

# United States Senate

WASHINGTON, DC 20510

May 25, 2022

The Honorable Patty Murray  
Chair  
Labor, Health and Human Services,  
Education, and Related Agencies  
Appropriations Subcommittee  
186 Dirksen Senate Office Building  
Washington, D.C. 20510

The Honorable Roy Blunt  
Ranking Member  
Labor, Health and Human Services,  
Education, and Related Agencies  
Appropriations Subcommittee  
125 Hart Senate Office Building  
Washington, D.C. 20510

Dear Chair Murray and Ranking Member Blunt,

As you begin consideration of the Fiscal Year (FY) 2023 Labor, Health and Human Services, Education, and Related Agencies (LHHS) Appropriations bill, we respectfully request the subcommittee provide \$25 million in matching funds for KidneyX, a public-private partnership to accelerate innovation in the prevention, diagnosis, and treatment of kidney diseases.

More than 37 million Americans live with kidney diseases, including nearly 800,000 Americans who have kidney failure, for which there is no cure.<sup>1</sup> Kidney disease disproportionately affects communities of color. For instance, Black Americans are 400 percent more likely than White Americans to have kidney failure.<sup>2</sup>

The prevalence of kidney diseases continues to grow at a cost to both patients and taxpayers. The Medicare program annually spends more than \$51 billion to manage kidney failure alone through the End Stage Renal Disease benefit – accounting for more than 7 percent of all Medicare spending.<sup>3</sup> Medicare beneficiaries dependent on dialysis are particularly vulnerable to the effects of COVID-19, with COVID-associated mortality of 16.7 percent.<sup>4</sup> COVID-19 has also been shown to damage the kidneys of 33 percent of all hospitalized COVID-19 patients, even those without a prior history of kidney diseases.<sup>5</sup>

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<sup>1</sup> “VUMC study raises hope for improving treatment of kidney disease.” *Vanderbilt University Medical Center*, <https://news.vumc.org/2022/02/02/vumc-study-raises-hope-for-improving-treatment-of-kidney-disease/#:~:text=An%20estimated%2037%20million%20Americans,2018%2C%20according%20to%20government%20figures>

<sup>2</sup> “2021 USRDS annual data report: Epidemiology of Kidney Disease in the United States, Incidence, Prevalence, Patient Characteristics, and Treatment Modalities.” *National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases*, <https://adr.usrds.org/2021/end-stage-renal-disease/1-incidence-prevalence-patient-characteristics-and-treatment-modalities>

<sup>3</sup> “2021 USRDS annual data report: Epidemiology of Kidney Disease in the United States, Health Care Expenditures for Persons with ESRD.” *National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases*, <https://adr.usrds.org/2021/end-stage-renal-disease/9-healthcare-expenditures-for-persons-with-esrd>

<sup>4</sup> “2021 USRDS annual data report: Epidemiology of Kidney Disease in the United States, COVID-19; Racial and Ethnic Disparities.” *National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases*, <https://adr.usrds.org/2021/supplements-covid-19-disparities/14-racial-and-ethnic-disparities>

<sup>5</sup> “2021 USRDS annual data report: Epidemiology of Kidney Disease in the United States, COVID-19; Racial and Ethnic Disparities.” *National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases*, <https://adr.usrds.org/2021/supplements-covid-19-disparities/14-racial-and-ethnic-disparities>

Relative to other chronic diseases with comparable federal spending and disease burden, people with kidney diseases have suffered from a lack of innovation in prevention, diagnosis, and treatment of kidney diseases, but hope is on the horizon: KidneyX is attracting a new generation of innovators and investors and has begun to transform kidney care.

KidneyX is a public-private partnership between the U.S. Department of Health and Human Services (HHS) and the American Society of Nephrology (ASN), that is incentivizing innovators to fill unmet patient needs through a series of prize competitions, de-risking the commercialization process by fostering coordination among federal agencies, and creating a sense of urgency on behalf of patients and families.

To date, KidneyX has provided more than 65 awards to innovators across 5 prize competitions for solutions ranging from patient-developed solutions to improve quality of life, such as dialysis accessible clothing, and cutting-edge innovations, including artificial kidneys and xenotransplantation. These innovations hold promise to provide a better quality of life and improve access to care. Further, KidneyX is delivering on its pledge to catalyze private markets to invest in the advancement of kidney care. For instance, after winners from KidneyX's Redesign Dialysis competition were highlighted at three Capital Market Days for Kidney Health hosted by ASN, investors contributed more than \$300,000,000 to several of these winners.

A bipartisan achievement, KidneyX was first unveiled as a concept at the 2016 Obama White House Organ Summit and was a central pillar of President Donald J. Trump's July 2019 Executive Order on Advancing American Kidney Health. For KidneyX to meet its full potential and continue to foster the development of technologies such as a wearable or implantable artificial kidney, Congress must increase its support for KidneyX by including \$25 million for KidneyX in the FY 2023 LHHS appropriations bill. We are grateful for Congress' previous support of KidneyX and the appropriation of \$15 million total for the program since FY 2020.

Including the full \$25 million for KidneyX in the FY 2023 LHHS appropriations bill would allow the program to expand its record of success and continue to drive innovation for people with kidney diseases. Currently, KidneyX is running Phase 2 of the Artificial Kidney Prize, which seeks to promote the integration and advancement of prototype bioartificial kidneys.<sup>6</sup> Recent advances in regenerative medicine and xenotransplantation have demonstrated the promise innovation can bring to kidney health. With full funding, KidneyX can support additional innovators in the Artificial Kidney Prize competitions, run competitions in other priority areas, and develop tools to prevent kidney diseases altogether.<sup>7</sup>

We respectfully request that the LHHS Subcommittee continue the commitment made to millions of Americans living with kidney diseases by appropriating \$25 million in FY 2023 for KidneyX, catalyzing private sector investment in kidney health. Thank you for your consideration of our request.

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<sup>6</sup> "Prize Winners." *KidneyX*, <https://www.kidneyx.org/PrizeCompetitions/PrizeWinners?msclkid=3a7c838bb12e11ec996cf5dd8862a0e8>.

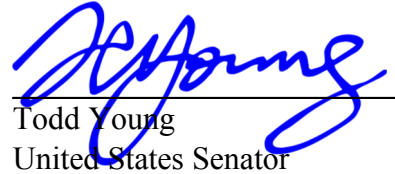
<sup>7</sup> "Chronic Kidney Disease in the United States, 2021." *Centers for Disease Control and Prevention*, <https://www.cdc.gov/kidneydisease/publications-resources/ckd-national-facts.html>

Sincerely,



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Benjamin L. Cardin  
United States Senator



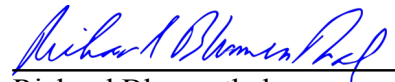
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Todd Young  
United States Senator



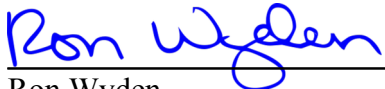
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Cory A. Booker  
United States Senator



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Richard Blumenthal  
United States Senator



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Ron Wyden  
United States Senator



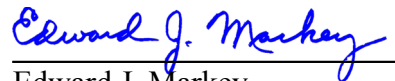
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Sherrod Brown  
United States Senator



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Kirsten Gillibrand  
United States Senator



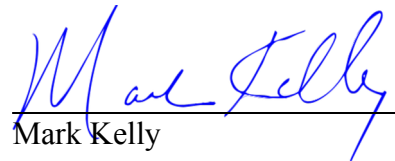
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Edward J. Markey  
United States Senator



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Kyrsten Sinema  
United States Senator



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Mark Kelly  
United States Senator