

1. Arteriovenous Fistulas Created Before Dialysis Start – Ongoing Evaluation of Preemptive AVF Outcomes in British Columbia

BC Renal Agency

Leader: Alexandra Romann

Team members: Mercedeh Kiaii, Monica Beaulieu

The interdisciplinary Provincial Vascular Access Services Team (PVAST) in British Columbia (BC), Canada, focuses on improving provincial vascular access (VA) outcomes. As part of this initiative, we are committed to monitoring arteriovenous fistula (AVF) outcomes over time at the provincial, health authority, and hospital levels by regularly reporting VA outcomes. Since 2008 we have been able to capture 100% of key vascular access data elements due to provincial funding for data entry, allowing accurate assessment of outcomes and permitting continuous quality improvement.

The objective of this analysis is to describe the outcomes of preemptive fistulas created in patients with Chronic Kidney Disease (CKD) in British Columbia between 2008-2010. Follow-up data was collected until September 30, 2011. This information is required for ongoing quality assurance and permits local, accurate, and unbiased outcome data, from which patients being advised to have a preemptive AV fistula created can be informed.

A retrospective analysis of prospectively collected data identified 794 first AVFs created between April 1, 2008 and March 31, 2010. Of these, 371 were created during the pre-dialysis period. Patients with a preemptive fistula created had been followed by a nephrologist for a median of 16 (5-39) months prior to creation. Median eGFR at AVF creation was 13 (11-16) mmol/L. Patients whose AVF was created during CKD were older (HD 67 yrs, CKD 70 yrs, $p=0.002$), more likely to be Caucasian (HD 56%, CKD 64%, $p=0.03$), less likely to require an angioplasty (HD 29%, CKD 20%, $p=0.004$), but displayed no gender or comorbidity differences when compared to the HD group.

In the CKD cohort ($n=371$), primary failure occurred in 81 (22%) of AVFs. Of the patients whose AVF experienced a primary failure, 70% were Caucasian, 60% diabetic, 58% with a cardiovascular comorbidity, and 59% were forearm AVFs.

260/371 (72%) patients started HD by the end of follow-up. 216/260 (83%) started HD with a fistula (first fistula in 204, subsequent fistula in 12). 40 patients started with a catheter and 4 patients started with a graft. 17 patients died prior to dialysis start (14 with a mature fistula, 3 with a failed fistula).

Of first AVFs that were created during CKD and then used for HD, 1, 2 and 3 year patency rates were 78, 64, and 64% for primary patency; 99, 96, and 94% for secondary patency; 97, 94, and 91% for functional patency; and 87, 80, and 80% for functional patency up to first intervention. Complete data capture allows accurate assessment of patency rates in different cohorts, and will help direct practice improvements.

In conclusion, we report the outcomes of pre-emptive fistula creation in British Columbia. In our cohort, a large percentage of patients (72%) started dialysis within the follow-up period and very few died before dialysis start, indicating appropriate selection of patients. As vascular access guidelines continue to promote fistula creation in the pre-dialysis period, ongoing evaluation of outcomes are required to ensure appropriate patient selection and outcomes.

2. The Power of Data – British Columbia’s Provincial Initiative of Regular Vascular Access Outcome Reporting Improves Arteriovenous Fistula Rates

BC Renal Agency

Leader: Alexandra Romann

Team members: Janet Williams, Mercedeh Kiaii, Monica Beaulieu

The interdisciplinary Provincial Vascular Access Services Team (PVAST) in British Columbia, supported by the BC Renal Agency, focuses on improving provincial vascular access (VA) outcomes. Phase 1 of the initiative focused on ensuring standardized guidelines, clinical pathways, education and targets (2005-2008). Building on this structure, phase 2 of the initiative (2009-present) involves regular reporting of VA outcomes, twice yearly, at the provincial, health authority, and hospital, and provider level. We hypothesized that regular reporting of VA outcomes in a real world environment would lead to improvement in AVF incidence rate over time.

Resources were required to ensure provincial engagement, development of metrics, and the accurate capture of data and data analysis. These resources included BC Renal Agency support for a part time project manager, physician champion, and statistical support for data analysis and report generation. Estimated total provincial costs were \$27,000 per annum. Data capture was possible through the use of PROMIS, an electronic provincial renal database with a customized vascular access module. The resources required to provide vascular access creation and maintenance (operating room and radiology) remain funded by the individual health authorities.

The reports disseminated to the province included information on patient demographics, vascular access incidence and prevalence, vascular access performance (primary failure, primary and secondary patency, complications), and wait times for vascular access. For patients that started with a hemodialysis catheter, a detailed “why catheter” report was generated which looked at the provider and patient or system factors that have previously been identified as barriers. These reports were available at the provincial, health authority, hospital, and provider level.

Through this initiative, the provincial AVF rate in all incident HD patients has improved from 15% in 2008/09 to 20% in 2011. For patients who were known to provincial nephrologists for at least 6 months in pre-dialysis care, peritoneal dialysis, or transplant prior to dialysis start, we also achieved an increase in the number of patients who started HD with an AVF from 23% in 2008/09 to 28% in 2011.

In conclusion, regular reporting of vascular access outcomes has led to an improvement in the AVF incidence rate in British Columbia despite no change in the resources available for creation and maintenance of AV fistulas. This suggests that the regular reporting of VA outcome data may be an important and cost effective strategy to improve VA outcomes.

3. Stress Disorder in Hemodialysis Patients after Experiencing a Fire Accident in a Medical Centre in Central Taiwan

Taichung Veterans General Hospital, Taiwan

Leader: Cheng-Hsu Chen

Team members: Sin-Ju Lin, Mei-Lin Yu, Chi-Hung Cheng, Ming-Ju Wu, Tong-Min Yu, Ya-Wen Chuang, Shih-Ting Huang, Shang-Feng Tsai, Ying-Chih Lo, Kuo-Hsiung Shu

On April 6, 2012, smoke was detected by a hemodialysis (HD) nurse under the floor of the dialysis centre in a medical centre in Central Taiwan. The urgent evacuation with clamp and cut procedure of 34 on-line HD patients was complete in 17 minutes by 6 staff. All staff, patients and their families were safe but suffered a scare during this incident. This study was to investigate the psychometric methods to track acute stress disorder (ASD) in HD patients and staffs in this episode. The Stanford Acute Stress Reaction Questionnaire (SASRQ) was used to assess ASD symptomatology within a month. 34 patients and staff participated.

The prevalence of ASD was 8 (23.5%) of the participants who had a greater than cut-off score 40 by SASRQ. Three patients had more than 3 dissociative symptoms (sense of numbing and detachment, decreased awareness of surroundings, derealization, depersonalization, and dissociative amnesia). Some of participants suffered from the symptoms of re-experiencing trauma (21; 61.8%), avoidance (10; 29.4%), marked anxiety or arousal (13, 38.2%), and impairment (3; 8.8%). The follow-up study of posttraumatic stress disorder (PTSD) after this episode is ongoing. In conclusion, ASD is prevalent following a stressful event, the previous study disclosed that ASD symptomatology can reliably predict PTSD up to 24 months later in burn, and, once established, PTSD usually persists. We hope the early recognition and psychological management of persons with ASD to improve their mental health and to prevent the development of PTSD.

4. Exceptional Distribution Kidney Transplant Process A LEAN Project

St. Paul's Hospital

Leader: Clare Bannon

Team members: Renal Transplant Program, BC Transplant

Health Canada Regulations mandate that all testing (e.g. transmissible diseases) be completed prior to organ donation. Outside of these conditions, organs may be released only under **exceptional distribution**, at the discretion of the physician and with informed consent of the recipient. These recipients are at increased risk of infectious disease transmission and need to be identified and monitored for 1 year post kidney transplant. Prior to the implementation of this new process, there was inconsistent communication from the donor procurement agency to the in-patient chart to the post transplant chart to the regional centre. The objective of this LEAN project was to create a standardized process to ensure identification and follow up of renal transplant recipients who have received and **exceptional distribution** kidney transplant.

5. Sustaining a Residential Care Peritoneal Dialysis Program

Three Links Care Centre

Leader: Gary Steeves

Team members: Rita Steeple, Faria Ali

Statistics (2006), show that the percentage of individuals over 65 years who are diagnosed with end-stage renal failure have been steadily rising since the late 1990's. Vancouver Coastal Health Authority recognized

the need for an ongoing continuum of care and medical support for these individuals who are receiving either peritoneal dialysis or hemodialysis.

In 2007, Vancouver Coastal Health Authority, through partnerships with St. Paul's Hospital, Vancouver General Hospital, Vancouver Community and Three Links Society, opened its first six bed Regional Peritoneal Dialysis Program in a residential care setting. Tremendous effort was placed in standardizing policies and procedures between two tertiary facilities, community and a long-term care facility. Energies were also placed in the development of a sustainable residential care peritoneal dialysis education program, through ongoing staff training and support. During the 2nd-3rd year of the program, a need for an adjunct respite program was identified which led to the development of the Peritoneal Dialysis Respite Program in residential care, to support individuals and families for short term periods.

This poster will provide an evaluation of the Residential Care Peritoneal Dialysis Program since its implementation in 2007. Focus will be on the program successes, challenges and future strategies for sustainability.

6. Contact Pharmacy Service Integration into the Penticton Renal Program - Pilot Project

Skaha Pharmacy/Penticton Integrated Health Centre

Leader: Greg Wheeler

Team members: Susi Wilkinson, Lia Briceno, Piera Calissi

Chronic kidney disease (CKD) patients are prescribed multiple medications which require frequent monitoring and dosage adjustment, increasing the risk of medication discrepancies and drug related problems (DRPs). Performance of medication reviews to maintain an up-to-date medication list can reduce adverse drug events. We conducted a pilot from November 9, 2011 to February 8, 2012 to enhance pharmacy services provided by Skaha Pharmacy (using the Pharmacare Medication Review Program) at the Penticton Integrated Health Centre (PIHC). The contract pharmacist performed medication reviews with 141 CKD patients over 18 clinic visits, identifying and resolving 692 discrepancies and 228 DRPs. The majority, 86% (141/165), of the medication reviews were eligible for full Pharmacare compensation. The PIHC team (nephrologists and nurses) agreed that the pharmacist-performed medication reviews provided more accurate medication reconciliation, and improved patient care by solving DRPs.

7. Clusterin-Dependent Autophagy Prevents Hypoxia-Induced Renal Tubular Epithelial Cell Death

Department of Urologic Science, University of British Columbia

Leader: Caigan Du

Team members: Hatem A. Alnasser, Qionong Guan, Christopher Y.C. Nguan

Acute kidney injury (AKI) is accounted for > 90% of the kidney problems in a nephrology clinic. Renal hypoxia is a common pathological factor for AKI. This study was designed to investigate the role of autophagy in clusterin-dependent kidney cell survival in response to hypoxia. Hypoxia in renal tubular epithelial cell (TEC) cultures was induced by exposure to 1%O₂ for 24 hours. Autophagy was determined by an increase in LC3-BII expression in Western Blot, and LC3-GFP aggregation in confocal microscopy. The results showed that autophagy was activated in human HKC-8 cells and murine TECs by hypoxia, and in the kidney with IRI. Further studies showed that the autophagy activation was associated with clusterin expression and resistance to cell

death. Inhibition of autophagy with BaAl also promoted hypoxia-mediated cell death. In conclusion, these data suggest that Clusterin-dependent autophagy may protect the kidney from hypoxia-mediated cell death.

8. Hidden Treasures of Home Hemodialysis: Dispelling Myths Educating Renal Staff about Home Hemodialysis

Fraser Health Home Hemodialysis

Leader: Janice Newell

Team members: Martin Duffy, Ruth Burns

The Home Hemodialysis team developed an interactive inservice project to educate renal staff in Fraser Health about our program. The objectives were to promote the benefits and increase patient enrollment to home hemodialysis. Between Feb 7, 2012 and April 17, 2012 ten inservices were held at the various renal program sites in Fraser Health educating 110 staff.

The interactive format included:

- A patient sharing personal experiences
- Scrolls with interactive questions and answers to dispel myths about home hemodialysis
- Utilization of props including a treasure chest filled with beads, candy and home hemodialysis pens

During the six months following initiation of the project there was a 69% increase in referrals compared to the six months prior to inservicing. Monthly referrals continue to increase suggesting that an interactive inservice format involving home hemodialysis patients is an effective way to engage staff and increase patient enrollment.

9. The Safety and Efficacy of a Vitamin D Deficiency Management Protocol in Pediatric Chronic Kidney Disease

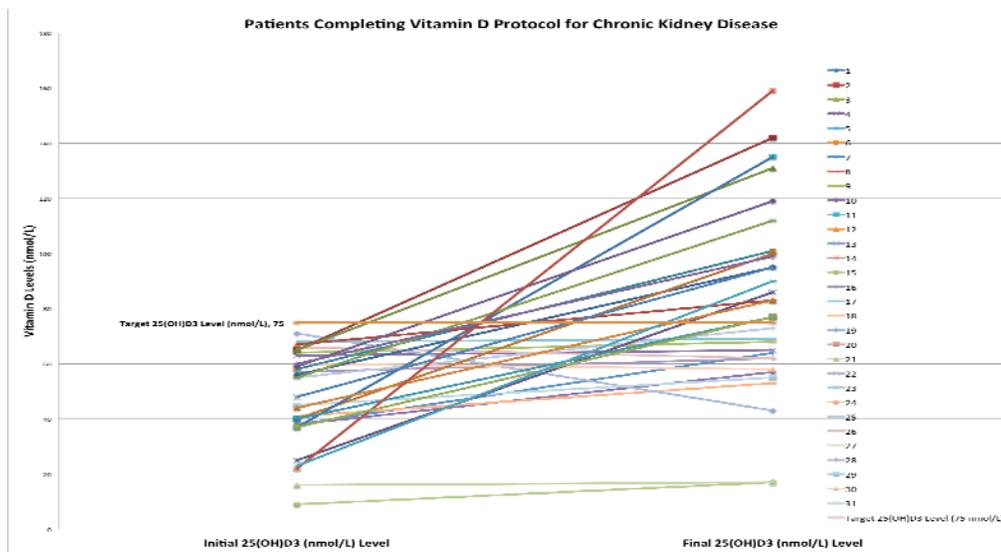
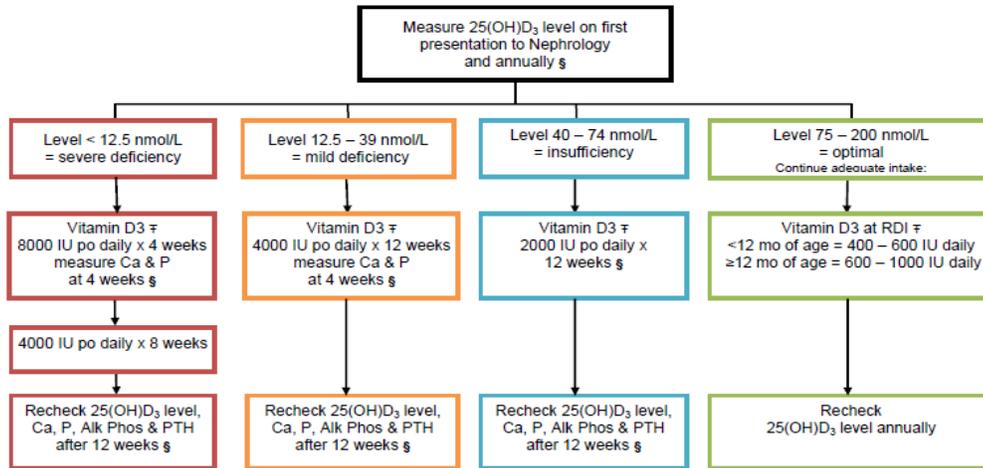
BC Children's Hospital

Leader: Kathleen Collin

Team members: Irfan Rajani, Janis M. Dionne

Vitamin D deficiency and insufficiency are common with 50-65% of Canadian children being 25(OH)-vitamin D insufficient. Children with chronic kidney disease (CKD) may also develop renal osteodystrophy and are at risk of growth failure. K/DOQI Pediatric Nutrition Guidelines recommend treatment of 25(OH)-vitamin D deficiency and therefore we developed a management protocol for use in our outpatient CKD clinic (See Figure 1). The goal of this quality assurance study was to evaluate the safety and efficacy of our protocol 1 year after implementation. Results: The prevalence of vitamin D insufficiency was 62% in our population. 60% of eligible patients completed the protocol based on a final Vitamin D level, and 80% based on a final calcium level. Only 33% of patients were vitamin D replete on intention to treat analysis and 55% by completion analysis (See Figure 2). Most patients who did not achieve adequate vitamin D were known to be non-adherent, had heavy proteinuria, or were prescribed a reduced dose. Hypercalcemia was not more common at the end point and no patient developed toxic vitamin D levels. Conclusions: The vitamin D protocol was safe but effective in only 55% of patients completing final vitamin D levels. Methods to improve adherence will be focused on and the analysis repeated.

Vitamin D Deficiency Management Algorithm



10. Travel Grants Facilitate Dietitian Networking Opportunities at a Regional Nephrology Meeting

BC Children's Hospital

Leader: Jennifer Krempien

Team members: Nonnie Polderman, Douglas Matsell

Opportunities for dietitians to network are limited creating a barrier to the development of supportive professional relationships. At the Western Society of Pediatric Nephrology meeting in Vancouver, allied health were invited to participate with 13 dietitians attending both the main program and a series of 4 nutrition working groups. In the planning phase, organizers identified lack of financial support to be the primary barrier for dietitian attendance. Thus, travel grants supporting travel and accommodation were offered to all allied health delegates including 10 dietitians. Survey evaluation of the meeting, suggested that attendees valued the nutrition working group format for the opportunities to collaborate, discuss current research and practice. As a result of one face-to-face working group on nephrotic syndrome, the dietitians have committed to publishing a collaborative consensus document on the nutritional management of nephrotic syndrome.

11. Development of Two Pediatric Intraperitoneal Antibiotic Dosing and Delivery Tools

BC Children's Hospital

Leader: Kathleen Collin

Team members: Jennifer Leechik, Colin White, Chanel Prestidge

Our purpose was to develop user-friendly antibiotic dosing tools to reduce the risk of medication error and ensure rapid and accurate administration of our empiric antibiotics.

During a redevelopment and standardization of current evidence based peritonitis guidelines, we developed two tools for physicians to follow: an antibiotic dosing worksheet and antibiotic mixing instructions.

Each antibiotic worksheet allows sequential dosing calculations with clearly designated and “letter labelled” outcomes at each step. Each step builds on those preceding it and feeds results into subsequent calculations. Worksheets have clear suggestions for making modifications for patient size, calculating loading vs. maintenance doses, change in dwell volume, choice of APD vs. CAPD and presence of residual urine output. Antibiotic mixing instructions provided to the physicians as part of their peritonitis treatment algorithm are identical to those provided to families in their Take-Home kits.

Failure to adhere to evidence-based guidelines and improper calculations can lead to sub-optimal or super therapeutic dose, neither of which are acceptable outcomes.

Delivery of peritonitis protocols can be effectively translated into dosing and mixing worksheets which minimize risk of drug errors even where drug doses require significant modification.

12. Home Sweet Home: A Take Home Peritonitis Kit

BC Children's Hospital

Leader: Jennifer Leechik

Team members: Kathleen Collin, Chanel Prestidge, Colin White

Distance and lack of local facilities often lead to delay in initiation of peritonitis therapy. A kit is developed to immediately initiate our empiric antibiotic protocol and standardize its delivery in the home and/or local facilities.

After reviewing our peritonitis episodes, organisms and sensitivities, we revised our Peritonitis Policies & Procedures based on current best evidence. Our team chose Cefazolin, Tobramycin & Vancomycin for the kits. Kits have expiry dates, lot numbers and are individually assembled by a PD nurse & pharmacist. Each kit contains a 72 hour supply of antibiotics with provisions for sampling, reconstituting & administering the antibiotics, and replacing the transfer set. The kit includes a professionally-designed booklet for parents or health care workers with step-by-step instructions for proper delivery of each antibiotic and replacement of the transfer set.

Peritonitis is a major cause of PD failure. Promptly delivered and appropriately dosed antibiotics are paramount for effective treatment and salvage of membrane lifespan. Delay of antibiotic treatment,

inefficient/insufficient dosing of antibiotics, lack of facilities and haphazard applications of protocols often lead to poor outcomes.

These kits allow best evidence based delivery of empiric antibiotics in a timely manner to our distant patients. Measuring the cost and effectiveness of these kits is planned.

13. Comparison of Gentamicin Ointment to Mupirocin Ointment for Prevention of Peritoneal Dialysis Catheter-Related Infections

Vancouver General Hospital

Leader: Karen Shalansky

Team members: Erica Greanya, Katherine Wu, Nadia Zalunardo, Suneet Singh

Antibiotic ointments with activity against *Staphylococcus aureus* are recommended to be applied to the peritoneal dialysis (PD) catheter exit site for prevention of catheter-related infection. In July 2007, all PD patients at our hospital were switched from mupirocin to gentamicin ointment. The purpose of this study is to compare the efficacy of gentamicin and mupirocin in the prevention of catheter-related PD infections.

An observational sequential cohort study was conducted to compare infectious outcomes with mupirocin and gentamicin catheter care protocols. Mupirocin patients were followed retrospectively from January 2004 to June 2006. Gentamicin patients were prospectively enrolled from July 2007 until December 2008. All patients were followed for 18 months following catheter insertion.

A total of 59 patients were included in the mupirocin arm and 37 patients in the gentamicin arm. Time to first infection (either catheter exit site (CES) or peritonitis) was similar between groups, with a probability of being infection-free at 12 months of 67% for patients in the mupirocin arm and 53% in the gentamicin arm ($p=0.34$). The rates of infection were 0.54 and 0.56 infections per patient-year for the mupirocin and gentamicin arms, respectively ($p=0.94$). Peritonitis rates were 0.41 per patient-year in the mupirocin group and 0.37 per patient-year in the gentamicin group ($p=0.84$). Rates of both gram-positive and gram-negative infections were similar in the two groups. The mupirocin arm experienced 5 *Pseudomonas aeruginosa* infections (4 CES, 1 peritonitis) compared to none in the gentamicin arm.

Gentamicin ointment has comparable effectiveness to mupirocin ointment for prevention of PD catheter-related infections.

14. Incorporating Supportive Care within Chronic Disease Management: The Renal End-of-Life Initiative at Providence Health Care

Providence Health Care

Leader: Beverly Jung

Team members: Wallace Robinson, Marianna Leung, Ronald Werb, Clifford Chan-Yan

The majority of Canadians will die from complications associated with a chronic illness such as kidney disease. The purpose of the Renal End-Of-Life (REOL) initiative is to develop a coordinated approach to end of life care for renal dialysis patients who face a 20-25% annual mortality rate.

Implementation of the REOL initiative has been articulated as the first priority in the program's strategic plan, indicating the combined commitment of administrative/physician leadership and front line staff. REOL consists of 4 foci: symptom management, advance care planning, bereavement support and palliative care training for the inpatient renal nurses.

This storyboard describes a successful journey in REOL care: a downward trend at one year in symptom measurement through routine use of the Edmonton Symptom Assessment System questionnaire followed by the proactive management of patients with high symptom burden; a more than 40% increase in documented advance care planning; a standardized approach to bereavement follow-up; and an increased comfort with palliative principles in renal nursing.

15. Longitudinal Evaluation of Edmonton Symptom Assessment System in Hemodialysis Patients

Providence Health Care

Leader: Beverly Jung

Team members: Jodie Ford, Marianna Leung, Fong Huynh, Tinnie Chung, Stan Marchuk, Mercedeh Kiaii, Ronald Werb, Clifford Chan-Yan, Monica Beaulieu

Dialysis patients have an extremely high symptom burden. Unfortunately, their physical and psychological symptoms are often under-recognized and under-appreciated. Beginning September 2010, the Edmonton Symptom Assessment System (ESAS) questionnaires have been administered quarterly to patients at St. Paul's Hospital Hemodialysis Unit. The purpose of this retrospective review is to describe the prevalence and severity of ESAS symptoms at baseline and 1 year after implementation.

A total of 187 patients completed ESAS at baseline and at 1 year. The mean scores after 1 year were statistically significant reduced for tiredness, depressed and drowsiness symptoms, -0.57 ± 3.19 , -0.47 ± 2.65 , -0.80 ± 2.79 , respectively. Fewer patients had severe symptoms for pain, tiredness, depressed, anxiety, drowsiness, wellbeing, and shortness of breath at 1 year although more than 10% continued to report severe pain, tiredness, itchiness or insomnia.

Practitioners caring for hemodialysis patients should continue to strive to target patients with high symptom burden and improve their quality of life.

16. Medication Reconciliation Standardization in a Regional Health Authority Renal Program

Interior Health

Leader: Mary Lou Lester

Team members: Piera Calissi, Pam Caron, Jennifer Miller, Sue Bannerman, Paula James

Medication reconciliation (MedRec) is a challenge to healthcare professionals in all settings. There are unique challenges to standardize MedRec in an ambulatory care setting renal program that is part of a health authority within a large, geographical area with minimal pharmacist support. We report our experience to standardize MedRec in hemodialysis (HD) patients in the Interior Health Authority Renal Program (IHARP). We designed a process where an HD nurse performed MedRec in HD patients. MedRec processes were standardized using focus groups and development of written procedures, best possible medication history tools, and education sessions. Medication discrepancies were tracked through the PROMIS database and were reduced from a mean/patient of 3.9 at baseline to 2.7 one year later. Nurses reported improved clarity of

processes and tools to perform MedRec. Patient engagement in MedRec was provided through provision of a letter and medication bags suitable to bring medications to HD for review.

17. Vancomycin Dosing in Hemodialysis Patients: Optimization of Serum Trough Concentrations

Interior Health

Leader: Piera Calissi

Team members: Peter Dessens, Pamela Caron

Vancomycin is a bacteriocidal glycopeptide antibiotic commonly used to treat methicillin-resistant *Staphylococcus aureus* (MRSA) infections, such as line-related sepsis, in hemodialysis (HD) patients. Recently, the Infectious Diseases Society of America and Society of Infectious Diseases Pharmacists, recognized that trough serum concentrations >10 mg/L are needed to avoid resistance and therapeutic failures. Furthermore, they recommended that for *S. aureus*, 15-20 mg/L trough serum concentrations be achieved to treat complicated infections.

Therefore, from July 2011-July 2012, we evaluated a vancomycin dosing strategy to achieve a 15-20 mg/L vancomycin trough concentration using an empiric loading and maintenance dose of 25 mg/kg and 10 mg/kg each HD treatment, respectively, plus a dosage adjustment algorithm. The vancomycin dosing strategy was effective to achieve a trough of 15-20 mg/L in the majority of patients. Patients with good residual renal function (e.g. with a creatinine clearance >10 mL/minute) typically required a vancomycin dose >10 mg/kg each HD treatment.

18. Clinical Utility of Serum Prealbumin Measures in Determining Nutritional Status in the Pediatric CKD Population: Should We Keep Measuring?

BC Children's Hospital

Leader: Rhonda Van Oerle

Team members: Janis M. Dionne

Prealbumin is a costly but useful marker of nutritional status in many populations due to its short half-life and small body pool. Low prealbumin indicates poor energy and protein status, but can also be lowered by inflammation and heavy proteinuria or raised with advanced CKD or corticosteroid use. At BC Children's, prealbumin has been routinely collected since 2010 to aid in the evaluation of nutritional status within our outpatient CKD population. The goal of this quality assurance study was to determine the utility of prealbumin in pediatric CKD. Results: 142 prealbumin levels in 59 patients were analyzed. 25 levels were abnormal with 11 being elevated and 14 low. 90% of the elevated levels were in patients with CKD stage IV. Nutritional information including anthropometrics, diet history and lab data rather than prealbumin was used for nutritional adjustments based on information gathered from dietitian clinic notes. In addition, prealbumin levels did not always correlate with clinical nutrition assessment (see Table 1). Prealbumin status was also compared to CRP levels and provided potentially useful clinical information in 12/47 (25%) assessments (see Table 2 shaded sections). Conclusion: Prealbumin is no longer routinely measured in BC Children's CKD population, but may be used in a targeted approach for patients within the context of CRP levels if other information gathered is inadequate for full nutrition assessment.

Table 1

		Nutrition status*	
		Poor	Adequate
Pre-albumin	Low	3 (true positive)	7 (false positive)
	Normal	20 (false negative)	76 (true negative)

*"poor" assessed as stated growth/weight concerns, prescribed increase in calorie or protein intake, from clinic note within one month after prealbumin measure

Table 2

		Inflammation, as measured by CRP	
		Normal	Elevated
Pre-albumin	Low	6 (malnutrition)	2 (inflamed +/- malnutrition)
	Normal	33 (normal)	6 (inflamed)

19. Health Care Providers' Approach, Style, and Strategies When Facilitating Advance Care Planning with Indigenous Populations in the Hemodialysis Unit

Abbotsford Regional Hospital

Leader: Victoria Lakusta Lamberton

The objective of this University of the Fraser Valley Graduate level research project was to explore the strategies and techniques utilized by health care providers when facilitating Advance Care Planning (ACP) with the Indigenous population in a hemodialysis unit. There is a consensus in the literature that ACP engagement is valuable and essential for those who have Chronic Kidney Disease however less attention has been given to consideration of culturally relevant approaches and ethno-cultural values and nuances when engaging in ACP facilitation.

This explorative research project collected survey participant (n=27) data that was received from one national renal organization, two provincial renal groups, and one renal health authority committee group in addition to interviews with strategic key informants (n=4). The results indicate healthcare providers are seeking knowledge regarding best practice whilst engaging in ACP with Indigenous people in the hemodialysis unit. Salient themes to improve upon the ACP facilitation process with Indigenous peoples include provisions of additional investment of health care provider time to enhance patient and staff relationships, a commitment to ensure adequate space is available for larger groups of family to attend, and respect, knowledge, and honouring of ethno-cultural beliefs and values that can differ from the hegemonic western ideologies.

The majority of disciplines that participated in this research were nurses (45%) and social workers (42%). The discipline that most strongly engaged in the ACP process were social workers (80%) followed by Nursing (54%).

20. Renal Nursing Educators Collaborate to Deliver Province-Wide Study Sessions for Specialty Certification

Northern Health

Leader: Wanda Dean

Team members: BC Renal Educators Group

CNeph(C) specialty certification represents excellence in renal nursing and commitment to continuing competence. The BC Renal Educators Group (BCREG) supported and encouraged registered nurses in obtaining this Canadian Nurses Association designation by delivering a provincial web-based study group in 2012.

The purpose of this poster presentation is to describe the collaboration required to offer study sessions and the challenges faced; the success rate of British Columbia Nurses in obtaining their certifications; and the results of two surveys evaluating the experiences of both the study group participants and the presenters.