



Children's Mercy

KANSAS CITY

**Brendan Tripp Elam
Transplant Center**

The Brendan Tripp Elam Transplant Center

Annual Outcomes Report 2022-2023

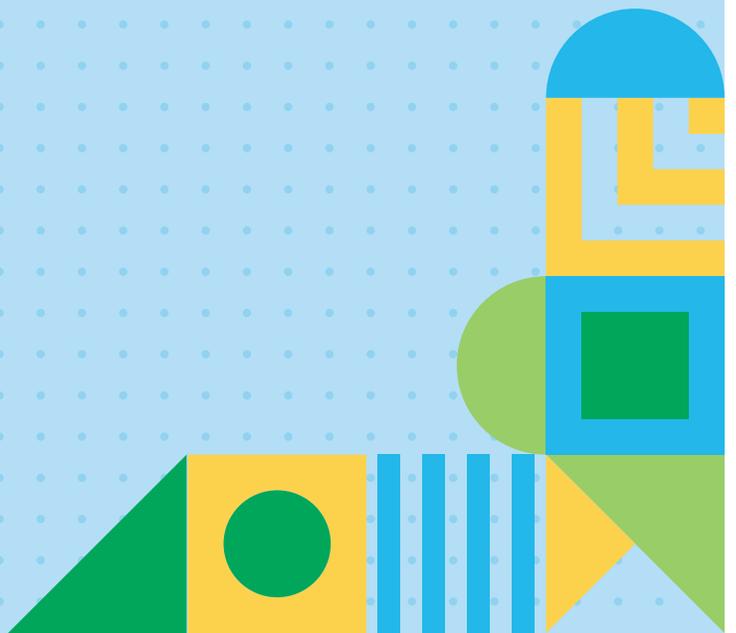




Table of Contents

Leadership.....	2
Introduction.....	3
About Children’s Mercy.....	4
Transplant Center Achievements.....	5
Heart Transplant.....	6-7
Highlights	
Volume	
Mortality	
Outcomes	
Kidney Transplant.....	8-9
Highlights	
Volume	
Mortality	
Outcomes	
Liver Transplant.....	10-11
Highlights	
Volume	
Mortality	
Outcomes	
Patient Stories.....	12

For questions or to refer a patient, please call:

Transplant Center
(816) 302-3088

Heart Transplant
(816) 302-8045

Kidney Transplant
(816) 302-3304

Liver Transplant
(816) 460-1010

Leadership

TRANSPLANT PROGRAM DIRECTORS



Aliessa Barnes, MD, Heart Center Co-Director; Chief, Section of Cardiology; Co-Director, Brendan Tripp Elam Transplant Center; Associate Professor of Pediatrics, University of Missouri-Kansas City School of Medicine; Education Associate Professor of Pediatrics, University of Kansas School of Medicine

Dr. Barnes is a board-certified pediatric cardiologist with over 15 years of cardiology experience, specializing in pediatric heart failure and pediatric cardiac transplantation.



Bhargava Mullapudi, MD, Chief, Section of Transplant Surgery and Co-Director of the Brendan Tripp Elam Transplant Center; Assistant Professor of Surgery, University of Missouri-Kansas City School of Medicine

Dr. Mullapudi is dually trained in pediatric surgery and abdominal transplant surgery and has seven years of experience. He specializes in liver, kidney, intestinal and multi-visceral transplantations. He serves as the Surgical Director for both kidney and liver transplant.

HEART TRANSPLANT LEADERSHIP



William Gibson, DO, Surgical Director, Cardiac Transplantation; Assistant Professor of Surgery, University of Missouri-Kansas City School of Medicine; Clinical Assistant Professor of Cardiovascular and Thoracic Surgery, University of Kansas School of Medicine

Dr. Gibson has nearly seven years of experience in the field of congenital heart surgery. In addition to serving as the Surgical Director for Heart Transplantation, he performs a breadth of congenital heart surgeries and mechanical circulatory support.



David Sutcliffe, MD, Medical Director, Pediatric Heart Transplantation; Medical Director, Pediatric Ventricular Assist Device; Assistant Professor of Pediatrics, University of Missouri-Kansas City School of Medicine; Education Assistant Professor of Pediatrics, University of Kansas School of Medicine

Dr. Sutcliffe serves as the Director of Heart Transplant and our VAD Program. He is a board-certified pediatric cardiologist with over 10 years of cardiology experience.

KIDNEY AND LIVER TRANSPLANT LEADERSHIP

Kidney



Bradley Warady, MD, Division Director, Pediatric Nephrology; Director, Dialysis & Transplantation; McLaughlin Family Endowed Chair in Nephrology; Professor of Pediatrics, University of Missouri-Kansas City School of Medicine; Education Professor of Pediatrics, University of Kansas School of Medicine

Dr. Warady is a pediatric nephrologist who specializes in pediatric kidney disease. He has more than 43 years of experience. He serves as Co-Principal Investigator of the NIH-funded Chronic Kidney Disease in Children Study and the International Pediatric Dialysis Network (IPDN).

Liver



Ryan Fischer, MD, Chief, Section of Hepatology & Transplantation; Director, Liver Care Center; Professor of Pediatrics, University of Missouri-Kansas City School of Medicine; Clinical Assistant Professor of Pediatrics, University of Kansas School of Medicine

Dr. Fischer is a pediatric transplant hepatologist who has been in practice for 15 years. He serves as Chief of our Hepatology and Transplantation section and is experienced in pediatric gastroenterology, pediatric hepatology and pediatric transplant hepatology.



About the Transplant Center

The Brendan Tripp Elam Transplant Center at Children's Mercy Kansas City specializes in pediatric heart, liver and kidney transplants as well as multi-organ transplants like heart-liver, heart-kidney and liver-kidney. Our experienced clinicians are focused on the best treatment plan for each child. With the development of the Transplant Center in 2016, we have brought the expertise of our staff in each of our transplant programs together into a collaborative environment to further enhance care, advance research and improve outcomes.

It has been over 30 years since the first kidney transplant was performed at Children's Mercy. Since that time, we have continued to grow and expand. We are now one of the busiest and most successful transplant programs in our region. As this report will show, our collaborative approach to care has achieved some of the best outcomes in the United States.

We are committed to finding safer, more effective medications for children. Children's Mercy offers the largest pediatric clinical pharmacology program in North America, with a number of staff who are double board-certified in clinical pharmacology and pediatric subspecialties. The knowledge gained from these programs helps to better understand the origins of many complex disorders and the needs of transplant patients who often require a lifetime of complex medication management.

We know outcomes are better when care is connected. Our multidisciplinary team works with referring physicians to ensure effective continuity of care for pediatric recipients and their families. This means our patients and families benefit from a team with a wide range of experience and expertise.

All of these aspects contribute to the outstanding outcomes seen at Children's Mercy Kansas City.

Aliessa Barnes, MD

Co-Director, Brendan Tripp Elam Transplant Center

Bhargava Mullapudi, MD

Co-Director, Brendan Tripp Elam Transplant Center



Transplant Center Achievements

In 2022, our team set a Children's Mercy volume record, performing **42 total transplants.**

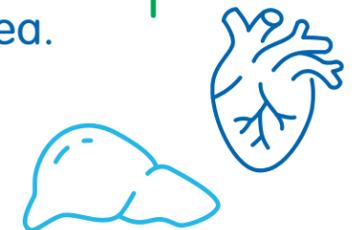


100% 1-year patient and graft survival for Heart, Kidney and Liver.



Provided **50 viable organs** to recipients around the country.

First Pediatric Home Heart-Mate 3 VAD Patient in the Kansas City area.



First Pediatric En Bloc Heart/Liver transplants in the region.

Twice been honored with the Organ Donation Medal of Honor by the U.S. Department of Health and Human Services, achieving **greater than 95% authorization or organ donation.**



Most active **Living Pediatric Donor Program** in the region.

Top 3 in the nation for Heart Transplant Survival after listing. (SRTS 7/1/2020 - 6/30/2022)

16 days median liver transplant wait time. (One of the lowest among pediatric transplant programs in the country).

About Children's Mercy

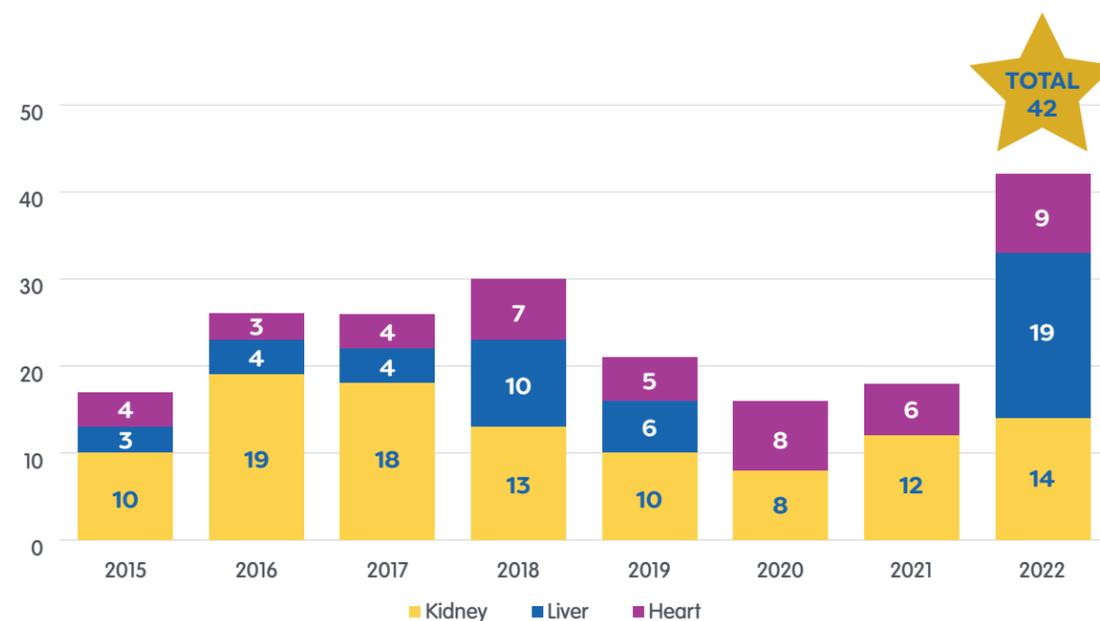
Children's Mercy is a leading independent children's health organization dedicated to holistic care, translational research, breakthrough innovation, and educating the next generation of caregivers.

Together, we transform the health, wellbeing and potential of children, with unwavering compassion for those most vulnerable.

Our vision is to create a world of wellbeing for children.

And as the Brendan Tripp Elam Transplant Center, our purpose is to be the destination for holistic, innovative and unparalleled transplant care for all children.

TRANSPLANT VOLUME BY CALENDAR YEAR



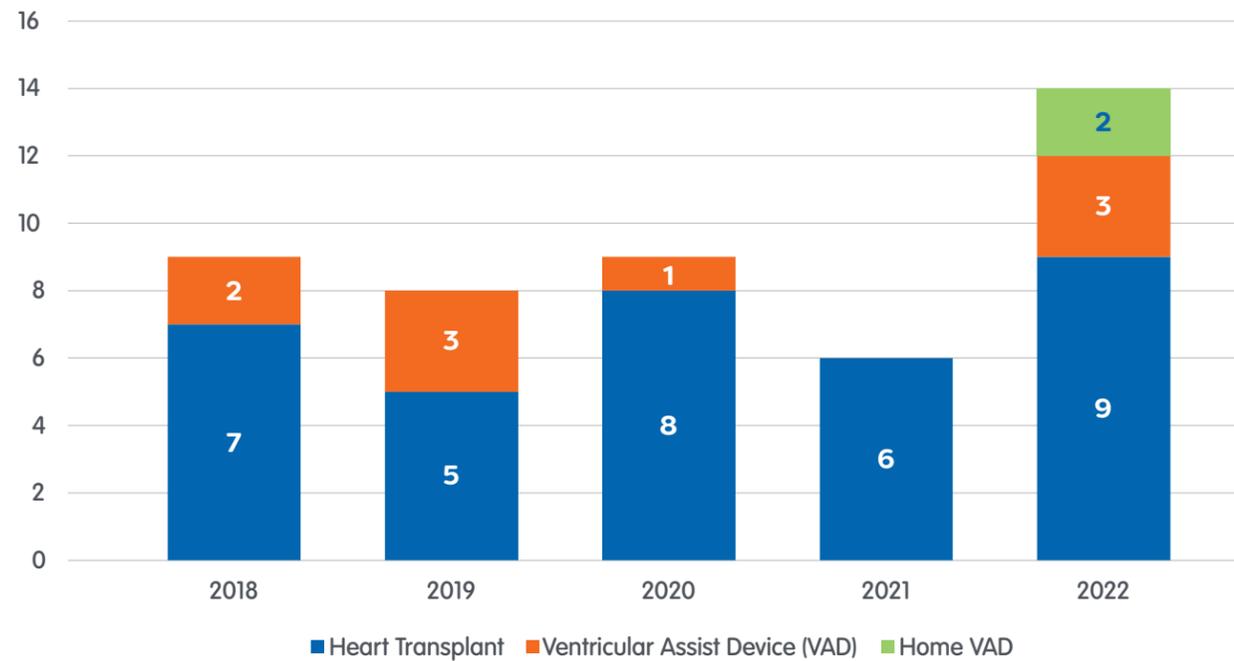
HEART TRANSPLANT

HIGHLIGHTS

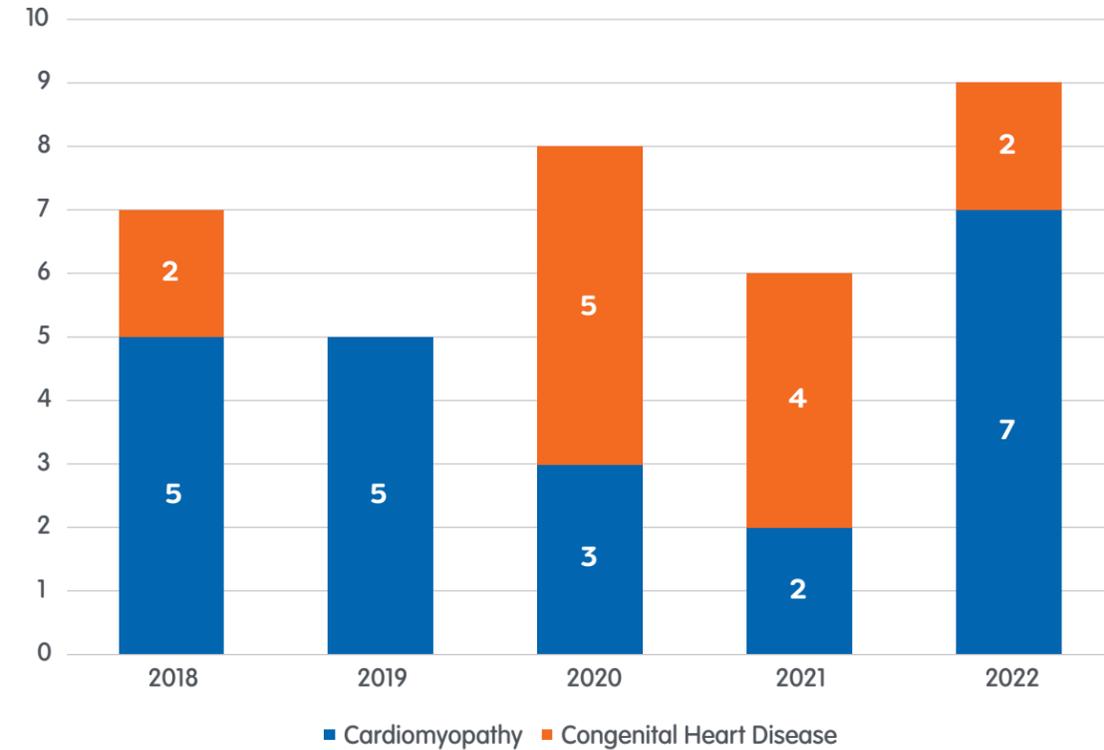
- **100% 1-year patient survival** post heart transplant.
- **Third best overall survival rate** in the country from listing.
- **Regional leader** in VAD patient volume.
- **Successful transplantation** of single ventricle patients at all three stages of repair: Norwood, Glenn, Fontan.
- **Three Multi-Center Quality Improvement Initiatives** (PHTS, ACTION, Pedimacs).
- **Shorter average length of stay** for patients: 14 days.
National average: 21 days.



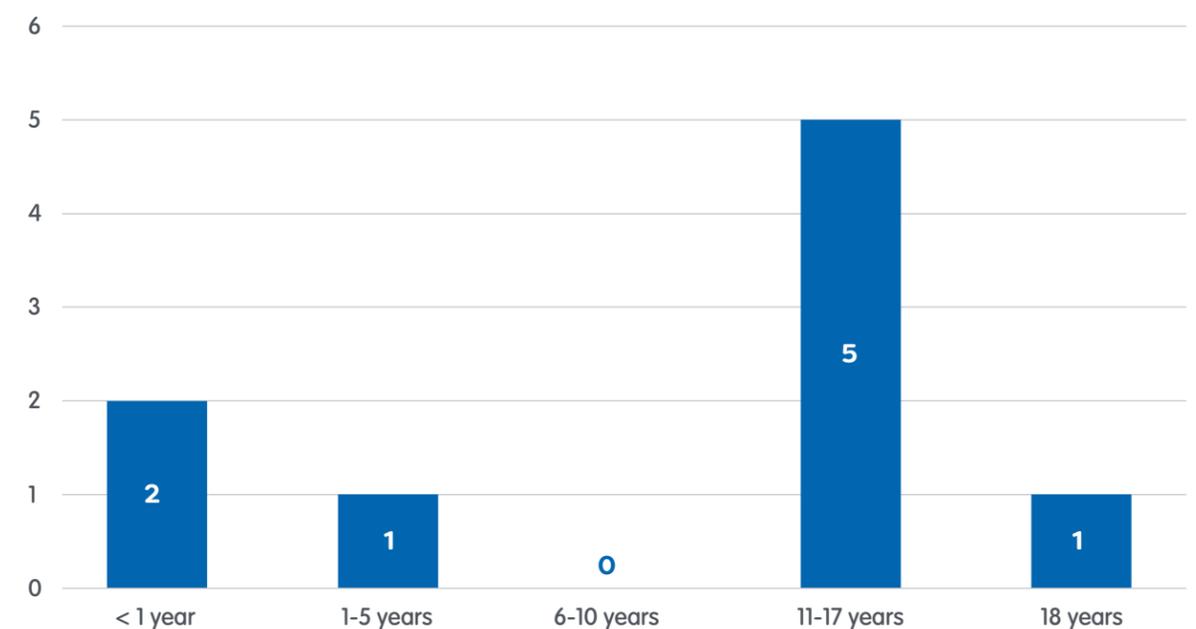
HEART TRANSPLANT AND VAD VOLUMES



HEART TRANSPLANT BY DIAGNOSIS YEAR OVER YEAR (UNOS 4/2023)

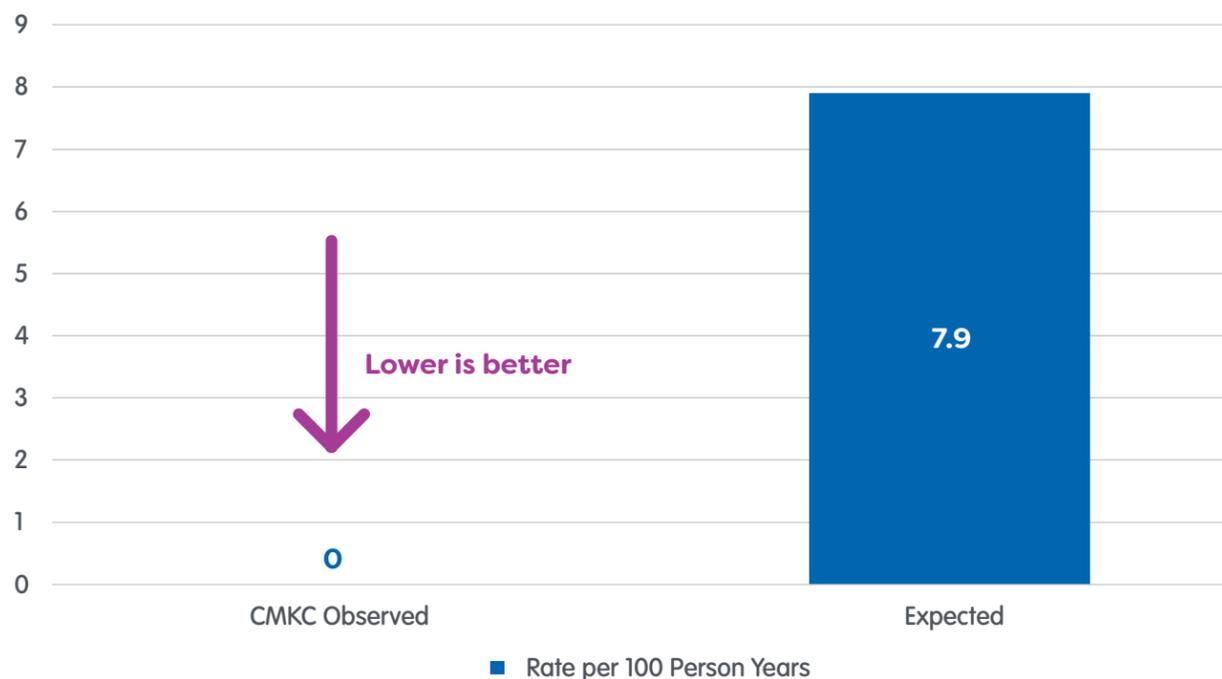


2022 HEART RECIPIENT AGE (OPTN JULY 2023)



OBSERVED PRE-TRANSPLANT MORTALITY RATE (SRTR JANUARY 2023)

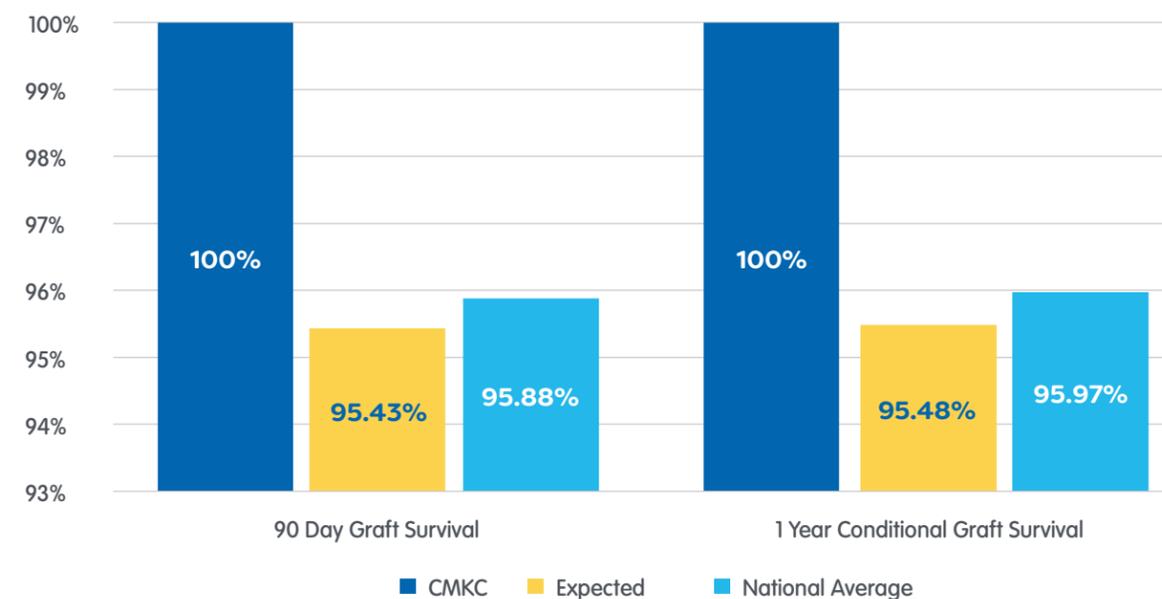
01/01/2021 – 12/31/2022



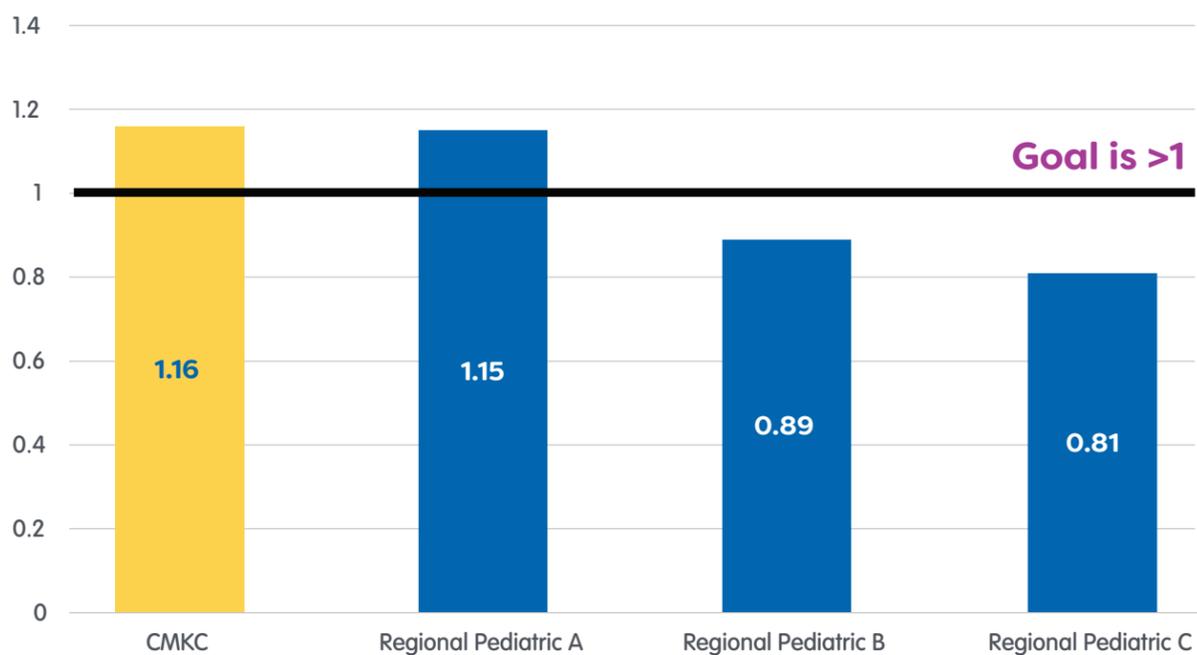
HEART TRANSPLANT OUTCOMES (SRTR JULY 2023)

GRAFT SURVIVAL

01/01/2020 – 3/12/2020 AND 6/13/2020 – 6/30/2022



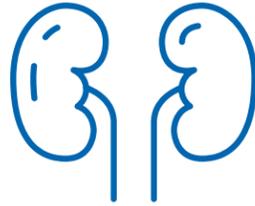
HEART OFFER ACCEPTANCE RATIO REGIONAL COMPARISON (SRTR JANUARY 2023)



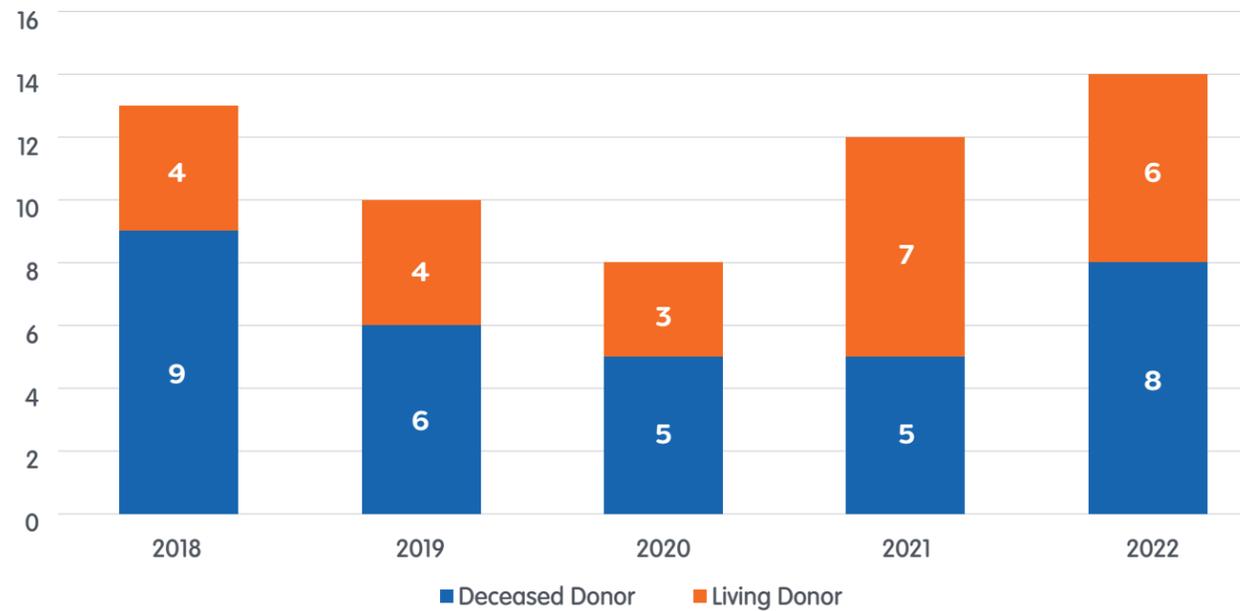
KIDNEY TRANSPLANT

HIGHLIGHTS

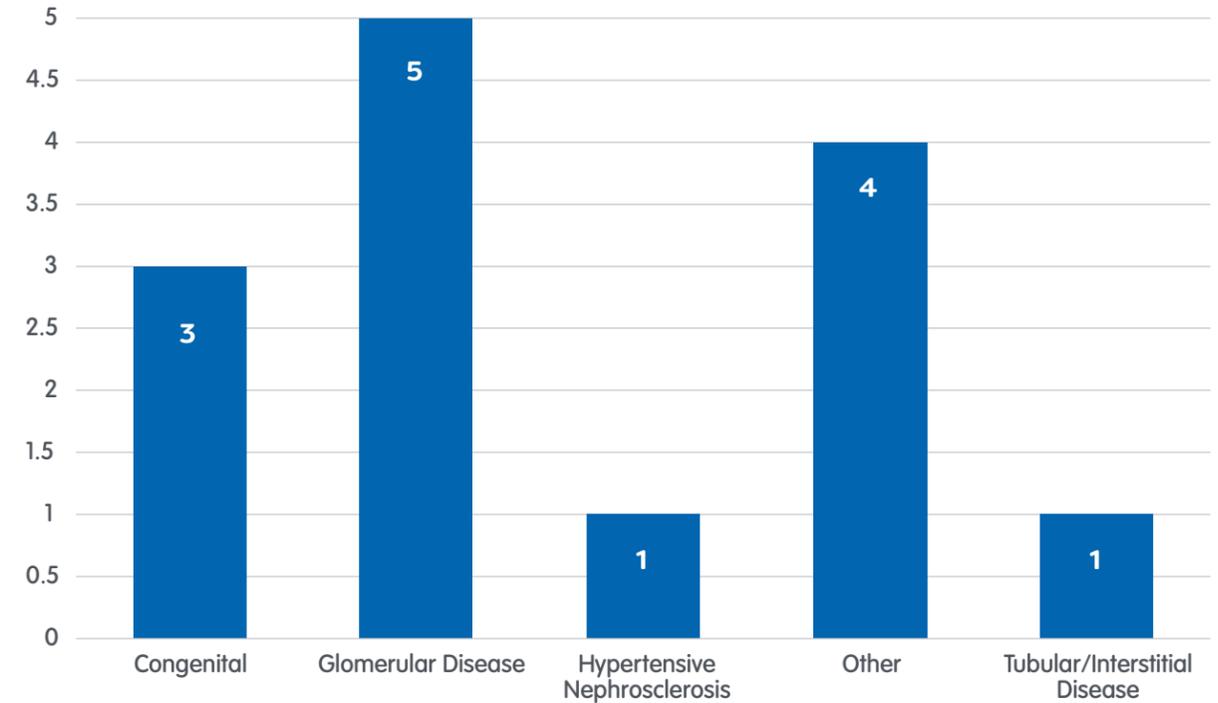
- **Surveillance transplant biopsies** conducted at six months, one year, and two years post-transplant.
- **Epitope Matching** conducted to permit donor/recipient matching at a more detailed level than only using HLA.
- Pharmacokinetic guided dosing of mycophenolate mofetil to **enhance the personalized medicine approach to immunosuppression.**
- Transition program based on a **multidisciplinary curriculum** and a coordinated effort between pediatric and adult transplant teams.



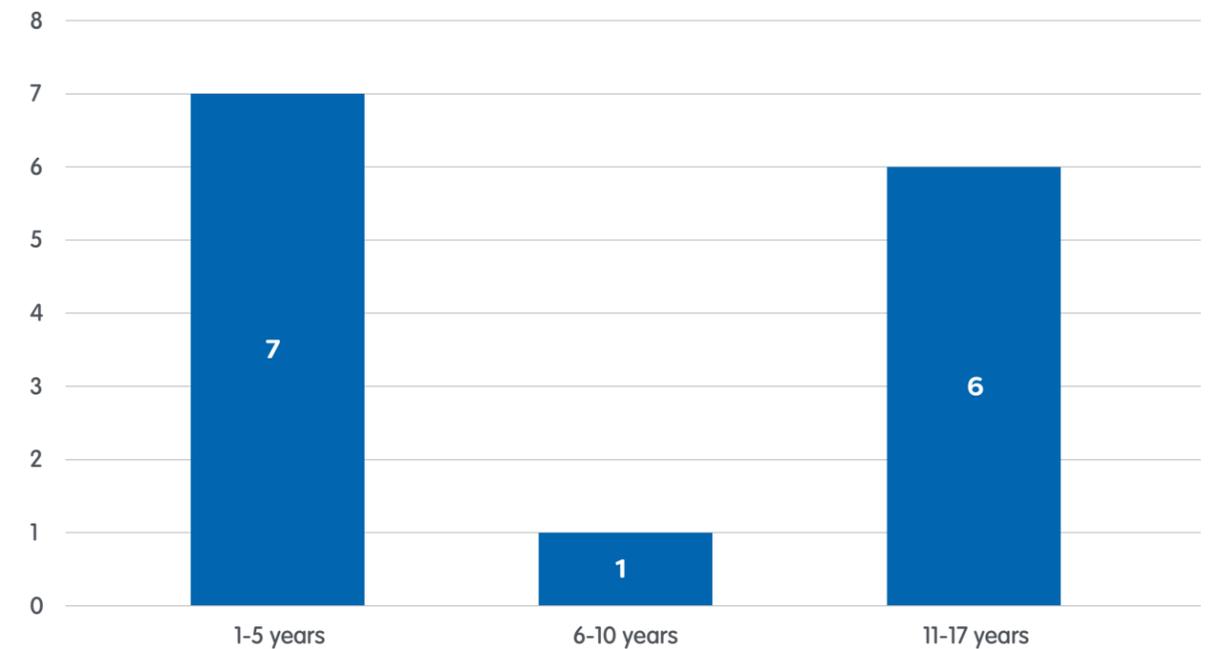
KIDNEY TRANSPLANT VOLUMES



PRIMARY DISEASE AT TRANSPLANT 2022 (UNOS 4/2023)

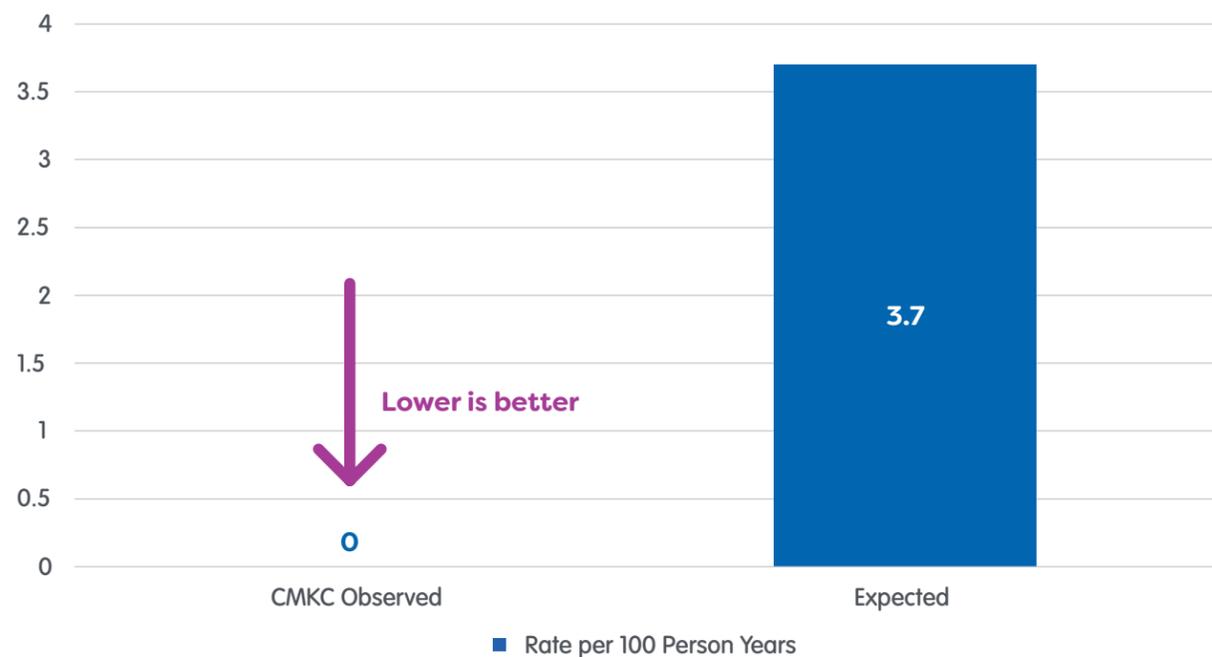


2022 KIDNEY RECIPIENT AGE (OPTN JULY 2023)



OBSERVED PRE-TRANSPLANT MORTALITY RATE (SRTR JULY 2023)

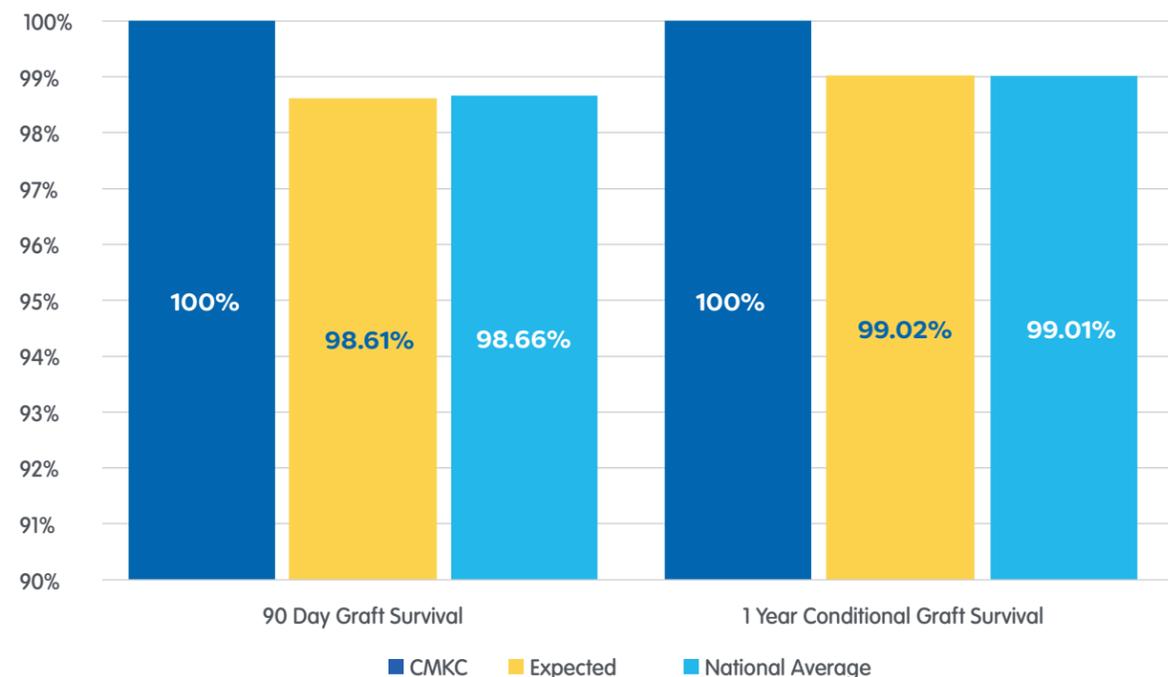
01/01/2021 – 12/31/2022



KIDNEY TRANSPLANT OUTCOMES (SRTR JULY 2023)

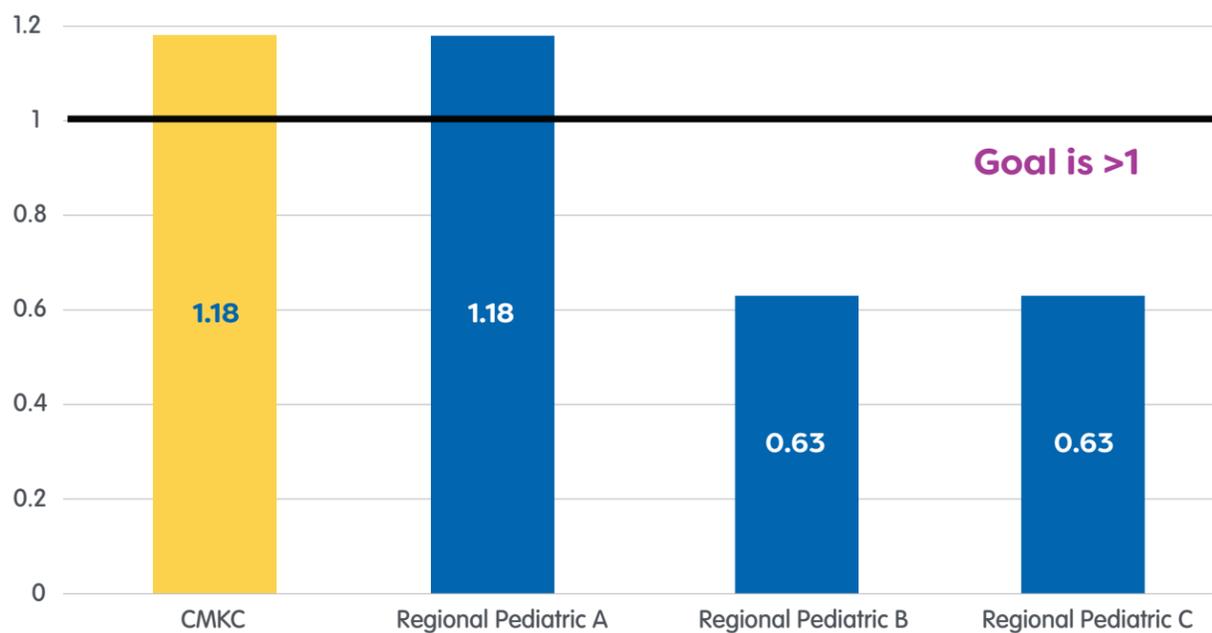
GRAFT SURVIVAL

01/01/2020 – 3/12/2020 AND 6/13/2020 – 6/30/2022



KIDNEY OFFER ACCEPTANCE RATIO REGIONAL COMPARISON (SRTR JANUARY 2023)

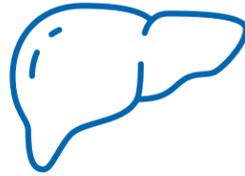
01/01/2021 – 12/31/2022



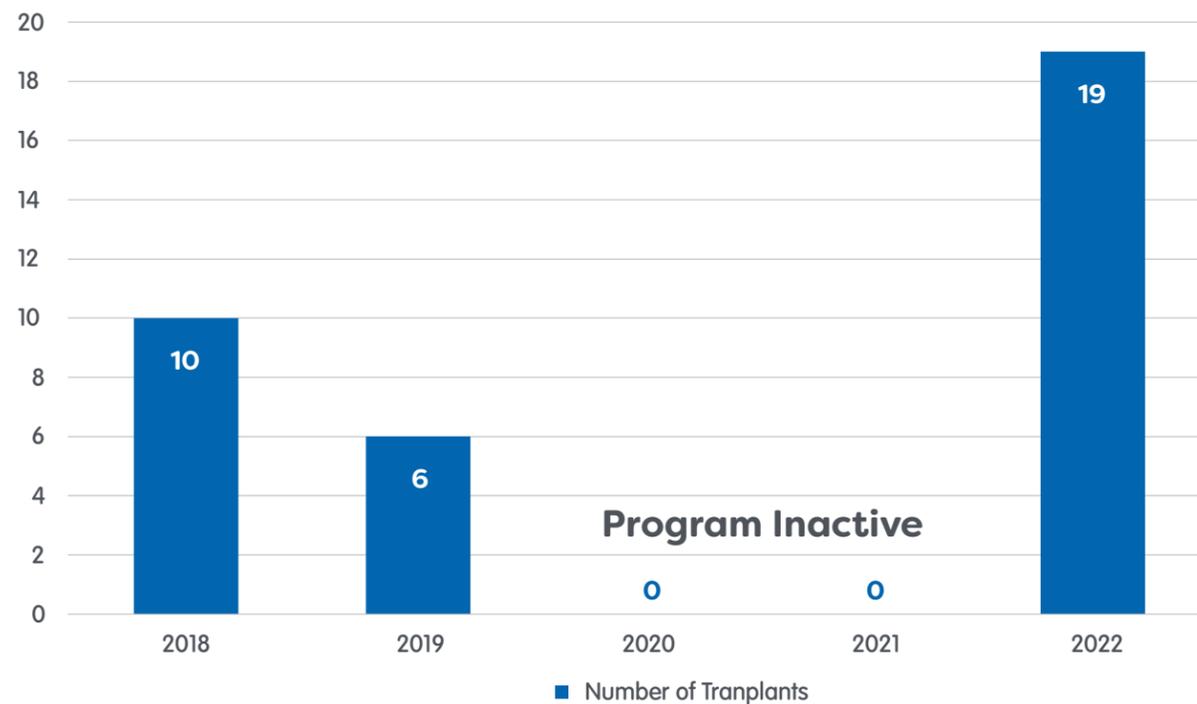
LIVER TRANSPLANT

HIGHLIGHTS

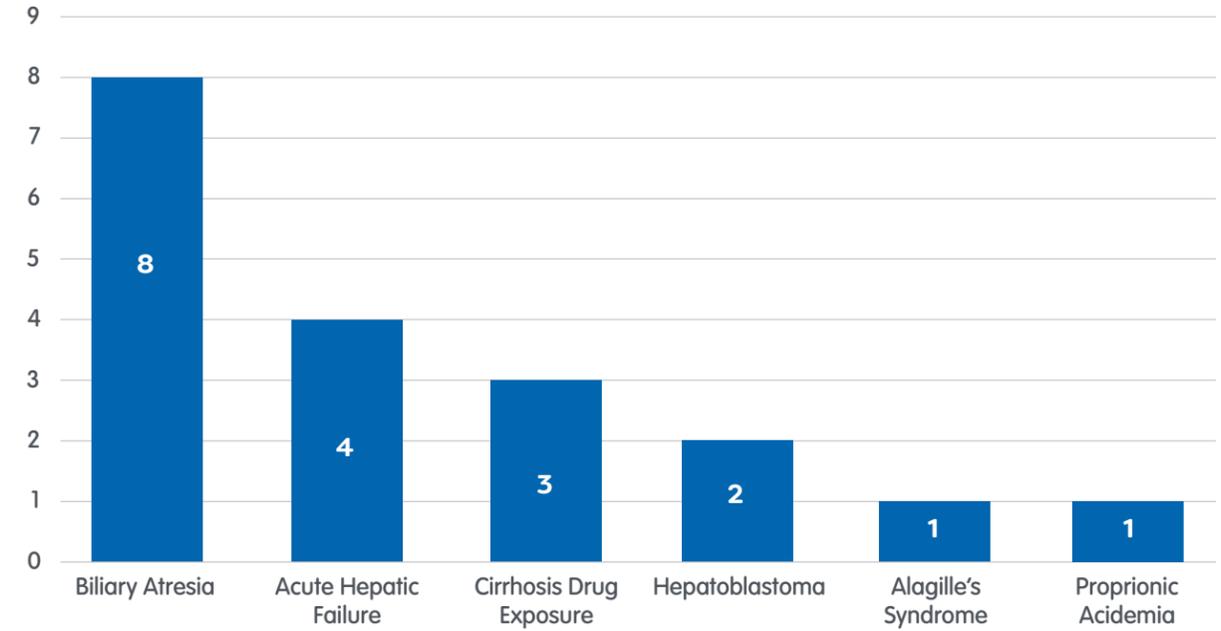
- **First Heart-Liver En Bloc** completed – October 2022.
- **First** transplant for propionic acidemia.
- **NIH-funded site** for the study of acute liver failure.
- **Industry funded** for the study of immune cell gene expression in liver transplant rejection.
- **One of four programs** in the country with two dually trained transplant surgeons in pediatric surgery and transplant surgery.



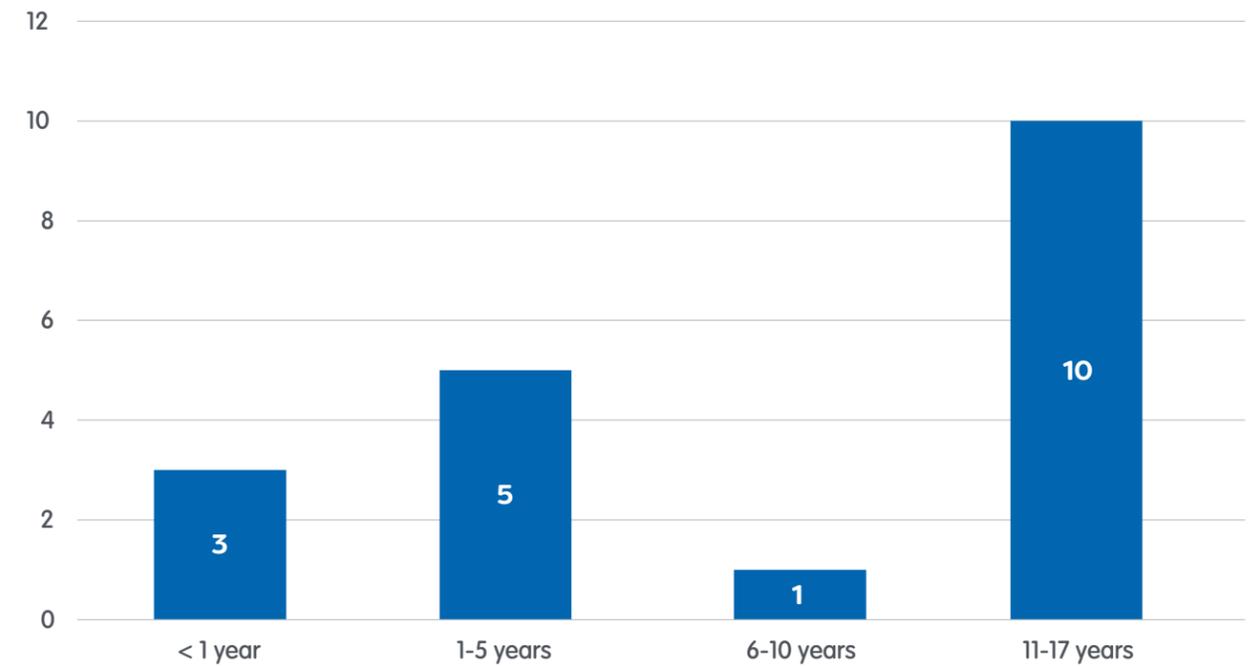
LIVER TRANSPLANT VOLUMES



2022 LIVER TRANSPLANTS BY DIAGNOSIS (UNOS 4/2023)

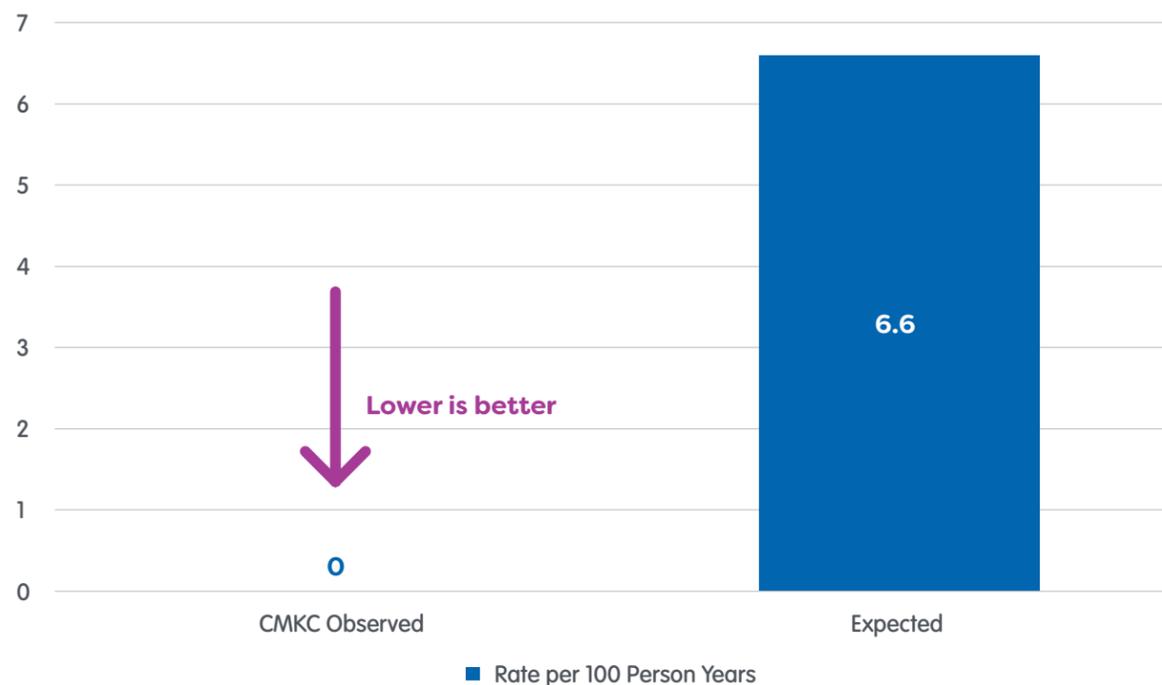


2022 LIVER RECIPIENT AGE (OPTN JULY 2023)



OBSERVED PRE-TRANSPLANT MORTALITY RATE (SRTR JULY 2023)

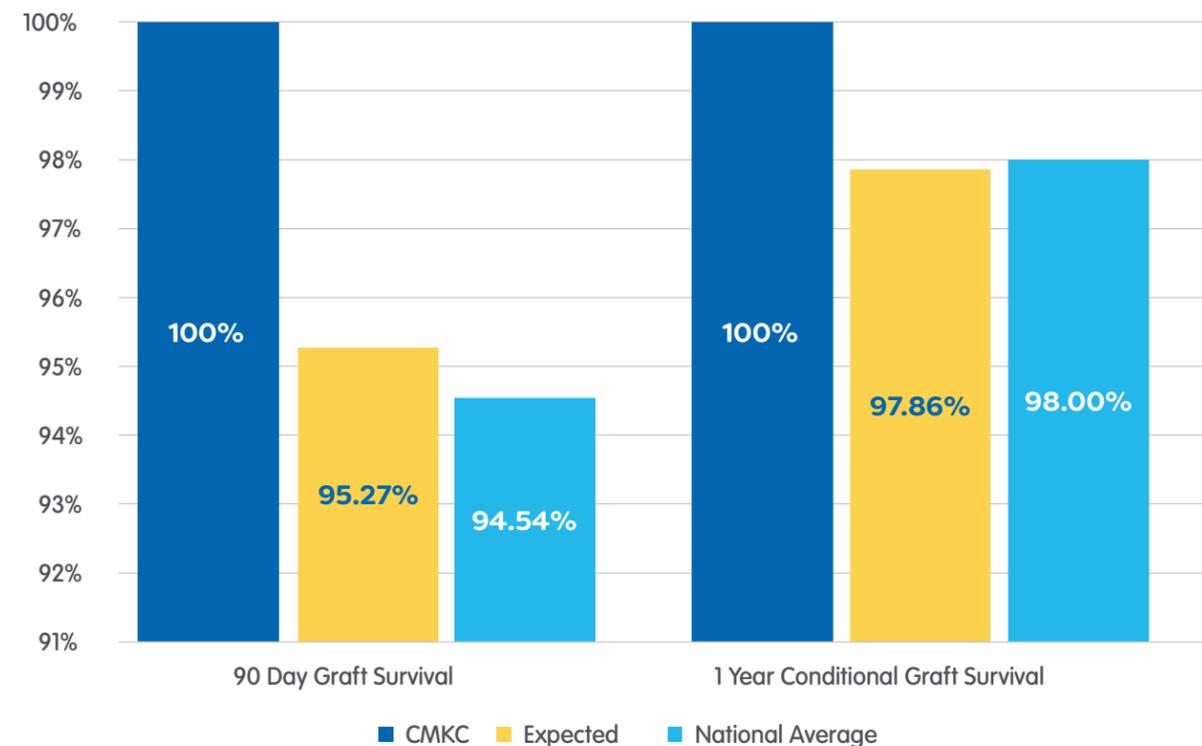
01/01/2021 – 12/31/2022



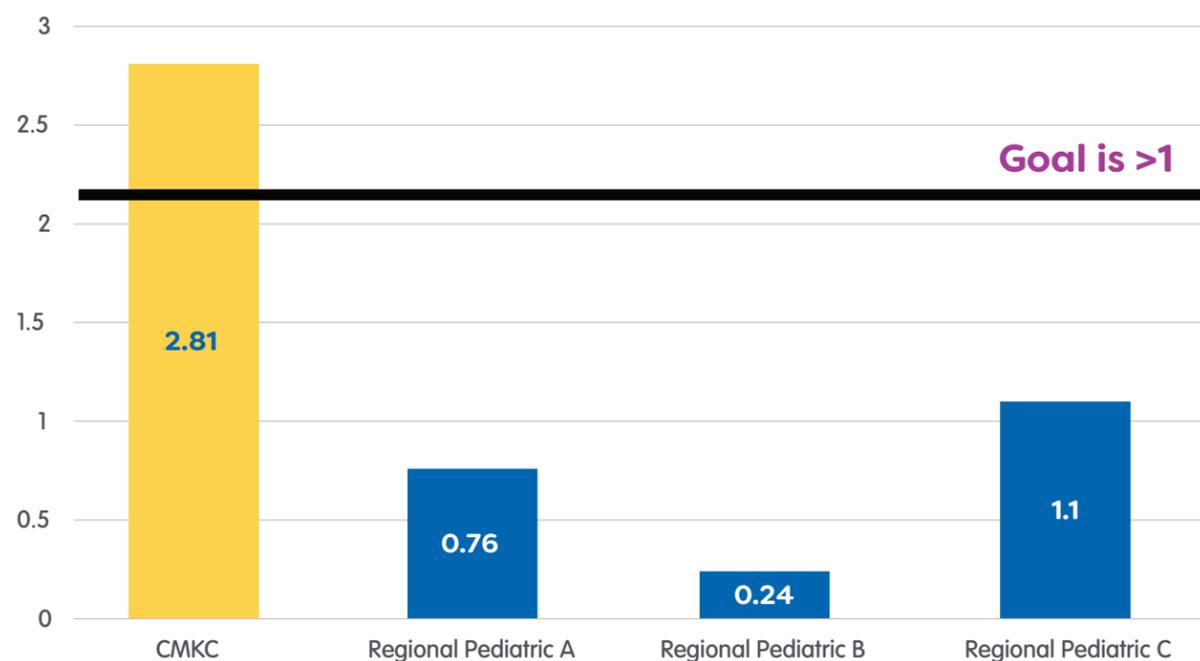
LIVER TRANSPLANT OUTCOMES (SRTR JULY 2023)

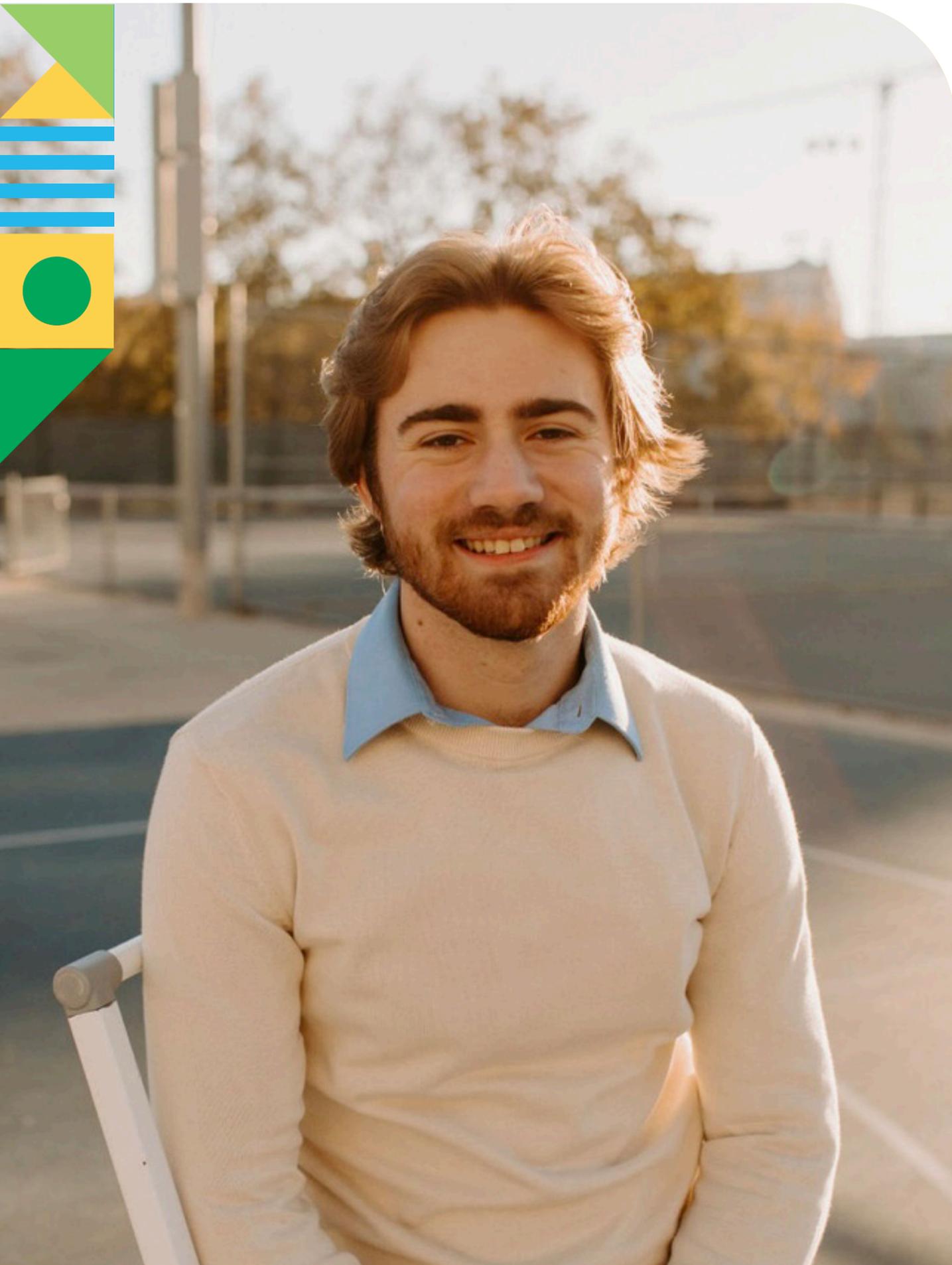
GRAFT SURVIVAL

01/01/2020 – 3/12/2020 AND 6/13/2020 – 6/30/2022



LIVER OFFER ACCEPTANCE RATIO REGIONAL COMPARISON (SRTR JANUARY 2023)





BRENDAN TRIPP ELAM

Brendan Tripp Elam was a former patient diagnosed with a rare hereditary disorder, alpha-1 antitrypsin deficiency (A1AD), when he was only a few weeks old. At age 10, Brendan received a liver transplant after developing peritonitis, a potentially life-threatening infection. He was able to return home nine days later. As time passed, Brendan's visits to the hospital became less frequent as his health became more stable, and he became an active teen, eventually graduating high school and attending college at the University of Nebraska, Lincoln. Today, Brendan is finishing his degree in music education at the University of Nebraska, Lincoln, and plans to become a music educator.

Brendan's grandparents, Montie and Marjorie Tripp, were so grateful for the expert and compassionate care the Children's Mercy team provided their grandson, they gave a generous gift to support the Children's Mercy transplant program, which was re-named the Brendan Tripp Elam Transplant Center

Patient Stories

HEART TRANSPLANT



Zack, 12: Zack came to Children's Mercy with restrictive cardiomyopathy. His heart squeezed ok, but relaxation was not so great, which ultimately led him to need a heart transplant. Learn more about his story and how he is thriving today.

KIDNEY TRANSPLANT



Clara, 3: Before Clara was born, she was diagnosed with cloaca—a kind of anorectal malformation that can also cause kidney complications. By age one, she needed a kidney transplant, and her mom was a match. Read more about Clara's story and how she is doing today.

LIVER TRANSPLANT



Lacie, 14: Lacie started her journey at Children's Mercy right when she was born. She came to our NICU to remove a hamartoma cyst on her liver. During that time, her medical team discovered she had biliary atresia. After 14 years of liver appointments, she was diagnosed with Hepatopulmonary Syndrome (HPS) and would need a liver transplant. Read about her journey and how she's doing after her liver transplant.

Transplant Team

HEART

Physicians:

Aliessa Barnes, MD
Victor Benvenuto, MD
Brian Birnbaum, MD, FACC, FAAP
David Sutcliffe, MD

Surgeons:

Edo Bedzra, MD, MBA
William Douglas, MD
William Gibson, DO
James O'Brien, MD, FACS

Coordinators:

Katie Garner, RN, BSN
Beth Lang, RN, BSN, CCRN, CCTC
Kay-Leigh, Lawrence, MSN, RN, CPN
Stefanie Kruezkamp, CCRN, BSN, RN

Nurse Practitioner:

Rebecca Juhl, DNP, APRN,
CPNP-AC, RN

KIDNEY

Physicians:

Vimal Chadha, MD
Heather Morgans, DO
Bradley Warady, MD
Judith VanSickle, MD, MHPE,
FAAP, FASN

Surgeons:

Richard Hendrickson, MD,
FAAP, FACS
Bhargava Mullapudi, MD

Coordinators:

Nicole Fenton, RN
Madison Ince, RN, BSN, CPN
Trudi Jackson, RN, BSN
Melissa Walker, RN, BSN, CCTC
Katelyn Walsler, RN, BSN, CPN

Nurse Practitioners:

Kathleen Mallett, MSN, APRN,
FNP-C, CNN-NP, FNKF
John (Tyson) Moore, MSN, APRN,
FNP-C, CPN, CNN-NP

LIVER

Physicians:

Ryan Fischer, MD
Jenny Halma, MD
Voytek Slowik, MD

Surgeons:

Richard Hendrickson, MD,
FAAP, FACS
Bhargava Mullapudi, MD

Coordinators:

Megan Faseler, BSN, RN, CPN, CCTC
Molly Hufferd, BSN, RN, CPN,
VA-BC, CCTC
Misty Uhl, RN, BSN, CPN
Michelle Boswell-Walden, MHA,
RN, CPN

Nurse Practitioner:

Andrea Bennett Wieser, PA-C



Please visit cmkc.link/transplantstories or scan the QR code to view additional information about our transplant center, including referral information and patient stories.

For more information

Children's Mercy Kansas City

Adele Hall Campus

2401 Gillham Road

Kansas City, MO 64108

Phone: (816) 302-3088

Fax: (816) 855-1948

Email: transplant@cmh.edu

childrensmercy.org/transplant



Children's Mercy
KANSAS CITY