialysis catheter complications - REDUCTION), we sought to understand the reasons for dialysis catheters insertions in patients in Australian renal units.

Background: The reasons for catheter insertion are varied. Understanding the reason for catheter insertion on a real-time basis allows units to identify trends. We collected prospective data on dialysis catheters across 37 Australian renal units using a web-based data collection tool.

Methods: Data was collected on all patients requiring a dialysis catheter cared for by a renal unit between 20/12/2016 and 08/02/2018. Study data collection continues. The reasons for insertions were grouped into Acute Kidney Injury (AKI), commencement of maintenance dialysis, arteriovenous fistula/graft issues and transition from Peritoneal Dialysis (PD).

Results: A total of 3145 (2213 patients) dialysis catheters were captured. Of these, 1024 (32.5%; 59% Tunnelled and 41% non-Tunnelled) catheters were inserted for AKI, while 919 (29.3; 84.9% tunnelled and 14.1% non-tunnelled) catheters were inserted for patients commencing maintenance dialysis without functioning access. 403 catheters (12.8%) were inserted for arteriovenous fistula/graft issues and 331 (10.5%) were inserted in patients transitioning from PD. The remaining catheters (465; 14.5%) were inserted for other issues. 1032 catheters remained inserted, while 2213 catheters were removed (median duration 45 days (IQR 9-134 days)) with current total catheter days of 274,003.

Conclusions: Catheter insertion in dialysis patients is often unavoidable. Having an understanding of the reasons for catheter are insertion allows renal units to assess trends and review their service.
74. The successful use of plastic cannulae in a clinical dialysis challenge: A case study

Frances Skilton¹
Amanda Biddle¹,², Yvonne Matthew¹, Rebecca Taylor¹ and Paul Bennett¹

¹ CNARTS
² CHSALHN

Background: The widespread use of plastic cannulae in Australian haemodialysis (HD) clinics has been limited despite over 30 years of international use. Plastic cannulae been shown to be useful to preserve immature arterio-venous fistula (AVF), for nocturnal dialysis, and in patients with dementia and needle phobias.

Context: On commencement of HD after transfer from peritoneal dialysis Ms A, a 46 yr old female, exhibited severe restlessness, expressing feelings of extreme restriction by having to sit still in a chair. Despite ongoing support and reassurance from staff her restlessness caused AVF infiltration and resulted in not completing more than 30 minutes on HD. This resulted in inadequate dialysis, AVF damage, and prevented her returning home to her rural dialysis unit.

Objective: The objective of our care was to find strategies to decrease intradialytic AVF trauma whilst still allowing the patient to able to move on dialysis.

Key Message: Plastic cannulae were commenced resulting in Ms A now fully completing her dialysis treatments without infiltration of the AVF, even though she continues to stand frequently and move around in her chair. By engaging with the patient, looking for alternatives, and training staff to try something new, Ms A was able to return home and successfully dialyse in her rural location.

Conclusion: There are many potential uses for plastic cannulae in the dialysis population. This case highlights the potential for plastic cannulae in a patient who continually moves during HD sessions.
75. A ‘good death’: One unit’s experience

Norrie Aviga¹
Barbara Harvie¹

¹ Queanbeyan Renal Unit, SNSWLHD

**Context:** Research suggests that most of us want a ‘good death’. For many, the thought of going to sleep and not waking up sounds the ideal way to go. The reality is very different, with many dying in hospital, rather than their place of choice. Of those who had designated a preferred place of death, less than half their preferred place of death in 2017.

In January 2017, we had 24 people dialysing in the local HD unit. By November, four people had withdrawn from HD. Each death was different, some more challenging than others, impacting on other patients, their families and staff. Two long-term patients, both in their 70s, and both with multiple comorbidities, withdrew from dialysis within two weeks of each other. This is our experience of two ‘good deaths’.

**Objectives:**

- To share our story
- To outline the challenges we faced
- To explain the strategies we are putting in place

**Key messages**

- Listen actively when people raise the subject of death and dying
- Take opportunities to discuss long term plans with patients and their families
- Learn from previous experiences – early discussions are essential
- Document wishes and encourage written plans

**Conclusion:** We have all learned from these experiences. We support each other as well as our patients. We acknowledge our abilities and limitations in the workplace. We know that social worker support is critical and we are strongly advocating for return of the lost social worker hours.
76. That which does not kill us, makes us stronger!

Norrie Aviga¹

¹ Queanbeyan Renal Unit, SNSWLHD

Context: ‘That which does not kill us, makes us stronger!’ I used to think this was a ‘wissy washy, touchy feely’ saying which I couldn’t imagine saying it to anyone let alone myself. However, when my boss told me she was resigning and leaving in two weeks, I thought ok... what? Was I hearing right? Did she say she was leaving?

We started this unit together with the best staff in the world and the most amazing patients. We’re a team. She can’t breakup this family!! She was the organiser/planner and meeting attender while I was the hands on/clinical problem solver with patients. What’s going on???

Within minutes, panic started to set in! Our senior RN starts maternity leave soon. A new RN without haemodialysis experience starts next week. In a month, we are facing new machines, chairs, training, patients and accesses. I’m hyperventilating and crying into my cup of tea at the same time. It’s not a pretty sight!

Objectives:

- To share the story of a unit under pressure
- To share the challenges and successes

Key Messages

- Building (and rebuilding) the team is essential
- Sharing frustrations and offering solutions are equally important

Conclusion: Today a year later, I didn’t drown in that cup of tea of sorrow. Our amazing new team with our amazing patients are still here and we are supporting another Renal Unit 100km away. Logistically it could have been impossible! It’s been an amazing journey for our unit with a sense of growth and renewed strength.
77. Venous Needle Dislodgement during Haemodialysis: Practices to minimise the risks.

Ahana Atteppallil Sebastian¹
Nisha Kurikilayil George²

¹ Monash health
² Monash Health

Context: Venous needle dislodgement (VND) is a serious and life-threatening complication during haemodialysis treatment and it is a concerning issue for renal nurses, doctors and patients. When needle dislodgement occurs, it only takes a few minutes for rapid blood loss in a patient as the flow rate is 250-350ml/minute.

Objectives: To identify the reasons for VND and explore the best clinical practices for the prevention of this complication.

Key Messages: Multiple factors can contribute to the risk of VND such as high risk patients, inconsistent taping techniques and lack of clinical observations. The risks associated with VND are costly to both the patient and the health service; costs include interventions such as ICU or emergency department admissions, increased erythropoietin use, pathology testing and blood transfusions. A combination of staff observation, safe preparation of access site, correct taping technique and ongoing assessment of patients can address the issue. Patients who are cognitively impaired, acutely delirious, confused and resistive require increased staff observation. Home haemodialysis patients are also at high risk as they less frequently assess their fistula during therapy. Moisture detectors are useful to alert home therapy patients. The recommended practice for taping needles based on literature review is the Chevron technique. This technique will avoid dislocations even with arm movement. A well-defined unit policy for securing needles is very important to minimize the risks significantly.

Conclusion: Following safe needle securing techniques, identifying the risk patients and vigilant observation are the vital steps to avoid the occurrence of VND and associated complications.
78. Revolutionising the Nurse Practitioner workforce

Maria Safe¹
Elaine Sanders¹, Jenny Beavis¹, Jo-Anne Moodie¹, Jayne Amy¹, Narissa Andrew¹, Jade Ryan¹ and Steve Holt¹

¹ Royal Melbourne Hospital

Context: Nurse practitioners (NP) were first endorsed in Australia in 2000, and there are now around 1,600 NPs. Our renal service is one of the largest in Australia and has strong regional affiliations, with around 50% of ESRD patients in rural and remote areas. A CKD NP was appointed in 2013; however there remained enormous potential to expand this workforce model into other domains of renal care.

Objective: To outline how one service introduced 5 Renal NP Candidates (NPC) roles to meet identified need; and to highlight the personal, operational, clinical and financial implications this has had throughout service.

The service identified the need for several NP roles and sought funding to develop both dialysis and transplant models of care. 5 NPCs were appointed across satellite and home dialysis, and nephrology surgical and transplantation.

The roles aim to build capacity of the renal team, improve patient outcomes and access to comprehensive care for regional patients. Each NPC has specific learning objectives, scope of practice and activity metrics to ensure ongoing success. Financial sustainability will be through current Victorian WASE funding with each NP potentially attracting $50,000 pa.

The creation and implementation of these roles has presented several operational, resource and financial implications service wide.

The introduction of 5 NPC roles has required strategic planning and negotiation; and has potential to revolutionise the delivery of renal services. These evolutionary roles aim to improve patient outcomes and streamline care; and are likely to be financially sustainable under the current activity funding models.
79. Managing Restless Legs Syndrome to improve quality of life

Barbara Harvie¹
Norrie Aviga¹, Cidrex Ramos¹, Dante Celaya¹ and Bincy Thomas¹

¹ Queanbeyan Renal Unit, SNSWLHD

Context: Restless legs syndrome (RLS) is a sensorimotor disorder, defined as an overwhelming urge to move one’s legs, associated with uncomfortable and unpleasant sensations. RLS is worse during inactivity, eg haemodialysis (HD) and is eased by movement.

A quick search ‘RLS’ identified 10,600 articles since 2014, of which 2,810 articles were published in the last 12 months. RLS is well-recognised as a significant symptom burden for people with diabetes and those on haemodialysis (HD). A 2016 systematic review of RLS found 28% prevalence in the dialysis population, which continues to be under-treated. This is despite the increasing use of the iPOS tool for symptom-scoring and management. At the local HD unit, data was obtained from the entire HD group using the iPOS scale, with results ranging from ‘not at all’ to ‘severe’.

Objectives

- Identify causes of RLS
- Utilise validated tools to identify the symptom burden
- Identify strategies to optimise quality of life

Key Messages: RLS is a significant problem causing sleep disorders, insomnia and reduced quality of life. Nurses need to recognise and act to reduce the symptom burden. In addition, untreated RLS has potential to create havoc with family dynamics, especially bed-partners.

Conclusion: RLS is under-recognised and under-treated. Within HD settings, nurses can identify the problem and its severity; suggest strategies and alert the treating team as well as documenting changes. Using validated tools and dedicated symptom management clinics can guide clinicians to optimise quality of life for both the person and family.
80. Consent for Dialysis

Maria Safe¹
Jayne Amy¹, Jade Ryan¹, David McCallum¹, Jo-Anne Moodie¹, Elaine Sanders¹, Lambrina Likouresis¹ and Steve Holt¹

¹ Royal Melbourne Hospital

**Context:** Obtaining consent for dialysis has not traditionally been a priority for many renal units and many consider this implied consent by virtue of attendance at, and cooperation with, the procedure. However, this falls short of ethical and legal requirements to informed consent. There is significant disparity in practice across Victoria.

**Objectives:** To improve the quality and comprehensiveness of our consent process for all dialysis patients through overhauling the consent content and processes.

**Key messages:** Strategies implemented included: revising the consent content, credentialing senior nurses to perform annual re-consent, communication to staff and patients, and monitoring and reporting of compliance rates across dialysis areas.

Baseline data showed of 522 dialysis patients, only 7% with valid consent (within 1 year), 22% consent > 12mths old, and 71% no consent form on record (although we have evidence of pre-dialysis education on all). Within 5 months of implementing changes, 54% have valid consent, 12% with consent > 12mths old and only 34% without a recorded form. We now have good evidence of ACP discussions with all patients under the new consent process. There have been significant improvements in initial consent for new starts since the strategies were implemented (from 10% to 50%).

Some challenges included engaging private nephrologists, and nurses were restricted to re-consent only.

**Conclusion:** Revising consent content, credentialing senior nurses and intensive education has seen significant improvements in dialysis consent. It has more importantly allowed an annual opportunity to help patients understand their options and express their wishes and to discuss ACP.
81. Lung transplanted cystic fibrosis patients with renal replacement therapy - One unit’s experience

Sarah Russo

1 Hunter New England Local health district

**Context:** Cystic Fibrosis (CF) is a disease that is life limiting however with improvements in medications and accessibility to transplantation, many CF patients are now living well into adult years. This has led to an increased comorbidity burden for those patients who have achieved such longevity.

In our local health district, there are approximately 110 existing adult CF patients. Many have lung transplantation and CF related diabetes that may further develop some form of kidney disease/injury and may possibly progress to end stage kidney failure (ESRF). Our nephrology department has thus far accepted 3 CF patients. All have been patients with lung transplants who are now diabetic with end stage renal disease requiring renal replacement therapy.

Two patients commenced haemodialysis and one has initiated with peritoneal dialysis.

**Key messages:** Patients from the CF paradigm have experienced a very different management approach to their chronic disease. This is often in conflict of usual restrictions required of a patient undergoing renal replacement therapy. There are often clear individual infection control protocols to embed into care to reduce cross contamination of infection between CF patients and dialysis groups. This has proved to be a unique, complex and challenging clinical management situation requiring a highly collaborative and specialised multidisciplinary approach to patient care.

**Conclusion:** The CF/ESRF/Transplant patient phenomenon is posing new uncharted area of renal replacement therapy. We are working towards producing guidelines to assist with these and future patients.
82. CKD clinical education in Aboriginal communities

Kerrie Parker¹

¹ Kimberley Renal Service

Context: The key to stemming the progression of Chronic Kidney Disease (CKD) is the early detection and management. CKD guidelines and protocols exist to assist staff but they are often unaware. Data from a large aboriginal community clinic was analysed to identify gaps in care, this has allowed a focused approach for improving CKD management.

Objectives: Clinic data of those at risk showed only 65% of attendees had at least 2 tests for ACR and eGFR in a 2-year period. Both tests are required in annual CKD screening in this community. Results for correctly assigned care plans (which indicate pathology requirements) were varied. For example, in one high risk group (eGFR>90 but indications of macroalbuminuria) allocated care plans were only 36% accurate. Increased education around current CKD protocols for screening and management is outlined.

Key message: In aboriginal communities, especially remote ones, workloads are highly complex and there is often a high turnover of staff. Use of quick reference guides, clinical toolkits and education around accessible online information is a multi-factorial approach implemented to improve communication of current CKD protocols.

Conclusion: The need for improvement in clinical education around screening requirements and assigning of care plans was highlighted. Non-compliance around correct CKD management has been considered to be due to a lack appropriate resources for busy clinics to use, as a result, a suite of tools was developed. If we are to make headways in slowing the progression of CKD correct management is vital.
84. Exercise on dialysis: Using a systematic review to improve patient care

Suzanne Joynt¹

¹ Auckland District Health Board

Patients on dialysis are a unique group with a high incidence of other chronic conditions combined which is complicated by inactivity (O’Hare et al, 2003). Dialysis patients are known to be less active than those with normal renal function and unfortunately they are rarely assessed or advised on increasing their level of activity by health care professionals (Johansen, 2007). Haemodialysis is also a time-consuming treatment lasting 3-5 hours for three times a week (Jung & Park, 2011).

As nephrology nurses are we aware of that haemodialysis patients are less active than others. The question therefore is, is there evidence to support that exercise on haemodialysis is effective in improving functional capacity and quality of life? Sheng et al (2014) did a systematic review of 24 studies. The exercise programmes were all for at least 30 minutes three times per week for at least eight weeks. They varied in intensity, duration and type with the most common form of exercise being cycling.

The data supported that exercise during haemodialysis was beneficial to patients particularly when done for more than six months. Intradialytic exercise is not widely used despite being safe and beneficial. It improves adequacy, physical functioning and quality of life (Sheng et al, 2014). Healthcare professionals need to work together to develop individualised patient exercise programmes.

So where to from here:

- Formation of Dialysis Exercise Working Group - SMO, dietician, exercise physiologist, nurses, pre-dialysis/CKD nurse, clinical physiologist
- Pre-dialysis patient survey
- Haemodialysis patient survey
- Staff education
- Patient information
- Equipment
Scheduled Scoring of Renal symptoms: Patients report Renal Supportive Care Clinic improves quality of life

Megan Hughes

ACT Health

Context: Renal dialysis patients in the ACT region previously had no measurable identification of symptom burden or a service to focus on their diminished quality of life. Collaboration between Renal and Palliative Care Services established the Renal Supportive Care (RSC) clinic at Canberra Hospital in July 2016. Patients gained access to a specialist palliative care physician focusing on treating symptom burden.

Objectives: The Supportive Care Outcome Scale – Symptoms Renal (SOS-S Renal) tool identifies eighteen (18) distinctive symptoms related to renal disease. Assessments were scheduled every 3 months into dialysis care workflows in the Renal Electronic Medical Record (EMR). Pre and post clinic symptom data was collected. Post clinic data identified a reduction in symptom burden and improved patient quality of life.

Key Messages: The RSC clinic has proven to be beneficial as measured by the overall reduction in SOS-S renal scores of patients who accessed the clinic. This was reinforced by positive patient verbal feedback. This has also resulted in easier transition to end of life discussions for patients having established a good relationship with the Supportive Care physician.

Conclusion: Scheduled measuring of symptom scores leading to initiation of appropriate medications and interventions have resulted in improved quality of life by alleviating symptoms for our dialysis patients. The RSC clinic utilizing a Palliative Care Physician is a permanent service offered to dialysis patients with future plans to include Chronic Kidney Disease contemplating dialysis, and Transplant patients.
86. 'Masking out' catheter-related PD peritonitis: A retrospective review

Christie McKellar¹
Rita Barbi¹ and Sara Guardado Henriquez¹
¹ Monash Health

**Background:** Peritonitis continues to be the main cause of failure on peritoneal dialysis. Yearly all units look at patient technique to reduce the peritonitis rates. The number of peritonitis cases associated with catheter connection transmission, in particular streptococcus organisms, were increasing thereby required new method to be implemented as a quality improvement strategy.

**Aim:** A retrospective review was conducted at a metropolitan Melbourne Peritoneal Dialysis unit to evaluate the impact of the use of face masks in peritonitis originating from oral cavity pathogens. The review reported on new patients who incorporated the wearing of face masks at the initiation of their peritoneal dialysis training.

**Method:** All new patients were taught to use a face mask during peritoneal dialysis connections. A questionnaire was conducted to ask patients on the use of face masks. Peritonitis rates and the causative organisms were reported over a 6 month period.

**Results:** 25 new PD patients were trained to use face masks. No patients developed peritonitis associated with an oral cavity pathogen during the survey period. The results of the questionnaire on the patients who incorporated the use of face masks will be presented.

**Conclusion:** The introduction of the use of face masks has produced a positive outcome in reducing peritonitis rates. The new practice has become part of the standard training for all new peritoneal dialysis patients. There is currently no ISPD recommendation on the wearing face masks. Improving infection prevention and control measures is one of the key standards in NSQHS.
87. Successful treatment of a patient with advanced kidney disease and Hepatitis C

Leanne Brown

1 Wide Bay Health Service

**Context:** Chronic Hepatitis C (HCV) has been independently associated with the development of chronic kidney disease (CKD). A meta-analysis demonstrated that chronic HCV infection was associated with a 43% increase in the incidence of CKD. There is also a higher risk of progression to end stage kidney disease (ESKD) in people with chronic HCV infection. Hepatitis C infection has been associated with substantial morbidity and mortality. Direct-acting anti-viral agents (DAAs) have better efficacy and tolerance and are now the treatment of choice. Cure of HCV infection is achievable in CKD stages 4 - 5.

**Objectives:** The aim of this case study presentation is to describe the complexities of managing a patient with acute on chronic kidney injury caused by HCV.

**Key Messages:** Complexities of management of this patient included acute on chronic kidney injury, social and psychosocial issues. The patient also had co-morbidities such as morbid obesity, uncontrolled hypertension, acute pulmonary oedema and nephrotic range proteinuria. Social and psychosocial issues included no fixed address and poor health literacy which impacted adherence to treatment. Clinical management occurred within a regional setting where a patient of this complexity and active HCV are not routinely managed. An understanding of strategies to overcome health literacy barriers and also to engage the patient in self-management strategies were critical in ensuring successful treatment and management.

**Conclusion:** This case study demonstrates that with proactive nursing and medical management, HCV and accompanying acute on chronic kidney injury can be treated successfully and additionally avoid dialysis.
88. Ergonomic improvements to manual handling when servicing and repairing haemodialysis machines.

Richard Knight¹
Tony Sharpin¹

¹ Barwon Health

Background: Renal biomedical staff identified manual handling risks when servicing and repairing haemodialysis machines. This included repeated leaning and reaching whilst sat or kneeling to access the internals of the machine. Although no injuries had been reported, the potential for musculoskeletal injury certainly existed.

Aim: Reduce the potential for injury whilst servicing/repairing haemodialysis machines

Method: A review of existing manual handling equipment used at other hospitals/services as well as searching for existing ‘off the shelf’ lifting devices revealed nothing suitable. A local lifting designer/supplier was engaged to design a suitable device around the requirements of the renal biomedical staff.

Results: Collaboration between renal biomedical staff, health & safety staff and ‘Liftaide’ designers resulted in the development of the ‘Liftaide' Dialysis Machine Work Platform’. Since May 2017, this equipment has been used within our main satellite haemodialysis unit when servicing/repairing our fleet of Fresenius & Baxter haemodialysis machines and will be rolled out to our other units over the next 2 years. Feedback from renal biomedical staff has been excellent, with reports of much improved ergonomic posture. In October 2017, this project was nominated and reached the final within the ‘Manual Handling’ category of the Victorian WorkSafe awards.
90. Caring for haemodialysis patients with anorexia nervosa: Putting some of the clinical challenges into context

Lucy Spencer

1 Royal North Shore Hospital

**Background:** 10 - 15% of patients with anorexia nervosa (AN) progress to a chronic course of the illness. Significant physiological disturbances associated with the disease include a range of renal sequelae. A small proportion of patients with AN progress to chronic kidney disease stage 5 (CKD5) requiring dialysis.

**Aim:** There is little information available for clinicians caring for patients with CKD5 secondary to AN who transition to maintenance haemodialysis. This review will present one tertiary hospital’s experience in preparing patients for, and providing maintenance dialysis for several patients with AN.

**Results:** Features of AN include body dysmorphia, intense fear of gaining weight and rigorous restriction of energy intake. The unique clinical, behavioural and psychological effects of these features impact on the provision of renal replacement therapy for patients with AN. Longstanding behaviours typical of AN lead to significantly different patterns of interdialytic electrolyte changes and fluid gains from most dialysis patients. Underlying organ damage from AN confounds the situation further, potentially impacting on haemodynamic stability and the development of dialysis complications. Nursing staff have developed a cohesive approach, offering consistency in managing fluid and electrolyte aberrations and in dealing with patient behaviour that affects these clinical parameters.

**Conclusion:** Despite being relatively young, a patient with AN on renal replacement therapy requires closer observation and more careful monitoring than someone of a similar age without this underlying illness. Caring for a patient with atypical fluid and electrolyte patterns poses ongoing clinical challenges for dialysis staff.
91. An initiative: Use of renal supportive care symptom measurement tools to recognise the burden that haemodialysis patients experience.

Leanne O'Grady

1 Renal Service Manning Hospital Taree

**Context:** Symptom burden in advanced chronic kidney disease and the haemodialysis population is often under diagnosed and under managed. Regular review of symptoms, psychological and social concerns should be built into every day care with management plans actioned and regularly reviewed.

**Objectives:** To determine the burden that our in-centre and satellite haemodialysis patients encounter by use of assessment tools and care plans. To gain buy-in from patients and staff in this initiative. To use a holistic approach with view of management of burden. To review the outcomes associated with the process and intervention and to share this information with our patients and renal colleagues.

**Key massages:** Inclusion, communication, education, follow through & a holistic patient centred ethic is required for this initiative.

**Conclusion:** The initiative is currently at Stage 1: Collation of assessment tools, provision of information and communication with patients and staff about processes, attending baseline burden measurement, preparation of care plans and review of process and outcomes. Stage 2: Collation of process and outcome results. Stage 3: Sharing outcomes of the initiative with our patients and colleagues.
93. Haemodialysis access for needle phobic client: A case report

Aphrodite Stathis¹
Debbie Knagge¹

¹ RNSH

Context: An arteriovenous fistula is the preferred access for patients undertaking haemodialysis although not all patients are suitable to receive this access type. The long term uses of Central Venous Catheter (CVC) comes with inherent risks, including infection and are associated with high rates of morbidity and mortality and increased health care costs for these patients. How should we best care for a young gentleman with severe autism and needle phobia?

Objectives: To report the unusual case of managing this young man’s haemodialysis treatment with multiple CVC’s and the solution that was created. Our approach was different – mostly due to his young age and determination of his mother to have her son receive the best care possible under the circumstances. The journey this family travel and the positive outcome are described.

Key messages: Strategies to overcome the challenges nursing and medical staff faced in caring for this patient will be discussed. When it seemed impossible to keep a CVC secured for dialysis, a safe and logical solution was found. The unique tunnelling of a CVC, where hands could not reach, must be shared and celebrated.

Conclusion: The aim of this case presentation is to highlight the unusual and unique placement of a tunnelled CVC in a young man with severe autism. This unique situation required a unique solution only achieved by thinking outside the box.
95. Innovations in peritoneal dialysis prescription management

Monique Borlace

1 Central Northern Adelaide Renal & Transplantation Service

**Context:** Peritoneal dialysis (PD) is a renal replacement therapy available for patients with end stage kidney disease (ESKD) requiring dialysis. PD represents 11% of the global and 29% of the Australian dialysis populations. PD prescription management has changed over the past decades becoming innovative and individualising PD prescriptions, in response to advances in the delivery of PD, solutions and technology resulting in cost-effective and patient centred therapy.

**Objectives:** To report on innovations of PD prescription management, with emphasis prescription management, individualised prescription, combination therapy PD with HD and subsequent monitoring / evaluation / adjustment of prescription management.

**Key messages:** PD prescription management has improved over the recent decades with its outcomes now in the form of patient survival, are equivalent to, and at times better than those for HD. PD prescription management has evolved and is innovative and adaptable to meet the individual needs of each patient. This is able through the technologic advances in PD delivery devices and solutions, the ability to deliver innovated dialysis, and the minimization of peritoneal membrane damage to improve both clinical and patient outcomes.

**Conclusion:** There has been significant improvements clinical outcomes in patients treated on PD, such that it is now PD is accepted as an equivalent therapy to HD and in some instances may offer advantages over HD. The innovations in PD prescription management has shown to improve infection complications rate, technique and patient survival and overall improving clinical and patient outcomes on PD.
96. Clinical Challenges of Home Dialysis

Monique Borlace¹

¹ Central Northern Adelaide Renal & Transplantation Service

Context: Home dialysis units are experiencing more a complex patient population opting for a home dialysis modality (peritoneal dialysis (PD) or home haemodialysis (home HD)). There is an increased prevalence of end stage kidney disease (ESKD) patient population with multiple comorbid risk factors and an ageing population. Resulting in home dialysis units experiencing clinical challenges with a home base / self care dialysis therapy.

Objective: To report on a home dialysis unit addressing these clinical challenges in order to increase their incident / prevalent home dialysis patient population.

Key messages: Home dialysis is a viable alternative to facility-based HD (in-centre / hospital or satellite) that is effective and patient-centred, however only 28% of the dialysis patient population in Australia are on a home dialysis modality. It is predicted that the ESKD incident patient population is increasing by 8% annually globally, so how can we improve access and increase the home dialysis patient population. Emphasizing the need to review home dialysis modalities and the specific clinical challenges faced by this patient population and develop strategies to address these challenges, disparities and optimise the utilization of home dialysis.

Conclusion: Home dialysis offers more flexibility, with longer hours, more frequent treatments than facility-based HD, studies report home dialysis can improved patient outcomes and reduce burden on facility-based HD. So in addressing the clinical challenges impacting home dialysis units is likely to ensure home dialysis is more accessible, sustainable and attractive to our patient population, increasing the uptake of home dialysis modalities.
98. The dialysis nurse: The shining light in preserving the dialysis patient’s lifeline.

Tuija Kostiainen¹

¹ NSW Health

Context: The vascular access is essentially the lifeline of the haemodialysis patient but also remains their Achilles’ heel; being a major cause of morbidity and mortality. Stenosis is the main complication compromising both arteriovenous fistulae and grafts and maintaining the patency of this lifeline is pivotal to ensuring adequacy of treatment. Methods for detecting access stenosis include technical surveillance to measure access flow; monitoring of cannulation and haemodialysis anomalies; and physical examination of the access: inspection, palpation and auscultation.

Controversy regarding optimal methods for detecting stenosis remains in the limelight and the role of the dialysis nurse appears to have been relegated into the shadows, with literature illustrating that many dialysis units have abandoned physical examination of the access in favour of the very technology at the centre of the controversy and that staff lacked either the motivation or the proficiency to perform the skill.

Objectives: Provide education and resources for dialysis nurses to enable them to recognise and embrace their crucial role in detecting access dysfunction.

Key messages: The basic skill of physical examination can be readily taught and is a validated and cost effective method to detect stenosis. ‘Look, feel and listen’ at every session - the dialysis nurses’ mantra

Conclusion: The provision of education and resources for dialysis nurses enabled them to recognise and embrace their crucial role in preserving the dialysis patient’s lifeline and reinvigorated the ‘look, feel & listen’ culture into the day to day practice of the dialysis unit.
99. Continuous quality improvement in peritoneal dialysis: Shining a light on practice

Bettina Douglas

1 Princess Alexandra Hospital

Context: Peritoneal dialysis (PD) is a well-established treatment option for end stage kidney disease. These days about 20% of Australian dialysis patients are on PD. Benchmarking of registry data shows that outcomes in this country are not as good as those achieved internationally. Within Australia there is considerable variation in outcomes between treating centres. This suggests that local practice patterns contribute to the variation.

Our centre is reflecting on our patient outcomes which are disappointing for a large tertiary referral unit. To address this we are undertaking a number of initiatives using a continuous quality improvement (CQI) approach as recommended by the International Society for Peritoneal Dialysis (ISPD).

Objectives: To describe the philosophy behind CQI by looking at its application in settings other than healthcare; to describe the steps taken by our centre to fulfil the ISPD recommendation re CQI; to discuss outcomes to date and implementation challenges.

Key messages: We all aim to provide excellent patient care and want to achieve great patient outcomes. While there are multicentre collaborative initiatives underway in Australia to improve the rate of PD peritonitis, there are things we can do locally to improve practice.

Conclusion: CQI is a proven technique for improving safety in complex environments. We will monitor and report on the impact of CQI on our patient outcomes.
100. Improving Aboriginal patient journeys

Janet Kelly¹

¹ University of Adelaide

**Background:** Aboriginal people have both similar and different renal care needs to other Australians. They experience renal disease at higher rates and at younger ages, resulting in complex care needs, and patient journeys involving numerous health care professionals and services.

**Aim:** To better understand and respond to the experiences of patients, perspectives of staff, and barriers and enablers to quality care.

**Methods:** The Managing Two Worlds Together Project involved Aboriginal patients, their families and health professionals in urban, rural and remote areas. A set of patient journey mapping tools were co-developed with renal staff. Aboriginal patient journeys were mapped from multiple perspectives and compared to standards of care. Action plans were developed for future improvements.

**Results:** Complex journeys and near miss events were mapped, highlighting both gaps in care and responsive strategies. One journey involved an Aboriginal patient transferred from a regional location to a city hospital for a vascular infection, who was later discharged late on a Friday night in response to bed pressures, ending in a disconnected journey home. Another involved a dialysis patient from a remote area who wished to return home for their end of life care. These patient journeys were written into case studies and used for quality improvement. A clinical and cultural education framework was developed to assist renal educators and undergraduate programs to further utilise the case studies for reflective practice.

**Conclusion:** Renal nurses and managers found the mapping structure made sense of complexity and enabled them to create evidence for change.
101. Insight into paediatric practices

Julie Reynolds¹
Kirsty Nilsen¹

¹ Women’s and Children’s Hospital

The Women’s and Children’s hospital (WCH) at North Adelaide is the tertiary hospital for state wide & Northern Territory paediatric renal patients. This service offers acute haemodialysis, haemodialysis and haemodiafiltration, manual and automated peritoneal dialysis (APD) for end stage renal disease (ESRD) children, as well as plasma exchange when required for pre and post-transplant renal patients. Though a small unit with patient numbers, it is essential to keep skilled staff up to date in all things renal. By combining Medical Day Unit (MDU) and renal dialysis together, this has provided an avenue to keep staff employed across both areas and ensure availability of renal staff for acute and chronic renal services. But what are we doing differently in dialysis at the WCH? Are we managing to continue to be innovative and “light the path to success” with our practices? Our session will give an insight into the role of virtual reality goggles, the use of plastic cannulas, play therapy and the first paediatric paired kidney exchange at the WCH.
102. Clinical challenges in diabetes and dialysis/transplantation

Jessica Stranks¹

¹ Diabetes and Endocrine Services, Northern Adelaide Local Health Network

Diabetic nephropathy and its sequelae of chronic and end-stage renal impairment are some of the most important determinants of not only morbidity and mortality but also quality of life in patients with diabetes mellitus. Management of the patient with diabetes with end-stage renal impairment is challenging for both clinician and patient, significant barriers to optimal care include limitations in the use of newer non-insulin agents in these patients as well as the inherent difficulties with intermittent dialysis and blood glucose control and potential inaccuracies in our usual markers of glycaemic control. Examining the limited data available in the area of dialysis modalities and blood glucose monitoring highlights the potential expansion of additional monitoring strategies such as continuous glucose monitoring and flash glucose monitoring to help tailor management strategies in these high risk patients.

Furthermore, transition from renal replacement therapy in the form of dialysis to renal transplantation presents a new set of challenges and is often associated with a (usually temporary) further destabilisation in glycaemic control. Data regarding the use of newer non-insulin injectable hypoglycaemic agents such as GLP-1 agonists in the post-transplantation setting is sparse but critically needed given the data seen in recent cardiac safety trials and the obvious potential for significant benefit in these patients for whom vascular disease is a critically important cause of mortality.
103. Pregnancy in women after kidney transplantation

Shilpa Jesudason

1 Royal Adelaide Hospital

Parenthood is a central focus for women with chronic kidney disease, but can be a challenging clinical scenario and raises important fears and uncertainties about risks to their own and their baby’s health. Pregnancy in women with a functioning kidney transplant poses an excellent opportunity for achieving parenthood, but is associated with higher maternal–fetal morbidity and potential impact on maternal allograft health. In this session, the care of women with kidney transplantation is discussed, including pre-pregnancy planning, antenatal care and impact of pregnancy on maternal and fetal outcomes. The focus will be on practical aspects of management, and how to effectively counsel women with kidney disease who may be contemplating pregnancy after transplant.
104. Kidney Health Australia and collaboration in nephrology

Shilpa Jesudason¹

¹ Royal Adelaide Hospital

KHA is a not-for-profit organisation dedicated to helping people with kidney disease, with a view to improving their health outcomes and quality of life, and that of their families and carers. KHA is a national, peak organisation representing consumers, and bringing the consumer voice to education, clinical care, policy and research.

KHA celebrates it’s 50th year this year, and is in a new phase of engagement, community building and collaboration across all areas of nephrology. In this session, the current efforts of KHA will be discussed with specific focus on partnerships with key professional bodies including the RSA.
105. What’s new in ANZDATA?

Stephen McDonald¹

¹ Royal Adelaide Hospital

The ANZDATA Registry has many roles — health service planning, clinical quality registry, research. Substantial changes have occurred in the ANZDATA Registry in all these domains over recent years. These include changes within ANZDATA in electronic data submission, data linkage projects, registry based trials, different ways of engagement with stakeholders, and new uses of existing data. There have also been substantial changes in how ANZDATA data is utilized, including in the areas of advocacy and safety and quality.

In this presentation critical developments and outcomes in ANZDATA will be outlined, together with opportunities for future engagement.
107. Renal calculi - What you eat or drink it matters!

Rajiv Juneja

1 Flinders Medical Centre

Renal calculi are a common health issue; it may affect all ages, sexes, and races. Renal calculus disease is a major cause of morbidity, especially in patients with recurrent stone formation. The medical management and dietary changes if applicable can significantly influence rate of recurrence. Medical treatment of renal calculi needs full understanding of metabolic work up and dietary history. In my presentation, I will talk about the pathophysiology and medical management of renal calculi with special emphasis on dietary factors and challenges in managing specific type of calculi during pregnancy.
108. Translating science into health: integration, flexibility and speed

Steve Wesselingh1

1 SAHMRI

Why does it take an average of 17 years for new knowledge to enter health care delivery, to be faster, we have to value translation and impact, we have to collaborate, and we have to provide fast and efficient platforms. Examination of the characteristics of high performance and high impact research organisations has helped to identify the key drivers of successful translation and impact. These include the characteristics of high impact researchers, organisational leadership and culture and the types of collaborations and networks needed. In addition, the provision of infrastructure and platforms that support translation is critical. If we better understand how to support high impact research we are more likely to develop an evolving and sustainable health system.
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