



**Kidney Patient and  
Donor Alliance Canada**



## **TRANSPLANT FIRST:**

**An Urgent Call to Action for the Radical Reform  
of the Kidney Health Care System in Canada**

**A White Paper Presented by The Patient Partner Coalition  
of the Kidney Patient and Donor Alliance Canada**

## EXECUTIVE SUMMARY

Thousands of Canadians suffer and die needlessly each year when a kidney transplant could have restored them to optimal health. Further, billions of dollars are wasted by an inefficient healthcare system that continues to prioritize dialysis as the primary treatment for kidney failure, despite longstanding evidence that kidney transplant provides far superior outcomes, longer life expectancy, and a better quality of life.<sup>1,2</sup>

A radical system-wide reform of the Canadian healthcare system that prioritizes kidney transplant first, as the best treatment for kidney failure, is urgently needed to optimize every patient's chance to receive a kidney transplant and every donor's opportunity to donate.

This new kidney care model centred on transplant as the first and best treatment for kidney failure would save thousands of lives and realize billions of dollars in health care costs related to dialysis, including disability benefits, lost work productivity, increased financial burden on patients and families, and countless other social service support costs.

“**TRANSPLANT FIRST**” is an urgent call to action to reform the Canadian healthcare system to give more patients the opportunity to receive kidney transplants. Leading this call to action is the Patient Partner Coalition of the Kidney Patient and Donor Alliance Canada, a grassroots group of kidney patients and donors working in partnership with researchers and healthcare providers.

## HIGH LEVEL BACKGROUND

1. Patient Experience: We have first-hand experience of the benefits of kidney transplant and want to help more patients access transplant.<sup>3,4</sup>

Patients and their family members already know dialysis and transplant are not equal treatments. Transplant is far superior to dialysis, restoring patients to the quality of life they enjoyed prior to kidney failure.

Patients and living kidney donors, including the members of the Kidney Patient and Donor Alliance, describe feeling helpless and uninformed in an understaffed, disorganized health system – a system that continues to prioritize dialysis over transplant despite abundant evidence that transplant provides better patient outcomes and costs provinces and hospitals far less. Patients and donors experience significant gaps in care that ultimately prevent timely access to kidney transplant or donation, with many losing their opportunity to receive a transplant at all.

While the lack of deceased kidney donors is often cited as the biggest challenge to increasing kidney transplant, patients and donors commonly report facing systemic delays and barriers that, if resolved, could better realize the opportunity for living kidney donor transplantation.

## 2. Direct Cost of Dialysis versus Kidney Transplant

The cost of providing dialysis treatment to patients with end stage kidney disease is one of the most expensive publicly funded medical treatments in Western medicine.<sup>5</sup> Eighty per cent of patients on dialysis become too ill to work. Besides productivity losses, this results in over \$300 million per year in costs to disability insurance and the Canadian Pension Plan.<sup>6,7</sup> Transplants break this cycle because most people with transplants can work.

In 2018, in Ontario alone, over \$660 million was spent on renal services, including dialysis care, while only \$20 million was provided for kidney transplant.<sup>8</sup>

The 5-year mortality rate for hemodialysis (HD) patients remains unacceptably high at approximately 50%, rivaling the mortality rates of stage IV cancer.<sup>9,10</sup>

The costs of dialysis for patients in Canada is \$100,000 per patient per year.<sup>6,11</sup> By comparison, the initial cost for transplantation is approximately \$100,000 for the first year of transplantation but tapers in subsequent years at approximately \$20,000 per year.<sup>12</sup>

Bottom line, more transplants relieve the burden of increasing healthcare costs on an over-stressed system.

## 3. Lives Saved & Cost Savings Projection

In 2021, 29,835 Canadians were on dialysis and only 1,502 of them received a kidney transplant. This means only 5% of patients on dialysis received a transplant.<sup>13</sup>

If Canada could increase the total number of transplants by a minimum of just 1% (from 5% to 6%) an additional 288 transplants could occur every year in Canada – **up to 1,440 more lives could be saved through transplant over five years.**

More transplants would save money. Over a 5-year period, every 100 kidney transplants would save the healthcare system approximately \$20 million, driven primarily by hospital-based dialysis costs.<sup>14,15</sup> If 1,440 people avoid or are taken off dialysis, the healthcare system would save **\$288 million** in dialysis costs alone over five years (not including other related costs such as disability, loss of productivity, etc.).

It's time for Canada to adopt a Transplant First approach to kidney care, both to save kidney patients falling through the cracks of a broken system and to take concrete steps to reduce the growing burden of kidney disease of our health care system.

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<sup>1</sup> Tonelli M et al. Systematic Review: Kidney Transplantation Compared With Dialysis in Clinically Relevant Outcomes. *Am J Trans* 2011; 11:109.

<sup>2</sup> Ortiz F, Aronen P, Koskinen PK, et al. Health-related qual *Transpl Int*. 2014;27:1143-1151

<sup>3</sup> <https://kidneyalliance.ca/article/patient-donor-coalition/>

<sup>4</sup> [www.transplantambassadors.ca](http://www.transplantambassadors.ca)

<sup>5</sup> Morton RL, Kurella Tamura M, Coast J, Davison SN. Supportive care: economic considerations in advanced kidney disease. *Clin J Am Soc Nephrol*. 2016;11(10):1915-1920. doi:10.2215/CJN.12651115.

<sup>6</sup> Manns B, McKenzie S, Au F, Gignac P, Geller L: The Financial Impact of Advanced Kidney Disease on Canada Pension Plan and private disability insurance costs. *Can. J. Kidney Heal. Dis*. 2017 <https://pubmed.ncbi.nlm.nih.gov/28491340/>

<sup>7</sup> Government of Canada: Canada Pension Plan Disability Benefit [Internet]. <http://www.esdc.gc.ca/en/cpp/disability/index.page>.

<sup>8</sup> Auditor General of Ontario: Chronic Kidney Disease Management. [https://www.auditor.on.ca/en/content/annualreports/arreports/en19/v1\\_303en19.pdf](https://www.auditor.on.ca/en/content/annualreports/arreports/en19/v1_303en19.pdf).

<sup>9</sup> Kitzler TM, Chun J. Understanding the Current Landscape of Kidney Disease in Canada to Advance Precision Medicine Guided Personalized Care. *Can J Kidney Health Dis*. 2023 Feb 13;10:20543581231154185. doi: 10.1177/20543581231154185. PMID: 36798634; PMCID: PMC9926383.

<sup>10</sup> Naylor KL, Kim SJ, McArthur E, Garg AX, McCallum MK, Knoll GA. Mortality in Incident Maintenance Dialysis Patients Versus Incident Solid Organ Cancer Patients: A Population-Based Cohort. *Am J Kidney Dis*. 2019 Jun;73(6):765-776. doi: 10.1053/j.ajkd.2018.12.011. Epub 2019 Feb 6. PMID: 30738630.

<sup>11</sup> Ferguson TW, Whitlock RH, Bamforth RJ, et al. Cost-utility of dialysis in Canada: hemodialysis, peritoneal dialysis, and nondialysis treatment of kidney failure. *Kidney Med*. 2021;3(1):20-30.e1. doi:10.1016/j.xkme.2020.07.011.

<sup>12</sup> Barnieh L, Yilmaz S, McLaughlin K, et al. The cost of kidney transplant over time. *Prog Transplant*. 2014;24(3):257-262. doi:10.7182/pit2014710.

<sup>13</sup> Canadian Institute for Health Information. [Annual statistics on organ replacement in Canada, 2012 to 2021](#). Accessed August 29.

<sup>14</sup> Kidney Foundation of Canada. Facing the facts. <https://kidney.ca/KFOC/media/images/PDFs/Facing-the-Facts-2020.pdf>. Published 2020. Accessed September 10, 2020.

<sup>15</sup> Klarenbach SW, Tonelli M, Chui B, et al. Economic evaluation of dialysis therapies. *Nat Rev Nephrol*. 2014;10:644-652.