



Chronic Disease
Innovation Centre



2019/20 Annual Report

Our Vision

It is our vision to change the way healthcare is delivered by leading research that enables the personalization of healthcare systems. Responsive patient care, better solutions, and life-changing results are at the core of our vision.

Our Mission

It is our unique mission to unite experts from the healthcare, research, academic, and business sectors in working towards a brighter healthcare future. Additionally, we aim to:

- Improve the healthcare, health, and well-being of people living with chronic disease
- Identify and support those who are at risk of developing chronic disease
- Spur innovations that help reduce cost and stress to the healthcare system
- Bring new healthcare products and technologies to the market
- Provide our research with local, national, and international reach through collaborations and partnerships





Message from our Board Chair and CEO

We are pleased to present the second Annual Report of the Seven Oaks Chronic Disease Innovation Centre (CDIC).

CDIC is an independent organization that partners with the public and private sectors to conduct novel research and translate it into real world applications. Creating a measurable positive impact directly on patient care is at the core of everything CDIC does. In this report we share the successes and achievements of our amazing team of researchers and professionals from the past two years.

The COVID-19 pandemic created unprecedented challenges to healthcare delivery in Manitoba and across the country. While some of our clinical trials were challenged by setbacks and deferrals, much of CDIC's research was able to continue unaffected. Physical distancing requirements accelerated our digital and virtual care initiatives. The advancement of our VIEWER program, a tailor-made virtual home monitoring platform, has increased patient confidence in remote care technology. This has improved patient independence and quality of care.

Collaborations with industry, led by patient feedback, continue to drive innovation. CDIC's scientific research is combined with commercial expertise, resulting in the development of new products and services designed to improve patient care.

By maintaining ongoing collaboration between CDIC, the Wellness Institute, and Seven Oaks General Hospital, we aim to change how healthcare is delivered. We would like to extend a special thank you to our fantastic and hardworking team of physicians, biostatisticians, health economists, nutritionists, researchers, and data analysts who continue to produce incredible research despite the challenges we've all faced this year.

We also thank our valued donors who provide the funding necessary to sustain the critical work done at CDIC.

Respectfully submitted on behalf of the Board of Directors,



Don MacDonald
Board Chair
Chronic Disease Innovation Centre



Carrie Solmundson
Chief Executive Officer
Chronic Disease Innovation Centre

Improving health systems and patient outcomes

We are passionate about improving people's lives through the prevention and management of chronic disease.

At a time when healthcare systems are coping with shifting demographics, increasing incidence of chronic disease, and rising healthcare costs, our approach of integrating patient engagement throughout the research process and integrating new technologies into clinical care is directly improving the quality of patient care, helping to prevent disease, and promoting wellness.

Through partnerships with experts from the healthcare, research, academic, medical device, and business sectors, we foster innovation and collaboration to:

- Improve health systems and patient outcomes
- Integrate patient perspectives into research
- Spur innovation that reduces healthcare costs
- Bring new healthcare products and technologies to market
- Provide local, national, and international reach



Improving the patient journey

1 Screening

Early and accurate detection of at-risk individuals

→ **PATIENT BENEFIT**

Prevent, delay, and minimize severity of disease

→ **HEALTH SYSTEM BENEFIT**

Ease of administration and high reliability leads to cost saving throughout the system

2 Triage

Determining optimal personalized treatment pathway

→ **PATIENT BENEFIT**

Rapid access to the most appropriate specialists, care and resources

→ **HEALTH SYSTEM BENEFIT**

Improved efficiency, optimization of resources and reduced backlog

3 Treatment

Providing advanced and improved care to patients

→ **PATIENT BENEFIT**

Improved patient outcomes, experience, and quality of life

→ **HEALTH SYSTEM BENEFIT**

Dramatically reduce costs, optimize resources, and improve outcomes



A unique model that leads to ground-breaking solutions

CDIC develops life-changing solutions for Manitobans and people throughout the world by putting prevention-focused research into action.

Our unique model of integration with Seven Oaks General Hospital and the Wellness Institute allows us to apply our research directly to care given within the hospital. This model is the only one of its kind in Manitoba, resulting in a community and hospital environment that creates a special emphasis on treatment, management, and prevention of chronic disease.

Our hospital patients are able to see the benefits of our model immediately - our researchers are also clinicians. They are able to apply CDIC research directly to improve care within the hospital. This improves patient experiences and reduces healthcare costs.

CDIC also works to improve health policies and healthcare processes physicians use to make daily assessments of patients. We are able to do this via our established and flourishing collaborations with local, national, and international academics and industry partners.



Collaborators and funding partners



SEVEN OAKS
GENERAL HOSPITAL



SEVEN OAKS
GENERAL HOSPITAL
FOUNDATION

thewellness
Institute



University
of Manitoba | Rady Faculty of
Health Sciences



CIHR | Canadian Institutes of
Health Research
IRSC | Instituts de recherche
en santé du Canada



FIRST NATIONS HEALTH AND SOCIAL
SECRETARIAT OF MANITOBA



Research
Manitoba



kidney
FOUNDATION



Keewatinohk Inniniw
Minoayawin Inc.
Northern Peoples' Wellness



Can-SOLVE
CKD Network

Strategy for Patient-Oriented Research

SPOR
Putting Patients First

kidneyhealth.ca
manitoba renal program

Insight through Patient Partnerships

Patients and their families are truly at the heart of everything we do. Their first-hand experience living with kidney disease, and experience dealing with the health care system is invaluable in helping guide researchers and clinicians in their work. Including people living with kidney disease and their family members in each stage of the lifecycle of our academic projects ensures that the patient perspective is incorporated.

1 Project Inception

CDIC works with patient partners to identify the research priorities and outcomes that are important to them, and invites them to collaborate closely on funding applications, proposal writing, and study design.

2 Project Implementation

Patient partners work with us to implement studies – including helping with recruitment of participants and communities, conducting focus groups, and helping analyze and write-up results. Patient partners are also integral facilitators, helping us reach out to vulnerable populations who may benefit from participating in our projects.

3 Knowledge Translation

We aim to produce information that can be used to improve health care practice, and in turn improve the lives of patients and their families. To help implement solutions, information needs to be disseminated to end-users. We work with patient partners to engage stakeholders through a variety of platforms, for example writing blog posts and academic articles, producing videos and infographics, as well as engaging in media interviews.



Strengthening the next generation: Bringing CDIC innovation into education

Our partnership with the University of Manitoba strengthens the work we do and ensures it will continue for years to come.

- Our principal investigators hold academic appointments with the University of Manitoba, both in the Max Rady College of Medicine, Rady Faculty of Health Sciences, as well as the Department of Food and Human Nutritional Sciences.
- Medical students and Masters of Science students from the University of Manitoba participate directly in our ongoing research. They gain insights into how research is conducted and gain valuable transferable skills for their future careers.
- The CDIC's academic research funding is secured through University of Manitoba-based grants, with multi-year programs in place.



Generating real patient benefits through applied research

CDIC strives to prevent chronic disease, enhance patient care and develop innovative technology to bring to market. The diversity in our multidisciplinary team enables us to bring newfound research across eight key areas of expertise.



Academic

CDIC has a strong track record of publishing research in high-impact journals and presenting at local, national, and international conferences. Our researchers have been awarded millions of dollars in grant funding from local and national agencies such as the Canadian Institutes of Health Research, Research Manitoba, and the Kidney Foundation of Canada.



Big Data Analytics

CDIC is based in Winnipeg, Manitoba, Canada, where our researchers work with clients to navigate the approval process and acquire access to comprehensive population-level administrative health databases gathered over the past few decades. Our biostatisticians and data analysts are specially trained in conducting pharmacoepidemiology, epidemiology, and risk prediction analyses. This allows CDIC to analyze large clinical and administrative datasets, as well as effectively assess internal datasets held by industry partners to provide evidence-based solutions.

Through conducting provincial, national, and international epidemiological studies and real-world effectiveness trials, our team has become highly adept at looking for patterns in data that could improve efficiency and service delivery for clients. In addition, CDIC provides evidence-based policy recommendations based on our research findings.



Health Economics

In the constantly changing healthcare landscape, budgets must be carefully adjusted to respond to rapid changes and competing priorities. Oftentimes, a major change can shift the burden of cost from one healthcare budget to another. CDIC is highly proficient in translating the results of novel cost-effectiveness research into budgetary impact analyses, providing guidance on how funding will need to be re-allocated and adjusted to meet the growing healthcare concerns of patients in Canada and worldwide.

CDIC excels in the design and execution of studies that combine data on relevant costs and effectiveness estimates of an intervention. This helps us to determine whether interventions have a high likelihood of offering cost savings to the healthcare system, or alternatively, find interventions that may increase spending, but at a degree that offers substantial value to the population.

While many decisions in healthcare and business come with multiple choices, varying outcomes, and associated risks, our analysts are skilled in acquiring information on the comparative effectiveness of interventions, or available options. We also assess the potential risks associated with these decisions, and create a framework from which we can make informed recommendations regarding competing options.



Nutrition

Because health is intrinsically tied to nutrition and lifestyle, CDIC employs different types of research to study the effects of both in the prevention and management of obesity, diabetes, chronic kidney disease, and cardiovascular disease. Below are some of the methods of research that we practice:

- Assessment of the feasibility, acceptability, and effectiveness of nutrition and lifestyle intervention programs
- Acute feeding trials investigating the effect of foods and nutritional components on glycemic and appetite control in healthy and at-risk populations
- Longer-term trials investigating the effects of nutrition and lifestyle interventions, including foods and dietary supplements, on the prevention and management of chronic disease



Knowledge Translation

Our accumulated data goes far beyond the research and clinical trial period. CDIC excels at knowledge translation, putting valuable information into the hands of individuals and organizations who can put it into practical use. Aside from developing, implementing, and evaluating materials to help this practice, we also:

- Translate research findings into clinical practice
- Develop patient and provider-facing materials such as printed educational materials, decision aids, websites, and apps
- Engage end users throughout the knowledge translation process to ensure that materials developed meet the needs of the target population



Clinical Trials

CDIC works with both industry and academic partners to participate in novel drug and device trials. We are able to put our research findings into practice at CDIC by offering patients the opportunity to participate in clinical trials with potentially life-changing novel therapies. We also conduct nutritional trials to evaluate the effectiveness of nutritional interventions in chronic disease.

We have a team of researchers that have received specialized training in innovative clinical trial methodology that assist with developing protocols and training of site staff to conduct trials in a safe and effective manner.



System Improvement

As the use of best practice guidelines in clinical trials is highly important to us, our team has developed expertise in implementing these guidelines into clinical settings by adopting evidence-based practice recommendations that improve care and maximize operational efficiencies. This involves assisting with the design of database registries, and ensuring quick access to data for analytic and evaluation purposes. In turn, this gives CDIC the ability to conduct a comprehensive evaluation of research or clinical-based programs.



Innovative Service Delivery

International Collaborations, China

In 2018, CDIC established a joint venture with More Health, one of China's largest and most innovative digital health providers, to advance the Wellness Institute model under the international brand name Canada Wellness Institute (CWI).

As CWI, we have partnered with several organizations in China to develop state-of-the-art, digitally integrated offline facilities. In addition, CWI combines our clinically validated therapeutic lifestyle programs with next-generation solutions that use artificial intelligence, smart connected health devices, and expert health coaching through a digital health platform.

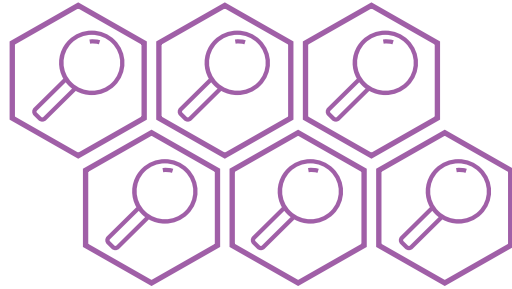
The CWI platform enables broad scaling of frequent, high-touch, personalized, behavioral interventions at low cost, and is becoming an essential and innovative part of preventing and managing chronic conditions in China.

This successful collaboration will allow us to adapt and scale the Wellness Institute model to diverse environments. This contributes to market value, and in turn will provide the ability to expand into new markets.



Highlights 2019/20

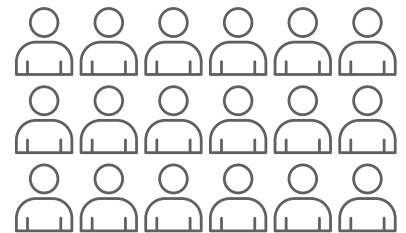
6



Principal Investigators

18

Supporting Team Members
as of Dec 2020



Trainees

2

Post-doctoral Fellows

6

Masters Students

7

Medical Residents

10

Medical Students

3

High School Students

7

Grants Awarded

\$2.28

Million Total



35

Conference Presentations

Can-SOLVE Projects

4 projects with
27 patient partners



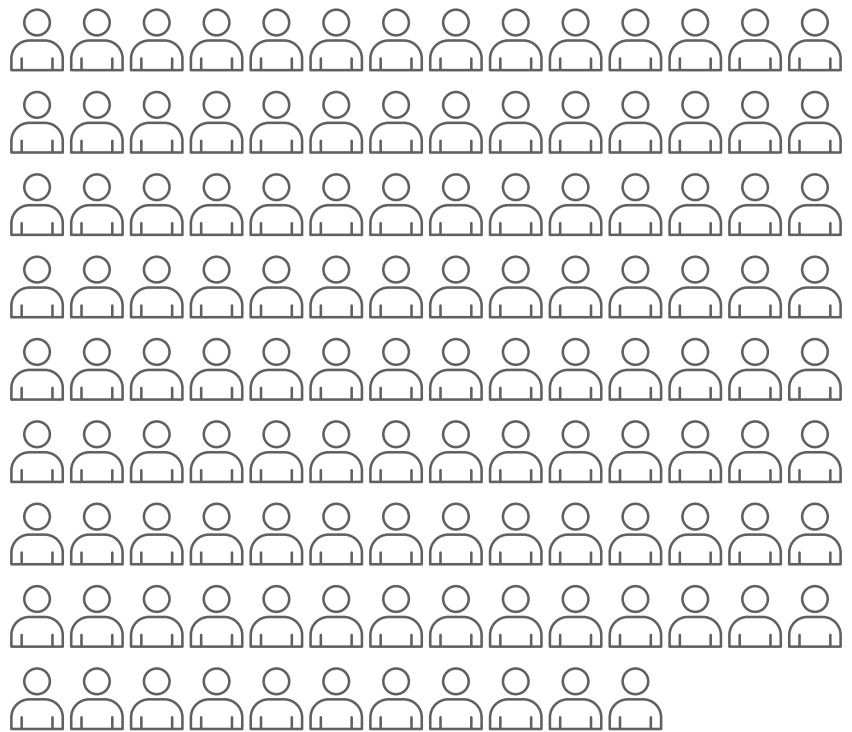
Indigenous
Communities in
British Columbia
screened through
Kidney Check.

155

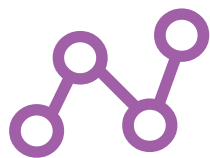
Individuals
Total

108

Individuals
enrolled in
Renal Rehab-
an intradialytic
cycling study



13



Big Data
Analytics Projects

31



Research
Articles

Here are the stories that shaped 2019/20

Point-of-care testing recognized around the world

CDIC's innovative Kidney Check program, led by Dr. Paul Komenda, carries out point-of-care testing to identify chronic kidney disease, diabetes and hypertension in underserved rural and remote Indigenous communities across 5 provinces (Manitoba, British Columbia, Ontario, Alberta and Saskatchewan). In 2020, the Kidney Check program received the prestigious UNIVANTS of Healthcare Excellence Best of North America award, and was one of three teams to receive UNIVANTS' highest honour, the Global Winner award. In December 2019, the program was also awarded one million dollars in funding from the TD Ready Challenge presented by the TD Bank Group – one of ten recipients selected from 378 applicants from across Canada. The funding will be used to continue expanding the program.

Information, interactions and individualized care

Dialysis patients often require complex care and are faced with unique challenges. Finding solutions to these challenges is no easy task – but the research team behind Can-SOLVE CKD's Triple I project, led by Dr. Clara Bohm, is making important progress with patients to provide better **information**, improve their **interactions** with their healthcare team, and operationalize more **individualized care**.

In its first phase, through nationwide surveys and focus groups, as well as by bringing together more than fifty stakeholders from across Canada for a workshop in Winnipeg in June 2019, the Triple I project identified a condensed list of the top ten challenges facing hemodialysis patients. Members of the Triple I team are now preparing to explore and test several short-and long-term solutions that address these top ten challenges, such as partnering with private-sector technology companies to develop app-based patient supports.

The project is a massive undertaking that is being spearheaded by nearly two dozen team members, including five patient partners, and is taking place at eight sites across Canada. The approach the team is taking is very iterative, making sure to incorporate feedback at each stage from people who have lived experience with hemodialysis.



Improving patient care at home

COVID-19 has rapidly accelerated the shift to virtual care in health systems around the world. Individuals with late stage Chronic Kidney Disease (CKD) are particularly at risk of infection and adverse events. As a result, the global nephrology community has looked to transition to CKD management using telephone or video linked clinics when possible. Providing high quality virtual care has proved challenging due to the close surveillance of physical status and symptoms required.

In order to meet this new challenge, our team of researchers, patients and technology partners have created a tailor-made virtual home monitoring platform (VIEWER). We have completed the pilot study stage and have now entered into the next stage of technology development, including a large, national, pragmatic, randomized controlled trial of VIEWER in CKD clinics across Canada.

A Legacy of Excellence: CDIC Academic Awards

Each year, select students from the University of Manitoba BSc (Med) conduct research under the supervision of CDIC Principal Investigators. In 2019 and 2020, three of these students received academic excellence awards from the UofM:

2020

Dr. Jack C. Wilt Memorial Award for Excellence and Outstanding Promise in Research in Infectious Diseases, Microbiology, Communicable Diseases or Diagnostic Medicine

Recipient: Brittany Plant

2020

Dr. James C. Haworth Memorial Award for Excellence And Outstanding Promise in Research within the Area Of Hereditary Metabolic Disorders or Nutritional Disorders

Recipient: Qiming Hu

2019

A. Allyn Rossen Award for the Best BSc(Med) Thesis

Recipient: Anirudh Agarwal

Examining dialysis timing in Canada

A recent CDIC study published in the Journal of the American Medical Association Internal Medicine assessed the impact that a 2010 publication regarding the Initiating Dialysis Early and Late (IDEAL) clinical trial had on the timing of dialysis initiation in Canada. CDIC conducted a study to assess the association between the IDEAL trial results and the proportion of early dialysis starts over time. The interrupted time series analysis used data from the Canadian Organ Replacement Register to study adult patients with incident chronic dialysis between January 1, 2006, and December 31, 2015.

Prior to the IDEAL trial, a statistically significant increasing trend was observed in the monthly proportion of early dialysis starts. After the IDEAL trial, an immediate decrease was observed in the proportion of early dialysis starts, along with a statistically significant change in trend between the pre-trial and post-trial periods. Our study concluded that the publication of the IDEAL trial appeared to be associated with an immediate and meaningful change in the timing of dialysis initiation in Canada.



Exporting expertise

The growth of CDIC's International collaborations has created demand for our services and innovative approaches on a global scale. In 2019 and 2020, CDIC continued to advance its partnerships in China with three key initiatives.

CDIC signed an MOU with the National Nephrology Innovation Alliance in China to stimulate and facilitate the development of chronic kidney disease research related projects in China. The Alliance consists of members from Nephrology Departments in major Chinese hospitals and from related industry. CDIC and the Alliance plan to advance collaborative research activities that will focus on the following key project related areas: (1) Early and accurate case finding among appropriate at-risk groups; (2) Risk-based patient management including lifestyle, dietary and pharmacologic interventions; and (3) Efficient and effective multidisciplinary care clinics that slow progression, reduce unplanned dialysis starts and enable and empower patients to transition optimally to home based therapies.

CDIC also continued its research partnership with Xuanwu Hospital, China's leading Stroke Center to conduct a clinical device trial for an ischemic conditioning device used for stroke prevention.

Finally, CDIC, who is licensed by the Wellness Institute to advance its chronic disease prevention and management model, continued to expand the number of Canada Wellness Institute (CWI) sites in China. CWI partners with hospitals, senior care providers, insurance firms and real estate companies to bring Canada's award-winning preventive medicine to China and with the aim of helping Chinese people improve their lifestyle and reduce the risk of chronic disease. There are now seven Canada Wellness Institute sites established or in development across China including Beijing, Hangzhou, Zhengzhou, Xingtai, Shiyuan and Rizhao.

Exploring new dietary solutions with industry partners

CDIC is leading a trial to determine if starch derived from raw potatoes could slow the damaging effects of chronic kidney disease. The team, led by CDIC affiliate Dr. Dylan MacKay, with Dr. Rebecca Mollard and Dr. Navdeep Tangri, is partnering with the Manitoba-based company MSPrebiotic, who are providing supplement-grade resistant starch from peeled, dried potatoes. The project was awarded funding in 2019 from The W. Garfield Weston Foundation through its Weston Family Microbiome Initiative.

Adapting patient care to COVID-19

The onset of COVID-19 created significant challenges to care delivery across our healthcare system, including the delivery of kidney failure treatment. In Canada, the majority of individuals with kidney failure receive facility-based hemodialysis (HD) treatment three times a week to sustain life. Understanding the impacts of COVID-19 on care delivery for people receiving hemodialysis is critical to address resultant gaps and subsequently identify innovations that can improve future HD treatments.

The CHRONIC Study, led by Dr. Clara Bohm, has set out to identify the impacts COVID-19 has had on the quality of hemodialysis care across Canada and identify how this knowledge can lead to improvements in care and patient-important outcomes now and in the future. The study will be analyzing national data from hemodialysis patients to investigate temporal trends prior and throughout the pandemic. Patient perspectives will also be gathered, along with input from relevant stakeholders using the James Lind consensus methodology.





Understanding the impacts of COVID-19

CDIC has been awarded a Research Manitoba grant to launch a new study evaluating the impact of COVID-19 on lifestyle behaviours. The 16-week program will strive to understand how individuals' needs and perspectives on lifestyle programs and services have changed in response to the pandemic. Results of the study will help support the creation of a new version of the Wellness Institute's online programming.

Physical distancing measures and movement restrictions have resulted in a substantial shift toward virtual patient care. Virtual solutions to therapeutic lifestyle programming may mitigate the collateral harms due to pandemic distancing restrictions and are urgently needed. However, early virtual interventions in the form of lifestyle programming have yet to be studied in the context of a pandemic. The study aims to evaluate the efficacy of virtual lifestyle programming to limit collateral health damage from COVID-19 by measuring changes in lifestyle behaviours and risk factors for chronic disease.

The path to commercialization and global impact

In 2019 and 2020, we continued to foster our existing relationships with industry partners, as well as develop new partnerships. These partnerships have allowed us to broaden our research activities to help improve patient outcomes. A focus of our work has been on conducting clinical trials, as well as on big data analytics. Recent milestones include the publications of two industry funded studies in high impact, peer-reviewed journals:

A safety comparison of metformin vs sulfonylurea initiation in patients with type 2 diabetes and chronic kidney disease: a retrospective cohort study.

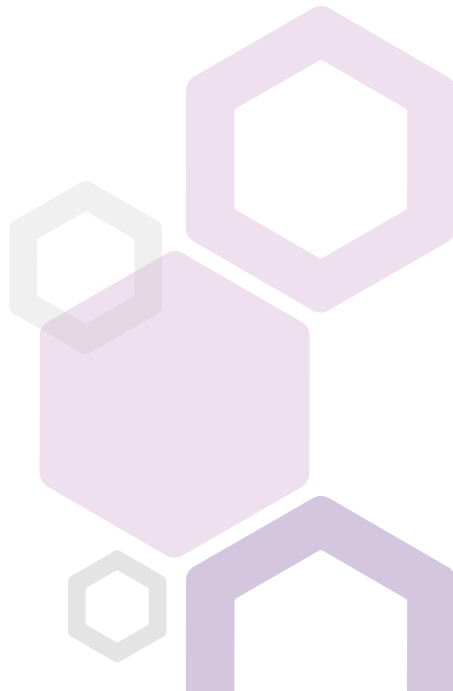
Whitlock RH, Hougen I, Komenda P, Rigatto C, Clemens KK, Tangri N

Mayo Clinic Proceedings, 2020 Jan 1 (Vol. 95, No. 1, pp. 90-100). Elsevier.

Acute kidney injury events in patients with type 2 diabetes using SGLT2 inhibitors versus other glucose-lowering drugs: a retrospective cohort study.

Rampersad C, Kraut E, Whitlock RH, Komenda P, Woo V, Rigatto C, Tangri N

American Journal of Kidney Diseases, 2020 Oct 1;76(4):471-9.



Publications and presentations

Publications 2019

The impact of frailty on technique failure and mortality in patients on home dialysis

Brar R, Whitlock R, Komenda P, Lerner B, Prasad B, Bohm C, Thorsteinsdottir B, Rigatto C, Tangri N

Peritoneal Dialysis International, 2019 NOV.

Early intraoperative iron-binding proteins are associated with acute kidney injury after cardiac surgery

Choi N, Whitlock R, Klassen J, Zappitelli M, Arora RC, Rigatto C, Ho J

The Journal of Thoracic and Cardiovascular Surgery, 2019 JAN.

Canadian nephrologist views regarding stroke and systemic embolism prevention in dialysis patients with nonvalvular atrial fibrillation: a survey

Collister D, Healey JS, Conen D, Brimble KS, Rigatto C, Harel Z, Sood MM, Walsh M

Canadian Journal of Kidney Health and Disease, 2019 JAN.

Post-PIVOTAL iron dosing with maintenance hemodialysis

Collister D, Tangri N

Clinical Journal of the American Society of Nephrology, 2019 OCT.

Association between the publication of the initiating dialysis early and late trial and the timing of dialysis initiation in Canada

Ferguson TW, Garg AX, Sood MM, Rigatto C, Chau E, Komenda P, Naimark D, Nesrallah GE, Soroka SD, Beaulieu M, Alam A, Kim JS, Dixon S, Mann B, Tangri N.

JAMA Internal Medicine, 2019 JUL.

Cost controversies of a “Home Dialysis First” policy

Hager D, Ferguson TW, Komenda P

Canadian Journal of Kidney Health and Disease, 2019 AUG.

Human factors testing of the Quanta SC+ hemodialysis system: An innovative system for home and clinic use

Harasemiw O, Day C, Milad JE, Grainger J, Ferguson T, Komenda P

Hemodialysis International, 2019 JUL.

Integrating risk-based care for patients with chronic kidney disease in the community: study protocol for a cluster randomized trial

Harasemiw O, Drummond N, Singer A, Bello A, Komenda P, Rigatto C, Lerner J, Sparkes D, Ferguson TW, Tangri N

Canadian Journal of Kidney Health and Disease, 2019 MAY

New Therapies for Hyperkalemia

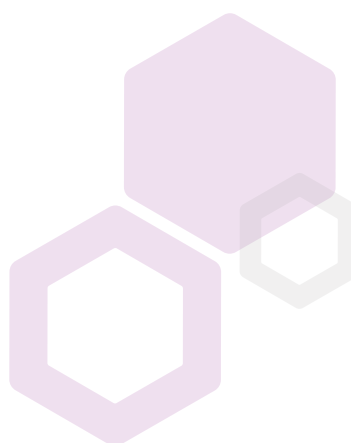
Leon SJ, Harasemiw O, Tangri N

Current Opinion in Nephrology and Hypertension, 2019 MAY

The use of renin-angiotensin system inhibitors in patients with chronic kidney disease

Leon SJ, Tangri N

Canadian Journal of Cardiology, 2019 SEP.



The Manitoba Personalized Lifestyle Research (TMPLR) study protocol: a multicentre bidirectional observational cohort study with administrative health record linkage investigating the interactions between lifestyle and health in Manitoba, Canada

Mackay D, Mollard RC, Granger M, Bruce S, Blewett H, Carlberg J, Duhamel T, Eck P, Faucher P, Hamm NC, Khafipour E, Lix L, McMillan D, Myrie S, Ravandi A, Tangri N, Azad M, Jones PJH

BMJ Open, 2019 OCT.

Risk of hospitalization for serious adverse gastrointestinal events associated with sodium polystyrene sulfonate use in patients of advanced age

Noel JA, Bota SE, Petrcich W, Garg AX, Carrero JJ, Harel Z, Tangri N, Clark EG, Komenda P, Sood MM

JAMA Internal Medicine, 2019 AUG.

CDIC conference abstracts and presentations 2019

- | | | | |
|---|--|---|--|
| 8 | Canadian Society of Nephrology | 1 | Diabetes Canada/ The Canadian Society of Endocrinology and Metabolism Conference |
| 3 | Can-SOLVE CKD | 7 | American Society of Nephrology |
| 1 | Canadian Heart Failure Society's Heart Failure Update Conference | 1 | North America Primary Care Research Group Annual General Meeting |
| 1 | Canadian Frailty Network Conference on Frailty | | |

Publications and presentations

Publications 2020

Peripheral artery disease: its adverse consequences with and without CKD

Bourrier M, Ferguson TW, Embil JM, Rigatto C, Komenda P, Tangri N

American Journal of Kidney Diseases, 2020 MAY

The Dialysis Symptom Control-Restless Legs Syndrome (DISCO-RLS) Trial: A Protocol for a Randomized, Crossover, Placebo-Controlled Blinded Trial

Collister D, Pohl K, Herrington G, Lee SF, Rabbat C, Tennankore K, Zimmermann D, Tangri N, Wald R, Manns B, Suri RS.

Canadian Journal of Kidney Health and Disease, 2020 NOV.

Screening for chronic kidney disease: moving toward more sustainable health care

Curtis S, Komenda P

Current Opinion in Nephrology and Hypertension, 2020 MAY

Evaluation of administrative case definitions for chronic kidney disease in children

Dart A, Chartier M, Komenda P, Walld R, Koseva I, Burchill C, Tangri N

Pediatric Research, 2020 FEB.

A Cost-Minimization Analysis of Nurse-Led Virtual Case Management in Late-Stage CKD

Ferguson TW, Hager D, Whitlock RH, Di Nella M, Tangri N, Komenda P, Rigatto C

Kidney International Reports, 2020 JUN.

Effect of an exercise rehabilitation program on physical function over 1 year in chronic kidney disease: an observational study

Hargrove N, Tays Q, Storsley L, Komenda P, Rigatto C, Ferguson T, Tangri N, Bohm C

Clinical Kidney Journal, 2020 FEB.

Assessing physical function in chronic kidney disease

Iman Y, Harasemiw O, Tangri N.

Current opinion in nephrology and hypertension, 2020 MAY 1

Health-related quality of life: A rapid predictor of hospitalization in patients with cirrhosis

Kok B, Whitlock R, Ferguson T, Bailey RJ, Burak KW, Kowalczewski J, Tangri N, Tandon P

American Journal of Gastroenterology, 2020 APR.

Hemodialysis With the Quanta SC+: Efficacy and Safety of a Self-care Hemodialysis Machine

Komenda PV, Harper G, Wilson LM, Mitra S, Breen C, Milad JE

Kidney Medicine, 2020 NOV.

A Province-Wide Analysis of the Epidemiology of Thoracic Aortic Disease: Incidence Is Increasing in a Sex-Specific Way

Lodewyck CL, Prior HJ, Hiebert BM, Nickel NC, Yamashita MH, Ouzounian M, Kumar KK, Arora RC, Tangri N.

Canadian Journal of Cardiology, 2020 NOV. .

The comparative outcomes of radical prostatectomy versus radiotherapy for non-metastatic prostate cancer: a longitudinal, population-based analysis

Oake JD, Shiff B, Harasemiw O, Tangri N, Ferguson TW, Bhindi B, Saranchuk JW, Bansal RK, Drachenberg DE, Nayak JG

The Journal of Urology, 2020 FEB.



Intradialytic exercise preconditioning: an exploratory study on the effect on myocardial stunning

Penny JD, Salerno FR, Brar R, Garcia E, Rossum K, McIntyre CW, Bohm CJ

Nephrology Dialysis Transplantation, 2019 NOV.

Trabecular bone score in patients with chronic kidney disease

Rampersad C, Whitlock RH, Leslie WD, Rigatto C, Komenda P, Bohm C, Hans D, Tangri N

Osteoporosis International, 2020 OCT.

Acute kidney injury events in patients with type 2 diabetes using SGLT2 inhibitors versus other glucose-lowering drugs: a retrospective cohort study

Rampersad C, Kraut E, Whitlock RH, Komenda P, Woo V, Rigatto C, Tangri N

American Journal of Kidney Diseases, 2020 OCT.

A Mixed Method Investigation to Determine Priorities for Improving Information, Interaction, and Individualization of Care Among Individuals on In-center Hemodialysis: The Triple I Study

Rossum K, Finlay J, McCormick M, Desjarlais A, Vorster H, Fontaine G, Talson M, Ferreira Da Silva P, Soroka KV, Sass R, James M

Canadian Journal of Kidney Health and Disease, 2020 OCT.

Patient, Caregiver, and Provider Perspectives on Challenges and Solutions to Individualization of Care in Hemodialysis: A Qualitative Study

Sass R, Finlay J, Rossum K, Soroka KV, McCormick M, Desjarlais A, Vorster H, Fontaine G, Ferreira Da Silva P, James M, Sood MM

Canadian Journal of Kidney Health and Disease, 2020 NOV.

Validation of the Kidney Failure Risk Equation in kidney transplant recipients

Tangri N, Ferguson TW, Wiebe C, Eng F, Nash M, Astor BC, Lam NN, Ye F, Shin JI, Whitlock R, Yuen DA

Canadian Journal of Kidney Health and Disease, 2020 MAY

Recent advances in the treatment of uremic pruritus

Trachtenberg AJ, Collister D, Rigatto C

Current Opinion in Nephrology and Hypertension, 2020 SEP.

A safety comparison of metformin vs sulfonylurea initiation in patients with type 2 diabetes and chronic kidney disease: a retrospective cohort study

Whitlock RH, Hougen I, Komenda P, Rigatto C, Clemens KK, Tangri N

Mayo Clinic Proceedings, 2020 JAN.

CDIC conference abstracts and presentations 2020

- 1 National Kidney Foundation Spring Meeting
- 1 European Renal Association
- 1 Manitoba Family Doctors Annual Scientific Assembly
- 1 The Canadian Society of Clinical Chemists (CSCC)

- 5 Canadian Society of Nephrology
- 3 American Society of Nephrology
- 1 Sociedad Española de Nefrología

Grants awarded



2019

CIHR Rewarding Success

Home Dialysis First/Real-time Data Platform

Awarded May 2019

\$106,441.5 per year for 4 years

Total: \$425,766

Weston Family Microbiome Initiative

Digestion resistant starch in Chronic Kidney Disease

Awarded June 2019

\$150,000

Mitacs Elevate

The epidemiology of metabolic acidosis and Fabry Disease in Manitoba

Awarded August 2019

\$60,000 (including \$30,000 matching funds from CDIC)

Mitacs Elevate

Resistant Starch Prebiotic Effects in Chronic Kidney Disease (ReSPECKD) study

Awarded November 2019

\$60,000 (including \$30,000 matching funds from CDIC)

TD Ready Challenge

Expansion of Kidney Check, screening in remote Indigenous communities in Manitoba

Awarded December 2019

\$1,000,000

2020

Manitoba Medical Service Foundation

Validation of the kidney failure risk equation in cancer patients

Awarded January 2020

\$25,000

CIHR Innovative Clinical Trials

National multi-centre trial testing different magnesium levels in patients on dialysis

Awarded March 2020

\$704,308 per year for 4 years

Total: \$2,817,232

National Institute of Health (USA)

Changes in eGFR and urine ACR after blood pressure lowering

Awarded March 2020

\$60,000 per year for 3 years

Total: \$180,000

University Indigenous Research Program

Addressing challenges to care in Indigenous individuals on hemodialysis: An ethnographic study

Awarded March 2020

\$21,274.00

Research Manitoba Innovation Grant

Evaluation of Wellness Institute virtual programming

Awarded October 2020

\$100,000

Media interviews

2019

Nephrology News and Issues

Clara Bohm

Exercise rehabilitation program may present long-term benefits to patients with CKD

<https://www.healio.com/nephrology/chronic-kidney-disease/news/online/%7B80fe695f-0988-4b2d-b864-3903ccf83209%7D/exercise-rehabilitation-program-may-present-long-term-benefits-to-patients-with-ckd>

Winnipeg Free Press

Navdeep Tangri

Patients told bad news for their own good in kidney study

<https://www.winnipegfreepress.com/local/patients-told-bad-news-for-their-own-good-in-kidney-study-511991441.html>

CTV Winnipeg

Navdeep Tangri

Project training more Manitoba family doctors to calculate kidney failure risk

<https://winnipeg.ctvnews.ca/project-training-more-manitoba-family-doctors-to-calculate-kidney-failure-risk-1.4543773>

Renal & Urology News

Silvia Leon, Navdeep Tangri

Stopping ACE Inhibitors, ARBs After Hyperkalemia Episode Ups Death Risk in CKD

<https://www.renalandurologynews.com/home/conference-highlights/kidney-week-annual-meeting/kidney-week-2019/stopping-ace-inhibitors-arbs-after-hyperkalemia-episode-ups-death-risk-in-ckd/>

Winnipeg Free Press

Dylan MacKay

Manitoba company converts spuds into supplement that is being studied for its health benefits

<https://www.winnipegfreepress.com/arts-and-life/life/health/potato-power-565674632.html>

Winnipeg Sun

Paul Komenda

U of M researchers get \$1M for chronic kidney disease project

<https://winnipeg.sun.com/news/news-news/u-of-m-researchers-get-1m-for-chronic-kidney-disease-project>

CTV Winnipeg

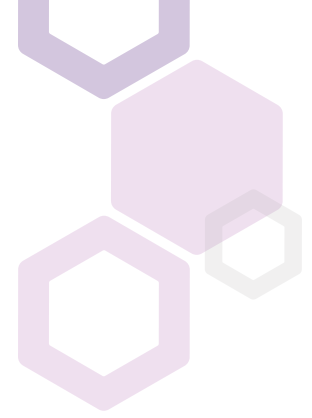
Paul Komenda

University of Manitoba wins \$1 million for research project to improve kidney health

<https://winnipeg.ctvnews.ca/university-of-manitoba-wins-1-million-for-research-project-to-improve-kidney-health-1.4713766>



Media interviews



2020

University of Manitoba News Today Paul Komenda/ SPOR Rewarding Success Team

\$4.8-million research project to support health system decision-making data needs

<https://news.umanitoba.ca/manitoba-invests-in-research-project-to-support-health-system-decision-making-data-needs/>

City News SPOR Rewarding Success Team

“Better health data, better outcomes”

<https://winnipeg.citynews.ca/video/2020/02/13/better-health-data-better-outcomes/>

Helio Nephrology News and Issues Navdeep Tangri

“Peripheral artery disease more common in patients with late stage CKD”

<https://www.healio.com/news/nephrology/20200122/peripheral-artery-disease-more-common-in-patients-with-latestage-ckd>

Ha-Shilth-Sa (local B.C. Indigenous newspaper) Kidney Check Project

Nuu-chah-nulth face higher risk of kidney disease, encouraged to get screened

<https://hashilthsa.com/news/2020-02-21/nuu-chah-nulth-face-higher-risk-kidney-disease-encouraged-get-screened>

CTV Morning Live Clara Bohm

Feature about intradialytic exercise for World Kidney Day 2020

<https://winnipeg.ctvnews.ca/video?clipId=1917782&binId=1.1206882&playlistPageNum=1>

CTV Morning Live Paul Komenda

Feature on Kidney Check for World Kidney Day 2020

<https://winnipeg.ctvnews.ca/video?clipId=1917843>

CJOB radio news interview with Richard Cloutier Clara Bohm

Interview about World Kidney Day

TD Canada Newsroom Paul Komenda

How two TD Ready Challenge grant recipients adapted during COVID-19

<https://newsroom.td.com/featured-news/td-ready-challenge-winners-adapting-covid19>

The Daily Scan (local B.C. newspaper) Kidney Check

Indigenous Canadians help change kidney care for their communities

<http://thedailyscan.providencehealthcare.org/2020/06/indigenous-kidney-care/>

Helio Nephrology News and Issues Paul Komenda

Collaboration and strong payment model key to nephrology primary care efforts to slow Chronic Kidney Disease

<https://www.healio.com/news/nephrology/20200804/collaboration-strong-payment-model-key-to-nephrology-primary-care-efforts-to-slow-ckd>

University of Manitoba News Today

Paul Komenda

Kidney Check program receives UNIVANTS of Healthcare Excellence awards

<https://news.umanitoba.ca/kidney-check-program-receives-univants-of-healthcare-excellence-awards/>

Canadian Healthcare Technology

Paul Komenda

Seven Oaks wins award for kidney program

<https://www.canhealth.com/2020/11/25/seven-oaks-wins-award-for-kidney-program/>

Helio Nephrology News and Issues

Paul Komenda

'Home dialysis first' approach more cost-effective in 10-year study vs in-center care

<https://www.healio.com/news/nephrology/20201120/home-dialysis-first-approach-more-costeffective-in-10-year-study-vs-incenter-care>

American Association for Clinical Chemistry

Paul Komenda

A New Wave of Global Efforts to Improve Patient Outcomes

<https://www.aacc.org/cln/articles/2020/december/a-new-wave-of-global-efforts-to-improve-patient-outcomes>





POWERED BY SEVEN OAKS GENERAL HOSPITAL

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