According to nephrologist Dr. Amit Garg, for those with advanced chronic kidney disease, the treatment options are stark: continuous dialysis or a kidney transplant to survive.
"A kidney transplant not only gives a patient up to a decade of longer life and quality of life, but data also shows that every 100 kidney transplant procedures save the health care system a staggering $20 million over five years by sidelining dialysis costs. And, kidneys from living donors compared to deceased donors further amplify these benefits," said Garg, who is associate dean, clinical research at Western University's Schulich School of Medicine & Dentistry and clinician-scientist at Lawson Health Research Institute and London Health Sciences Center.

"Yet, due to many barriers, many eligible patients never receive a transplant."

Garg and a multidisciplinary team of clinicians and researchers developed a potential solution with the goal of helping patients navigate barriers and enhance their access to kidney transplant and living kidney donations.

Co-designed by a diverse group of health-care stakeholders, including patients, the solution focused on improving four pivotal components: administrative assistance, education, peer support and progress monitoring.

The intervention, called Enhance Access to Kidney Transplantation and Living Kidney Donation (EnAKT LKD), was tested in a unique province-wide clinical trial, embedded within routine care settings and studied using existing real-world data.

The trial encompassed all 26 renal care facilities in Ontario, dedicated to advanced treatment of chronic kidney disease with care provided by more than 3,600 health care professionals. With a total of 20,000 participants—equivalent to the seating capacity of Madison Square Garden—the trial divided the patient participants evenly: 10,000 received the intervention solution, while the other 10,000 were given...
standard care. This comprehensive trial lasted just over four years.

"Patients with advanced kidney disease in the trial were either approaching the need for dialysis or were already undergoing maintenance dialysis," said Garg. "About half the patients approaching the need for dialysis started dialysis during the trial period."

With the COVID-19 pandemic striking two and half years into the trial, many aspects of the tested solution were disrupted and the trial could not meet its primary goal to enhance kidney access. However, the lessons and insights learned from the trial are critical.

The findings, published in *JAMA Internal Medicine*, show that there was not a significant difference between the intervention and usual-care group in the number of steps completed towards receiving a kidney transplant. However, the rate of evaluations of living kidney donors to ensure they are healthy to donate a kidney was numerically higher in the intervention group than the usual care group.

"Working with diverse stakeholders to create solutions, connecting with health-care professionals in a community of leading practice, and educating patients and health care professionals has been beneficial. We observed that when past transplant recipients and donors share their personal experiences, they provide hope to other patients, which helps achieve an attitude shift," said Garg. "The patient-partner involvement has also set a precedent for future efforts."

As part of the peer support component, the Transplant Ambassador Program (TAP), pioneered by Garg and steered by over 85 individuals who had either received a kidney transplant or were living kidney donors, offered personal insights and emotional support to those undergoing the transplant process during the trial.
"As a kidney patient who experienced dialysis and received a kidney transplant 13 years ago, I know firsthand how a transplant can completely transform someone's life. But I also know the path to transplant isn't easy for anyone, and is almost impossible without support, education and hope," said Susan Q. McKenzie, a patient partner and co-founder and chair of Transplant Ambassador Program.

"Many patients have told us directly that we have made a difference in their lives."

A shift in how staff at renal programs approached quality improvement work was also observed during the trials.

"It is vitally important that we have a health care system of renal programs and transplant centers that continually learn and improve. With this trial we supported a culture of quality improvement among center staff," said Dr. Seychelle Yohanna, provincial medical lead for kidney transplant at the Ontario Renal Network, and a transplant nephrologist at McMaster University.

Taking lessons from this trial, the team is currently completing a process evaluation to optimize its future approach.

"Some of the early data suggests better integration of different components, more health-care resources, better re-training for personnel who turnover, and making it clearer who is responsible for what may lead to future success," said Garg.

**Key components of EnAKT LKD**

- Administrative Backbone: A dedicated operations group ensured the formation of grassroots-level quality improvement teams, driving performance and fostering the sharing of best practices.
• Empowering through Education: Tailored resources for health-care teams, patients and potential donors guaranteed a well-informed community.
• Transplant Ambassador Program: Spearheaded by 85+ kidney transplant recipients and donors, this peer-driven initiative shared personal stories and provided vital emotional support.
• Tracking Progress: Quarterly reports kept CKD programs updated on patients' journey through transplant milestones.


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