
Solid Organ Transplant Program

Kidney • Liver • Heart



Making Life Better for Children

Children's Medical Center Dallas, the flagship of Children's HealthSM, offers one of the largest comprehensive pediatric transplant programs in the country. Here, children and their families receive care and support by a dedicated team of pediatric specialists throughout the transplant process.

With access to every medical and surgical subspecialty within our nationally ranked medical center, these specialists are uniquely equipped to care for this special patient population.

Our partnership with UT Southwestern allows us to provide the only academically affiliated pediatric transplant program in North Texas, elevating the care we provide through research and clinical expertise.



Dear Colleagues,

We are proud to share the remarkable achievements of the Solid Organ Transplant Program at Children's Medical Center Dallas. As one of the oldest pediatric multi-organ transplant programs in the nation, our team of dedicated, multidisciplinary professionals share a firm belief that we can make life better for children.

The Solid Organ Transplant Program team is composed of more than just the surgeons and physicians. There are decades of experience in advanced practice providers, transplant coordinators, social workers, dietitians, psychologists, financial coordinators, child life specialists, pharmacists, program coordinators, scheduling coordinators, research coordinators and administrative assistants all supported by a strong infrastructure of other health care professionals and providers.

Children's Medical Center Dallas proudly serves a multi-state referral area caring for newborns through late teens. We have active programs to support parents and children, and we offer significant support as they transition to adult care programs. We are approved by the United Network for Organ Sharing (UNOS) and the Centers of Medicare and Medicaid (CMS), and we work closely with the organ procurement organizations to support organ donation.

The Solid Organ Transplant Program is actively engaged in leading-edge technology that ranges from mechanical support for a failing heart to digitized medical therapy to assess adherence and learning. Every facet of our program is focused on patient care first, and we help our patients and their families throughout the transplant process and beyond. This report chronicles our achievements.

We welcome your inquiries and suggestions.



Sincerely,

A handwritten signature in black ink, appearing to read "Dev M. Desai".

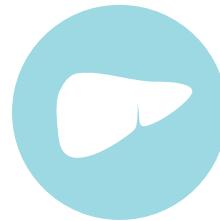
Dev M. Desai, M.D., Ph.D.
Program Director, Solid Organ Transplant

Children's Medical Center Dallas performs more solid organ transplants on patients younger than 5 years old than any other hospital in the state.

We were the first program in the Southwestern United States to perform over 1,000 pediatric transplants, and we are still the only program in Texas to have performed over 1,000 abdominal transplants.



KIDNEY



LIVER



HEART

We understand the benefits of a multidisciplinary approach to care that supports the unique physical, emotional, psychological and developmental needs of each patient.

Renowned specialists – including physicians, surgeons, nurses, dietitians, social workers, child life specialists, chaplains, pharmacists and psychologists – collaborate on the care of every child before, during and after the transplant.

The Transplant Services Team

The transplant services team at Children's Medical Center Dallas offers comprehensive care to address all your patient's needs and provides education and support so families can receive quality care for each child. Our Remote Patient Monitoring Program, the first in the nation, allows clinical staff to remotely monitor patient health status and progress via secure mobile technologies. Through iPads that include one-touch video conferencing, physicians and other clinical staff can conduct visits and connect to patients at home, their school or virtually anywhere.

And, when a child is ready, Our Pediatric to Adult Care Transition (PACT) Program helps patients successfully transition to an adult program. These programs demonstrate our commitment to advanced, efficient and patient-focused care management.

Recognized as a Transplant Center of Excellence by:

- Blue Distinction Centers for Transplants*
- Cigna LifeSOURCE Transplant Network
- Humana National Transplant Network
- INTERLINK
- LifeTrac
- OptumHealth



*Organization does not offer pediatric kidney transplant network.



Kidney Transplant Program



Kidney Transplant Program

Surgeons with the Kidney Transplant Program at Children's Medical Center Dallas have performed more than 500 pediatric kidney transplants, including transplants on infants with renal failure, since 1980. The program offers transplantation of deceased donor or living donor kidneys in the treatment of a range of diagnoses.

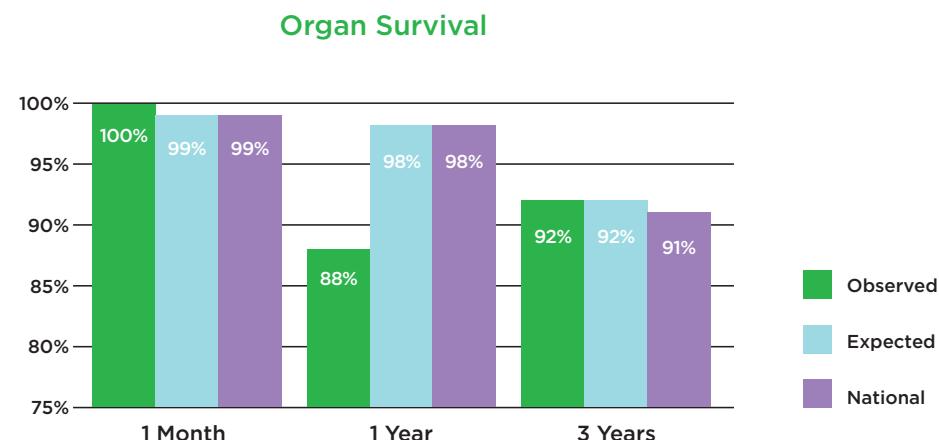
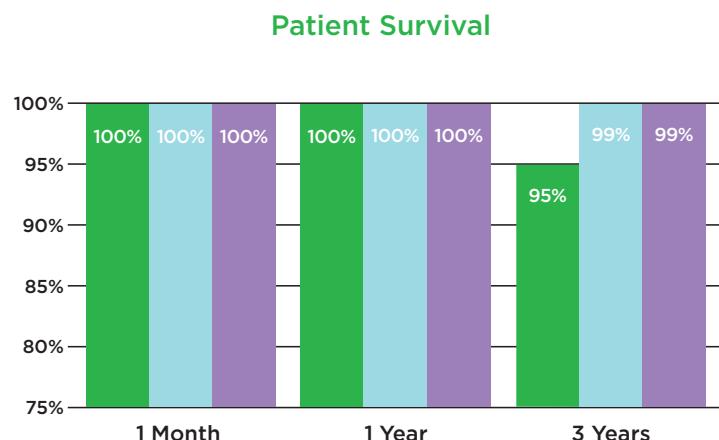
The Children's Health Nephrology department is among the top pediatric hospital nephrology programs in the country, according to *U.S. News & World Report*. Our comprehensive approach to care involves the management of end-stage renal disease, providing a full spectrum of services for patients who need complex care to bridge them to transplant.



Kidney Transplant Outcomes

Transplant survival statistics are an important way to communicate a program's accomplishments. In fact, government regulations require transplant programs to share current organ and patient survival statistics at the time a patient undergoes evaluation.

Our transplant program, led by UT Southwestern surgeons and physicians, consistently achieves outcomes that meet or exceed the national averages.



Graphs compiled using data from the Scientific Registry of Transplant Recipients January 2018 Program-Specific Report.

**Please note there are no expected outcomes due to 100% patient survival.

Kidney Transplant Program highlights:

- Maintains the highest volume of pediatric kidney transplants completed in Texas
- Ranked among the top pediatric hospital Nephrology departments in the country by *U.S. News and World Report*
- Largest pediatric living kidney donor program in the Southwest region

Diagnoses we treat include:

- Renal dysplasia
- Cystic kidney disease
- Congenital nephrotic syndrome
- Focal segmental glomerulosclerosis
- Membranoproliferative glomerulonephritis
- IgA nephropathy
- Hereditary glomerulopathy
- Alport syndrome
- Obstructive uropathy

Specialized services and treatments:

- Arteriovenous fistulas for hemodialysis access
- Multi-organ transplant
- Paired living-donor exchange program
- Desensitization program

Transplant Volumes

Age	Total Kidney Transplants
All Ages	510
<1 Year	0
1-5 Years	58
6-10 Years	109
11-17 Years	204
18+	139

The volume numbers above represent transplant totals from 1980 through the end of 2017.

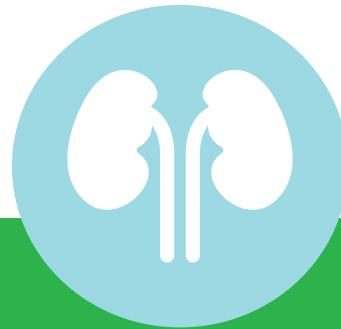


Since 1980, more than

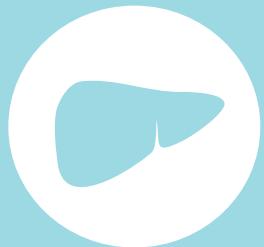
500
pediatric kidney transplants

have been performed at Children's Medical Center

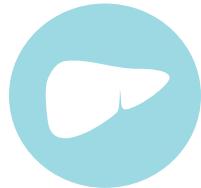
Children's Health offers a desensitization program with
100% renal graft survival to date.



For more information on our Kidney Transplant Program
or to refer a patient, please call **214-456-8600**.



Liver Transplant Program



Liver Transplant Program

More than 550 liver transplants have been completed since the first liver transplant was performed at Children's Medical Center Dallas in 1984. The liver transplant team offers whole, split and ABO-incompatible liver transplants using deceased donor livers to treat a range of diagnoses. As one of the busiest transplant centers in the nation, we are dedicated to patient- and family-centered care that produces outcomes that exceed national standards.

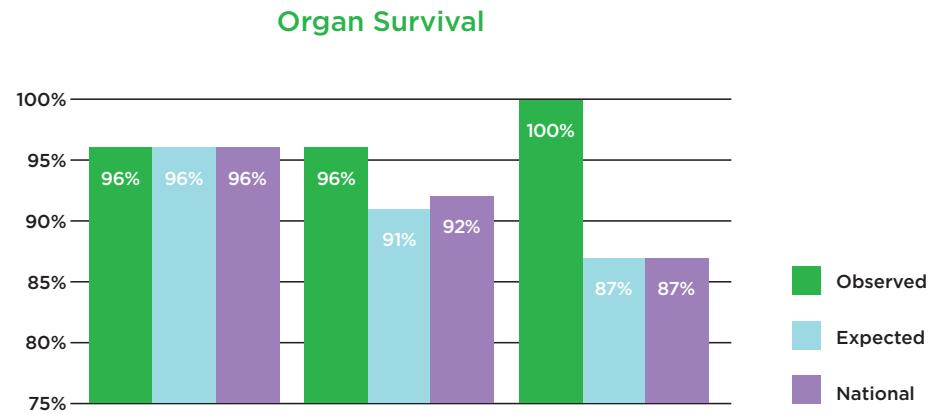
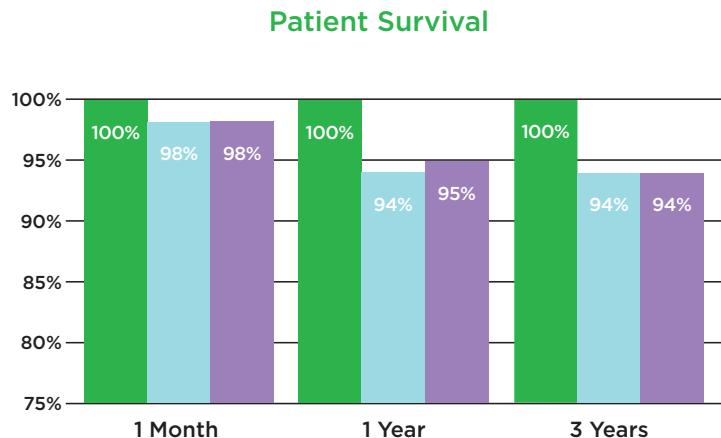
Children's Medical Center Dallas received a 4 out of 5 rating from the Scientific Registry of Transplant Recipients (SRTR) for our liver transplant outcomes. Our survival rates consistently meet or exceed the SRTR national averages.



Liver Transplant Outcomes

Transplant survival statistics are an important way to communicate a program's accomplishments. In fact, government regulations require transplant programs to share current organ and patient survival statistics at the time a patient undergoes evaluation.

Our transplant program, led by UT Southwestern surgeons and physicians, consistently achieves outcomes that meet or exceed the national averages.



Graphs compiled using data from the Scientific Registry of Transplant Recipients January 2018 Program-Specific Report.

The Division of Gastroenterology, Hepatology and Nutrition at Children's Health leads the field in innovative care of digestive and nutritional conditions in infants, children and adolescents.

Our transplant program, led by UT Southwestern surgeons and physicians, received a 4 out of 5 rating from the Scientific Registry of Transplant Recipients (SRTR) for our liver transplant outcomes. We are proud to deliver patient- and family-centered care with clinical expertise that consistently achieves outcomes that meet or exceed the national average.

Ranked by *U.S. News & World Report* magazine as one of the top programs of its type in the nation, Children's Health routinely delivers world-class care to over 1,000 patients per month, including children from surrounding communities who travel to visit us. We take a comprehensive approach to care, managing the diagnosis and treatment of metabolic liver disease, acute liver failure, liver cancer and biliary atresia.



Liver Transplant Program highlights:

- In 1984, the first liver transplant in Texas was performed at Children's Medical Center Dallas
- Ranked in the Top 10 for pediatric gastroenterology and GI surgery by U.S. News & World Report in 2018-19

Diagnoses we treat include:

- Alagille's syndrome
- Alpha-1 antitrypsin deficiency
- Biliary atresia
- Chronic active hepatitis
- Cystic fibrosis
- Intrahepatic cholestatic liver diseases
- Acute liver failure
- Liver tumors – primary and metastatic
- Congenital metabolic liver disease
- Wilson's disease

Specialized services and treatments:

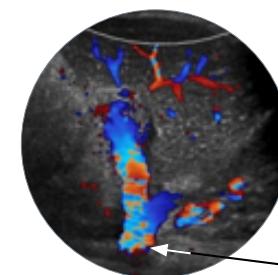
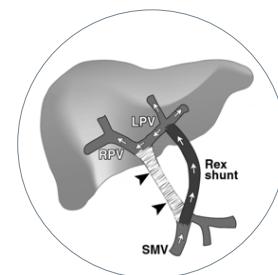
- Comprehensive hepatology and gastroenterology services
- Portal hypertension surgery
- Advanced hepatobiliary surgery for benign and malignant diseases

Transplant Volumes

Age	Total Liver Transplants
All Ages	558
<1 Year	105
1-5 Years	256
6-10 Years	70
11-17 Years	78
18+	49

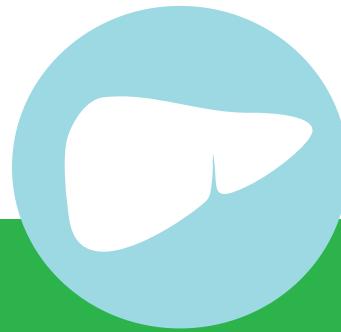
The volume numbers above represent transplant totals from 1984 through the end of 2017.

Advanced Hepatobiliary and Portal Hypertension Surgery



Distal Splenorenal Shunt

In 2006, Texas' **first pediatric liver-heart transplant** was performed at Children's Medical Center.



For more information on our Liver Transplant Program or to refer a patient, please call **214-456-8600**.



Heart Transplant Program



Heart Transplant Program

When the most advanced medical therapies and mechanical support fail to relieve symptoms and improve the quality of life, a child may be suitable for a heart transplant. Although this is considered the most advanced form of heart failure treatment, families can rest assured their child is in good hands.

As one of the largest heart transplant centers in the country, Children's Health has successfully treated more than 250 children, giving them new, healthy hearts using state-of-the-art transplant services including heart transplant surgery and re-transplantation surgery.

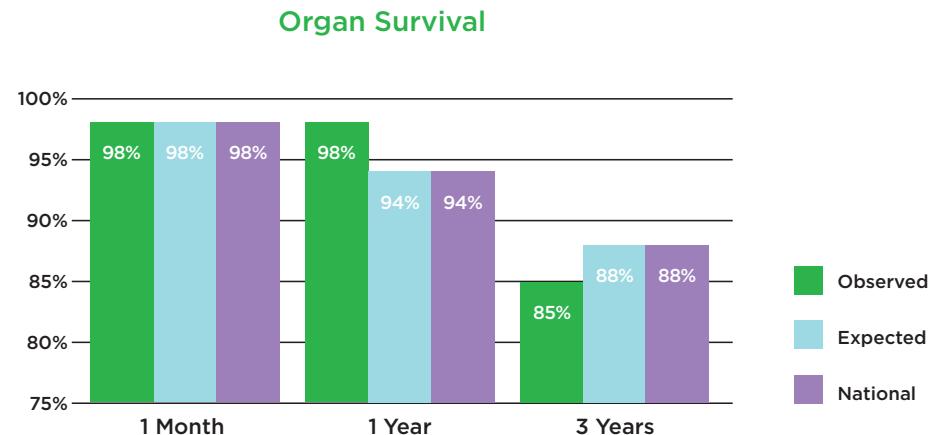
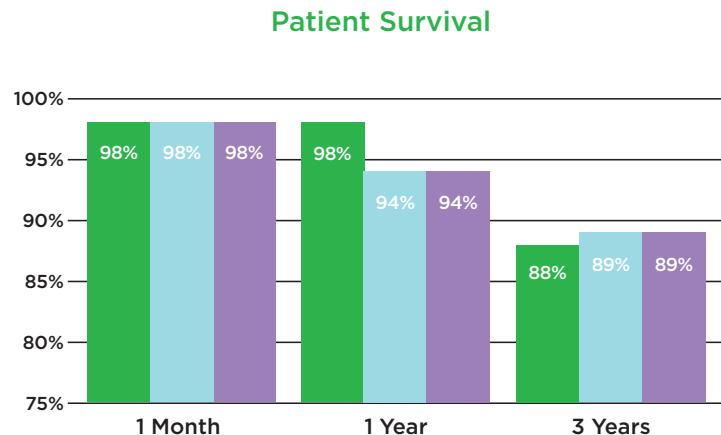
During a child's carefully coordinated operation, our team of renowned cardiothoracic surgeons will replace the child's heart with a healthy one. After surgery, the child will be monitored at one of our cardiology clinics by the heart transplant team. This protects the child from possible infections and complications, leading to higher success rates.



Heart Transplant Outcomes

Transplant survival statistics are an important way to communicate a program's accomplishments. In fact, government regulations require transplant programs to share current organ and patient survival statistics at the time a patient undergoes evaluation.

Our transplant program, led by UT Southwestern surgeons and physicians, consistently achieves outcomes that meet or exceed the national averages.



Graphs compiled using data from the Scientific Registry of Transplant Recipients January 2018 Program-Specific Report.

Heart Transplant Program highlights:

- The only hospital in North Texas, and one of only two in the state, that performs pediatric heart transplants
- The fifth most active pediatric transplant program in the country
- Performed over 250 heart transplants since our first heart transplant in 1988

The only pediatric VAD program in North Texas, we offer a comprehensive range of mechanical devices including:

- PediMag & CentriMag Devices
- HeartWare® HVAD® System
- HeartMate 3™ Left Ventricular Assist System
- Berlin Heart® EXCOR Pediatric
- Ventricular Assist Device
- Impella® 2.5, 5.0 and CP Systems
- SynCardia 50cc Total Artificial Heart

Our transplant services include:

- Heart transplant surgery
- Re-transplantation surgery
- ABO-incompatible heart transplantation

From the early phases of heart failure to mechanical assistance to after surgery care, our team of internationally renowned cardiothoracic surgeons and cardiologists will select the best treatment plan for each child's specific needs. For children in severe heart failure, a mechanical pump (MCS) or VAD can be implanted in order to help a child's heart heal before transplant surgery – or in some cases, recover fully.

Transplant Volumes

Age	Total Heart Transplants
All Ages	251
<1 Year	79
1-5 Years	54
6-10 Years	28
11-17 Years	57
18+	33

The volume numbers above represent transplant totals from 1988 through the end of 2017.

As the only Heart Transplant program in North Texas,
Children's Medical Center Dallas performs between
15 and 20 transplants a year and is currently the
fifth most active pediatric heart center in the nation.



For more information on our Heart Transplant Program
or to refer a patient, please call **214-456-2333**.



Support & Research

Support Services

Financial Support

A financial coordinator is available to help families with financial considerations throughout the transplantation process. The financial coordinator will contact the patient's insurance company to obtain a benefit summary and determine if approval is required for evaluation and transplant. At the time of the transplant evaluation, a financial coordinator will meet with the family to discuss the details of their benefits, as well as identify additional financial resources.

Social Work

We have three full-time clinical social workers within our Solid Organ Transplant department that work closely with families as they adjust to the stressors that accompany transplantation and hospitalization. They will help coordinate the resources needed prior to transplant, which could include transportation, lodging, community counseling or other similar assistance. Social workers also provide counseling and emotional support, and they help families being discharged from the hospital with appropriate referrals to outside community resources, if necessary.

Psychology

As part of the evaluation process, all patients and families will see one of the transplant team psychologists. These are people expertly trained in child development and behavior who will conduct a thorough developmental assessment before the transplant, which then provides a baseline for future annual assessments and interventions. They will also coordinate with school nurses, teachers and diagnosticians regarding necessary school accommodations and ongoing educational needs following the transplant.

Dietitian

Transplant dietitians have special training in food and nutrition, which play an important role in preparing the patient for and recovering from a transplant. Whether the goal is for a child to gain or lose weight, start eating solid foods or follow a special diet, a transplant dietitian will create the plan and support families to achieve their goals.

Pharmacy

The transplant pharmacist is available to transplant patients and their families throughout the transplantation process. The pharmacist serves as a resource and provides education regarding transplant medications to patients and their families in the pre-transplant and post-transplant phases. He or she collaborates with the transplant team to prescribe and monitor medication therapies during the admission for transplant and after discharge.

Child Life

The job of a child life specialist is to help educate and prepare patients for things that will happen in the hospital. The hospital can seem scary and overwhelming to children, so child life specialists help difficult situations appear simple and nonthreatening. Whether it is helping during a procedure, preparing for transplant surgery or familiarizing patients with medical equipment through medical play, child life specialists are available to provide explanations and ongoing support for transplant patients and families to help them feel comfortable and encourage positive coping skills throughout the transplant process.

Pastoral Care

Our Pastoral Care department provides emotional and spiritual support to patients and families of all faiths and spiritual traditions. Chaplains are available to patients and families, by request, 24 hours a day to provide families the emotional and spiritual resources they need while here at Children's Health.

Transplant Coordinators

Our transplant nurse coordinators organize every element of a child's care before, during and after the transplant. The nurse will educate the patient and family on the transplant process and will schedule and communicate the patient's diagnostic testing and follow-up care.

Support Groups

School-aged Patient Group

This psychoeducational group for post-transplant patients ages 8 to 13 is designed to teach them about their procedure, the importance of taking daily medications, coping skills, how to manage their emotions and how to develop social skills. It is also a great opportunity for patients to get to know other peers who have had similar experiences. The group starts with four initial sessions, and after completing those, the patients are eligible for an additional four-session advanced-curriculum group.

Pediatric to Adult Health Care Transition (PACT) Group for Teens

This group for patients ages 14 and 15 and their family builds upon information provided during the School-aged Patient Group and prepares patients for the Young Adult PACT program that begins for patients at age 16. The PACT group for teens is designed to help meet the needs of transplant patients as they begin thinking about the role they play in their health care. The PACT group for teens begins fostering skills directly related to the management of their chronic illness in conjunction with their parents. The program includes eight sessions held quarterly over two years.

Pediatric to Adult Health Care Transition (PACT) Group for Young Adults

This group for post-transplant patients 16 and older and their families has a strong focus on preparation for transition from pediatric to adult health care, and it teaches patients how to operate more independently when able. It builds upon information provided during the School-aged Patient Group and PACT Group for Teens. The sessions provide transition focus on patients' health management education and skill-building, as well as communication and coordination of care with adult providers. The program includes eight sessions held quarterly over two years.

Transplant Caregiver Support Group

Intended for caregivers of pre- and post-transplant patients of all ages, the goal of this program is to help families learn how to support each other throughout the transplant journey. This caregiver group is facilitated by social work, pastoral care and psychology. The topics vary in this group that meets quarterly.

Active Research

Biomarkers for Post-Transplant Lymphoproliferative Syndrome in Children

Study Sponsor: The National Institute of Allergy and Infectious Diseases (NIAID)

This is a multi-center clinical study (involves seven U.S. sites) investigating biomarkers associated with the development of Epstein-Barr virus (EBV)-related post-transplant lymphoproliferative disorder (PTLD) in pediatric liver, heart, kidney, heart with liver, small intestine and liver with small intestine transplant candidates and recipients.

Studies of Pediatric Liver Transplantation (SPLIT) Clinical Research Network

Studies of Pediatric Liver Transplantation (SPLIT) Community is a Clinical Research Network that serves to assess outcomes and form a foundation for patient-based research and improvement in care. This is a prospective observational study to assess outcomes in pediatric liver transplant recipients.

The primary objectives of the SPLIT are:

- Identify risk factors associated with long-term immunosuppression complications, such as renal failure, malignancy, infections and cardiovascular complications.
- Determine issues and risk factors associated with late-graft dysfunction and loss.
- Identify gaps between outcomes and defined benchmarks at a center level or consortium level that serve as a foundation for local or multi-center quality improvement efforts and/or development of potential clinical trials.

SPLIT Sub study: Cytomegalovirus (CMV) Prophylaxis in Pediatric Liver Transplantation: A Comparison of Strategies Across the SPLIT Consortium.

The purpose of this sub study is to estimate and compare the incidences of CMV infection, syndrome and disease among subjects who receive different durations (short or long) of antiviral prophylaxis. It will also compare the cost of CMV prophylaxis, monitoring, antiviral side effects, health care utilization and CMV infection, syndrome and disease between short and long prophylaxis.

SPLIT Biliary Strictures Research Study

This is a collaboration between the SPLIT Registry Biliary Strictures Working Group and Yale University School of Medicine Section of Gastroenterology and Hepatology. The SPLIT Strictures Working Group is investigating the management of biliary strictures post-liver transplantation in children.

SPLIT Immunization Study

This is a one-year prospective study investigating immunization rates at the time of pediatric liver transplant. The goal of this study is to quantify the percent of patients at SPLIT centers who are up-to-date (for age) on vaccinations at the time of pediatric liver transplantation. This study will seek to understand which vaccines are most under-utilized and which subgroups of transplant candidates are most at-risk for under-vaccination.

Sub study: Cardiovascular Data (CVD)

The focus of this sub study is to identify the patient phenotype at risk for complications related to occult cardiovascular disease. The primary aim is to define the range of cardiovascular disease across the pre-transplant and perioperative phases of care for children awaiting liver transplantation by a structured assessment, including EKG and echocardiogram. This sub study also wants to determine if patients with evidence of cardiac disease have increased morbidity and mortality during the pre-transplant and perioperative periods.

**Prevalence and Correlates of Post-Traumatic Stress Symptoms (PTSS) in Adolescent Solid Organ Transplant Recipients
Study Sponsor: The National Institute of Allergy and Infectious Diseases (NIAID)**

The primary objective of this study is to investigate the prevalence of clinically meaningful posttraumatic symptoms in adolescent transplant recipients.

Proteus Project

Proteus Discover is a pilot program composed of ingestible sensors, a small wearable sensor patch, an application on a mobile device and a provider portal. Once activated, Proteus Discover unlocks never-before-seen insight into patient health patterns and medication treatment effectiveness, leading to more informed health care decisions for everyone involved. Children's Health is the nation's only Pediatric Transplant Center utilizing Proteus, which has been successfully used for 50 transplant patients.

Pediatric Heart Transplant Society

The mission of the PHTS is to collect clinical information about pediatric heart transplants and thereby advance the science and treatment of children while listed for and following heart transplantation. Our cardiologists and surgeons have been heavily involved with the PHTS and are co-authors on many of the scientific reports published by the Society. The Foundation supports the good works of the Pediatric Heart Transplant Society (PHTS) by raising and administering funds.

Abby

"The staff at Children's Medical Center have been amazing through it all. Everyone from the doctors and nurses to the cafeteria ladies and housekeeping staff is like a second family to us."



Ben

"I hope Ben values the second chance he was given to have a healthy life. I hope he always feels comfortable being exactly who he is because he is perfect in every way to us. I hope he uses his story as a platform to inspire others to be organ donors."



Izayah

"Out of all the hospitals we have been to, Children's Medical Center is the best. We have received excellent care, and the whole team really knows Izayah. He is a shy and quiet child, but he opens up and talks to them."



Aliyah

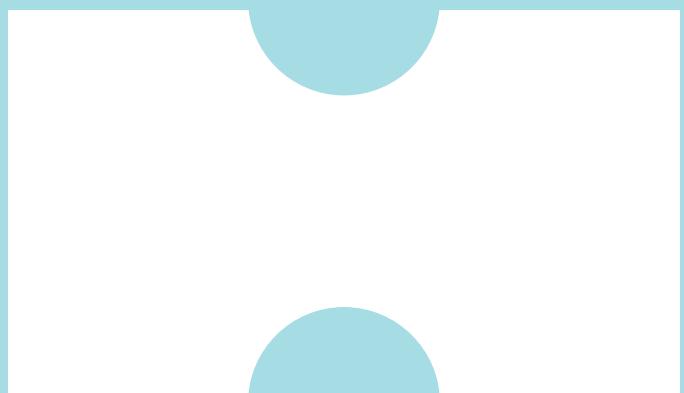
"Aliyah has been a trooper throughout it all. She also has a lot of energy and runs around outside with her older sister. We are thankful that she is healthy now and always happy."

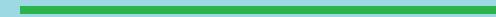
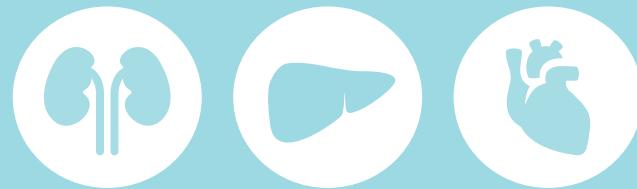


Ivanna

"You would never know she had a heart transplant. She is active, smiling and participating in therapy. Ivanna's gift of life came just in time. Obviously, she is here for a purpose."







Live Life. Give Life.
Solid Organ Transplant

children'shealth[®]