

PEDIATRIC TRANSPLANT PROGRAM

DR. PATRICK HEALEY, PROFESSOR
DIVISION OF TRANSPLANT SURGERY



Dr. Patrick Healey

Clinical decisions and practices continue to evolve during the COVID-19 pandemic, presenting new and uncertain challenges to transplant programs across the US. In 2021, the United Network for Organ Sharing (UNOS) introduced new allocation policies that significantly changed the way deceased donor organs are allocated to patients on the waiting list. Despite these external challenges, 2021 was one of our pediatric program's busiest years, performing 66 organ transplants in children and placing Seattle Children's Hospital (SCH) at #6 nationally in pediatric transplant activity across all programs. With these changes, we have increased our focus on living donor (LD) transplant in our Kidney and Liver Transplant Programs.

In 2021, 45 abdominal organ transplants were performed by our pediatric team. This included 14 liver transplants, one intestine transplant, and a program-high 30 kidney transplants. Nine of the kidney transplants were LD transplants, making SCH #2 in the US.

The LD programs at Children's are a true collaboration with the UW Medicine adult transplant programs. Donor evaluation, surgery, and care is provided by the UW Medicine transplant team, and the donated organ is transported from UW Medicine to SCH after removal. These procedures are performed simultaneously and require meticulous coordination between the two teams. Since inception of the combined LD kidney program in 2003, over 125 children have been able to receive LD transplants with excellent outcomes. Patient and graft survival outcomes reported by the Scientific Registry for Transplant Recipients (SRTR) reveal 100% survival at one-year and three-years post-transplant.

To increase LD kidney transplant possibilities, we participate in Kidney Paired Donor (KPD) Exchange programs with UW Medicine for children who do not have compatible blood types with their intended donor. In KPD exchange, the child is matched with a compatible donor to receive a living donor kidney, and the child's intended donor donates to the recipient paired with that donor. This has resulted in three additional LD kidney transplants that otherwise would not have been possible.

Liver transplant activity has also benefited from the growth of the UW Medicine Living Donor Liver Transplant Program, resulting in three child LD transplants so far in 2022. To date, over 330 children have received liver transplants, with 13 being LD transplants. We have seen 93% overall graft survival in our liver transplant recipients, with 100% survival outcomes in our LD recipients.

These increased volumes and excellent outcomes are the result of highly organized collaborations between the UW Medicine and SCH teams, as well as highly skilled surgery, transplant physician, anesthesia, nursing and social work team members committed to achieving the best outcomes for our children in need of transplant.



If you are interested in learning how you can support **pediatric transplant**, please [click](#) here or email Jeannie Stuyvesant, senior director for philanthropy, at jstuy@uw.edu.

HEART TRANSPLANT PROGRAM

DR. JAY PAL, PROFESSOR
DIVISION OF CARDIOTHORACIC SURGERY



Dr. Jay Pal

The [Heart Transplant Program](#) at UW Medicine has a long and storied career. The program has performed over 1,100 transplant procedures, with survival better than the national average. In fact, patients are more likely to be transplanted at UW, with lower waitlist mortality, than the national average, as reported by the Scientific Registry for Transplant Recipients (SRTR). In addition to heart transplantation, UW provides the full spectrum of advanced heart failure treatments, including extracorporeal membrane oxygenation (ECMO), left ventricular assist device (LVAD), and Total Artificial Heart. Furthermore, the faculty in cardiology and cardiac surgery who specialize in the treatment of advanced heart failure are national leaders in clinical care and translational research.

Three surgeons in the Division of Cardiothoracic Surgery focus on heart transplantation and LVAD implantation: Drs. [Jeffrey Keenan](#), Assistant Professor, [Maziar Khorsandi](#), Assistant Professor, and [Jay Pal](#), Professor. Interestingly, all three obtained their cardiothoracic or transplant training at Duke University. These surgeons work together to ensure all heart failure patients are cared for by surgeons with specialty training in these advanced techniques.



Dr. Jeffrey Keenan carries a donor heart from the Organ Care System to the recipient for a transplant procedure.

Although the basic techniques of heart transplantation are more than 50 years old, several recent developments have led to rapid advancements in the field. In particular, the ability to transplant heart from patients who have died a circulatory death, as well as the use of ex-vivo perfusion systems to transport organs, has allowed more patients to receive heart transplants in 2021 than ever before. With similar advances in LVAD therapy, patients with advanced heart failure are living longer, more normal lives than could have been imagined just a few years ago.



If you are interested in learning how you can support **heart transplant**, please [click](#) here or email Jeannie Stuyvesant, senior director for philanthropy, at jstuy@uw.edu.