



Paul Komenda, MD
 Nephrologist
 Chronic Disease Innovation
 Center, Seven Oaks
 General Hospital



Barry Lavallee, MD
 Manitoba Keewatinawi
 Okimakanak Inc.



Binh Nguyen
 eQoL



Abdul Razaq Sokoro, PhD
 Executive Director
 Provincial Laboratory
 Operations, Shared Health



Andeera Levin, MD
 Nephrologist
 Can-Solve CKD Network

Kidney Check: The Next Generation of Surveillance for Hypertension, Diabetes and Chronic Kidney Disease

Chronic Disease Innovation Center, Seven Oaks General Hospital, Manitoba, Canada

Chronic kidney disease (CKD) is a debilitating illness that has significant impact on not only quality of life, but also longevity. Additionally, healthcare costs associated with treatment and dialysis are substantial at >\$60,000/patient per year. Modifiable risk factors for CKD include hypertension and diabetes. As such, early detection and management of these conditions can substantially reduce CKD risk and improve outcomes.

Maximizing kidney health can be achieved through comprehensive screening and treatment programs that focus on early recognition and treatment in high-risk groups. Unfortunately, challenges can exist in ensuring equitable access to ongoing and long-term care for patients in rural remote communities. An integrated care team from Winnipeg, Manitoba identified an opportunity to improve CKD awareness, detection and treatment of CKD in patients living in rural First Nations Communities in Northern Manitoba through a novel program called “Kidney Check”.

Kidney Check is a comprehensive screening, triage, and treatment initiative that brings preventive kidney care to rural and remote First Nations communities across Canada. This is achieved by utilizing the

portability of point-of-care testing (POCT) to identify CKD, diabetes, and hypertension in individuals ages 10 and up, regardless of pre-existing risk factors. Using the Kidney Failure Risk Equation (age, sex, eGFR and proteinuria) high-risk individuals are identified and linked to appropriate care.

Since inception, Kidney Check has reached >5500 registered on-reserve adults, across 11 communities. Strong collaboration with patient partners has resulted in more than 1700 First Nations People opting-in for screening, of which, 1168 patients have been identified as high-risk for CKD and subsequently linked to appropriate care. Importantly, 21.8% of screened children had at least one risk factor for CKD identified, thus enabling an opportunity for early intervention and prevention or mitigation of downstream complications.

In a climate where mistrust and apprehension are often associated with traditional medicine, 100% of patients first seen in these rural communities have been referred for appropriate follow-up care and/or have extended invitations for the care team return to the communities for further care.

With such strong initial success, it is not surprising that the Kidney Health program has expanded to four additional Provinces across Canada. This subsequent expansion is the next step in improving the health trajectory of patients in Canada who are at risk for CKD.

Although many interdisciplinary team members across several partnering organizations have played an integral part in implementation of this screening initiative, a special congratulation is extended to the innovators and recipients of the 2020 UNIVANTS of Healthcare Excellence Award for Outstanding Health Outcomes at Seven Oaks General Hospital: Paul Komenda, MD, Nephrologist, CDIC, Abdul Razaq Sokoro, PhD, Executive Director, Provincial Laboratory Operations, Shared Health, Barry Lavallee, MD, Manitoba Keewatinawi Okimakanak Inc., Adeera Levin, MD, Nephrologist, Can-SOLVE CKD Network, Binh Nguyen, eQoL.

THREE KEY TAKEAWAYS

1. Screening for kidney disease, hypertension, and diabetes with individualized risk scores can change delivery of care and improve patient wellness for patients in rural communities
2. Strategic use of high-quality point-of-care testing can help ensure rural and remote Indigenous communities have equitable access to preventative care
3. Cross-disciplinary involvement and collaborations, including patient partners, help ensure uptake and success