

CANNT JOURNAL JOURNAL ACITN

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IN THIS ISSUE

Recurrent White-Coloured Platelet and Fibrin Aggregates (White Clot Syndrome) in the Venous Tubing During Conventional Hemodialysis: A Case Report

CONTINUING EDUCATION SERIES
Caring Beyond the Dialysis Chair: Social Work Perspectives on Providing Indigenous Kidney Care

Profiling...
2025 CANNT Award Recipients

CANNT 2025 – Leading the Future of Kidney Care: Inclusive. Sustainable. Accessible.
Oral and Poster Abstracts



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l'Association canadienne des infirmières et infirmiers et des technologues de néphrologie

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CONTENTS

- 16** **Recurrent White-Coloured Platelet and Fibrin Aggregates (White Clot Syndrome) in the Venous Tubing During Conventional Hemodialysis: A Case Report**
By Ivan Escudero, Rosa M. Marticorena, Leszek Szczerba, Sangil Patel, and Bajinder Reen
- 21** **CONTINUING EDUCATION SERIES**
Caring Beyond the Dialysis Chair: Social Work Perspectives on Providing Indigenous Kidney Care
By Sally Gabra, Laura Cogollo, and Carla Sweetland
- 28** **PROFILING...**
2025 CANNT Award Recipients
- 30** **CANNT 2025 – Leading the Future of Kidney Care: Inclusive. Sustainable. Accessible. Oral and Poster Abstracts**

IN EACH ISSUE:

- 4** Letter from the Editors
- 6** Lettre de la rédaction
- 8** President's Message
- 10** Message de la présidente
- 12** CANNT in Action
- 14** L'ACITN en action
- 29** Notice Board
- 43** **CANNT Journal** Manuscript Submission Guidelines
- 46** Lignes directrices pour la soumission des manuscrits au **Journal ACITN**



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Letter from the Editors

In our year-ending issue, we start with thanking the collective village who have contributed to publication of quality articles in the *CANNT Journal*. We may be a small journal, but we are the connective tissue linking nephrology nursing and technological practice, and scholarship. We are grateful to the authors and continuing education contributors for entrusting us with their novel articles. The reviewers are vital to vetting the quality of these articles—we are indebted to you for your time and dedication. We are beholden to Pappin Communications over the years for supporting the *CANNT Journal* in the dissemination of the authors' work. This is bittersweet on our part since Pappin Communications will pave the way for Meadowlight Media as the new publisher for the journal as of the new year. We thank Heather Coughlin (owner of Pappin Communications) for her service to the *CANNT Journal* and patience with the editorial team, and welcome Sherri Keller from Meadowlight Media into the fold. Sherri is no stranger to the journal as she has been instrumental in the layout and formatting of the journal contents. We are grateful for a seamless transition in ownership of the publishing companies. We are similarly appreciative of our partnership with Lemieux Bédard in the French translation of the Letter from the Editors, President's Message, and Board in Action segments of the journal. All of the preceding would not be possible without the guidance and support of the Events Management Plus staff who helm the CANNT National Office in the background through calm and not-so-calm waters. Megan Howes and her team's collective efficiency allow the CANNT Board of Directors to focus singularly on serving the needs of the CANNT membership.

In this issue, we present an article titled "Recurrent White-Coloured Platelet and Fibrin Aggregates (White Clot Syndrome) in the Venous Tubing During Conventional Hemodialysis: A Case Report" by Escudero et al. This is a very interesting descriptive study about recurrent thrombi formation localized to the venous tubing that occurred over

a period of two years for which kidney transplantation offered the only viable alternative for the patient's survival. This offering highlights the utility of case reports in exploring and then disseminating knowledge about a singular phenomenon encountered in practice. Of course, manuscript writing for the *CANNT Journal* takes different forms including original qualitative/quantitative research papers, literature reviews, and innovative quality improvement reports. We encourage budding authors to consider using the case report format for their maiden submission to the *CANNT Journal*.

It is with pleasure that we welcome Gabra et al. as they share their insights in the article titled "Caring Beyond the Chair: Social Work Perspectives on Providing Indigenous Kidney Care." In this heartfelt piece, we come to fully appreciate how renal social workers mitigate the challenges faced by the Indigenous population living with kidney failure such as lack of accessibility to medical resources, the need for medical relocation with its implications for loss of community, and transportation issues, to name a few. Last, accompanying these articles are the abstracts for the oral and poster presentations at the 2025 CANNT Conference in Victoria, BC, which were very well received.

As part of our accomplishments to date, we are very pleased to share that we have reconvened the *CANNT Journal* Editorial Board, which was first formed at the 2000 CANNT National Conference in Ottawa under the co-editorship of Gillian Brunier and Colleen Turpin. We are pleased to welcome the following individuals to the new *CANNT Journal* Editorial Board:

- Lori Harwood, PhD, NP – London Health Sciences Centre, London, ON
- Christina Doré, PhD, RN – McGill University, Montreal, QC
- Jarrin, Penny, PhD, RN – London Health Sciences Centre, London, ON
- Shyalini, Jeevakaran, MN, RN – Unity Health, St. Michael's Hospital, Toronto, ON
- Sherri Kensall, MSN, CNS – Fraser Health Authority, New Westminster, BC

We look forward to working with the new editorial board as we recalibrate the strategic objectives of and thereby further enhance the overall quality of the *CANNT Journal*.

We are happy to report the *CANNT Journal* is now a fully open access journal, which means all past journal issues published since 2008—the year the journal transitioned to digital publication—have now been uploaded online at: <https://cannt-acitn.ca/general/custom.asp?page=CANNT-Journal&VID=12041980#PastIssues>

We continue to work on obtaining a DOI (unique digital object identifier) that will provide each article a stable and permanent web address for easy location and retrieval. This would allow authors and readers to locate articles with ease through a direct link. We will share our progress and the logistics involved in obtaining this important link in early 2026.

It has been a busy but rewarding year at the *CANNT Journal*. We are very excited at what 2026 will bring to advance nephrology nursing and

technological writing. We thank you, the readers, for your continued support of the *CANNT Journal*. We shall meet again in the first quarter of 2026. In the interim, we wish you and those close to you a wonderful holiday season and a peaceful start to 2026.

Sincerely from your *CANNT Journal* editors,



Jovina Bachynski
PhD, NP Adult, CNeph(C)
Editor-in-Chief,
CANNT Journal



Rosa M. Marticorena
CNS, CNeph(C),
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Lettre de la rédaction

Dans notre numéro de fin d'année, nous remercions d'abord tous les membres du collectif qui ont contribué à la publication d'articles de qualité dans la *Revue de l'ACITN*. Notre revue est peut-être modeste, mais elle représente le fil conducteur qui relie les soins infirmiers en néphrologie, les technologies et le savoir. Nous sommes reconnaissantes aux auteurs et aux collaborateurs de la formation continue qui nous ont confié leurs articles inédits. Les réviseurs sont essentiels pour assurer la qualité de ces articles — nous vous sommes redevables de votre temps et de votre dévouement. Nous saluons également, non sans une pointe de nostalgie, Pappin Communications pour le soutien apporté au fil des ans à la *Revue de l'ACITN* dans la diffusion du travail des auteurs. Meadowlight Media prendra la relève de Pappin Communications comme éditeur de la revue dès la nouvelle année. Nous remercions Heather Coughlin (propriétaire de Pappin Communications) pour ses services à la *Revue de l'ACITN* et la patience dont elle a fait preuve avec l'équipe de rédaction, et souhaitons la bienvenue à Sherri Keller de Meadowlight Media. Sherri n'est pas une inconnue puisqu'elle a contribué à la mise en page de la revue. Nous sommes heureuses que ce transfert de propriété se déroule harmonieusement. De la même façon, nous saluons notre partenariat avec Lemieux Bédard pour la traduction française des segments de la revue comme la lettre de la rédaction, le message de la présidente et l'article, l'ACITN en action. Tout ce qui précède n'aurait pas été possible sans les conseils et le soutien du personnel d'Events Management Plus qui tient le gouvernail du bureau national de l'ACITN dans des eaux parfois turbulentes. L'efficacité de Megan Howes et de son équipe permet au conseil d'administration de l'ACITN de se concentrer exclusivement sur la réponse aux besoins des membres de l'ACITN.

Dans le présent numéro, vous trouverez un article intitulé « *Recurrent white-coloured platelet and fibrin aggregates (white clot syndrome) in the venous*

tubing during conventional hemodialysis: A case report » (Agrégats de plaquettes et de fibrine de couleur blanche récurrents [syndrome du caillot blanc] dans la tubulure veineuse pendant l'hémodialyse conventionnelle : un rapport de cas » par Escudero *et al.* Il s'agit d'une étude descriptive très intéressante sur la formation récurrente de thrombus localisés dans la tubulure veineuse qui s'est produite sur une période de deux ans, pour laquelle la transplantation rénale constituait la seule solution de rechange viable pour la survie du patient. Cet article met en évidence l'utilité des études de cas pour diffuser les connaissances sur un phénomène singulier rencontré dans la pratique. Bien sûr, la rédaction de manuscrits pour la *Revue de l'ACITN* prend différentes formes, depuis les documents originaux de recherche qualitative/quantitative jusqu'aux revues de littérature et aux rapports innovateurs d'amélioration de la qualité. Nous encourageons les auteurs débutants à utiliser le modèle de rapport de cas pour présenter leur première soumission à la *Revue de l'ACITN*.

C'est avec plaisir que nous accueillons Gabra et ses collaborateurs qui partagent leurs idées dans l'article intitulé « *Caring Beyond the chair : Social Work Perspectives on Providing Indigenous Kidney Care.* » Cet article poignant nous aide à mieux comprendre comment les travailleurs sociaux en néphrologie composent avec les problèmes auxquels est confrontée la population autochtone vivant avec une insuffisance rénale, comme le manque d'accessibilité aux ressources médicales, la nécessité de déménager pour des raisons médicales et ses conséquences, notamment la perte de soutien social, ainsi que les problèmes de transport, pour n'en nommer que quelques-uns. Ces articles sont accompagnés des résumés des présentations orales et par affiches du congrès de l'ACITN 2025 à Victoria, C.-B., qui ont été très bien reçues.

Dans le cadre de nos réalisations à ce jour, nous sommes très heureuses de vous annoncer que nous avons réuni

à nouveau le comité de rédaction de la *Revue de l'ACITN*, qui a été initialement formé lors du congrès national de l'ACITN de 2000 à Ottawa sous la codirection de Gillian Brunier et de Colleen Turpin. Nous sommes heureuses d'accueillir les personnes suivantes au sein du nouveau comité de rédaction de la *Revue de l'ACITN* :

- Lori Harwood, Ph. D., IP – London Health Sciences Centre, London (Ontario)
- Christina Doré, Ph. D., inf. – Université McGill, Montréal (Québec)
- Jarrin, Penny, Ph. D., inf. – London Health Sciences Centre, London (Ontario)
- Shyalini, Jeevakaran, M.N., inf. – Unity Health, St. Michael's Hospital, Toronto (Ontario)
- Sherri Kensall, MSN, ICS – Fraser Health Authority, New Westminster, C.-B.

Nous sommes impatientes de travailler avec le nouveau comité de rédaction alors que nous réajustons les objectifs stratégiques de la *Revue de l'ACITN* pour améliorer la qualité globale de la *Revue*.

Nous sommes heureuses de vous annoncer que la *Revue de l'ACITN* est désormais une revue en libre accès, ce qui signifie que tous les numéros des revues publiés depuis 2008, année de la transition vers la publication numérique, ont été téléchargés en ligne à l'adresse suivante : <https://cannt-acitn.ca/general/custom.asp?page=CANNT-Journal&VID=12041980#PastIssues>

Nous continuons à travailler sur l'obtention d'un DOI (identifiant unique d'objet numérique), qui fournira à chaque article une adresse Web stable et permanente pour faciliter leur localisation et leur récupération. Les auteurs et les lecteurs pourraient ainsi avoir un lien direct vers les articles. Nous vous tiendrons au courant des derniers développements et de la logistique nécessaire pour obtenir ce lien important au début de 2026.

Ce fut une année chargée, mais enrichissante pour la *Revue de l'ACITN*. Nul doute que l'année 2026 apportera des avancées dans les soins infirmiers en néphrologie et la rédaction technologique. Merci à vous, chers lecteurs,

pour votre soutien continu à la *Revue de l'ACITN*. Rendez-vous au premier trimestre de 2026. Dans l'intervalle, nous vous souhaitons, à vous et à vos proches, un merveilleux temps des fêtes et une nouvelle année paisible.

Cordialement, vos rédactrices en chef de la *Revue de l'ACITN*,



Jovina Bachynski
Ph. D., IP (adulte),
CNeph(C)
Rédactrice en chef, *Revue de l'ACITN*



Rosa M. Marticorena
ICS, CNeph(C), D.E.S.
Épidémiologie, Ph. D.
Rédactrice associée,
Revue de l'ACITN

President's Message

Welcome to the year-end edition of the *CANNT Journal*. As 2025 draws to a close, I find myself reflecting on an incredible year of growth, connection, and change. At the CANNT conference in beautiful Victoria, BC, I had the honour of stepping into the role of CANNT President. It is a privilege to serve this vibrant community of nephrology professionals, and I am grateful to be working alongside a dedicated and passionate CANNT Board of Directors. I would like to acknowledge these amazing individuals from the 2025–2026 CANNT Board of Directors who help support my role as CANNT President:

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Recipient Transplant Coordinator, Multi-Organ Transplant Program, Nova Scotia Health Authority

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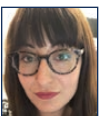
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Rosa Marticorena, DClInEpi, PhD, CNS, CNeph(C)
Manager, Clinical Research Program, William Osler Health System, The Osler Research Institute for Health Innovation

I would also like to take a moment to recognize our Past President, Alicia Moonesar. Alicia has been a committed volunteer on the board for six years, serving as our fearless leader for the past two. Her advocacy, professionalism, and unwavering dedication have left a lasting impact on our association. Thank you, Alicia, for your leadership and inspiration. I would also like to thank Lisa Robertson, Vice-President for the Ontario region, for her term. We thank her for her many contributions to the CANNT Board of Directors, including her work on the “Kidney Organ Trafficking Patient Pamphlet” that is available on the CANNT website.

Let me share a little about my journey in kidney care. I have worked in nephrology for 18 years, beginning in the hemodialysis unit. When my children were young, I transitioned to the Kidney Care Clinic and later discovered my true passion as the Regional Dialysis Access Coordinator. Currently, I serve as the program lead for the hemodialysis

unit, but I will be returning to my role as the access coordinator in the new year. I live in Prince George, BC—in the heart of the province—with my husband and two sons.

At this juncture, I would like to address CANNT's mission and vision that inform our service. Our current mission is to **provide leadership and promote the best nephrology care and practice through education, research, and communication.**

Our vision is **CANNT as the key-stone of excellence in nephrology nursing and technological care in Canada.** CANNT is positioned to assist the nephrology community in Canada to work together to provide excellence in care for all patients living with kidney disease. As a conduit for educational and networking opportunities, CANNT is in position to search out new partnerships in the renal community and promote excellence in the field.

The vision of CANNT will be realized through the effective use of the following goals:

- 1. COMMUNICATION:** To ensure clear, timely, effective communication of CANNT activities/initiatives amongst members and the nephrology community at large
- 2. MEMBERSHIP:** To have nephrology nurses and technologists as active members of CANNT
- 3. EDUCATION:** To promote best practice through the provision of educational opportunities
- 4. PROFESSIONAL PRACTICE:** To define best practice for quality patient care through the ongoing development and promotion of national standards
- 5. RESEARCH:** To promote and encourage inquiry and evidence-based practice
- 6. PARTNERSHIP:** To maintain and develop local, regional, national, and international partnerships that inform, support, and educate the membership
- 7. OPERATIONS:** To maintain the viability of the Association
- 8. ADVOCACY:** To advance the interests of nephrology professionals

To ensure our association remains relevant and responsive to the evolving landscape of healthcare, we will continue to review our goals to ensure we remain aligned with the needs of our association and our members. Looking ahead to 2026, we will be taking active steps to support and strengthen these goals. Members can look forward to a membership-needs assessment survey, which will help us better understand priorities and continue delivering meaningful value. During my term, I would love to hear from you—your ideas will help better inform how we serve you. We also plan to host at least five webinars, review and update our Standards of Practice, and continue expanding our Special Interest Groups (SIGs) through enhanced functionality on our website platform.

We had a successful conference this year in Victoria, BC, and were pleased to collaborate once again with the Canadian Association of Nephrology Social Workers (CANSW). The theme, *Leading the Future of Kidney Care: Inclusive. Sustainable. Accessible.*, resonated deeply with our shared goals. However, attendance was lower than expected due to limited funding for education from many health authorities across the country. This challenge reminds us of the importance of finding creative ways to stay informed and connected. Education is vital, and attending the national conference is one of the best ways to network, share knowledge, and improve patient outcomes through multidisciplinary collaboration.

I encourage you to consider submitting an abstract for the 2026 CANNT

Conference that will be hosted on October 22–24, 2026, in St. John's, Newfoundland. Whether you are working on a new initiative, navigating a challenge, or have a story to share, we want to hear from you. Abstract submissions will open early January—take this opportunity to start preparing your ideas!

Last, I would like to acknowledge the contributions of all CANNT/ACITN members. Thank you for all you do to provide high-quality care to patients living with kidney disease and your ongoing support of CANNT. You are AWESOME!

Kind regards,



**Deidra Goodacre, BCN,
RN, CNeph(C)**
President, CANNT-ACITN

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FRIENDS



Message de la présidente

Nous sommes fiers de vous présenter le dernier numéro de l'année de la *Revue de l'ACITN*. L'année 2025 a été une année incroyable de croissance, de connexion et de changement. Lors du congrès de l'ACITN, dans la belle ville de Victoria en Colombie-Britannique, j'ai eu l'honneur de devenir présidente de l'ACITN. C'est un privilège de servir cette communauté dynamique de professionnels en néphrologie et de travailler aux côtés d'un conseil d'administration dévoué et passionné. Je tiens à saluer ces personnes extraordinaires du conseil d'administration de l'ACITN 2025–2026 qui m'ont aidée dans mes fonctions à titre de présidente de l'ACITN :

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Rachael Blair, M.Ed., B.Sc. inf., inf., CNeph(C)
Coordonnatrice des receveurs de greffe, Programme de multitransplantation d'organes, Régie de la santé de la Nouvelle-Écosse

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Chef de l'expérience qualité pour les soins en néphrologie, Programmes de soins oncologiques et de génétique et Services environnementaux, Orillia Soldiers' Memorial Hospital

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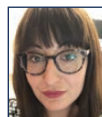
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Rédactrice en chef, *Revue de l'ACITN*



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Directrice, Programme de recherche clinique, William Osler Health System, Institut de recherche Osler pour l'innovation en santé

Je voudrais profiter de l'occasion pour saluer la présidente sortante, Alicia Moonesar. Alicia est une bénévole engagée qui siège au conseil d'administration depuis six ans. Pendant les deux dernières années, elle a vaillamment dirigé notre association. Elle a su défendre nos intérêts avec un professionnalisme et un dévouement inébranlable. Nul doute que son passage à la présidence laissera une empreinte durable. Merci, Alicia, pour votre leadership et votre inspiration. J'aimerais également remercier Lisa Robertson, vice-présidente pour la région de l'Ontario, qui a accompli un travail remarquable au sein du conseil d'administration de l'ACITN,

notamment par sa contribution à une brochure destinée aux patients « Kidney organ trafficking » (Quand les reins font l'objet d'un trafic), accessible en anglais sur le site Web de l'ACITN.

Quelques mots sur mon parcours en soins de néphrologie. Je travaille en néphrologie depuis 18 ans, depuis mes débuts à l'unité d'hémodialyse. Quand mes enfants étaient jeunes, je suis passée à la clinique de soins en néphrologie où j'ai occupé plus tard le poste de coordonnatrice régionale de l'accès à la dialyse, un poste qui m'est très cher. Actuellement, je suis responsable du programme pour l'unité d'hémodialyse, mais je reprendrai mes fonctions comme coordonnatrice de l'accès en 2026. Je vis à Prince George en Colombie-Britannique, au cœur de la province, avec mon mari et mes deux fils.

À ce stade, j'aimerais aborder la mission et la vision de l'ACITN, un phare dans notre secteur d'activité. Notre mission actuelle est d'assurer un leadership et de promouvoir les meilleurs soins et pratiques en néphrologie par le biais de l'éducation, de la recherche et de la communication.

Notre vision est que l'ACITN devienne la pierre angulaire de l'excellence en soins infirmiers et technologues en néphrologie au Canada. L'ACITN est bien placée pour aider la communauté de néphrologie au Canada à s'unir pour offrir des soins d'excellence à tous les patients atteints d'une maladie rénale. En canalisant les possibilités de formation et de réseautage, l'ACITN est en mesure de rechercher de nouveaux partenariats dans la communauté rénale et de promouvoir l'excellence dans le domaine.

Pour réaliser sa vision, l'ACITN mise sur les objectifs suivants :

1. **COMMUNICATION** : Assurer une communication claire, actuelle et efficace des activités/initiatives de l'ACITN auprès des membres et de la communauté de néphrologie dans son ensemble.
2. **ADHÉSION** : Attirer des infirmières et des technologues en néphrologie comme membres actifs de l'ACITN

3. **ÉDUCATION** : Promouvoir les meilleures pratiques en proposant des formations
4. **PRATIQUE PROFESSIONNELLE** : Définir les meilleures pratiques pour assurer des soins de qualité aux patients par l'élaboration et la promotion continues de normes nationales
5. **RECHERCHE** : Promouvoir et encourager la recherche et les pratiques fondées sur des données probantes
6. **PARTENARIAT** : Maintenir et développer des partenariats à l'échelle locale, régionale, nationale et internationale afin d'informer, de soutenir et de former les membres
7. **OPÉRATIONS** : Maintenir la viabilité de l'Association
8. **REPRÉSENTATIVITÉ** : Promouvoir les intérêts des professionnels de la néphrologie.

Pour que notre association demeure pertinente et réactive dans un secteur en pleine mutation, nous continuerons de revoir nos objectifs pour nous assurer d'être en phase avec les besoins de nos membres. En 2026, nous prendrons des mesures actives pour appuyer et renforcer ces objectifs. Un sondage réalisé auprès des

membres nous permettra d'évaluer les besoins, de mieux comprendre les priorités et de continuer d'offrir une valeur significative. Au cours de mon mandat, n'hésitez pas à nous faire part de vos commentaires – nous pourrions ainsi savoir si nous visons juste. Nous prévoyons par ailleurs tenir au moins cinq webinaires, revoir et mettre à jour nos normes de pratique et continuer à élargir nos groupes d'intérêts spéciaux grâce à des fonctionnalités améliorées sur la plateforme de notre site Web.

Le congrès de cette année, qui se tenait à Victoria en Colombie-Britannique, a été couronné de succès. Nous avons été heureux de collaborer de nouveau avec l'Association canadienne des travailleurs sociaux et travailleuses sociales en néphrologie (ACTSN). Le thème, *Leading the future of kidney care: Inclusive. Sustainable. Accessible. (Diriger l'avenir des soins en néphrologie : Inclusifs. Durables. Accessibles.)*, rejoignait en tous points nos objectifs communs. Il est regrettable que la participation ait été moins importante que prévu en raison des ressources limitées allouées à l'éducation par les pouvoirs publics à l'échelle du pays. Cette situation nous rappelle l'importance de trouver des moyens

créatifs de rester informés et connectés. L'éducation est vitale, et le congrès national est l'un des meilleurs moyens de réseauter, de partager les connaissances et d'améliorer le devenir des patients grâce à une collaboration multidisciplinaire.

Je vous encourage à soumettre un résumé pour le congrès de l'ACITN 2026 qui aura lieu du 22 au 24 octobre 2026 à John's, Terre-Neuve. Exprimez-vous, que ce soit pour présenter une nouvelle initiative qui vous tient à cœur, un enjeu complexe ou une expérience que vous souhaitez partager. Vous pouvez soumettre votre résumé dès le début janvier. D'ici là, notez vos idées!

Enfin, je tiens à souligner les contributions de tous les membres de la CANNT/ACITN. Merci pour tout ce que vous faites pour fournir des soins de grande qualité aux patients atteints d'une maladie rénale et pour votre soutien continu à l'ACITN. Vous êtes FORMIDABLES!

Cordialement,



**Deidra Goodacre, BCN,
inf., CNeph(C)
Présidente, CANNT-ACITN**

CANNT in Action

It is hard to believe we have already reached the final *CANNT Journal* issue of the year. What a busy and rewarding year it has been for the Canadian Association of Nephrology Nurses and Technologists (CANNT).

A highlight of 2025 was undoubtedly the annual CANNT National Conference, held in Victoria, BC. Once again, we partnered with the Canadian Association of Nephrology Social Workers (CANSW) to deliver a rich and diverse program that included sessions on supporting patients, equitable access to living kidney transplant donation, and the use of AI methods to improve similar access to dialysis, mental health care in dialysis, home dialysis programs, technologists' practice, and more. This year, we were thrilled to welcome nearly 20 technologists, with technologist-focused content integrated into nearly every stream—an important and meaningful advancement for CANNT.

Our plenary speakers added tremendous value to the program. Dr. Jagbir Gill opened the conference with *Bridge to Transplant: Integrating Truth and Reconciliation Into Clinical Care*—a powerful and thoughtful presentation. We were also privileged to include a film-based learning session with Dr. David Campbell, featuring an exclusive screening of *Low*, an award-winning film depicting the story of Bobby, a man navigating both diabetes and homelessness. The discussion that followed offered impactful lessons for all healthcare providers.

Our conference theme, “Leading the Future of Kidney Care: Inclusive. Sustainable. Accessible.” came to life in many ways—particularly through the collaborative “paint-by-numbers” community art project. Over three days, attendees contributed to a collective painting of the British Columbia *Spirit Bear*, which was later donated to Royal Jubilee Hospital hemodialysis unit as a symbol of community and connection.

As part of our program, attendees also enjoyed an inspiring session on Pet Therapy – The PATS Perspective, presented by the Pacific Animal

Therapy Society (PATS). This session explored PATS' mission and programs, highlighted current research on the benefits of pet therapy for both patients and healthcare providers, and offered meaningful stories from the field. Delegates also learned about common challenges and practical solutions in delivering animal-assisted interventions. A memorable highlight was the opportunity for delegates to meet several of the beloved PATS therapy dogs in person—an experience that brought joy to many throughout the conference!

We extend our sincere thanks to both the CANNT Planning Committee and CANSW for their dedication and hard work. Although overall attendance was lower than anticipated this year, the quality of learning, networking, and collaboration remained exceptional. Conference presentations are now available online to members under *Past Events*. Attendees also shared wonderful photos throughout the event, and these images are available in the online photo gallery under *Conference Galleries*. We would also like to thank all of our presenters, industry partners, sponsors, and exhibitors, for helping make this conference possible—and, of course, our attendees, whose engagement and enthusiasm contributed greatly to its success.

In 2025, CANNT proudly revamped and refreshed our Awards Program, ensuring it continues to recognize and celebrate excellence across nephrology nursing and technologist practice. We were honoured to present the 2025 Award recipients at the National Annual Conference:

- CNA Certification Bursary: Julie Boudreau, MN, RN, CNeph(C), CCNE, CCSNE
- CANNT Research Grant: Meghan Harris, RN
- CANNT Journal Award: Jing Qiong (Irene) Chen, MN, RN, CNeph(C); Zheng Jing Hu, MSc, PhD(C); Samantha Rahaman, MSW, RSW; Alison F. Rowe, MSW, RSW; Blessymol Kalathiparambil, BSN, RN, CNeph(C)

- Excellence in Research Award: Kokab Younis, MN, RN, CNeph(C), CCNE
- Excellence in Education Award: Steffany Bourque, RN
- Administrative Leadership Practice Award: Sarah Thomas, RN

We congratulate each of these outstanding recipients and thank them for their dedication to advancing nephrology care across Canada.

As part of our ongoing commitment to fostering connection within specialty areas, we continued to host special interest group (SIG) networking sessions at the conference. These sessions allowed members to share experiences, challenges, and ideas. We encourage all members to continue using the SIG features on our website—where you can share files and photos, participate in forums, message one another, and collaborate on ideas, such as webinars or education pieces. We are always pleased to support members who wish to host educational sessions within the nephrology community.

Looking ahead to 2026, CANNT will continue to focus on strengthening SIG engagement, expanding our webinar offerings, and collaborating with partners to provide meaningful education and continuing learning opportunities. Each of our regional vice presidents will be responsible for delivering a webinar in 2026 as part of our commitment to broadening accessible education.

This year, the Board of Directors also met in-person for strategic planning, to ensure CANNT is delivering value that aligns with the needs of our membership. As part of our operational planning, membership fees will increase from \$80.00 to \$105.00 as of January 1, 2026. We have worked diligently to keep fees nominal; however, after more than a decade without an increase and given the rising operational costs, this adjustment is necessary to continue providing high-quality programs and member services.

We are also proud to share that, as of January 2026, journal authors will have the opportunity to receive



Board Members with the paint-by-numbers painting



Delegates meeting the PATS dogs

DOI numbers for their manuscripts at \$50.00 per article. Our new *CANNT Journal* Editorial Board will support the continued development of the journal, ensuring it remains a strong and respected publication for nephrology professionals. A special thank you goes to our journal editors, Jovina and Rosa, for their leadership and commitment.

A reminder that current and past journal issues remain accessible on our website.

We are excited to announce that CANNT 2026 will take place in Newfoundland at the Delta Conference Centre on October 22–24, 2026. We look forward to seeing many of you there.

Wishing all our members a warm and joyful holiday season. We are excited about what 2026 has in store and remain grateful for your continued engagement and support of CANNT.



**Megan Howes, CAE,
CMP, CANNT Executive
Director**

JOIN THE CANNT COMMUNITY

The Canadian Association of Nephrology Nurses and Technologists (CANNT) provides leadership and promotes the best nephrology care and practice through education, research, and communication. Join today and receive:

- a discount of the annual conference registration fee
- educational opportunities at a reduced cost or free to members
- connections to the latest information and resources related to nephrology, technology or nursing
- networking opportunities with colleagues practising in your nephrology specialty on a national level
- opportunities for collaborative networking and problem solving through participation in a Refined Clinical Practice Group
- CANNT awards and research grants offered to individuals in recognition of their excellence in the workplace and/or to further their studies in Nephrology

Learn more at cannt-acitn.ca

L'ACITN en action

Il est difficile de croire que nous en sommes déjà au dernier numéro de l'année de la *Revue de l'ACITN*. Quelle année chargée et enrichissante pour l'Association canadienne des infirmières et infirmiers et des technologues en néphrologie (ACITN)!

L'un des faits saillants de 2025 a sans aucun doute été le congrès national annuel de l'ACITN tenu à Victoria, en Colombie-Britannique. Une fois de plus, nous nous sommes associés à l'Association canadienne des travailleurs sociaux et travailleuses sociales en néphrologie (ACTSN) pour offrir un programme riche et diversifié qui comprenait des séances sur le soutien aux patients, l'accès équitable au don de rein provenant d'un donneur vivant et l'utilisation de méthodes d'IA pour améliorer l'accès à la dialyse, aux soins de santé mentale en dialyse, aux programmes de dialyse à domicile, aux technologues, et plus encore. Cette année, nous avons été ravis d'accueillir près de 20 technologues et d'intégrer un volet s'adressant aux technologues dans presque tous les groupes, ce qui est une avancée importante et significative pour l'ACITN.

Nos conférenciers de séance plénière ont ajouté une énorme valeur au programme. Le Dr Jagbir Gill a donné le coup d'envoi au congrès avec une présentation puissante et réfléchie « *Bridge to transplant: Integrating truth and reconciliation into clinical care* » (En attente de greffe : la vérité et la réconciliation dans les soins cliniques). Nous avons également eu le privilège d'inclure une séance d'apprentissage basée sur un film avec le Dr David Campbell : une projection exclusive de *Low*, un film primé décrivant l'histoire de Bobby, un homme en situation d'itinérance atteint de diabète. La discussion qui a suivi était une source d'enseignements précieux pour tous les fournisseurs de soins de santé.

Le thème de notre congrès, *Leading the future of kidney care: Inclusive. Sustainable. Accessible.* (Diriger l'avenir des soins en néphrologie : Inclusifs. Durables. Accessibles.), était omniprésent. Il se retrouvait, par exemple,

dans le projet d'art collaboratif de « peinture par numéros » : Pendant trois jours, les participants ont apporté leur touche à une peinture collective de l'ours esprit (ours Kermode) de la Colombie-Britannique; l'œuvre a ensuite été donnée à l'unité d'hémodialyse de l'Hôpital Royal Jubilee pour symboliser l'esprit communautaire et la connexion.

Dans le cadre de notre programme, les participants ont également profité d'une séance inspirante sur la zoothérapie, PATS Perspective, présentée par la Pacific Animal Therapy Society (PATS). Au menu : une présentation de la mission et des programmes de la PATS, le point sur les recherches menées actuellement quant aux bienfaits de la zoothérapie à la fois pour les patients et pour les fournisseurs de soins de santé. Le tout était ponctué d'anecdotes pertinentes recueillies sur le terrain. On a également parlé des difficultés courantes et des solutions pratiques inhérentes aux thérapies assistées par l'animal. Un moment fort de l'activité : l'arrivée en chair et en os de plusieurs des chiens chouchous de PATS – une onde de joie a parcouru bien des participants!

Nous remercions sincèrement le comité de planification de l'ACITN ainsi que l'ACTSN pour leur dévouement et leur travail acharné. Bien que la fréquentation générale ait été plus faible que prévu cette année, la qualité de la formation, les perspectives de réseautage et l'esprit de collaboration étaient exceptionnels. Les présentations sont maintenant accessibles en ligne pour les membres sous l'onglet Past Events (Événements passés). Les participants ont également partagé de merveilleuses photos tout au long de l'événement et ces images sont accessibles dans la galerie de photos en ligne sous l'onglet *Conference Galleries* (Photos du congrès). Nous tenons également à remercier tous nos présentateurs, partenaires de l'industrie, commanditaires et exposants grâce à qui le congrès a pu avoir lieu – et, bien sûr, nos participants, dont l'engagement et l'enthousiasme ont grandement contribué à son succès.

En 2025, l'ACITN a fièrement remanié et actualisé son programme de prix, en veillant à ce qu'il continue de reconnaître et de célébrer l'excellence des soins infirmiers et de la pratique des technologues en néphrologie. Nous avons eu l'honneur de présenter les lauréats des Prix 2025 à l'occasion du congrès national annuel :

- Bourse de certification de l'AIIC : Julie Boudreau, M.N., inf., CNeph(C), CCNE, CCSNE
- Bourse de recherche de l'ACITN : Meghan Harris, inf.
- Prix de la *Revue de l'ACITN* : Jing Qiong (Irene) Chen, M.N., inf., CNeph(C); Zheng Jing Hu, M. Sc., Ph. D.(C); Samantha Rahaman, MSW, RSW; Alison F. Rowe, MSW, RSW; Blessymol Kalathiparambil, BSN, inf., CNeph(C)
- Prix d'excellence en recherche : Kobab Younis, M.N., inf., CNeph(C), CCNE
- Prix d'excellence en éducation : Steffany Bourque, inf.
- Prix de la pratique du leadership administratif : Sarah Thomas, inf.

Toutes nos félicitations aux récipiendaires! Merci pour les efforts que vous déployez afin de faire progresser les soins en néphrologie partout au Canada.

Parce que nous jugeons important de favoriser les échanges dans les secteurs spécialisés, nous avons continué d'organiser des séances de réseautage de groupes d'intérêts spéciaux (SIG) lors du congrès. Ces séances ont permis aux membres de partager leurs expériences, leurs défis et leurs idées. Nous encourageons tous les membres à continuer d'utiliser les fonctionnalités SIG de notre site Web, qui vous permettent de partager des fichiers et des photos, de participer à des forums, d'envoyer des messages et de collaborer sur des projets tels que des webinaires ou des documents éducatifs. Nous sommes toujours heureux de soutenir les membres qui souhaitent organiser des séances éducatives au sein de la communauté de néphrologie.

En 2026, l'ACITN continuera de se concentrer sur la mobilisation des



Membres du conseil avec la peinture par numéros



Délégués faisant la connaissance des chiens PATS

groupes d'intérêts spéciaux, sur l'élargissement de notre offre de webinaires et la collaboration avec des partenaires pour offrir des occasions significatives de formation et d'apprentissage continus. Chacun de nos vice-présidents régionaux aura la responsabilité de donner un webinaire en 2026 dans le cadre de notre mission pour élargir l'accès à l'éducation.

Cette année, le conseil d'administration s'est également réuni en personne pour la planification stratégique afin de s'assurer que l'ACITN répond aux besoins de ses membres. Conformément à notre planification opérationnelle, les droits d'adhésion passeront de 80 \$ à 105 \$ à compter du 1^{er} janvier 2026. Malgré tous nos efforts pour limiter les frais, après plus d'une

décennie sans augmentation et avec la hausse des coûts opérationnels, cet ajustement est devenu nécessaire pour continuer à offrir aux membres des programmes et des services de qualité supérieure.

Nous sommes fiers de vous annoncer qu'à compter de janvier 2026, les auteurs de la Revue auront la possibilité de recevoir des numéros DOI pour leurs manuscrits à raison de 50 \$ par article. Le nouveau comité de rédaction de la *Revue de l'ACITN* soutiendra l'amélioration continue de la revue, en veillant à ce qu'elle demeure une publication solide et respectée pour les professionnels de la néphrologie. Nous remercions tout particulièrement les rédactrices en chef de la revue, Jovina et Rosa, pour leur leadership et

leur engagement. À titre de rappel, les numéros actuels et passés de la Revue restent accessibles sur notre site Web.

Nous sommes heureux d'annoncer que le congrès 2026 de l'ACITN aura lieu à Terre-Neuve, au Delta Conference Centre, du 22 au 24 octobre 2026. Nous espérons vous voir en grand nombre.

Nous souhaitons à tous nos membres un heureux temps des fêtes. L'année 2026 nous réserve sûrement de belles surprises. Merci à tous pour votre engagement et votre soutien continu envers l'ACITN.



Megan Howes, CAE, CMP,
Directrice générale de
l'ACITN

Recurrent White-Coloured Platelet and Fibrin Aggregates (White Clot Syndrome) in the Venous Tubing During Conventional Hemodialysis: A Case Report

By Ivan Escudero, Rosa M. Marticorena, Leszek Szczerba, Sangil Patel, and Bajinder S. Reen

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ABSTRACT

Background: White clot syndrome (WCS) is a colloquial term that describes heparin-induced thrombocytopenia (HIT) typically caused by treatment with heparin wherein platelet and fibrin particles coalesce to form white-coloured clots (thrombi), resulting in thrombocytopenia and the formation of heparin-induced antibodies. WCS has variants, but it may occur due to a combination of pro-thrombotic risk factors, regardless of heparin use, and may not result in thrombocytopenia or generate heparin-induced antibodies. Formation of white clots post dialyzer along the venous dialysis line of the extracorporeal circuit during conventional hemodialysis is a rare and dangerous event. **Case Presentation:** We highlight details of recurrent thrombi formation only in the venous tubing in the dialysis circuit during conventional hemodialysis over a two-year period. Clots developed in the venous tubing at random times during dialysis sessions with no known precipitating factors. Laboratory pathology analysis confirmed the presence of white-coloured clots composed of platelet and fibrin aggregates. Platelets were normal, and antiphospholipid, anticardiolipin, and HIT antibodies were negative. Clots occurred regardless of the type of dialyzer membrane or use of dalteparin. The patient had an accelerated kidney transplant

as a result of recurrent significant clotting in the dialysis circuit. **Discussion:** End-stage kidney disease increases thrombogenicity and mortality risk. The paradoxical clotting that occurred strictly in the venous tubing may have been inevitable. It is worthwhile to consider that a unique interaction between the patient's blood and dialyzer membrane may have precipitated clotting. **Conclusion:** Recurrent white clot formation significantly increases the risk of mortality. Kidney transplantation is the only remedy for this rare condition.

Keywords: hemodialysis, white clot, platelet activation, thrombosis

BACKGROUND

Heparin-induced thrombocytopenia (HIT) is a broad term that may include thrombosis (i.e., heparin-induced thrombocytopenia and thrombosis [HITT]), also colloquially known as white clot syndrome (WCS) due to the generation of white-coloured granulomatous aggregate material. The white-coloured material is primarily composed of fibrin and platelets that occurs predominantly from treatment with heparin. WCS is a life-threatening complication that can occur spontaneously with or without previous clotting history and could lead to adverse events, such as myocardial infarction, cerebral ischemia, pulmonary embolism, limb loss, and even death (Irvin, 1990; Shorten & Comunale, 1996).

The mechanism for WCS begins with IgG and IgM antibodies that form against the target platelet factor 4 (PF4)/heparin complex, which leads to platelet activation and subsequent thrombosis (Ananthasubramaniam et al., 2000; Brieger et al., 1998; Fabris et al., 2002; Sathe et al., 2015). HIT antibodies also form typically six to 13 days after initiation of treatment with heparin. As a result of this clotting reaction, platelet levels decrease and HIT antibody levels become detectable on chemistry analysis (Benhamou et al., 1985; Irvin, 1990; Stanton et al., 1988).

WCS is not a condition that occurs exclusively following treatment with heparin. It may also occur without the formation of HIT antibodies or the degradation of platelets regardless of whether or not heparin was given as treatment. We believe there are certain thrombogenicity risk factors—such as endothelial damage, inflammation, vascular disease, and diabetes—that may play a vital role in potentially leading to WCS. Although WCS is extremely rare, the exact mechanism behind this illness remains largely unknown.

AUTHOR NOTES

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White Clot Syndrome in Patients Receiving Hemodialysis

Patients with end-stage kidney disease (ESKD) require life sustaining renal replacement therapies including dialysis (peritoneal dialysis [PD] and hemodialysis [HD]) and renal transplantation to survive. HD is the most common modality of renal replacement therapy. An arteriovenous (AV) access such as a fistula or graft or a central venous catheter (CVC) access is important to establish a connection between the patient's blood and the HD machine to deliver the treatment. Heparin is commonly used in the extracorporeal circuit to prevent clotting within the hemodialyzer membrane and the extracorporeal circuit, while simultaneously preventing systemic thrombotic events from occurring in the patient (Brouwer & Peterson, 2000; Pham et al., 1995).

ESKD increases the risk of hypercoagulable events due to the depletion of endogenous anticoagulants, including anti-thrombin III, factor IX, factor XI, factor XII, protein C, and protein S, via urinary loss, along with increased synthesis of D-dimer, thromboxane A₂, adenosine diphosphate, C-reactive protein, factor VII, factor VIII, von Willebrand factor, and fibrinogen (Adams et al., 2008; Gordge et al., 1991; Nunns et al., 2017; Sagripanti et al., 1993; Wattanakit & Cushman, 2009; Željka et al., 2013). It is important to note that dialysis catheters and AV access dysfunction are extremely important causes of morbidity in patients with ESKD and should be taken into full consideration by clinicians when a patient is diagnosed with WCS and being treated with heparin (Feldman et al., 1996; Shah et al., 2014; Vanholder et al., 1987).

Cases of WCS have been reported in patients undergoing HD with white-coloured clots that formed specifically in the venous tubing of the dialyzer (Fischer, 2007; Nand et al., 1985; Pham et al., 1995; Shah et al., 2014). Watnick et al. (2008) postulated that an intradialytic interaction between artificial material, such as the dialyzer membrane, and blood could be a reason for such a rare and paradoxical coagulation during HD. On the other hand, Sathe et al. (2015) diagnosed WCS in a patient from an unknown cause while the patient was receiving heparin therapy. Nevertheless, there is an ongoing debate about possible etiologies of WCS occurring in the venous tubing of the extracorporeal dialysis circuit despite such few documented cases. This case report will present details of a patient with recurrent white thrombi that formed in the venous tubing during HD as well as shed light on this rare and potentially fatal condition.

CASE PRESENTATION

The patient was a 69-year-old female with obesity and ESKD secondary to focal segmental glomerulosclerosis. The patient's ESKD had been maintained on both PD and conventional HD. Her past medical history included: hypertension, prediabetes, hypercalcemia secondary to sarcoidosis, dyslipidemia, hypothyroidism secondary to total thyroidectomy, morbid obesity, osteoarthritis, gastroesophageal reflux disease, gout, and a previous motor vehicle accident in 2005. The patient had a body mass index of 38.4 kg/m² and was a non-smoker with no history of thrombotic events prior to starting PD or HD. Her family history of thrombosis was unknown.

The patient's kidney function had been declining for several years and she initially entered the Kidney Care Clinic at

Brampton Civic Hospital on May 13, 2014. Her renal function continued to decline, and she was initiated on PD in June 2015. Due to inadequate clearances on PD, she was transitioned to conventional HD six months later on January 11, 2016, when a tunneled CVC was inserted first in the right subclavian vein for acute dialysis and subsequently in the right internal jugular vein for long-term use. Her HD schedule was a thrice-weekly regimen every Monday, Wednesday, and Friday, for approximately four hours each session, with a target Kt/V of 2.0 and maximum blood flow rate (Q_b) of 400 mL/min and dialysate flow (Q_d) of 500 mL/min.

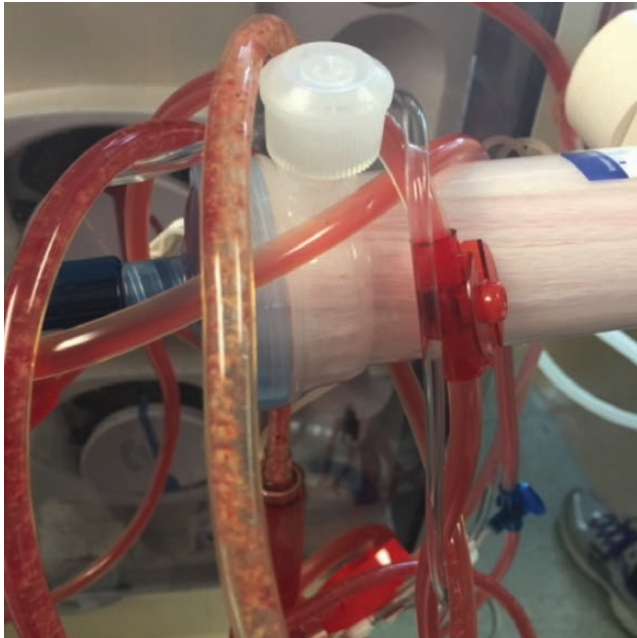
White-coloured granulomatous-appearing material was found adherent to the walls of the venous tubing after retransfusion for a total of twenty-two times, with the first event occurring on January 24, 2016. These thrombotic events occurred at random—at any time during dialysis—without warning or any clinical signs and regardless of the type of dialyzer used. The patient was given 2,000 IU of IV heparin at the commencement of each dialysis session, yet these clotting events still occurred. To proactively identify the occurrence of clots, the dialysis circuit was flushed with 200 mL of normal saline every hour and was changed if white thrombi were visualized. During and after each white thrombus event, the patient did not develop dyspnea, orthopnea, chest pain, or an altered mental state. Thrombus events did not occur in all dialysis treatments.

The patient was initially placed on Revaclear 400 dialyzer with Q_b 350 mL/min and Q_d was increased to 600 mL/min. Due to the repeated thrombus events during HD, it was decided by the nephrology team managing her care that the dialyzer should be changed as a possible solution. On April 11, 2016, the dialyzer was changed to Xenium +H25, a gamma ray-sterilized polyethersulfone membrane with similar clearance to the Revaclear dialyzer. In the ensuing weeks, the white-coloured granulomatous material appeared in the venous tubing during random dialysis sessions. The thrombi appeared during dialysis sessions that took place on May 4, 13, and 16, 2016. On May 13, 2016, the CVC access site was changed from the right subclavian to the right internal jugular vein due to catheter occlusion. Changing the CVC site did not impede or halt clotting. At first, the white granulomatous material seen in the venous tubing was believed to be fat emboli due to the patient's excessive weight; however, laboratory pathology analysis performed on May 16, 2016, revealed the white-coloured material was composed entirely of platelet and fibrin material. Triglyceride and cholesterol levels were subsequently tested after the thrombi appeared and were found to be within normal limits. Anticardiolipin, antiphospholipid, and HIT antibodies were also tested and found to be negative. Platelet levels were within normal limits, and there was no significant change in platelet level. Between June 29, 2012, and September 24, 2018, the patient's platelet levels on routine complete blood count analysis were recorded between 134 x 10⁹/L and 414 x 10⁹/L. Her platelet levels did not decrease before or after each clotting event, and there was no thrombocytopenia on laboratory analysis.

On May 30, 2016, the patient was given a bolus of 2,000 units of IV dalteparin with an additional dose of 1,500 units/hr combined with a reduced Q_b 250 mL/min. No clotting

Figure 1

Image of the Venous Tubing Containing White-Coloured Granulomatous Material Measuring 1 to 4 mm



events were seen from this point forward. On October 20, 2016, the patient underwent creation of a left brachio-cephalic AV fistula. On three occasions from October 31, 2016, to December 5, 2016, the AV fistula was deemed to have clotted as the patient presented with no thrill or bruit; however, no clotting was noted in the venous tubing. The patient declined creation of another AV fistula on the right arm due to feeling too weak to undergo another surgery.

The dialyzer was switched to Elisio-21H, another biocompatible polyethersulfone membrane, and the Qb was increased to 350 mL/min during dialysis on January 11, 2017. A clotting event was noted on March 3, 2017. Due to the availability of dialyzers, the patient was switched to FX120 membrane on September 13, 2017, and there were several more clotting episodes seen in the venous tubing over the subsequent months.

To mitigate further clotting events, the IV dalteparin dose was increased further from 2,000 units. On November 20, 2017, the patient was given 2,500 units of IV dalteparin for every dialysis session. However, clotting was still noticed during her next session on November 24, 2017. This dose was increased to 3,000 units IV for every dialysis session beginning on December 4, 2017. On December 11, 2017, there were still white aggregates found along the venous tubing and venous chamber. The dose of IV dalteparin was increased further to 5,000 units for every dialysis session beginning on January 19, 2018. No subsequent clotting events were then noted. On February 26, 2018, the patient was switched to a new Fresenius® dialysis machine as her previous machine was being phased out. Clotting was noted again after a few more dialysis sessions after this switch in machines, using the same dialyzer and dalteparin dose.

On April 20, 2018, dalteparin was changed to heparin, and she was given an IV heparin bolus of 2,000 units at the

Figure 2

Image of Venous Tubing Containing White-Coloured Granulomatous Material Measuring 1 to 4 mm Adherent to the Tubing Walls



beginning of dialysis along with 2,000 units every hour of the dialysis session. On May 4, 2018, the patient was switched to hemodiafiltration with an FX800 HDF dialyzer, and five more clotting events were recorded until she received a kidney transplant on October 1, 2018.

During dialysis, the patient's medication list included the following oral medications: allopurinol 100 mg daily, acetaminophen 325 mg every dialysis session and 1,000 mg as needed at home, aspirin 81 mg daily, cod liver oil 1 capsule daily, elemental calcium 1,000 mg three times daily with meals, ferrous sulfate 600 mg daily, furosemide 120 mg daily on non-dialysis days, levothyroxine sodium 125 mcg daily, omega-3-fatty acid one capsule daily, pantoprazole 40 mg twice daily, Replavite one tablet nightly, rosuvastatin 10 mg nightly, Senokot two tablets nightly as needed, and vitamin D3 1,000 units daily. She also received oral/IV dimenhydrinate 25 mg as needed during dialysis, and IV erythropoietin 2,000 units every dialysis session. Her catheter was capped with sodium citrate 4 % every dialysis.

DISCUSSION

Although our patient had WCS, which shares aspects similar to HIT, this case was not considered HIT because of her normal platelet values, hence the reason we continued to use heparin and saw resolution of the clotting events. In HIT, platelet levels drop due to platelet activation and an immune-mediated response, which results in thrombocytopenia and thrombosis. However, our patient's platelet values remained stable within a normal range over a two-year period. We also ruled out any potential contraindications from her medication regimen that may have induced clotting. What is perplexing is that the white-coloured material found in the venous tubing was indeed composed of fibrin and platelet aggregates, commonly seen in HIT thrombi.

The presence of white-coloured thrombi within the venous tubing is a rare occurrence, and little has been written about this phenomenon (Sathe et al., 2015). Surface interaction between artificial material, such as the dialyzer,

and the blood during HD has been hypothesized as being the cause for WCS in certain cases, although no sources have been able to explain why this happens (Sathe et al., 2015; Watnick et al., 2008). White-coloured thrombi generally form under conditions of high flow velocities, particularly within arteries and arterioles as it produces high shear stress and fosters platelet aggregation (Watnick et al., 2008). Nevertheless, thrombi can indeed form in veins. Our patient did have low pump speed during her dialysis sessions, yet the thrombi only appeared in the venous tubing. We initially hypothesized that perhaps her malfunctioned AVF may have been the culprit for clotting in the venous tube, as suggested by Sathe et al.; however, we excluded AV fistula dysfunction as the sole reason for her recurrent thrombosis since she had clotting events prior to having an AV fistula. We then hypothesized that there was a reaction between the material of the tubing in the dialyzers and her blood that led to these paradoxical thrombotic events, yet the number of clotting events occurred regardless of the type of dialyzer used. Moreover, irregularities in the manufacturing process of the dialyzer and blood tubing, and frequent changing of dialyzers, as suggested by Watnick et al., could cause endothelial dysfunction, as well as form microbubbles and precipitate clotting (Greinacher et al., 2005; Sakr, 2011; Watnick et al., 2008;). However, because of insufficient data in the literature pertaining to this condition, it would be difficult to identify a single reason for this patient's paradoxical clotting.

In addition to the possibility of a reaction between the patient's blood and the dialyzer/dialysis blood tubing, we also believe certain factors may have exacerbated her thrombogenicity and may have likely played a significant role in her paradoxical clotting regardless of the dialyzer tubing used. According to Watnick et al. (2008), there was a small subset of patients who developed clotting despite the use of different machines on multiple occasions similar to our patient. We reasoned that due to the fact continuous clotting regardless of the type of dialyzer used, stable platelet levels, and negative antiphospholipid, anticardiolipin, and HIT antibody levels, the patient most likely had an inherent thrombogenicity primarily due a combination of her ESKD, weight, and dyslipidemia.

Aso et al. (2002), Samad and Ruf (2013), and Nieuwdorp et al. (2005) suggested that obesity increases the levels of plasminogen activator inhibitor-1 and thrombin generation. Dyslipidemia may also trigger platelet aggregability and precipitate clotting events (Nieuwdorp et al., 2005). Additionally, hypercoagulability in patients with obesity is associated with the overproduction of microparticles, which are procoagulants, as well as an increase in thrombin production. The overproduction of these endogenous particles in patients with obesity worsens with the severity of obesity, regardless of insulin resistance or metabolic syndrome status (Campello et al., 2015). ESKD, depletion of endogenous anti-clotting molecules, borderline morbid obesity, dyslipidemia, and propensity for clot formation may have been inevitable regardless of an immune-mediated response from heparin, her history of sarcoidosis, or an interaction between the dialyzer membranes and her blood. We cannot concretely

rule out a potential immune-mediated response from dalteparin—an autoimmune response—if the material used in the dialyzers amplified her existing hypercoagulable state, or if a combination of any of these factors had any bearing on her repeated thrombi formation. The reason for this paradoxical clotting solely in the venous tubing remains largely unknown.

IMPLICATIONS FOR NURSING PRACTICE

The patient's responsiveness to high dose dalteparin therapy underscored the critical need for vigilant HD nursing care in managing anticoagulation and monitoring for both thrombotic and bleeding complications. Early recognition of recurrent clotting events and prompt interdisciplinary communication were essential to mitigate risks and support timely progression to kidney transplantation. HD nurses have a pivotal role in assessing vascular access patency, monitoring for circuit clotting, and evaluating bleeding tendencies, especially in patients receiving high-dose anticoagulation. The interplay between obesity, ESKD, and hypercoagulability emphasizes the importance of individualized dialysis prescriptions, careful anticoagulant dosing, and ongoing patient education on weight and lipid management. Given the limited evidence on managing patients with obesity who have ESKD and WCS localized to the extracorporeal circuit, nursing practice should prioritize meticulous observation, documentation, and collaboration within nephrology teams to guide safe and effective care. Continued nursing research and evidence generation in this area are essential to improve outcomes and advance understanding of paradoxical clotting phenomena in dialysis populations.

CONCLUSION

Although the patient was responsive to dalteparin therapy at high doses, it was imperative that she receive a kidney transplant sooner rather than later because these thrombotic events posed a substantial risk to her overall well-being and prognosis. Recurrent thrombi formation increases the risk for mortality. Additionally, the risks of adverse bleeding with repeated use of dalteparin at high doses outweigh the benefits of anticoagulation, further accelerating her need for a kidney transplant. Her weight and ESKD may have amplified her existing hypercoagulable state; however, there is not enough information in the literature regarding management of patients with obesity and with ESKD and WCS that occurs strictly in the venous tubing. Nonetheless, patients with obesity and dyslipidemia in addition to ESKD in general may be suitable targets for monitoring and early intervention. The complexity and rarity of this condition highlights the lack of understanding regarding paradoxical blood clotting in patients with ESKD receiving dialysis. Further research on WCS in patients with obesity and interactions between patients' blood and dialyzer material, is greatly needed.

CONSENT

Direct written consent was obtained from the patient for publication of this case report that includes all medical history and accompanying images. A copy of the consent is available for review.

DISCLOSURE

The authors of this paper have no conflicts of interest with the authorship of this paper.

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Caring Beyond the Dialysis Chair: Social Work Perspectives on Providing Indigenous Kidney Care

By Sally Gabra, Laura Cogollo, and Carla Sweetland

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In this article, we discuss the issues that Indigenous peoples often face when they need to start renal therapy. Highlighting a substantial health disparity, First Nations, Inuit, and Métis people have up to four times higher risk of experiencing kidney failure than non-Indigenous Canadians (Laurier et al., 2025). This article is written from the perspectives of three social workers, and the examples provided draw from real-life practice to illustrate how social workers support Indigenous peoples living with chronic kidney disease (CKD). We review key issues affecting Indigenous patients living with kidney failure, including (1) the biomedical approach that overlooks the cultural, spiritual, and relational aspects of care that are central to Indigenous wellness; (2) the challenges of navigating various government programs and jurisdictions; and (3) how the social determinants of health affect patient adherence to treatment. Additionally, we will also address barriers related to accessibility and transportation, and the insufficiency of available resources and lack of Indigenous representation in healthcare. We examine different geographic areas and how care is provided to their Indigenous patients, specifically in two regions: York Region in Ontario, where Indigenous patients are a minority group, and the Interlake-Eastern Regional Health Authority (IERHA) in Manitoba. The IERHA region has six dialysis units and provides care to 17 First Nations communities,

and it is the homeland of the Red River Métis. In this region, the representation of Indigenous patients receiving dialysis in the units can vary from one hundred percent (Berens Unit) to none (Gimli Unit; IERHA, 2025).

CULTURAL DISCONNECT

The biomedical model that predominates the Canadian healthcare system frequently overlooks the cultural, spiritual, and relational factors central to Indigenous wellness. This results in a cultural disconnect, where many Indigenous patients feel alienated and mistrustful of healthcare services (Roher, 2023). For example, a patient from a remote community may feel their needs are misunderstood or dismissed by healthcare providers, exacerbating their reluctance to seek care. This barrier is compounded by ongoing racism, discrimination, and a lack of cultural safety within healthcare environments. Clinically, addressing these gaps requires integrating culturally competent care, structural changes, and collaboration with Indigenous communities (Roher, 2023). The renal social worker working with Indigenous patients must be mindful of these challenges and work to foster an environment of trust and respect. This can involve incorporating Indigenous wellness approaches into treatment plans and ensuring that healthcare practices are culturally relevant. For instance, the renal social worker might partner with local Indigenous healers or community leaders to provide holistic care, ensuring patients feel their cultural values are respected.

NAVIGATION OF HEALTHCARE SYSTEMS

For many Indigenous patients, particularly those from on-reserve or remote communities, relocating to urban centres for dialysis treatment is overwhelming (Harasemiw et al., 2022). The transition often involves leaving behind their familiar environment, family, and cultural connections. This can be especially difficult for patients who may not be familiar with the complexities of urban healthcare systems, making it harder to navigate medical routines, appointments, and interactions with healthcare providers (Genereux et al., 2021). Medically relocated patients who are in urban health centres for extended periods receive support from federal and provincial levels. The federal government will cover expenses for a period of three months

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and, after this time limit, the patient needs to be transferred to receive financial support from the provincial level (Cheikh Hassan et al., 2020). Renal social workers can assist patients with this task by connecting them to the appropriate programs and ensuring they have all the requisite documentation.

Once in the urban centre, patients often struggle to access government programs that provide financial, medical, or housing support. The process of applying for these benefits can be time-consuming and confusing, leaving many patients uncertain about what resources are available or how to apply. For example, a patient may be eligible for housing assistance but may not know how to navigate the application process, leading to delays in securing adequate housing (National Collaborating Centre for Indigenous Health, 2019). Additionally, the time commitment required for dialysis often prevents patients from maintaining full-time employment, thus contributing to financial insecurity. The added costs of transportation, combined with the reduced income, create further strain (Genereux et al., 2021). Renal social workers can help patients navigate these challenges by connecting them with financial assistance programs, transportation services, and other resources that can alleviate these burdens.

SOCIAL DETERMINANTS OF HEALTH

Indigenous peoples face disproportionately low social determinants of health, including income, education, employment, and living conditions. These challenges are especially pronounced for individuals in rural and remote communities, where pre-existing poverty and socio-economic status create substantial barriers. For individuals requiring dialysis, these barriers become even more pronounced. Treatment schedules limit the ability to maintain employment, leading to income loss, while out-of-pocket expenses for transportation, medications, and specialized diets increase the financial strain. In remote communities, access to affordable and nutritious food is limited, complicating the management of conditions like diabetes, which are risk factors for CKD. Furthermore, lower education levels and a general lack of culturally relevant health information hinder patients' understanding of their illness and their ability to make informed decisions about treatment and self-care (Genereux et al., 2021). Clinically, it is crucial to recognize that addressing these social determinants of health is necessary before meaningful engagement in treatment can occur. For instance, if basic needs like food security, transportation, and culturally appropriate support are unmet, patients may struggle to maintain adherence to dialysis treatment. Renal social workers must advocate for resources to address these fundamental barriers, ensuring that patients are supported holistically to enable effective care.

ACCESSIBILITY

Access to healthcare services remains a significant challenge for Indigenous populations, with residence often determining availability. Many Indigenous patients, particularly those from rural and remote communities, must relocate to urban centres to access dialysis. This relocation not only impacts patients physically but also psychosocially and culturally. Medical relocation takes patients away from their families and their roles as parents, children, or caregivers (National Collaborating Centre for Indigenous Health, 2019). For example, female patients receiving dialysis may experience greater distress as, in some circumstances, they leave behind their children. The impact of

relocation affects the whole family. Sometimes the relocation of a family member to receive dialysis makes the others relocate with the individual as they provide care for them. Relocation to urban centres can also lead to emotional isolation, financial hardship, and cultural dislocation. For example, patients may experience loneliness and isolation due to the loss of community ties, while navigating unfamiliar urban environments. Additionally, Indigenous patients face significant cultural challenges, including language barriers, racism, and a lack of culturally safe care. In Manitoba, where patients may be required to relocate to Winnipeg for dialysis initiation, there are long wait lists and limited spots in rural dialysis units, which further complicates the repatriation process.

In these cases, renal social workers play a crucial role in coordinating patient relocation, providing emotional support, and ensuring patients' access to housing and transportation. They advocate for family support and assist with navigating Indigenous health services. A key example of this occurs when patients are placed on wait lists for rural dialysis units, for which renal social workers ensure that the transition to home is managed smoothly by helping patients return to their communities once a spot becomes available. In York Region, Indigenous patients requiring dialysis face significant challenges due to the ongoing housing crisis. Although these patients fall within the service boundaries of the dialysis program, the lack of affordable and suitable housing options exacerbates their struggles. Housing insecurity makes it difficult for patients to maintain stable living conditions while attending frequent dialysis sessions (Cheikh Hassan et al., 2020). This not only complicates logistics but also increases stress and health risks, as many patients are forced to live in overcrowded or substandard housing. These conditions undermine their overall health and recovery, further complicating their treatment.

TRANSPORTATION

Indigenous patients who are Treaty members can access medical transportation benefits through the Non-Insured Health Benefits (NIHB) program (Government of Canada, 2025). However, to utilize this support, patients must provide confirmation of their appointment attendance, and delays or issues with scheduling transportation are not uncommon. For many Indigenous patients, their band plays a key role in coordinating travel, which not only improves appointment attendance but also provides emotional support and a sense of safety. For example, a patient from a remote community travelling to an urban centre for dialysis may experience reduced anxiety and better adherence to treatment when their band assists with transportation arrangements.

For Indigenous patients who need to arrange their own transportation, the challenges are even greater. Long wait times and difficulty contacting providers can cause significant stress, particularly for women, many of whom report feeling unsafe when using urban taxis for medical appointments. For example, in Winnipeg, Indigenous women have created a network to provide safe rides to appointments (Gibbings, 2022). Additionally, patients who are non-status First Nations or those who are Métis face additional barriers, as they often have limited or no access to transportation support through programs like NIHB.

In York Region and surrounding areas, navigating transportation logistics can be complicated, even for healthcare professionals. Most patients receiving dialysis in the region rely on the York Region Transit: Mobility On Request service. However, strict geographic boundaries dictate the funding and availability of different transportation options, and patients often need to use multiple services when travelling longer distances. Decisions about transferring patients between dialysis centres or managing the high transportation costs can be challenging. Moreover, each transportation service has specific eligibility criteria, such as the need for assistive devices, cognitive requirements, or the mandatory presence of a support person during the ride.

LACK OF RESOURCES

From the perspective of a renal social worker supporting Indigenous patients living with CKD and kidney failure, it is clear that many of the challenges faced by Indigenous communities stem from deeply rooted systemic inequities and chronic under-resourcing. In many rural and northern communities, health care is delivered through nursing stations staffed primarily by community health nurses, with only occasional visits from nurse practitioners or physicians. These limited resources mean that screening for CKD is often lower, contributing to late diagnoses and poorer health outcomes (Lavoie, 2025). Remote Indigenous communities frequently rely on fly-in services and lack permanent clinics or specialists, resulting in long wait times and inconsistent access to care. For some patients, attending dialysis requires travelling hundreds of kilometres, leading to emotional distress, financial hardship, and separation from family.

Even for Indigenous patients living in urban regions, such as York Region, the resource gaps remain significant although they present differently. Whereas relocation is not required for dialysis within the program's boundaries, Indigenous patients often struggle to access culturally aligned care. Western-based services, such as psychiatry or counselling, may not meet their cultural needs, and experiences of racism and discrimination in healthcare settings can further discourage engagement. The mismatch between available services and Indigenous worldviews reinforces existing barriers and reduces trust in the system.

One of the most significant resource gaps is the lack of Indigenous representation within the healthcare system itself. Although Indigenous peoples are at a significantly greater risk of developing kidney disease than in the general population (Harasemiw et al., 2018), they continue to be vastly under-represented among healthcare professionals. The absence of Indigenous representation among healthcare providers is not simply a staffing issue—it is the result of the legacy of colonization, financial barriers, and the need for many Indigenous students to relocate for post-secondary and professional training. Without Indigenous representation, healthcare systems continue to operate from non-Indigenous norms and practices, unintentionally reproducing power imbalances that directly affect the quality of care (Allen et al., 2020).

These systemic issues have been acknowledged by the Truth and Reconciliation Commission of Canada (2015), which calls for increasing the number of Indigenous healthcare providers,

retaining them within their communities, and ensuring all healthcare workers receive cultural competence training. These Calls to Action reflect what renal social workers see every day: improving Indigenous representation is not separate from resource allocation—it is a resource issue, one that shapes cultural safety, patient trust, and overall health outcomes.

As renal social workers, we advocate for culturally safe, patient-centred care by helping patients navigate these gaps, promoting access to traditional healing practices, and working with clinicians to ensure services are responsive to Indigenous needs. Addressing insufficient resources, improving representation, and dismantling systemic barriers are essential steps toward building a healthcare system where Indigenous patients can receive equitable and culturally meaningful kidney care.

SOCIAL WORK INTERVENTIONS

One of the primary goals in nephrology social work is to “support and maximize the psychosocial adjustment of patients experiencing CKD and end-stage renal disease (ESRD), as well as those receiving renal replacement therapies. Social work services are extended to families, caregivers, and support networks” (Canadian Association of Nephrology Social Workers, 2019, p. 3). Renal social workers play a crucial role in supporting patients from a variety of ethnic, socioeconomic, and demographic backgrounds, including Indigenous communities, who face unique challenges in managing their health. Indigenous peoples in Canada are diverse, with each group—whether First Nations, Métis, or Inuit—having its own unique cultural and geographical identities, as well as varying relationships with the Government of Canada. For example, First Nations individuals with treaty status may access NIHB, whereas Métis and non-status individuals face more limited support. Recognizing these differences is vital in tailoring care and services to the specific needs of each patient (Alberta College of Social Workers, 2019).

Historically, social work has played a role in the development and implementation of policies that reinforced the assimilation of Indigenous peoples into dominant Canadian society. This role was formally acknowledged by the Canadian Association of Social Workers (CASW) in 1993, which called for a shift in social work education and practice with Indigenous communities, emphasizing the need for guidance from those communities themselves (CASW, 2019). Following the Truth and Reconciliation Commission Calls to Action in 2015, the social work profession has been tasked with taking actions 18 to 24 to improve care for Indigenous patients and contribute to the broader reconciliation process at both micro and macro levels. The focus on transforming Canada's health system to address the disproportionate health issues faced by Indigenous peoples calls for governments to acknowledge past harms, close health gaps, address jurisdictional disputes, increase the number of Indigenous healthcare professionals, provide cultural competency training, fund healing centres, and recognize Indigenous healing practices alongside Western medicine, to achieve true health equity (Truth and Reconciliation Commission of Canada, 2015).

Social work practices with Indigenous patients can vary significantly based on regional and cultural differences. In Manitoba, for example, social workers play a vital role in supporting patients living with kidney failure through the process

of relocation and repatriation. This support involves connecting patients to their home communities, coordinating medical transportation, and assisting with housing and other social needs. Social workers also advocate for the reunification of families when necessary, ensuring access to food, housing, and child-care, and connecting patients with other Indigenous services, such as local health organizations and cultural support teams. In Winnipeg, some communities offer health-related housing, transportation, and health navigation services, including cultural and spiritual care (Winnipeg Regional Health Authority, 2025).

A key component of renal social work practice in Manitoba involves ensuring patients are placed on wait lists for rural dialysis units and assisting with their return to home communities after extended stays in urban health centres. Renal social workers advocate for the safe return of patients, addressing housing issues that may arise due to the patient's absence, including repairs, relocation, and the allocation of new housing. They coordinate with medical transportation to ensure continued access to dialysis and other treatments in rural areas. They also work with various housing programs, such as subsidized housing, long-term care, and homes offering dialysis services. Advocacy for housing improvements and assistance with applications for housing are critical services, especially in the context of Canada's ongoing housing crisis.

In addition to housing, renal social workers connect patients with mental health resources, including counselling services and inpatient care, as well as home-based care programs, such as personal support workers and physiotherapy. Financial assistance is also a major area of support, with renal social workers helping patients apply for benefits like Employment Insurance, Canada Pension Plan Disability, Ontario Disability Support Program, and the Disability Tax Credit. For the elderly patients, referrals are often made to geriatrics and senior wellness programs to assist in monitoring and at times improving cognition. For palliative care, renal social workers explore various options, including inpatient hospice care, community services, and home palliative care programs, as well as coordinating with the palliative care team for end-of-life care. Part of the renal social worker's role is to also help patients navigate Medical Assistance in Dying programs when appropriate (Winnipeg Regional Health Authority, 2024). Although these services are available to all patients, Indigenous patients often face additional barriers in accessing culturally specific resources. Renal social workers work diligently to connect these patients with culturally relevant care by collaborating with Indigenous health organizations and referring patients to programs that are tailored to their needs. This often involves navigating local Indigenous health services such as spiritual care or traditional healing practices.

A notable example of this type of integration is the Giigewigamig Traditional Healing Centre at Pine Falls Hospital in Manitoba. This partnership between the Interlake-Eastern Regional Health Authority, the Province of Manitoba, and Health Canada provides Indigenous patients with access to traditional medicines, cultural ceremonies, and spiritual support, alongside conventional medical care (IERHA, 2025). A holistic approach has been shown to improve health outcomes for patients by integrating cultural knowledge and local spiritual practices into their care (Allen, 2020).

Renal social workers play an essential role in supporting Indigenous dialysis patients by addressing a wide range of medical, social, and cultural needs. From navigating transportation and housing to facilitating access to culturally appropriate services and supporting financial and mental health needs, they are key to ensuring that Indigenous patients receive comprehensive, coordinated, and culturally sensitive care. Through collaborative approaches and the integration of Indigenous practices, renal social workers help improve the health and well-being of these patients, contributing to the ongoing reconciliation process and better health outcomes for Indigenous communities.

FUTURE GOALS

Reconciliation is a continual process that involves everyone, and renal social work has an important role. In healthcare, this work includes improving services and experiences for Indigenous peoples. Four future goals have been identified to guide meaningful reconciliation: (1) knowing and honouring Indigenous histories and cultures; (2) taking direction from Indigenous patients; (3) implementing the Calls to Action; and (4) building strong connections with community groups (Co-Operative Housing Federation of Canada, 2020). A future goal of knowing and honouring Indigenous histories and cultures includes recognizing First Nations, Inuit, and Métis as the original peoples of this land and as self-determining nations. Prior to implementing appropriate social work interventions, it is important to properly capture the diversity/demographics of the Indigenous people. This would include Indigenous language and identified Indigenous group. Capturing this information will provide information to support and advocate for the most appropriate interventions. It also involves developing an understanding of local Indigenous communities and building meaningful connections with them. In a dialysis unit, one example of practicing this goal is identifying the Indigenous communities we serve, acknowledging their celebrations and dates, and incorporating these observances into the unit's environment and activities.

Another future goal for renal social workers is taking direction from our Indigenous patients, which could be implemented by creating an advisory committee. The advisory committee would consist of patients living with kidney disease who can make recommendations on how to improve the renal program. Ensuring the inclusion of Indigenous representation in this advisory group is important. Taking directions from Indigenous communities and patients will improve programming and supports for our Indigenous patients. Another example of taking direction from our Indigenous patients is in establishing a positive relationship or partnership with the Indigenous health team. In the Interlake Region, the Indigenous health program is continually expanding and, in return, the renal social work role is continually building a relationship with the program. The Ontario Renal Network (ORN) is also recommending changes to capture socio-demographic data collection, to identify Indigenous populations (among other identifiers) in all the regions in Ontario, including York Region (ORN, personal communication, December 1, 2025). This will provide opportunities for Indigenous partnerships and/or representatives. Reconciliation and healing of relationships with the Indigenous communities and programs are needed to address gaps in areas such as mental health, addictions, and end-of-life care.

Creating connections with community groups is important to the renal social work role. For example, renal social workers may collaborate with organizations such as the Manitoba Metis Federation (MMF). A priority of the MMF Health and Wellness Department is to engage with community members, listen to their concerns, and tailor health programming so it is relevant, accessible and impactful to the well-being of their citizens (MMF, 2025). Renal social workers can play an integral role in this process as they are aware of the needs of the patients and the gaps that exist in the healthcare system.

CONCLUSION

As renal social workers, we recognize that the inequities faced by Indigenous peoples living with CKD and kidney failure—whether in remote communities in Manitoba or urban regions such as York Region—are deeply rooted in systemic gaps, cultural disconnection, and the enduring impacts of

colonization. With humility from the land of Mr. Murray Sinclair, we acknowledge that, in Manitoba and across Canada, we are still in the early stages of reconciliation, guided by Sinclair's leadership as Chair of the Truth and Reconciliation Commission and its 94 Calls to Action (including seven actions focused on health), but we are beginning to make meaningful change (Schwartz et al., 2018). His work continues to inspire our efforts to promote culturally safe, equitable kidney care by addressing limited resources, supporting access to traditional healing, advocating for Indigenous representation in health care, and challenging racism and discrimination within the system. While progress remains uneven and the process of reconciliation is ongoing, renal social workers are committed to advancing this work through relationship-building, patient advocacy, and culturally grounded practice, to ensure that Indigenous patients receive care that is respectful, accessible, and aligned with their needs and identities.

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Caring Beyond the Dialysis Chair: Social Work Perspectives on Providing Indigenous Kidney Care

By Sally Gabra, Laura Cogollo, and Carla Sweetland

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1. How do the experiences of urban Indigenous people with accessing healthcare/dialysis treatment differ from those in remote communities?
 - a) Access to specialized renal care is limited
 - b) Lower screening for chronic kidney disease (CKD)
 - c) Patients usually have to relocate in order to receive dialysis treatment
 - d) None of the above
 - e) All of the above
2. What are the major issues Indigenous people face when they need to initiate dialysis treatment?
 - a) Patients need to relocate to urban centres or travel long distances to access hemodialysis in an urban centre
 - b) Patients usually feel culturally disconnected, lonely, and isolated
 - c) Patients need to navigate between different services and jurisdictions
 - d) All of the above
3. Which of the following is highlighted as the primary challenge that must be addressed *before* Indigenous patients can meaningfully engage in medical treatment like dialysis?
 - a) Ensuring patients have a high school diploma to understand medical information
 - b) Advocating for a full-time renal social worker position within every clinic
 - c) Providing culturally relevant information that immediately reverses pre-existing poverty
 - d) Meeting basic needs, such as food security, transportation, and culturally appropriate support
4. Which aspects are part of the social worker assessment with Indigenous patients with chronic kidney disease and end stage renal disease?
 - a) Language and Indigenous status
 - b) Formal and informal supports
 - c) Housing and finances
 - d) Health literacy
 - e) Mental health and addictions
 - f) All of the above
5. Why do the Indigenous people in Canada experience disproportional levels of CKD and end-stage renal disease (ESRD)?
 - a) Lower social determinants of health
 - b) Geographical and access barriers
 - c) Systemic inequities stemming from the enduring impacts of colonialism
 - d) All of the above
6. What are some examples of Indigenous Wellness approaches?
 - a) Interpreters and Elders
 - b) Cognitive behavioural therapy
 - c) Traditional medicines
 - d) Counselling and psychiatry referrals
 - e) Reinforcing cultural identity
 - f) A, C & E
 - g) B & D
7. What kind of supports can an Indigenous patient with treaty status receive from non-insured health benefits (NIHB)?
 - a) Transportation
 - b) Counselling services
 - c) Pharmacy and medical supplies
 - d) Dental and vision care
 - e) All of the above
8. What do the Truth and Reconciliation Commission (TRC) Calls to Action 18–24 focus on?
 - a) Calling for governments to acknowledge past harms
 - b) Closing health gaps
 - c) Addressing jurisdictional disputes
 - d) Funding healing centres
 - e) Recognizing and integrating Indigenous healing practices alongside Western medicine
 - f) Increasing Indigenous healthcare professionals and providing cultural competency training
 - g) Mandating cultural competency training for all healthcare professionals
 - h) All of the above
 - i) None of the above
9. What is an example of reconciliation in action in a dialysis unit and/or centre?
 - a) Knowing and learning about treaties and Indigenous culture
 - b) Acknowledgement of the Indigenous people and territories you are located on
 - c) Taking direction from Indigenous patients and communities
 - d) All of the above
10. Who was the Chair Commissioner of the Truth and Reconciliation Commission of Canada (TRC)?
 - a) Wilton Littlechild
 - b) Murray Sinclair
 - c) Dr. Marie Wilson
 - d) None of the above

Caring Beyond the Dialysis Chair: Social Work Perspectives on Providing Indigenous Kidney Care

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Volume 35, Number 4

Post-test instructions

CANNT members:

This quiz is complimentary to CANNT members. Complete this test on your Course Dashboard on the CANNT website <https://cannt-acitn.ca/course-dashboard/>. You must be logged in to access. Please contact info@cannt-acitn.ca if you have issues accessing your Course Dashboard.

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- Select the best answer and circle the appropriate letter on the answer grid below
- Complete the evaluation
- Send a copy of the answer form by email only to info@cannt-acitn.ca
- Post-tests must be emailed by December 31, 2026.
- You will receive a credit card invoice for \$15.00 + HST.
- If you receive a passing score of 80% or better, a certificate for 2.0 contact hours will be awarded by CANNT.
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POST-TEST ANSWER GRID

Please circle your answer choice:

- a b c d e
- a b c d
- a b c d
- a b c d e f
- a b c d
- a b c d e f g
- a b c d e
- a b c d e f g h i
- a b c d
- a b c d

EVALUATION

	Strongly disagree		Strongly agree		
1. The offering met the stated objectives.	1	2	3	4	5
2. The content was related to the objectives.	1	2	3	4	5
3. This study format was effective for the content.	1	2	3	4	5
4. Minutes required to read and complete:	50	75	100	125	150

Comments: _____

COMPLETE THE FOLLOWING:

Name: _____

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CANNT member? Yes No



2025 CANNT Award Recipients

We are pleased to recognize the 2025 CANNT Award Recipients. The CANNT Award Program was recently updated for 2025, and we are proud to celebrate the achievements and dedication of the following individuals, each of whom has demonstrated exceptional commitment to excellence in nephrology nursing and patient care.

CNA CERTIFICATION BURSARY

Julie Boudreau, MN, RN, CNeph(C), CCNE, CCSNE

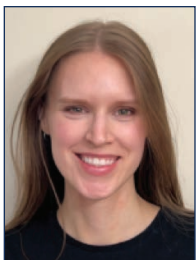


The Canadian Nurses Association (CNA) Certification Bursary is awarded annually to support members who have successfully completed CNA certification or recertification. This bursary is available to members who have passed the CNA certification exam or achieved recertification through continuous learning in the current year. This year's bursary is presented to **Julie Boudreau**. Julie's certification journey has played a significant role in strengthening her confidence and competence as a registered nurse, beginning with her initial CNA certification in nephrology nursing in 2010. Through successive recertifications, she has continued to deepen her breadth and depth of knowledge, expanding her expertise within this specialty. Since 2019, Julie has supported the professional growth of colleagues across Canada as a mentor for CNA certification, contributing to a strong culture of excellence within the nephrology nursing community.

tification journey has played a significant role in strengthening her confidence and competence as a registered nurse, beginning with her initial CNA certification in nephrology nursing in 2010. Through successive recertifications, she has continued to deepen her breadth and depth of knowledge, expanding her expertise within this specialty. Since 2019, Julie has supported the professional growth of colleagues across Canada as a mentor for CNA certification, contributing to a strong culture of excellence within the nephrology nursing community.

CANNT RESEARCH GRANT

Meghan Harris, RN



The CANNT Research Grant is presented to a member who is conducting a research project that advances nephrology practice, enhances patient care and outcomes, builds on existing nursing and technological knowledge, facilitates research and mentorship opportunities, or generates new knowledge to improve the understanding of renal disease management. This year's award is presented to **Meghan Harris**. Her proposed research project, "Validity and Reliability of the Chronic Kidney Disease Self-Management (CKD-SM) Questionnaire," addresses a significant gap in kidney care by refining and validating a tool that measures self-management in early-stage CKD.

ment. This year's award is presented to **Meghan Harris**. Her proposed research project, "Validity and Reliability of the Chronic Kidney Disease Self-Management (CKD-SM) Questionnaire," addresses a significant gap in kidney care by refining and validating a tool that measures self-management in early-stage CKD.

EXCELLENCE IN RESEARCH AWARD

Kokab Younis, MN, RN, CNeph(C), CCNE



This award is presented to a CANNT member who develops and/or participates in research that enhances patient outcomes in the field of nephrology. We are pleased to present this award to **Kokab Younis**. Since joining the Alberta Kidney Care Program in 2016, Kokab has been enthusiastic about improving the patient experience. Through her experience in nephrology, she had the opportunity to be involved in quality improvement projects where she advocated for standardized practices. One such project focused on implementing a standardized algorithm for managing dysfunctional central venous catheters. In this initiative, Kokab provided direct patient care to patients receiving hemodialysis, actively collaborated with clinical educators, and facilitated numerous in-services for staff.

ence in nephrology, she had the opportunity to be involved in quality improvement projects where she advocated for standardized practices. One such project focused on implementing a standardized algorithm for managing dysfunctional central venous catheters. In this initiative, Kokab provided direct patient care to patients receiving hemodialysis, actively collaborated with clinical educators, and facilitated numerous in-services for staff.

EXCELLENCE IN ADMINISTRATIVE LEADERSHIP PRACTICE AWARD

Sarah Thomas, RN



This award is presented to a member who demonstrates a commitment to professional growth of staff—thereby enhancing the quality of care provided—and encourages collaborative decision-making among staff. We are pleased to present this award to **Sarah Thomas**. Sarah has exemplified excellence in administrative leadership practice through her leadership in developing the provincial Hemodialysis Emergency Support Team (HEST) nurse program. Under her guidance, HEST has become a cornerstone of emergency readiness and workforce sustainability across British Columbia's renal care system.

ership in developing the provincial Hemodialysis Emergency Support Team (HEST) nurse program. Under her guidance, HEST has become a cornerstone of emergency readiness and workforce sustainability across British Columbia's renal care system.

EXCELLENCE IN EDUCATION AWARD

Steffany Bourque, RN



This award is presented to a CANNT member involved in staff or patient education, who provides creative and innovative learning experiences through which the learner may grow professionally. We are pleased to present this award to **Steffany Bourque**. Steffany is a dedicated clinical manager in a regional nephrology program with six satellites,

ensuring that the satellite staff are offered opportunities for education and training. Steffany is also a champion for ongoing professional development and encourages certification in nephrology, extra training for peritoneal dialysis nurses, and participation in conferences related to nephrology.

CANNT JOURNAL AWARD

Irene Chen, MN, RN, CNeph(C)

Lead Author

(*CANNT Journal*, 2024, 34[3], 9–15)



CANNT presents this award to the author, or authors, of the best peer-reviewed article to appear in the *CANNT Journal* during the year. We are pleased to present this award to Jing Qiong (Irene) Chen, Zheng Jing Hu (MSc, PhD[C]), Samantha Rahaman (MSW, RSW), Alison F. Rowe (MSW, RSW), and Blessymol Kalathiparambil (BSN, RN, CNeph[C]), for their manuscript “Investigating the Efficacy of Interactive Live Model Training for Hemodialysis Providers in Crisis Management.”

NOTICE BOARD

- Canadian Nurses Association (CNA) Exam Timeline. <https://www.cna-aicc.ca/en/certification/about-certification>

	Spring 2026	Fall 2026
Initial exam or renewal by exam application window	January 15–March 31, 2026	June 16–September 30, 2026
Certification exam window	May 1–15, 2026	November 1–15, 2026
Renewal by continuous learning application window	January 15–December 15, 2026	

- **February 26–March 1, 2026.** Annual Dialysis Conference | Marriott Downtown, Kansas City, Missouri | <https://www.annualdialysisconference.org>
- **March 12, 2026.** World Kidney Day – *Kidney health for all—Caring for people, protecting the planet* | <https://www.world-kidneyday.org>
- **March 28–31, 2026.** World Congress of Nephrology 2026 (WCN) hosted by the International Society of Nephrology | Pacifico Yokohama National Convention Hall, Yokohama, Japan | <https://www.theisn.org/wcn/>
- **April 25–28, 2026.** American Nephrology Nurses’ Association National Symposium | Hilton Riverside, New Orleans, Louisiana | <https://www.annanurse.org/event/national-symposium/>
- **May 6–10, 2026.** National Kidney Foundation Spring Clinical Meetings (SCM26) | New Orleans Ernest N. Morial Convention Center, New Orleans, Louisiana | <https://www.kidney.org/spring-clinical>
- **June 17–19, 2026.** Renal Society of Australasia (RSA) Conference 2026 | Te Pae Christchurch Convention Centre, Christchurch, New Zealand | <https://www.renalsociety.org/education/2026-conference/>
- **September 17–20, 2026.** 2026 Nephrology Nursing Summit, Scottsdale Resort & Spa, Scottsdale, Arizona | <https://www.annanurse.org/event/nephrology-nursing-summit/>
- **September 26–29, 2026.** 54th European Dialysis and Transplant Nurses Association/European Renal Care Association (EDTNA/ERCA) International Conference | *Mind matters in nephrology: Caring beyond the kidneys* | AmberEXPO Exhibition and Congress Center, Gdańsk, Poland | <https://www.edtnaerca.org/conferences/conferences-gdansk-2026>
- **October 22–24, 2026.** CANNT National Conference | Delta Hotel, St. John’s Conference Centre, St. John’s, Newfoundland | <https://cannt-acitn.ca/>
- **October 21–25, 2026.** American Society of Nephrology 2026 Kidney Week | Colorado Convention Center, Denver, Colorado | <https://www.asn-online.org/education/kidneyweek/archives/future.aspx>



CANADIAN
NURSES
ASSOCIATION

Nephrology Certification Registration Status Report 2025

Initial and Renewal by
Exam to Renew in 2025

Renewal by Continuous
Learning (CL) Hours

Total of Initials
and Renewals

Due to Renew
in 2025

36

18

54

142



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Oral and Poster Abstracts

Oral abstracts

1. Evaluation of the Live Donation Patient and Family Group

Jody Max^a, MSW, RSW

Christina Schellenberg^b, MSW, RSW

^a St Paul's Hospital, Live Donor and Kidney Transplant Programs, Vancouver, BC

^b Fraser Health Authority, New Westminster, BC

Background: The best treatment for most patients with end-stage renal disease is a live donor kidney transplant (LDKT). However, the rates of LDKT continue to be low. One of the hardest things about LDKT is that the responsibility is on the patient to find a live donor. Most patients feel very uncomfortable asking someone to donate a kidney and often lack information about the process. To this end, in the fall of 2020, our team created the monthly “Live Donation Patient & Family Group” over Zoom to help participants become more comfortable with having conversations about LDKT by providing education, resources, tools, and emotional support. **Purpose of Study:** In the spring of 2021, we participated in a research challenge to determine if participation in the group increased participants' comfort level in doing donor outreach. **Method:** We used a quantitative Likert scale survey, which was distributed via an online platform to participants who consented. **Results:** The survey results were very positive with 68%

of participants reporting that participation in the group improved their comfort levels. For those already doing donor outreach, 67% of participants said the group helped them do more. Several participants reported that the group increased their confidence, knowledge, and quality of donor outreach. **Conclusion:** The research results indicate that a group like this is beneficial for kidney patients seeking live donor transplants. **Implications for Nephrology Care:** We recommend offering similar groups across all kidney programs to all potential transplant patients. We expect that an increase in donor outreach will lead to an increase in live donor transplants.

2. Innovative Integration of Traditional and Western Approaches in Satellite Dialysis

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Background: Pasikow Muskwa or Rising Bear Healing Centre (RBHC) is an integrated satellite hemodialysis centre and primary health care clinic located in Fort Qu'Appelle, Saskatchewan, on Treaty Four Territory. **Purpose:** This presentation will outline a model of care that integrates Traditional and Western medicines in the context of a satellite dialysis unit. The philosophy of RBHC is guided by the

First Nations' Leadership vision to ensure all are welcome, respected, and empowered in meeting their holistic needs in achieving optimal health and wellbeing. **Description:** RBHC offers hemodialysis satellite services three days per week, primary care services, individual and group counselling, dietitian and diabetes educator services, traditional medicine, traditional and spiritual institutes, spiritual counselling, outreach services to surrounding communities, telehealth support, and visiting specialists. At the centre of RBHC are the traditional medicine services provided by the cultural team. Within the clinic are a medicine room and spiritual room where patients can access medicines, smudging, and prayers before or after their hemodialysis treatments. The hemodialysis patients are provided interdisciplinary services in a rounds format with a pharmacist, dietitian, health navigator, cultural practitioner, nurse, and nurse practitioner. **Outcome:** This unique model of care allows for improved access to culturally safe care for individuals, families, and communities, that is innovative, diverse, and respectful of various ways of knowing. **Implications for Nephrology Practice:** Rising Bear Healing Centre strives to enhance community engagement, prevention, early detection, and active self-management across the continuum of care for kidney wellness. Supporting, strengthening, and facilitating cultural healing through Traditional and Spiritual Institutes is an integral part of the services.

3. Sustainability Options for Dialysis Water Treatment Systems

Jennifer McGill, Technical Coordinator

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Background: Dialysis facilities on Vancouver Island faced serious water-related challenges, such as membrane clogging, boil-water advisories due to heavy rainfall, and disruptions from construction, pipe failures, and human error. These incidents highlighted the need for improved reliability and redundancy. **Purpose:** Our goal was to enhance the reliability of Island dialysis water treatment systems, reduce costly manual servicing (requiring technicians from Vancouver), and ensure adaptability to changing environmental conditions. **Description:** In 2016, we installed pre-reverse osmosis automated backwashing ultrafiltration systems. Between 2020 and 2025, we improved these systems with double-pass automated heat disinfection reverse osmosis units featuring indirect distribution tanks. **Outcomes:** Ultrafiltration extended the lifespan of reverse osmosis membranes over five times longer—now nine years compared to 1.5 years before. Manual membrane cleaning frequency decreased from quarterly to once a year, and service calls for emergency cleanings dropped to zero. These systems effectively manage boil-water advisories, turbidity from municipal issues/maintenance, and sediment during droughts, requiring less intervention. Indirect distribution tanks can provide one to two hours of dialysis-quality water during outages, which occurred three times in five years. The double-pass system allows easy transition to single-pass mode

during component failures. These upgrades are essential; they have proven their worth as investments and are highly recommended for similar regions. **Implications:** Investing in advanced water treatment equipment may entail significant initial costs, but it yields long-term savings in operating expenses while ensuring enhanced reliability, sustainability, and adaptability, especially in areas outside major urban centres. Embracing these innovations is a crucial step toward providing safe and dependable dialysis care.

4. Go With the Flow: The Future of Fistula Creation

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Background: Hemodialysis access options, such as central venous catheters, and arteriovenous fistulas (AVF) and grafts, each comes with unique complications, ranging from infection and thrombosis to non-maturation and limited long-term success in high-risk patients. Despite clinical advancements, equitable and sustainable access options remain limited, especially for patients with complex vascular anatomy. **Purpose of the Project:** This presentation aims to explore acellular tissue-engineered vessels (ATEVs) as an emerging vascular access option that could transform care for dialysis patients who are poor candidates for traditional AVF creation. **Description:** ATEVs are lab-grown, human-derived conduits developed through tissue engineering and decellularization to eliminate immune rejection. Initially pioneered for use in vascular trauma, ATEVs are now in late-stage clinical trials for dialysis access. This session will review how ATEVs are created, stored, and surgically implanted, and discuss their design benefits, including resistance to infection, long shelf life, and consistent structural integrity. **Evaluation/Outcome:** Recent randomized controlled trials (e.g., CLN-PRO-V007) have shown that ATEVs demonstrate superior functional patency at six and 12 months, compared to autologous AVFs in high-risk patients, particularly those who are female, diabetic, or obese. Although not yet approved by Health Canada or FDA for AVF use, clinical results are promising and point to improved durability and reduced catheter reliance. **Implications for Nephrology Practice/Education:** Acellular tissue-engineered vessels offer a glimpse into the future of vascular access—one that is more inclusive, durable, and potentially life-changing for patients with limited options. Nephrology professionals must stay informed about these advances to support evidence-based decision-making and patient education in a rapidly evolving landscape.

5. Dialysis Equipment Maintenance Optimization

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Background: The dialysis equipment is an essential part of the infrastructure of any dialysis unit and, as such, its proper functioning is critical to keep the unit operational. To prevent unexpected equipment failures, the manufacturer recommends routine and preventative equipment maintenance to restore the performance lost due to aging components. However, the particular conditions of each dialysis unit or home patient may differ from the manufacturer's laboratory testing conditions, stressing the equipment in ways that may not be previously evaluated, leading to premature failures. Consequently, the maintenance needs to be adjusted to those conditions to enhance the equipment's reliability and safety operation. **Purpose of the Project:** The poster describes a method of assessing the dialysis unit's particular operating conditions and the related equipment failures and implications, with the purpose of developing an optimized, unit-specific maintenance protocol to minimize equipment failures and service costs. **Description:** A maintenance protocol development requires collecting relevant data about the equipment's operating conditions and parameters, faults, and service history. Subsequently, dedicated forms and statistical tools are developed to assess and interpret the data and infer a conclusion. Furthermore, consolidating the findings with the manufacturer's recommendations creates the premises of an enhanced, unit-bound maintenance procedure. **Evaluation/Outcome:** Custom-made equipment maintenance protocols present the advantage of addressing unit-specific problems. Some notable outcomes are: (1) increased operational safety by failure prevention; (2) reduced equipment downtime by service; (3) labour and inventory optimization; and (4) decreased maintenance costs due to emergency interventions (equipment swaps during hi-peak or off-time operating hours, off-unit, or remote places). **Implications for Nephrology Practice/Education:** When the manufacturer support is limited, the engineering team must find new ways to ensure the stewardship of the technical side of the dialysis operations. The findings will increase technical knowledge, serve for future technical developments, and become part of the unit's continuing improvement initiative.

6. Patient and Family Engagement Practices that Mitigate Central Line Infections

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Rahel Tesfaye, RPN, Vascular Access Nurse

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Background: The Scarborough Health Network's (SHN) Nephrology Vascular Access team supports a diverse patient population by managing dialysis accesses and provides education about the risks and benefits of various access types. Due to an increase in hemodialysis central venous catheter (CVC) infections, the team identified a need to improve infection prevention strategies through enhanced patient and family engagement. **Purpose of the Project:** In being responsive to an identified program issue of increased CVC infections, the vascular team implemented a patient/family-centred approach, emphasizing hygiene practices at home to mitigate the central line infection risks and reassessment for alternative access options. **Description:** The SHN supports approximately 800 prevalent hemodialysis patients, many of whom use CVCs. Between July 2024 and February 2025, the team met with 487 patients and families to review showering and bathing techniques. Of these, 319 patients reported showering and 168 were using sponge baths. While most covered their CVCs during bathing, some did not, contributing to infection risk. **Evaluation:** Following these interventions, 154 patients with CVCs were encouraged to be reassessed for alternative dialysis access. As a result, 83 fistulas were created and 62 patients are awaiting surgical consultation. More than 80 patients were not suitable for alternative access, while 249 declined reassessments. Despite barriers, this initiative led to greater engagement in access planning. **Implications for Nephrology Practice/Education:** Face-to-face interactions with patients and families significantly improved understanding of access options, infection risks, and proper CVC care. This initiative fostered patient empowerment, supported informed decision making, and encouraged timely transition to safer dialysis access. This approach emphasizes the crucial role of education in enhancing outcomes and mitigating central line infection.

7. Enhancing Equitable Access to Living Kidney Donation: Innovations in the Canadian Kidney Paired Donation program

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Background: In 2023, 2,013 patients received a kidney transplant, yet as of December 31, 2023, 2,448 patients remained on the kidney transplant waitlist in Canada, highlighting the urgent need to expand access to living kidney donation. Many patients continue to face challenges, such as donor-recipient incompatibility, lack of awareness,

and delays in accessing transplantation. **Purpose of the Project:** Our goal is to empower healthcare professionals with the knowledge and tools to engage in patient-centred discussions on living kidney donation to increase transplant opportunities and improve access to living kidney donation. **Description:** Healthcare providers play a vital role in addressing these challenges by facilitating informed discussions about living kidney donation. The Kidney Paired Donation (KPD) Program helps overcome incompatibility by enabling donors and recipients to find suitable matches across Canada. This session will explore recent advancements in living kidney donation, our strategies for improving equitable access to transplants, program enhancements for hard-to-match patients, and the benefits of preemptive transplantation, a proactive approach that allows patients to receive a transplant before starting dialysis, improving long-term outcomes. **Evaluation/Outcome:** Through data-driven insights and national program advancements, our goal is to highlight how innovative approaches and national collaboration are expanding living kidney donation. Healthcare providers will gain access to resources, educational materials, and practical tools to support meaningful discussions with patients. **Implications for Nephrology Practice/Education:** By equipping healthcare professionals with the resources and knowledge to discuss living kidney donation, this initiative aims to improve patient education, enhance decision-making and, ultimately, increase access to kidney transplants.

8. A Practical Application of Implementation Science in Changing Practice of Alteplase Administration

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Josie Barbata, MS, BScN, RN

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Background: The use of thrombolytic alteplase in hemodialysis patients presents significant challenges, including overuse for non-thrombotic issues, underuse for thromboprophylaxis, and delayed recognition of persistent catheter dysfunction. Variability in medication administration indicates a gap between evidence and practice, hindering measurements of effectiveness of alteplase and care. The kidney program in Central-West Ontario, serving more than 600 hemodialysis patients, recently revised its alteplase policy. Addressing barriers is essential for effective practice change. **Purpose of the Project:** Utilizing implementation science frameworks, this initiative demonstrated bridging the knowledge-to-practice gap in nephrology through the implementation of the alteplase policy rollout. This project identified multi-level barriers and facilitators, customized knowledge tools to local contexts, and tailored interventions with the overall aim of improving hemodialysis catheter performance and cost-effectiveness in alteplase use. **Description:** The Knowledge-to-Action (KTA) framework guided the knowledge synthesis and translation process,

while the Consolidated Framework for Implementation Research (CFIR) helped identify barriers and co-design strategies. Tailored implementation strategies included championship, strategic education, health information system and workflow modifications, a new automatic alteplase alert system, and leadership engagement, to ensure participation, adoption of interventions, and facilitate behavioral changes. **Evaluation/Outcomes:** The next step involves conducting an implementation evaluation of the policy rollout, using qualitative and quantitative data from surveys, interviews, audits, and medication records. The analysis will focus on implementation outcomes, including adoption, fidelity, and stakeholder engagement, during the rollout and the three months following implementation. Pre- and post-comparisons of clinical outcomes will include catheter function indicators and costs measured six months before and after rollout. Expected outcomes are no change or improved catheter function indicators and reduced costs. **Implications for Nephrology Practice:** The frameworks guided the alteplase project in bridging evidence-practice gaps, promoting knowledge utilization, and enhancing clinical decision-making. These strategies may inform future kidney care initiatives in similar contexts.

9. Water Matters: Technical Solutions for a Scarce Dialysis Future

Adam Burwash

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Background: Water scarcity is an increasing risk to routine dialysis operations. With global freshwater reserves sharply dropping in 2014 and failing to recover, we are in a new era of water conservation. Given this backdrop, how do we develop dialysis systems that promote water conservation and are built for climate resilience? **Purpose of the Project:** Perform a quantitative analysis of the water usage of a dialysis water treatment system and highlight opportunities for conservation and reuse, while promoting system resilience. **Description:** Case study comparing currently installed and proposed future water treatment systems at Royal Jubilee Hospital in Victoria, BC. **Evaluation/Outcome:** Quantify existing and proposed water conservation technologies and system designs in terms of water conservation. Provide a qualitative analysis of the complexity of partial implementation of these best practices for existing systems. **Implications for Nephrology Practice/Education:** Advocate for a holistic approach to water conservation that includes equipment and procedures. Renew the discussion on how to balance water conservation and preventative maintenance to enhance water security for patient treatment.

10. Intra-Operative Renal Replacement Therapy During Liver Transplantation: Perspective of Nursing Care in University Health Network

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Background: Acute kidney injury (AKI) in patients admitted to the hospital for liver transplantation is common, with up to 80% of pretransplant patients having some form of AKI (Mitra et al., 2014). Many of these patients start dialysis before their transplant and have it continued intra-operatively during their surgery. This review synthesizes current evidence and expert opinion around the indications, potential benefits, limitations, and outcomes of intraoperative dialysis during liver transplantation. Particular attention is given to patient selection, electrolyte and fluid balance consideration (e.g., hyponatremia, hyperammonemia), and dialysis prescription adjustments across transplant phases (preanhepatic, anhepatic, and postanhepatic). **Purpose of the Study:** To review the role of the dialysis nurse and the uniqueness of AKI during liver transplantation, as it lies in its complex interactions between the liver and kidney, its impact on patient outcomes, and the specialized treatment required to manage both organ systems during such a critical procedure. **Description:** This presentation explores the significance of AKI in liver transplantation, focusing on patient eligibility, the impact of metabolic factors, such as hyponatremia and hyperammonemia, and the management strategies during different phases of the transplant trajectory to optimize outcomes. **Evaluation and Outcome:** Patients who received pretransplant renal replacement therapy (RRT) had statistically significantly longer post-transplant intensive care unit (ICU) and hospital stays, in comparison with those patients who did not receive pretransplant RRT. **Implications for Nephrology Practice and Education:** This review underscores the need for collaboration among nephrology professionals, the development of standardized protocols for practice, and enhanced training for staff. It highlights a critical gap at the practicing hospitals, where no policies currently exist to direct the requisite skills, making continuous research vital for ensuring nurses are prepared in this setting, such as well-developed orientation, standard operating procedures, and timely transfer of accountability is sufficient for the overall safety of these patients.

11. Perspectives on Mental Health Care in Dialysis: A Qualitative Study to Identify Gaps, Challenges, Opportunities, and Recommendations in Alberta

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Background: Individuals undergoing dialysis face a significantly higher proportion of mental health (MH) symptoms compared to other chronic illnesses; however, for multiple reasons, MH is frequently unaddressed, and care remains fragmented. This can contribute to lower quality of life and increased healthcare utilization. **Purpose:** The purpose of this study was to explore perspectives of persons receiving dialysis, healthcare professionals, and administrators within Alberta Kidney Care about 1) existing gaps, 2) challenges and facilitators of addressing MH care, and 3) recommendations for enhancing dialysis care. **Methods:** Using interpretive description methodology, we conducted qualitative secondary data analysis of phase 1 data from “Tailoring a Pathway for Mental Healthcare for Albertans on Dialysis.” Data included transcripts from 13 focus groups and interviews conducted via Zoom with persons receiving dialysis ($n = 10$), kidney clinicians ($n = 25$), and administrators ($n = 19$) across diverse geographic locations. Constant comparative analysis was utilized. **Results:** Four program-level gaps were identified: inconsistent screening, inefficient referral processes, insufficient follow-up and monitoring of MH outcomes, and absence of dialysis-specific pathways/protocols. Delivery of MH care was shaped by four overarching factors: knowledge, role ambiguity, resources, and privacy. These factors functioned both as challenges and facilitators within dialysis settings. Challenges included limited education and resource knowledge, role ambiguity among clinicians, time and staffing pressures, limited MH resources and specialist access, and inadequate privacy accommodations. Facilitators encompassed experienced clinicians with mental health interest, social work support and multidisciplinary teams, person-centred approaches, and feasible privacy accommodations. Participants recommended actions across five domains: education, MH pathways/protocols, program-specific resources, MH care coordination, and promoting privacy while addressing stigma. **Conclusion:** These findings provide actionable recommendations to inform policy and practice changes for improving MH care delivery in dialysis settings. **Implications for Nephrology Care:** Results support developing dialysis-specific clinical pathways, enhanced provider knowledge and education, and expanded MH service availability to improve outcomes for persons with kidney failure.

12. Innovative Approaches to IPAC Education Incorporating Knowledge Translation Processes

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Background: Adherence of frontline staff to infection prevention and control (IPAC) practices is crucial in preventing infections. However, consistent adherence to these protocols can be challenging. A strong need to enhance IPAC knowledge, particularly Hepatitis B, among renal nurses at William Osler Health System was identified. Practice gaps were reported in Hepatitis B exposure and delay in Hepatitis B immunization. The unit survey indicated the nursing staff's limited skills in interpreting Hepatitis B blood work results. **Purpose of the Project:** To enhance dialysis staff's knowledge of Hepatitis B and improve their IPAC practices, the education design and delivery need to integrate knowledge translation principles. **Description:** This project uses the concept of knowledge translation (KT). The Hepatitis B education program was designed following the translating process, a key concept in KT. It was delivered through a one-hour presentation using interactive slides. The presentation turned the investigation of Hepatitis B blood work into an engaging crime scene exploration, making the learning process immersive and interactive. **Evaluation/Outcome:** Data were collected using pre- and post-education surveys to measure the impact. A total of 180 pre-education surveys were collected and showed that many nurses were familiar with Hepatitis B blood work acronyms but found it challenging to interpret results confidently, reflecting novice to beginner competency levels according to Benner's nursing competency model. Sixty-eight post-education survey results indicated an increase in the competency level, suggesting that incorporating KT principles in IPAC education can lead to significant and sustainable improvements. **Implications for Nephrology Practice/Education:** The project demonstrated the effectiveness of translating in KT for improving knowledge retention and application.

13. Bridging Care: Establishing On-Site Hemodialysis at St. John's Rehab

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Background/Purpose: Before April 5, 2024, patients on hemodialysis at Sunnybrook Health Science Centre, who required the specialized rehabilitation program available at St. John's Rehabilitation, had to travel back and forth three times weekly. Not only was travel difficult for patients, but the timing of dialysis either eroded the rehabilitation time during the day or caused nursing challenges at both sites due to patient transfers. Additionally, it contributed to patient fatigue and decreased overall quality of care. To improve the quality of care, a four-bed dialysis unit was designed for St. John's Rehab and opened on this date. **Description:** To meet patient needs and provide safe effective dialysis, scheduled to align with rehabilitation, a comprehensive needs assessment was conducted to evaluate patient flow, logistical barriers, and facility readiness. An interprofessional team including nephrologists, dialysis and rehab nurses, pharmacists, dietitians, social workers, administrators, and infection control, and emergency services personnel, collaborated to develop and manage the implementation of the service. **Evaluation:** Initial outcomes show improved patient satisfaction and clinical efficiency. Benefits included: (1) elimination of transport-related fatigue and disruption; (2) better adherence to rehabilitation schedules; (3) enhanced coordination of care across teams; and (4) a high level of patients able to return home. **Implications for Nephrology Practice:** The on-site hemodialysis at St. John's Rehabilitation highlights the value of integrated, patient-centred care in nephrology practice. It improves treatment adherence during rehabilitation, reduces patient fatigue, and supports better rehabilitation outcomes by aligning dialysis with therapy schedules. This model also emphasizes the importance of interdisciplinary collaboration and continuity of care. Moreover, this approach highlights the importance of interdisciplinary collaboration bringing together nephrologists, rehabilitation specialists, nursing staff, and allied health professionals to develop comprehensive, individualized care plans. It fosters continuity of care, minimizes fragmentation, and ensures that the unique needs of patients with complex comorbidities are met in a timely and cohesive manner.

14. Utilizing Unregulated Healthcare Professionals in the Home Dialysis Assistance Program

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Background: Our program has experienced challenges in the recruitment and retention of personal support workers (PSWs) for our home dialysis assistance program (HDAP). Perceived instability of PSW hours and the travel burden compared to community work are often cited as reasons for non-interest or leaving the position. The program needed a sustainable and inclusive model to provide the human resources to meet the ongoing demand for HDAP in our program. This prompted the exploration of other avenues for recruitment from within our organization. **Purpose of the Project:** The purpose of this project was to identify existing non-regulated healthcare staff who would be interested in training with hemodialysis home nurses, to learn how to administer and provide care for hemodialysis patients requiring assistance to dialyze at home. **Description:** The dialysis technician group was selected as the unregulated healthcare providers from which we would make our selection. Their familiarity with dialysis equipment, knowledge of aseptic technique, and experience with face-to-face patient interactions were some of the group's traits that identified them as ideal candidates in our program. **Evaluation/Outcome:** To date, our program has one home technician trained to initialize a home dialysis treatment with accessing a central venous catheter, monitor the patient and treatment for the duration of hemodialysis, and discontinue the treatment. Each home technician will receive delegation (by patient) to perform the necessary dialysis tasks. **Implications for Nephrology Practice/Education:** This project has allowed us the ability to provide reliable home assistance to the patient population while providing another route for our employees to develop new skills and employment opportunities.

15. Sustaining Home PERITONEAL DIALYSIS Access for Clients Through the Lens of a Best Practice Spotlight Organization: A Collaborative Approach Between Scarborough Health Network and Care First Seniors & Community Services Association

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Background: Scarborough Health Network (SHN) implemented their Home Dialysis Assistance Program for Peritoneal Dialysis (HDAP-PD) in 2019. During the previous year, SHN obtained their Best Practice Spotlight Organization (BPSO) designation. As part of sustainability work in 2023 involving the best practice guideline (BPG), "Strategies to Support Self-Management in Chronic Conditions: Collaboration with Clients" (SMCC), a two-tiered success of the HDAP-PD program was captured as an attestation to SHN's FEED champion framework: Find champion, Empower them with knowledge, Engage them in meaningful activities, and Develop and celebrate them. **Purpose:** This presentation demonstrates the two-tiered success of the collaborative HDAP-PD program in safely transitioning clients home with community agency, Care First Seniors & Community Services Association (CF), support and empowering clients using best practice and standard work toward self-management. **Description:** Scarborough Health Network nurses initiate client education and training on home PD modality. Based on identified needs, the CF team is involved in developing a collaborative and safe transition plan together with SHN and the client. Client education continues at home using one of the recommendations from SMCC BPG: nurses utilize the 'ask-tell-ask' communication technique. Nurses are engaged in this work using the FEED champion framework. **Outcome:** Since the implementation of the HDAP-PD program in 2019, SHN has supported an additional 142 new clients in successfully transitioning home. In 2024, out of 50 HDAP-PD clients, seven clients (14%) transitioned to full self-management and carry out their PD independently at home. **Implications for Nephrology Practice/Education:** This goal towards self-management creates capacity in the HDAP-PD program to continue to support new clients on home PD. This transition is founded on strong collaboration between the two organizations in building standardized training and onboarding plans, as well as engaging through a champion model based on best practice.

16. Eliminating Bleach in Dialysis Facilities – A Safer Future

Jennifer McGill, Technical Coordinator

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Background: Dialysis facilities on Vancouver Island have experienced serious incidents related to bleach use, including missed residual checks, accidental mixing with acid that created hazardous gases, and exposure for staff allergic to chlorine. Additionally, improper tubing swapping during servicing led to damaging hot bleach cycles. Since 2020, bleach use for surface disinfection has been replaced with accelerated hydrogen peroxide, leaving only its weekly use for dialysis machines. **Purpose:** To address these risks, Island Health Renal Services has recommended the complete elimination of bleach from facilities. **Description:** After thorough reviews, the recommendation to remove bleach has been approved, contingent upon implementing weekly “interface” disinfection, which includes a 30-minute hot rinse of hoses, already implemented locally. **Outcomes:** The removal of bleach has significantly reduced exposure hazards. With weekly disinfection, dialysis machine drain hoses have not accumulated deposits. However, wallbox drains have worsened, necessitating a new twice-weekly cleaning procedure. **Implications:** This decision enhances safety for patients and staff. Although it requires “interface” heat disinfection for hoses and wallbox drain treatments, Island Health is committed to this work, ensuring a safer environment in our dialysis facilities.

17. Technology Behind Monitoring Vascular Access Recirculation

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Background: Toronto General Hospital, University Health Network (UHN) currently operates various dialysis machines across different platforms. The central unit uses the Nikkiso DBB-EXA dialysis machine. Off-units operate on Bellco Formulas for sustained low-efficiency dialysis (SLED) treatments. For shorter treatments, such as intermittent hemodialysis (IHD), UHN operates with Baxter dialysis equipment. **Purpose of Study:** Access recirculation occurs when dialyzed blood returning through the venous needle re-enters the extracorporeal circuit through the arterial needle, rather than returning to the systemic circulation, which reduces dialysis efficiency. Many invisible factors could impact recirculation in vascular access. Abnormalities, such as reduced arterial blood flow or obstruction in the venous side, can result in extracorporeal blood flow being higher than the actual vascular access blood flow. **Methods:** Currently, UHN is using Nikkiso machines model DBB-EXA to provide dialysis treatment. We will explore the dialysis equipment’s ability to capture access recirculation in real-time through features such as the blood volume monitor (BVM) tool, to measure the vascular access recirculation rate. **Principle:** The

vascular access recirculation rate (VARR) measurement function uses the BVM to measure the blood markers provided via the dialyzer in both the venous and arterial bloodlines. The function then calculates the vascular access recirculation rate based on the share of arterial blood markers in venous blood markers. **Results:** Supporting data, such as patient demographics, vascular access type (central venous catheter/fistula/graft), equipment type involved in finding access recirculation (Transonic/Nikkiso), cost, and percentage of efficiency, will be presented. **Conclusion:** The presence of access recirculation among hemodialysis patients can lead to significant inadequate dialysis, thereby resulting in reduced patient survival. **Implication for Nephrology Care:** Periodic assessments of access recirculation should be performed in the hemodialysis unit to obtain better outcomes.

18. Reference on the Go: A Mobile Resource for Home Dialysis Nursing Practice

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Background: As a home dialysis nurse, I often relied on handwritten notes, colour-coded highlights, and sticky tabs to quickly access essential information during busy shifts. Traditional manuals and guidelines are lengthy and overwhelming, making it difficult to find concise answers in critical moments. Inspired by my personal experience and training in educational principles such as microlearning and accessibility, I developed “Reference on the Go” (ROG), a mobile-friendly resource tailored to the needs of home dialysis nurses. **Purpose:** To create a mobile resource that supports home dialysis nurses by providing concise, actionable guidance for clinical decision-making. The long-term vision is to expand this resource to other nursing specialties. **Description:** “Reference on the Go” is a developing prototype designed to translate complex clinical information into easy-to-access formats. Accessible via mobile devices and hosted on Google Sites (free version), ROG allows nurses to reference key topics in real time at the point of care. Currently focused on home dialysis nursing, future iterations aim to include broader topics relevant to other nursing areas. The resource prioritizes user-friendly design, organization, and accessibility for nurses of all ages. The prototype can be accessed at <https://sites.google.com/view/pogseries/home>. **Evaluation/Outcome:** Although still in development, preliminary feedback suggests that ROG has strong potential to improve efficiency and confidence in decision-making. Its simple format is especially helpful for nurses who prefer quick guidance over lengthy manuals. **Implications for Nephrology Practice/Education:** “Reference on the Go” offers a practical solution for busy home dialysis nurses managing complex care environments, while supporting nurses with accessible tools. Future efforts will focus on expanding content, refining usability, and evaluating its impact on patient outcomes.

19. Innovative Solutions to Deliver Home Hemodialysis Care to Isolated First Nations Communities

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Background: There are many isolated First Nations communities in Northwestern Ontario, some of which are inaccessible by traditional modes of transportation. For patients requiring hemodialysis, this poses significant challenges. It is widely recognized that home dialysis improves patient's quality of life and independence. Logistical barriers in remote communities require innovative solutions to provide individuals access to hemodialysis treatment. **Purpose of the Project:** This project aimed to support two motivated hemodialysis patients who were eager to return home. The goal was to overcome significant location and logistical barriers to enable them to receive home hemodialysis in their own communities. **Description:** Windigo Island is a small community accessible by boat during summer and ice roads in winter. Hemodialysis equipment was transported to the island by boat. With the help of community members, it was then moved into the home using quads and trailers. Collins, located in Northwestern Ontario, is accessible only by train, snow machine, or boat. Hemodialysis equipment was transported via high rail trucks and then moved into the home with the help of community members using snow machines and trailers. In both circumstances, there were many considerations, including limited access to emergency services, and the provision of extra equipment and supplies in case of machine failure or missed deliveries. The safe transportation of dialysis equipment took considerable planning and collaboration with multiple community partners. **Evaluation/Outcome:** Both patients have successfully managed home hemodialysis for more than one year. They report greater independence and quality of life, and no dialysis-related hospital admissions, and they are currently being evaluated for transplant. **Implications for Nephrology Practice/Education:** This project demonstrated the feasibility of home hemodialysis in isolated communities with limited access. It supports the Ontario Renal Network's Community First approach and emphasizes the importance of culturally sensitive care and community-driven support to enhance patient outcomes and access to care.

20. Improving Equitable Access to Dialysis Using Artificial Intelligence

Tanja Keselj, BCompSc, MHI

Roman Soroka, BSc

Nova Scotia Health Renal Program

Background: Nova Scotia Health (NSH) Renal Program delivers adult dialysis services province-wide, aiming to provide care as close to home as possible for all patients. Population shifts across regions make it difficult to anticipate demand. Since building new dialysis units takes years, predictive planning is essential. **Purpose of the Project:** Support equitable service planning by forecasting dialysis needs using artificial intelligence (AI) methods and geographic information systems. **Description:** Data sources included the Renal Insight EMR, laboratory data, NSH Atlas community clusters, Statistics Canada population and road data, and GeoNova address geocoding. The QGIS (geographical information system) provided geolocation representation utilizing the publicly available data set, OpenStreetMap. Artificial intelligence methods, such as Named Entity Recognition, Text Analysis, and Pattern Matching, were applied to patient address data processing and standardization. A known challenge is that the data are manually entered in free text fields. As such, data are overwhelmingly inconsistent, susceptible to errors, and often contain obsolete or irrelevant information. Due to privacy requirements, all work had to be conducted locally on the secure NSH network. Modern AI tools available via application programming interfaces (API) or in the cloud (third-entity servers) could not be leveraged. A custom in-house AI tool was developed, capable of learning with each iteration to improve future performance and accuracy. **Evaluation/Outcome:** The approach successfully identified communities with emerging dialysis needs by analyzing patient distribution, population dialysis trends, and travel distance to existing units. The AI tool, as it learned, significantly improved address standardization and geolocation, enhancing data accuracy and processing speed over time. **Implications for Nephrology Practice/Education:** This initiative demonstrates how local AI solutions can support more equitable dialysis planning by identifying underserved areas. It also highlights the value of interdisciplinary collaboration and technological innovation in advancing nephrology service delivery and patient care.

Poster abstracts

1. Satellite Dialysis: Equitable Dialysis Access

Steffany Bourque, RN, Manager

Krista Cattapan, BScN, RN, Satellite Liaison Nurse

Health Sciences North, Sudbury, ON

Background: Health Sciences North (HSN) has six satellites across Northeast Ontario: Parry Sound, Kapuskasing, New Liskeard, Kirkland Lake, Elliot Lake, and Little Current. The closest satellite to our regional centre is 200 km with the furthest being 500 km. **Purpose:** The goal of the nephrology program at HSN is to ensure that all patients have fair and equitable access to high quality, patient-focused care. **Description:** Satellites are located within the host hospitals in their respective communities and are staffed by local nurses employed by HSN. The satellite liaison nurse and manager are located at the regional site in Sudbury. The satellites support HSN's peritoneal dialysis (PD) program. Satellites also support our multi-care kidney clinic (MCKC) patients. Our nephrologists visit each satellite every six weeks, and our social worker, dietitian, and access RN visit yearly. The nephrology program has faced challenges. The fluid nature of hemodialysis (HD) patient census has led to staffing challenges. Through the use of different staffing models, and with support from the primary site in Sudbury, we have ensured consistent HD in our satellites. Weather is also a challenge, especially during the winter months when there are many road closures. We adjust patient schedules to ensure they receive their ordered treatments. Transportation for patients to get to their treatment is yet another challenge. **Implications for Nephrology Practice:** Having satellites within small communities ensures that patients and families who have lived in these areas their whole lives, can continue to do so. **Evaluation/Outcome:** Health Sciences North has fostered relationships with the local healthcare professionals, which have allowed patients and their families to continue to reside in their homes while receiving high-quality, fully encompassing nephrology care.

2. Advancing Nephrology Care Through CNS-Led Innovation and Collaboration

Payton Russell, BScN, RN, MSN Student

St. Josephs Healthcare, Nephrology, Hamilton, ON

Background: The role of the clinical nurse specialist (CNS) in nephrology is evolving as healthcare systems seek to enhance patient outcomes, reduce costs, and integrate evidence-based care. The CNSs are critical for improving care coordination, patient education, and quality outcomes. Research has demonstrated that CNS involvement leads to better disease management, fewer hospitalizations, and increased adherence to clinical guidelines. **Purpose:** This project highlights how CNSs enhance patient management, foster interdisciplinary collaboration, and drive innovations in kidney care. It also explores the CNS's role in addressing

patient care needs in chronic kidney disease (CKD). **Description:** A review of current literature on CNS interventions in nephrology, including patient education, symptom management, and cost-effectiveness will be conducted. Studies have shown that CNSs significantly improve CKD management through medication optimization, early identification of complications, and enhanced patient engagement. Clinical nurse specialists contribute to evidence-based practice by researching and translating findings into clinical settings. **Outcome:** Clinical nurse specialist-led care reduces hospitalizations, enhances self-management, and improves adherence to treatment plans. Additionally, it results in cost savings by lowering healthcare utilization. The CNSs play a key role in educating both patients and staff, promoting the continuous integration of best practices. **Implications for Practice/Education:** To meet the growing demand for specialized kidney care, CNSs should be further integrated into nephrology teams in providing expert patient education, leading quality improvement initiatives, and mentoring nursing staff. Expanding CNS-led research can inform policies and treatment protocols. Additionally, advocating for role recognition and expanding educational programs will ensure comprehensive, patient-centred kidney care.

3. Barriers to, and Facilitators of, Diabetes Self-Management in the Dialysis Population: A Narrative Review and Implications for Research

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Graham McCaffrey^a, PhD, RN

Shelley Raffin Bouchal^a, PhD, RN

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Background: Patients with both diabetes and kidney failure requiring dialysis are a complex population that is at risk of diabetes-related complications, hospitalizations, and mortality. Due to the significant illness burden, self-management of diabetes becomes challenging. **Purpose of Study:** The purpose of this review was to identify and synthesize the literature on barriers to, and facilitators of, diabetes self-management among patients with both diabetes and kidney failure requiring dialysis. **Methods:** We conducted a search of health care databases (CINAHL, PubMed, OVID Medline) to find studies that were focused on exploring barriers to, and facilitators of, diabetes self-management in this population. We included English language qualitative, quantitative, and mixed-methods studies. **Findings:** A total of 134 articles were identified. A review of the articles revealed barriers in diabetes self-management covering six themes: financial limitations, limited access to healthcare services, siloed and

fragmented care, increased complexity of the dietary regimen, and the higher burden of health. Three themes were revealed pertaining to facilitators of diabetes self-management: self-management support and education, coordinated care between healthcare providers, and family support. **Conclusion:** There can be challenges living with multiple chronic conditions, especially for those with comorbid diabetes and kidney failure requiring dialysis. **Implications for Nephrology Care:** This study underscores the urgent need for quality improvement and research initiatives to support these individuals. Additionally, conducting further qualitative research to explore the perspectives of dialysis patients, their healthcare professionals, and caregivers would be beneficial.

4. An Interpretive Descriptive Study on Exploring Barriers to, and Facilitators of Diabetes Self-Management: Perspectives from Dialysis Patients with Diabetes

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Background: Self-management is a key component of optimal management of diabetes. Patients with coexisting diabetes and kidney failure requiring dialysis therapy have an additional health burden, which complicates self-management practices. **Purpose of Study:** The objective of this study was to understand, describe, and interpret barriers to and facilitators of diabetes self-management among patients with kidney failure requiring dialysis therapy. **Methods:** We utilized interpretive description methodology to conduct semi-structured interviews with 14 participants to explore their perceptions on barriers to, and facilitators of, maintaining optimal glucose control. **Results:** Fourteen participants (seven male and seven female) aged 45 to 84 years participated in semi-structured interviews. Analysis found perceived barriers to diabetes self-management that covered five themes: less stability and comfort, shortage of financial resources, physical limitations, healthcare access and navigation, and medical complexity. Facilitators were grouped into four themes: greater health literacy and empowerment, supportive social environment, fear management, and the positive role of dialysis. **Conclusion:** Findings from this study shed light on various barriers to and facilitators of diabetes self-management in context of kidney failure. **Implications for Nephrology Care:** These findings highlight the importance of further research in this domain to mitigate barriers and leverage facilitators, as well as to guide resource allocation to improve diabetes care and self-management education and support among patients with kidney failure.

5. Enhancing Care: Sharesource Implementation Experience at Sunnybrook

Myoung-Hee (Amy) Kim, BScN, RN, CNeph(C)

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Background: Home peritoneal dialysis programs, including Sunnybrook Health Sciences Centre, face challenges in monitoring patient adherence, addressing technical issues, and providing timely interventions. In 2022, Sunnybrook implemented Sharesource to address these issues and improve patient care. **Purpose:** This abstract aims to identify the impact of Sharesource implementation on patient care, clinical decision-making, and overall program efficiency at Sunnybrook, and share these findings with other programs. **Description:** Sharesource was integrated into our program, providing 24/7 access to patient therapy data. The system enables real-time monitoring of treatment parameters, alarms, and patient-reported information. We developed a standardized daily therapy log review process and trained staff to interpret effectively and act on the data. This transition moved us from traditional paper-based records to Sharesource's digital platform. **Evaluation/Outcome:** Sharesource implementation yielded positive outcomes. We observed enhanced patient monitoring, enabling early detection and prevention of complications. Time management improved, with less time spent on information gathering. Clinical interventions became more precise and timely, and patient engagement increased. Case studies demonstrated Sharesource's value in optimizing therapy for patients with diverse needs, such as elderly patients with hearing difficulties, patients with language barriers, and working professionals with adherence challenges. **Implications for Nephrology Practice/Education:** Our experience demonstrates that Sharesource enhances proactive patient care through early detection of potential issues and improves the accuracy of clearance calculations and supply management. However, ongoing review and team discussion are needed for data interpretation and decision-making. Future education should focus on addressing data integrity issues and enhancing patient understanding of data interpretation to improve outcomes through technology-enabled care.

6. Improving Influenza Vaccine Uptake Amongst Adult Kidney Transplant Recipients: A Mixed-Methods Study

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Elaine Moody, PhD, RN

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Background: Kidney transplant recipients (KTRs) are immunocompromised and more susceptible to infections such as influenza. Despite their increased risk of severe illness and mortality with influenza infection, uptake of the influenza vaccine is sub-optimal amongst KTRs, warranting further investigation. **Purpose of Study:** The main objectives of the proposed, mixed-methods design include: explore vaccine hesitancy (VH) and behaviour in kidney transplant recipients (objective 1); examine barriers and facilitators to influenza vaccine uptake amongst KTRs in Nova Scotia (objective 2); and co-design tailored implementation strategies to support influenza vaccine uptake in KTRs (objective 3). **Methods:** A sequential, explanatory, mixed methods design, guided by the Behaviour Change Wheel (BCW), will be used to complete the research objectives. A scoping review will be conducted to map and synthesize literature on VH and behaviour in KTRs. A validated, VH instrument will be used to assess quantitatively VH in KTRs in Nova Scotia (objective 1); semi-structured interviews will be conducted with renal transplant recipients and clinicians in Nova Scotia to deepen understanding of VH and barriers and facilitators to vaccine uptake in KTRs (objective 2); and, finally, nominal group technique (NGT) will be used to co-design and tailor implementation strategies with the BCW (objective 3). **Anticipated Results:** This project will explore knowledge and gaps in influenza VH and uptake within a unique population with complex health needs and considerations. Understanding the barriers and facilitators to vaccine uptake amongst KTRs is integral to addressing VH systematically and meaningfully in this vulnerable population. **Implications for Nephrology Care and Conclusion:** The proposed research will explore VH and factors impacting vaccine uptake in KTRs. Understanding VH in KTRs will guide clinicians to target barriers and facilitators to vaccine uptake. Based on the findings, evidence-informed implementation strategies will be tailored to improve influenza vaccine uptake and ultimately health outcomes amongst KTRs.

7. Advancing Access to Kidney Transplant: An Evaluation of A Community Hospital's Strategies

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Background: The transplant evaluation is an intensive process that places a substantial burden on patients and requires coordinated efforts among healthcare providers and systems. At William Osler Health System (WOHS), a community hospital in Central-Western Ontario, strategies were implemented to enhance the kidney transplant process, in alignment with the Ontario Renal Network's Access to Kidney Transplantation (AKT) initiative, contributing to a record 118 kidney transplants over two years. **Purpose of the Project:** This project evaluated WOHS's strategies for overcoming barriers in the transplant workup process and assessed their impact on patient outcomes, including satisfaction and perceived barriers during the journey. **Description:** The identified barriers included knowledge gaps, staff and communication challenges, the absence of an institutional triage and monitoring data system, and an uncertain and lengthy process. Key strategies included establishing a dedicated kidney transplant team with three renal navigator nurses, developing a patient tracking system, introducing the Transplant Passport, and formalizing patient and family education. An internal transplant matrix triaged patients by eligibility and readiness to guide tailored education. **Evaluation/Outcomes:** A bilingual (English, Punjabi) six-item patient survey ($N = 238$; 81.5% response rate) and follow-up focus groups ($n = 37$) were conducted in January 2024. The results showed 81% of patients were satisfied or strongly satisfied with the transplant education and 78% were satisfied with the workup process. Seventy-four percent found the Transplant Passport helpful. Half of respondents lacked clarity on the timeline for completing the workup. Patients identified two areas for improvement: reducing overall wait times and intervals between appointments, and providing clearer information on process timelines and status updates. **Implications:** The outcomes of Osler's kidney transplant workup provide evidence for optimizing transplant workup in community hospitals and transplant access. Next steps include evaluating outcomes of the enhanced communication strategy, exploring digital solutions for tracking progress, and scaling the model to other renal programs to support sustainability.

8. Bringing Care Closer: Expanding Out-of-Unit Treatments in Satellite Settings

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Background: Patients in satellite units often face limited access to care in their hometown when admitted to hospital. This can lead to unnecessary hospital transfers and delayed care, disrupting patient and caregivers' lives and increasing patient numbers at tertiary centres. **Purpose of the Project:** To explain a structured process that was implemented in the Brantford Dialysis satellite unit, which allows safe and effective out-of-unit acute dialysis treatments, thus keeping patients closer to home. **Description:** Brantford Satellite dialysis unit enabled acute out-of-unit dialysis treatments in the cardiac care unit (CCU) in Brantford General Hospital. Staff received training at St. Joseph's tertiary centre. On-call staff scheduling was implemented. Guidelines and policies were developed in collaboration with both centres to deliver safe and consistent care. **Evaluation/Outcome:** Brantford Satellite unit has been delivering acute out-of-unit treatments in the critical care unit (CCU) successfully since 2019. Since 2024, chronic patients requiring CCU admission were able to receive out-of-unit treatments. Patient satisfaction improved, and there has been a reduction in travel, ensuring continuity of care. **Implications for Nephrology Practice/Education:** This project demonstrated that acute treatments in satellite units are feasible, safe, and highly valued by patients. It supports patient-centred care by prioritizing local access and reducing system strain. This model can be adopted by other units.

9. Back to Basics – Moving Forward with Pre-Dialysis Education

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University Health Network, Toronto General Hospital, Toronto, ON

Background: Chronic kidney disease (CKD) is a progressive condition that can lead to kidney failure. In pre-dialysis care, two critical priorities are slowing the progression of CKD and educating patients about kidney replacement therapy (KRT). However, both patients and healthcare staff have identified significant knowledge gaps regarding kidney function, disease progression, blood pressure management, and medication adherence. **Purpose:** The purpose of this quality initiative research is to explore how targeted CKD education can improve outcomes for pre-dialysis patients by addressing these knowledge gaps and enhancing patient engagement and self-management. **Description:** This initiative focused on evaluating the current state of CKD knowledge among pre-dialysis patients and identifying areas where educational interventions could be most impactful. Research has indicated that there is a relationship between CKD knowledge, self-efficacy, and self-care behaviours. The aim of this project was to determine whether improved CKD education could lead to better health outcomes and patient experiences. **Outcome:** The results provided evidence that enhancing CKD education positively influences patient engagement, experience, and health outcomes. It demonstrated that patients with higher CKD knowledge exhibit stronger self-management skills and greater confidence in managing their condition. **Implications:** The findings suggest a clear need for changes in educational practices within pre-dialysis care. By implementing more comprehensive and accessible CKD education, healthcare providers can empower patients to take a more active role in their care, potentially slowing disease progression and improving overall quality of life.

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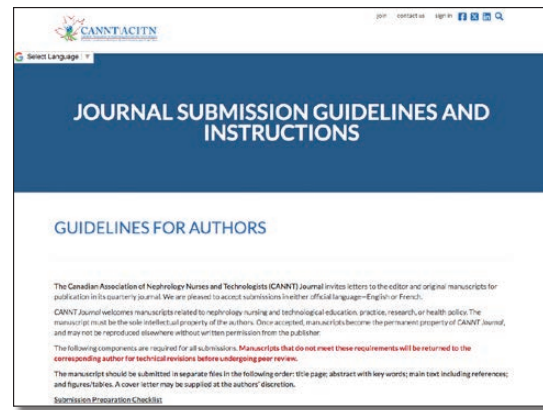
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sa publication est approuvée par tous les auteurs et les autorités responsables où la recherche a été réalisée, et que, si elle est acceptée, elle ne sera pas publiée ailleurs sous la même forme sans le consentement écrit du titulaire du droit d'auteur. À l'acceptation du document soumis, le ou les auteurs devront transférer la propriété du droit d'auteur au *Journal ACITN*. Les déclarations et les opinions contenues dans l'œuvre demeurent la responsabilité de l'auteur ou des auteurs.

ÉVALUATION PAR LES PAIRS

Le *Journal ACITN* fonctionne selon un processus d'évaluation par les pairs à double insu. Les noms des évaluateurs ne seront pas divulgués à l'auteur ou aux auteurs qui auront soumis le manuscrit, de même que le ou les noms des auteurs ne seront pas divulgués aux évaluateurs.

Toutes les contributions seront initialement évaluées par les rédactrices en chef pour leur pertinence à la revue. Les manuscrits réputés acceptables sont envoyés à deux experts indépendants qui en évalueront la qualité. Un manuscrit ne sera envoyé pour évaluation que si les rédactrices en chef déterminent que le manuscrit répond aux exigences de qualité et de pertinence appropriées, conformément à l'objectif et au champ d'application particuliers du *Journal ACITN*.

Les rédactrices sont responsables de la décision définitive en ce qui a trait à l'acceptation ou au rejet du manuscrit. Les rédactrices en chef n'interviennent pas dans les décisions relatives aux articles qu'elles-mêmes ont rédigés ou que des proches ou des collègues ont écrits ou encore qui portent sur des produits ou services pour lesquels elles sont en conflit d'intérêts. Toutes les soumissions de manuscrit font l'objet du processus habituel d'évaluation par les pairs indépendants de la revue.

Les critères d'acceptation de tous les manuscrits comprennent la qualité et l'originalité de la recherche ou du matériel intellectuel, son importance ou son attrait pour le lectorat de la revue et le style d'écriture en général.

PRÉPARATION DE LA SOUMISSION

Les éléments suivants sont requis pour toutes les soumissions. Les manuscrits qui ne répondent pas à ces exigences seront renvoyés à l'auteur-ressource en vue de révisions techniques avant d'être soumis à l'évaluation par les pairs.

Le manuscrit doit être soumis en fichiers séparés dans cet ordre : page titre; résumé avec mots clés; corps du texte incluant les références; et les figures ou les tableaux. Une lettre de présentation peut être fournie à la discrétion des auteurs.

Page titre

Inclure :

- Titre du manuscrit (concis et descriptif)
- Titre court comptant moins de 40 caractères
- Nom complet, diplôme de plus haut grade et affiliations de tous les auteurs, adresse courriel et numéros de téléphone/télécopieur de l'auteur-ressource
- Affiliations institutionnelles des auteurs (département, établissement, ville, pays) où les travaux de recherche ont été réalisés
- Tous les remerciements (y compris la divulgation du financement), les crédits ou les avertissements, un énoncé de conflit d'intérêts pour tous les auteurs

Résumé avec mots clés

Soumettre un résumé structuré ou succinct de 250 mots au maximum. La limite de mots inclut les en-têtes dans un résumé structuré (p. ex., *contexte, objet, méthode, résultats et discussion*).

Le résumé doit être une description succincte de la question, du problème ou du sujet principal abordé dans le manuscrit, ainsi que les résultats ou conclusions présentés. Il ne doit pas reproduire le corps du texte. Il ne doit pas contenir de sous-titres, d'abréviations ou de citations de référence.

Fournir jusqu'à huit mots clés qui décrivent le contenu du manuscrit.

Corps du texte (manuscrit, liste de référence)

Corps du texte :

- Longueur maximum de 15 à 20 pages, à double interligne
- Se servir du guide de style *Publication Manual of the American Psychological Association (APA)*, 7^e édition (droit d'auteur 2020) pour les lignes directrices en matière de style et de format
- Comme les manuscrits font l'objet d'une évaluation par des pairs à double insu, le corps du texte ne doit inclure aucune information pouvant servir à identifier les auteurs. Par conséquent, il ne faut pas inclure de renseignements d'identification (p. ex., noms des auteurs)
- Paginer sans interruption dans le coin supérieur droit
- Citer les tableaux ou les figures à la suite
- S'assurer d'approuver ou d'éliminer toutes les modifications de suivi de votre document Word avant le téléversement

Références :

- N'utiliser que des sources publiées dignes de foi et de qualité
- À double interligne à la fin du manuscrit
- La liste de citations et de références doit être conforme au guide de style de l'APA, 7^e édition (droit d'auteur 2020)
- Fournir les adresses URL pour toutes les références, le cas échéant
- S'assurer que toutes les références citées dans le texte figurent dans la liste de référence (et vice versa)

Tableaux ou figures

- Soumettre chaque tableau ou figure dans un fichier séparé, sous forme modifiable et non sous forme d'image
- Préparer les tableaux ou les figures selon le guide de style de l'APA, 7^e édition (droit d'auteur 2020)
- Citer les tableaux ou les figures à la suite dans le texte et les numéroter dans cet ordre. Ne pas incorporer les tableaux ou les figures dans le fichier texte du manuscrit
- Numéroter les tableaux et les figures à la suite selon leur apparition dans le texte et positionner le titre du tableau ou de la figure et toute note connexe sous le corps du tableau ou de la figure
- Utiliser les tableaux avec retenue et s'assurer que les données qui y sont présentées clarifient et complètent les résultats décrits dans le corps du texte, sans toutefois les reproduire. Seuls les tableaux sur 3 pages de manuscrit ou moins seront acceptés aux fins de publication dans l'article.
- Les auteurs qui utilisent des tableaux ou des figures précédemment publiés doivent inclure l'autorisation écrite de l'éditeur original. Cette autorisation doit être jointe au manuscrit soumis.



SOUSSION DU MANUSCRIT

Après avoir préparé le matériel de soumission conformément aux directives indiquées dans la rubrique « Préparation de la soumission » ci-dessus, les manuscrits doivent être soumis en ligne à cette adresse : <https://cannt-acitn.ca/page/journal-guidelines>

APRÈS LA SOUMISSION

L'examen du manuscrit se déroule en trois étapes avant que la décision ultime soit prise sur le statut de l'article aux fins de publication.

Examen préliminaire

Examen préliminaire par les rédactrices en chef afin de déterminer la pertinence de l'article aux fins d'évaluation par les pairs. Les rédactrices en chef examinent toutes les exigences de présentation de manuscrits, notamment le style et le format du manuscrit.

Évaluation rédactionnelle par les pairs

Le processus d'évaluation par les pairs détermine la valeur scientifique de l'article. Tous les manuscrits sont évalués par deux membres du comité d'évaluation rédactionnelle. Les critères d'acceptation pour tous les textes reposent sur la qualité et l'originalité de l'œuvre et sur son importance aux yeux du lectorat de la revue. Les manuscrits sont envoyés aux évaluateurs uniquement si les rédactrices en chef décident que le texte mérite un examen plus approfondi.

Détermination de l'admissibilité aux fins de publication

Après l'évaluation par les pairs, les rédactrices en chef prennent une décision concernant l'admissibilité de l'article à la sélection en se fondant sur les commentaires et les recommandations des évaluateurs. Selon l'évaluation par les pairs, les rédactrices en chef prennent l'une des décisions suivantes :

- Accepter le manuscrit sans modifications
- Accepter le manuscrit une fois les modifications mineures apportées
- Soumettre de nouveau le manuscrit une fois les modifications majeures apportées – réévaluation par les évaluateurs d'origine
- Rejeter le manuscrit

APRÈS L'ACCEPTATION

Les auteurs-ressources recevront une épreuve en format PDF de l'article. L'épreuve d'imposition doit être soigneusement relue afin de détecter toute erreur d'édition ou de composition. Il incombe aux auteurs de s'assurer que les épreuves sont exemptes d'erreurs. Les auteurs doivent également s'assurer que les tableaux, les figures ou les références renumérotés correspondent aux citations du texte et que les légendes des figures correspondent aux citations du texte et aux figures réelles. Les épreuves doivent être renvoyées dans le délai précisé par les rédactrices en chef.

Les modifications apportées à l'épreuve qui vont au-delà de ce qui est nécessaire pour corriger des erreurs ou pour répondre à des questions ou qui constituent un remaniement du matériel précédemment accepté **ne** seront **pas** permises. Les rédactrices en chef se réservent le droit de rejeter toute modification qui n'influe pas sur l'exactitude du contenu.

APRÈS LA PUBLICATION

L'auteur-ressource recevra une copie papier du numéro de la revue ainsi qu'une copie PDF de l'article.

S'il est accepté, votre article ne doit pas être publié nulle part ailleurs sous une forme similaire, en toute autre langue, sans le consentement de l'éditeur. Vous ne pouvez pas publier le fichier PDF de votre article révisé ou de votre article définitif publié dans un service d'archives ou sur un site de médias sociaux en ligne.

OPTION D'ACCÈS LIBRE

Les auteurs d'articles acceptés dans le cadre d'une évaluation par les pairs peuvent choisir de payer une redevance pour permettre aux lecteurs du monde entier d'accéder en ligne à leur article publié, sans restriction et à perpétuité, dès sa publication. Cette option n'a aucune influence sur le processus d'évaluation par les pairs. Tous les manuscrits font l'objet d'un processus standard d'évaluation par les pairs à double insu et seront acceptés ou refusés en fonction de leur propre valeur.

Des frais de traitement de l'article de 250,00 \$ sont facturés à l'acceptation du manuscrit et doivent être payés dans les cinq (5) jours par le ou les auteurs. Le paiement doit être traité pour que l'article soit publié en accès libre.

CONFLITS D'INTÉRÊTS ET SOURCE DE FINANCEMENT

Au moment de la soumission du manuscrit, les auteurs doivent divulguer toute source potentielle de conflit d'intérêts, ce qui inclut toute relation ou tout intérêt financier qui pourrait être perçu comme influençant leur objectivité. La présence d'un conflit d'intérêts n'empêche pas la publication. Les auteurs doivent également déclarer qu'ils n'ont aucun conflit d'intérêts à déclarer. Les sources de financement doivent figurer sur la page titre sous la rubrique « Conflits d'intérêts et source de financement ». Chaque auteur doit remplir et soumettre le formulaire d'entente de transfert du droit d'auteur de la revue, lequel comprend une section sur la déclaration de conflits d'intérêts potentiels.

ENTENTE DE TRANSFERT DU DROIT D'AUTEUR

Au moment de la soumission, l'auteur qui soumet un manuscrit recevra un formulaire d'entente de transfert du droit d'auteur et de déclaration de conflits d'intérêts. Les coauteurs recevront des directives par courriel pour aussi remplir le formulaire afin d'amorcer le processus d'évaluation.

COORDONNÉES DU BUREAU DE LA RÉDACTION

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