# Canadian Organ Replacement Register Update

Welcome to the 2018 update for the Canadian Organ Replacement Register (CORR). This update includes information about the following: the availability of 2017 CORR data on end-stage organ failure; upcoming and released CORR products; an exploratory analysis of renal patient-reported outcome measures (PROMs) data; submitting 2019 transplant and donor data; the final update for the CORR Access to Kidney Transplantation Feasibility (WAVE) Study; and new research using CORR data.



### 2017 CORR data on end-stage organ failure available

2017 data on end-stage organ failure became available for use in September 2018. This data is being used for analytical and data quality purposes and for centre-specific feedback reporting by the CORR Program; it is also available for data requests. CORR data is intended for use by anyone interested in health system policy and/or clinical and service management related to end-stage organ failure in Canada. <u>Access the data on CIHI's website</u>.

#### Newly released CORR products

In July 2018, the CORR Program released 2017 statistics in our *e-Statistics on Organ Transplants, Waiting Lists and Donors*. These data tables include annual information on transplants, donors and waiting lists, including the number of patients who died while waiting for a vital organ transplant. The data is based on summary statistics received from 9 organ procurement organizations (OPOs) across Canada.

# **Upcoming CORR products**

The CORR Program is working on the following analytical products for release this winter:

- Treatment of End-Stage Organ Failure in Canada, Canadian Organ Replacement Register, 2008 to 2017
- Canadian Organ Replacement Register Quick Stats (2017 data)

CIHI strives to ensure that the quality of the information in its data holdings is suited for the intended use. The CORR Program has been a leader in developing data quality documentation for users of its data. Data Quality Documentation for Users: Canadian Organ Replacement Register, 2008 to 2017 Data will also be available this winter.

CORR analytical and data quality products can be accessed on the <u>CORR page of</u> <u>CIHI's website</u>.



#### Patient-reported outcome measures

PROMs are measurement tools completed by patients who provide information on their health status and quality of life. PROMs are an important complement to clinical measures in evaluating the effectiveness of care, providing the patient's perspective, and standardizing measurement of patients' quality of life. Working with the pan-Canadian PROMs Renal Care Working Group, CIHI undertook a demonstration project to explore whether a standardized tool to measure symptom burden in dialysis patients in British Columbia can be used as a PROM and whether it could be analyzed for secondary research and reporting purposes. Findings from this work are being presented at the 2018 Canadian Society of Nephrology Annual General Meeting and the 2018 American Society of Nephrology Kidney Week.

# Submitting 2019 transplant and donor data to CORR

The CORR Program at CIHI has been working in collaboration with Canadian Blood Services (CBS) to ensure minimal duplicate reporting to both organizations. For the 2019 data year, all transplant programs and OPOs will continue to submit all record-level organ donation and transplantation data to CORR. CBS will continue to collect data for the Kidney Paired Donation Registry, National Organ Waitlist and the Highly Sensitized Patient Registry.

# CORR access to Kidney Transplantation Feasibility (WAVE) Study update

In 2009, the CORR board of directors and Canadian Society of Transplantation Kidney Transplant Group identified a need to capture patient-level information on kidney transplant referrals and activations to the deceased donor waiting lists. The CORR board approached CIHI to manage the data collection activities, which spanned a 6-year period from June 1, 2010, to April 30, 2016. 16 of 18 Canadian transplant centres captured end-stage renal disease patient information and data at the time of referral and final disposition regarding activation to the wait list. CIHI closed this data set at the end of June 2016. Since then, the data has been analyzed and preliminary findings were presented by Dr. Joseph Kim at the 2018 Canadian Society of Nephrology Annual General Meeting in May. More complete analyses have been submitted for peer-reviewed publication.

#### New research using CORR data

Data from CORR is used in many CIHI products, including annual reports, Analysis in Brief reports, Quick Stats, centre-specific comparative reports and more. CORR data is also frequently accessed by third-party data requestors for research purposes. Below is a list of journal articles and reports published in the last 2 years that used CORR data.

- Abuzeid W, Iwanochko RM, Wang X, Kim SJ, Husain M, Lee DS. <u>Prognostic impact of SPECT-MPI after</u> renal transplantation. Journal of Nuclear Cardiology. 2017.
- Acuna SA, Sutradhar R, Camacho X, Daly C, Del Giudice ME, Kim SJ, Baxter NN. <u>Uptake of cancer</u> <u>screening tests among recipients of solid organ transplantation</u>. *American Journal of Transplantation*. 2017.
- Acuna SA, Fernandes KA, Daly C, Hicks LK, Sutradhar R, Kim SJ, Baxter NN. <u>Cancer mortality among</u> recipients of solid-organ transplantation in Ontario, Canada. JAMA Oncology. 2016.
- Budhram B, Akbari A, Brown P, Biyani M, Knoll G, Zimmerman D, Edwards C, McCormick B, Bugeja A,
  Sood MM. End-stage kidney disease in patients with autosomal dominant polycystic kidney disease:
  <u>A 12-year study based on the Canadian Organ Replacement Registry</u>. Canadian Journal of Kidney Health and Disease. 2018.
- Chan AW, Fung K, Austin PC, Kim SJ, Singer LG, Baxter NN, Alhusayen R, Rochon PA. <u>Improved</u> <u>keratinocyte carcinoma outcomes with annual dermatology assessment after solid organ transplantation:</u> <u>Population-based cohort study</u>. *American Journal of Transplantation*. 2018.
- Chau EM, Manns BJ, Garg AX, Sood MM, Kim SJ, Naimark D, Nesrallah GE, Soroka SD, Beaulieu M, Dixon S, Alam A, Tangri N; Canadian Kidney Knowledge Translation and Generation Network (CANN-NET). <u>Knowledge translation interventions to improve the timing of dialysis initiation: Protocol for a cluster</u> <u>randomized trial</u>. *Canadian Journal of Kidney Health and Disease*. 2016.
- Cohen BA, Courtney MJ, Moist LM, Barton J. <u>Needs assessment: Towards a more responsive Canadian</u> <u>Society of Nephrology Annual General Meeting (CSN AGM) program</u>. *Canadian Journal of Kidney Health and Disease*. 2016.
- Dart AB, Zappitelli M, Sood MM, Alexander RT, Arora S, Erickson RL, Kroeker K, Soo A, Manns BJ, Samuel SM. <u>Variation in estimated glomerular filtration rate at dialysis initiation in children</u>. *Pediatric Nephrology*. 2017.
- Gao A, Osgood ND, Jiang Y, Dyck RF. <u>Projecting prevalence, costs and evaluating simulated interventions</u> for diabetic end-stage renal disease in a Canadian population of Aboriginal and non-Aboriginal people: <u>An agent-based approach</u>. *BMC Nephrology*. 2017.

- Hayward JS, McArthur E, Nash DM, Sontrop JM, Russell SJ, Khan S, Walker JD, Nesrallah GE, Sood MM, Garg AX. <u>Kidney disease among registered Métis citizens of Ontario: A population-based cohort study</u>. *Canadian Journal of Kidney Health and Disease*. 2017.
- Hodge M, McArthur E, Garg AX, Tangri N, Clemens KK. <u>Hypoglycemia incidence in older adults by</u> <u>estimated GFR</u>. *American Journal of Kidney Diseases*. 2017.
- Kalatharan V, Lemaire M, Lanktree MB. <u>Opportunities and challenges for genetic studies of end-stage</u> renal disease in Canada. Canadian Journal of Kidney Health and Disease. 2018.
- Kramer AH, Baht R, Doig CJ. <u>Time trends in organ donation after neurologic determination of death:</u> <u>A cohort study</u>. *CMAJ*. 2017.
- Lam NN, Garg AX, Knoll GA, Kim SJ, Lentine KL, McArthur E, Naylor KL, Bota SE, Sood MM. <u>Venous thromboembolism and the risk of death and graft loss in kidney transplant recipients</u>. *American Journal of Nephrology*. 2017.
- Lam NN, Kim SJ, Knoll GA, McArthur E, Lentine KL, Naylor KL, Li AH, Shariff SZ, Ribic CM, Garg AX. <u>The risk of cardiovascular disease is not increasing over time despite aging and higher comorbidity</u> <u>burden of kidney transplant recipients</u>. *Transplantation*. 2017.
- Manns B, McKenzie SQ, Au F, Gignac PM, Geller LI; Canadians Seeking Solutions and Innovations to Overcome Chronic Kidney Disease (Can-SOLVE CKD) Network. <u>The financial impact of advanced</u> <u>kidney disease on Canada Pension Plan and private disability insurance costs</u>. *Canadian Journal of Kidney Health and Disease*. 2017.
- Massicotte-Azarniouch D, Kuwornu JP, Carrero JJ, Lam NN, Molnar AO, Zimmerman D, McCallum MK, Garg AX, Sood MM. Incident atrial fibrillation and the risk of congestive heart failure, myocardial infarction, end-stage kidney disease, and mortality among patients with a decreased estimated GFR. *American Journal of Kidney Diseases*. 2018.
- Molnar AO, van Walraven C, McArthur E, Fergusson D, Garg AX, Knoll G. <u>Validation of administrative</u> <u>database codes for acute kidney injury in kidney transplant recipients</u>. *Canadian Journal of Kidney Health and Disease*. 2016.
- Molnar AO, van Walraven C, Fergusson D, Garg AX, Knoll G. <u>Derivation of a predictive model for graft</u> <u>loss following acute kidney injury in kidney transplant recipients</u>. *Canadian Journal of Kidney Health and Disease*. 2017.
- Nash DM, Brimble S, Markle-Reid M, McArthur E, Tu K, Nesrallah GE, Grill A, Garg AX. <u>Quality of care</u> for patients with chronic kidney disease in the primary care setting: A retrospective cohort study from <u>Ontario, Canada</u>. *Canadian Journal of Kidney Health and Disease*. 2017.

- Naylor KL, Garg AX, Kim SJ, Knoll GA. <u>Epidemiology of fracture in adults from Ontario, Canada,</u> <u>with chronic kidney disease: An examination of fracture burden using administrative health data</u>. *Healthcare Quarterly*. 2016.
- Naylor KL, Dixon SN, Garg AX, Kim SJ, Blake PG, Nesrallah GE, McCallum MK, D'Antonio C, Li AH, Knoll GA. <u>Variation in access to kidney transplantation across renal programs in Ontario, Canada</u>. *American Journal of Transplantation*. 2017.
- Nesrallah GE, Dixon SN, MacKinnon M, Jassal SV, Bota SE, Dirk JS, Arthurs E, Blake PG, Sood MM, Garg AX, Davison SN; on behalf of the Ontario Renal Network. <u>Home palliative service utilization and</u> <u>care trajectory among Ontario residents dying on chronic dialysis</u>. *Canadian Journal of Kidney Health and Disease*. 2018.

Norris S. Organ Donation and Transplantation in Canada. 2018.

- Perl J, Nessim SJ, Moist LM, Wald R, Na Y, Tennankore KK, Chan CT. <u>Vascular access type and patient</u> <u>and technique survival in home hemodialysis patients: The Canadian Organ Replacement Register</u>. *American Journal of Kidney Diseases*. 2016.
- Perl J, McArthur E, Bell C, Garg AX, Bargman JM, Chan CT, Harel S, Li L, Jain AK, Nash DM, Harel Z. <u>Dialysis modality and readmission following hospital discharge: A population-based cohort study</u>. *American Journal of Kidney Diseases*. 2017.
- Perl J, Na Y, Tennankore KK, Chan CT. <u>Temporal trends and factors associated with home hemodialysis</u> <u>technique survival in Canada</u>. *Clinical Journal of the American Society of Nephrology*. 2017.
- Tan VS, Garg AX, McArthur E, Lam NN, Sood MM, Naylor KL. <u>The 3-year incidence of gout in elderly</u> <u>patients with CKD</u>. *Clinical Journal of the American Society of Nephrology*. 2017.
- Tennankore KK, Na Y, Wald R, Chan CT, Perl J. <u>Short daily-, nocturnal- and conventional-home</u> <u>hemodialysis have similar patient and treatment survival</u>. *Kidney International*. 2018.
- Terner M, Redding N, Wu J. <u>Increasing rates of kidney failure care in Canada strains demand for</u> <u>kidney donors</u>. *Healthcare Quarterly*. 2016.
- Thomas A. <u>The Canadian Organ Replacement Register: From data submission to final reports</u>. *Canadian Association of Nephrology Nurses and Technicians Journal*. 2016.
- Trinh E, Na Y, Sood MM, Chan CT, Perl J. <u>Racial differences in home dialysis utilization and outcomes</u> in <u>Canada</u>. *Clinical Journal of the American Society of Nephrology*. 2017.

- Tsampalieros A, Knoll GA, Dixon S, English S, Manuel D, Van Walraven C, Taljaard M, Fergusson D. <u>Case mix, patterns of care, and inpatient outcomes among Ontario kidney transplant centers:</u> <u>A population-based study</u>. *Canadian Journal of Kidney Health and Disease*. 2018.
- Wong B, Ravani P, Oliver MJ, Holroyd-Leduc J, Venturato L, Garg AX, Quinn RR. <u>Comparison of patient</u> <u>survival between hemodialysis and peritoneal dialysis among patients eligible for both modalities</u>. *American Journal of Kidney Diseases*. 2018.
- Yoshida EM, Mason A, Peltekian K, Lilly L, Marotta P, Wong P, Hux M, Fischer A, Thiele SL, Borrelli R. <u>The current state of liver transplantation in Canada</u>. *The International Liver Congress*. 2017.
- Yoshida EM, Thiele S, Fischer A, Mason A, Shah H, Peltekian K, Hux M, Borrelli R. <u>Prevalence of primary</u> <u>biliary cholangitis in Canada: First national study</u>. *Canadian Digestive Diseases 2017 Conference*. 2017.
- Young A, Dixon SN, Knoll GA, Garg AX, Lok CE, Lam NN, Kim SJ. <u>The Canadian experience using</u> <u>the expanded criteria donor classification for allocating deceased donor kidneys for transplantation</u>. *Canadian Journal of Kidney Health and Disease*. 2016.
- Young A, Knoll GA, McArthur E, Dixon SN, Garg AX, Lok CE, Lam NN, Kim SJ. <u>Is the kidney donor risk</u> <u>index a useful tool in non-US patients?</u>. *Canadian Journal of Kidney Health and Disease*. 2018.

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#### For data-specific information:

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