When Curtis’ kidney disease became life-threatening his family began looking for a living kidney donor. He found his match thanks to a living donation from his uncle Steve. Curtis and his family are grateful to SSM Health Saint Louis University Hospital and the SLUCare physicians and transplant care team for giving him a lifesaving transplant.
Dear Colleagues:

We’re excited to provide you with this 2020 Annual Report of the Transplant Center at SSM Health Saint Louis University Hospital. The hospital’s organ transplant program is one of the most established programs in the Midwest, and we’ve been working to build on this success.

Our Transplant Center provides a full range of medical and surgical services for patients with end-stage renal disease and liver disease. Whether treating a new dialysis patient in need of access care (my surgeons don’t do vascular access) or a person with declining liver or kidney function, our multi-disciplinary team is here for each patient. With a long-standing history of medical excellence, we strive to provide compassionate and state-of-the-art care for patients with organ failure.

The ever-changing field of organ transplantation poses significant challenges and even greater opportunities when it comes to saving lives. The Transplant Center at SSM Health Saint Louis University Hospital works tirelessly to transform these opportunities into successful outcomes. For example, one area of opportunity is the national opioid epidemic, which has created a silver lining of sorts for organ transplantation. You can read about my perspective on this topic on the following pages.

Coming from other larger transplant programs, I had a number of goals for the hospital’s Transplant Center. I’m proud to say that in the five years since I joined the Center, we’ve made some incredible strides.

Here are just some of the highlights:

• On November 20, 2019, we performed our 100th organ transplant of 2019 in the form of a living donor kidney transplant.
• We’ve managed to double the size of our transplant program in the last five years.
• From 2018 to 2019, our program grew by 42 percent.
• We’re adding some new technology and telemedicine capabilities to our extensive suite of services.
• We’ve improved access to transplant care for patients in smaller, outlying communities.
• In February 2019, we launched a satellite kidney care clinic in Springfield, Mo. It has been such a successful program that we are hopeful to open a satellite liver care clinic in Cape Girardeau, Mo. in the near future.

This next year promises to be even more exciting with the opening of the new SSM Health SLU Hospital in September 2020. The design of our new clinical and surgical spaces is not only state-of-the-art, but also innovative. For example, two of the operating rooms will be connected by a smaller anteroom to help preserve sterility. This is critical when it comes to living organ donation, allowing the transplant team to safeguard the donated organ.

We’re really grateful for your continued support. Our Center’s success is a testament to the hard work that’s being done across the board.

Sincerely,

Henry B. Randall, MD, MBA, FACS
Professor of Surgery
Executive Director & Division Chief, Surgical Director
SSM Health/SLUH Abdominal Transplant Center
SLUCare Physician Group
Transplant Program Overview

The Transplant Center at SSM Health Saint Louis University Hospital is one of the most established programs in the Midwest, providing a full range of medical and surgical services for patients with end-stage renal disease and liver disease, as well as honoring the donor gift with excellent patient and family care.

The Center’s multidisciplinary clinic is conveniently located on the campus of Saint Louis University Hospital. This clinic allows for coordinated visits with our health care teams for Kidney Disorders, Liver & Digestive Diseases, Transplantation and Dialysis Access.

Why choose SSM Health Saint Louis University Hospital?

Whether treating a new dialysis patient in need of access care or a person with declining liver or kidney function, our multidisciplinary team is here for each patient. With a long-standing history of medical excellence, we strive to provide compassionate and state-of-the-art care for patients with organ failure. Through small, informal educational sessions, transplant candidates meet team members, talk with transplant recipients, and learn more about transplantation. Our program provides comprehensive support for patients and their families throughout the process – from undergoing a transplant to maintaining a healthy organ.

Building on extensive experience and a long history of nationally recognized care in hepatology, interventional nephrology and surgery, we are committed to promoting a patient-centered, multidisciplinary approach for each transplant patient.

Looking to the future

The ever-changing field of organ transplantation poses significant challenges and even greater opportunities when it comes to saving lives. The Transplant Center at SSM Health Saint Louis University Hospital works tirelessly to transform these opportunities into successful outcomes.

At the Transplant Center, we’re currently using artificial intelligence to better predict transplant outcomes. In fact, our team has built algorithms to help reduce the rate of discarded organs. We are also researching other new technologies, including growing kidneys and the use of artificial kidneys for transplant.

Our services include:

- Ongoing communication with referring physicians through all phases of care
- Kidney transplant outcomes that exceed national averages
- Dedicated transplant teams that manage patient care at all stages from pre-transplant evaluation to post-transplant surgical care
- Multidisciplinary team practices in a recently renovated clinic
- Coordinated visits with health care team minimizes patient trips to the hospital
- Designated Intensive Care Unit for transplant surgical management
- Hospital’s size and configuration offer easy access to transplant team
- Assistance with housing and transportation for out-of-town patients and families

News

Specialists at the Transplant Center at SSM Health Saint Louis University Hospital reached a milestone November 20, 2019 that they haven’t reached in a decade – their 100th organ transplant in a calendar year.

SLU Hospital’s organ transplant program is one of the most established programs in the Midwest, performing milestones such as St. Louis’ first heart transplant in 1972. The program’s transplant numbers dipped under previous hospital ownership but have rebounded dramatically since SSM Health purchased the hospital in 2015.

“This is a big deal and it speaks to the hard work everyone put in to accomplish this,” said Henry Randall, MD, transplant surgical director at SLU Hospital and a SLUCare physician.

Patient no. 100 – 57-year old Timothy Lampert from Springfield, Mo. – received a living donor kidney from a friend, Carmolee Cleir. Chintalapati Varma, MD, removed the kidney from Cleir, while Dr. Randall transplanted the kidney to Lampert.

Key highlights since 2015 include:

- The recruitment of key SLUCare physicians including Henry Randall, MD, and Chintalapati Varma, MD.
- SSM Health began an annual living organ donor awareness campaign in 2016 through advertisements and public service announcements, leading to a doubling in the number of living donors at the hospital.
- A partnership with the National Kidney Foundation called, ‘The Big Ask, The Big Give’, which began March 2018, providing those on the kidney transplant list with information on finding living donors.
- A transplant clinic in Springfield, Mo. opened February 2018 providing easier access for the growing number of patients on the transplant waiting list in the southwest Missouri region.
The Transplant Center at SSM Health SLU Hospital made significant strides in 2019 with a 42 percent year-over-year growth from 2018. This is a testament to the commitment of the hospital’s transplant team to perform more lifesaving transplants. The goal for 2020 and beyond is to continue to grow the transplant program, ensuring that those individuals who qualify receive the organs they so desperately need.

Key highlights
The following are some of the key highlights, comparing the numbers from 2018 to 2019, as it pertains to the number of transplant patients SSM Health SLU Hospital treated:

**Solid Transplanted Organs – 2018 v. 2019**

<table>
<thead>
<tr>
<th>Type</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kidneys</td>
<td>48</td>
<td>75</td>
</tr>
<tr>
<td>Liver</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Kidneys/Liver</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Kidneys/Liver</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

**Kidney Donors**

<table>
<thead>
<tr>
<th>Type</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Donor Types</td>
<td></td>
<td></td>
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<tr>
<td>Deceased Donor</td>
<td>38</td>
<td>59</td>
</tr>
<tr>
<td>Living Donor</td>
<td>14</td>
<td>16</td>
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**Liver – All donors (deceased donor and living donor)**

<table>
<thead>
<tr>
<th>JULY 2019 Public PSR Release</th>
<th>Recipient Cohorts*</th>
<th>OBSERVED</th>
<th>EXPECTED</th>
<th>NATL AVG</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 YEAR GRAFT SURVIVAL</td>
<td>All Donors 1/1/16 - 6/30/18</td>
<td>94.20%</td>
<td>92.30%</td>
<td>91.04%</td>
</tr>
<tr>
<td>3 YEAR GRAFT SURVIVAL</td>
<td>All Donors 7/1/15 - 12/31/16</td>
<td>90.74%</td>
<td>84.72%</td>
<td>83.29%</td>
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<tr>
<td>1 YEAR PATIENT SURVIVAL</td>
<td>All Donors 1/1/16 - 6/30/18</td>
<td>94.03%</td>
<td>93.64%</td>
<td>93.04%</td>
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<tr>
<td>3 YEAR PATIENT SURVIVAL</td>
<td>All Donors 7/1/15 - 12/31/16</td>
<td>90.57%</td>
<td>86.13%</td>
<td>85.58%</td>
</tr>
<tr>
<td>Transplant Rate</td>
<td>DD Only 1/1/17 - 12/31/18</td>
<td>46.2</td>
<td>46.1</td>
<td>53.0</td>
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<tr>
<td>WL Mortality</td>
<td>1/1/17 - 12/31/18</td>
<td>14.8</td>
<td>11.9</td>
<td>12.4</td>
</tr>
</tbody>
</table>

* SRTR 5-Tier uses these donor populations

**Kidney – All donors (deceased donor and living donor)**

<table>
<thead>
<tr>
<th>JULY 2019 Public PSR Release</th>
<th>Recipient Cohorts*</th>
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<th>EXPECTED</th>
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<tbody>
<tr>
<td>1 YEAR GRAFT SURVIVAL</td>
<td>All Donors 1/1/16 - 6/30/18</td>
<td>95.53%</td>
<td>95.42%</td>
<td>95.81%</td>
</tr>
<tr>
<td>3 YEAR GRAFT SURVIVAL</td>
<td>All Donors 7/1/15 - 12/31/16</td>
<td>94.44%</td>
<td>87.50%</td>
<td>88.91%</td>
</tr>
<tr>
<td>1 YEAR PATIENT SURVIVAL</td>
<td>All Donors 1/1/16 - 6/30/18</td>
<td>97.96%</td>
<td>97.38%</td>
<td>97.68%</td>
</tr>
<tr>
<td>3 YEAR PATIENT SURVIVAL</td>
<td>All Donors 7/1/15 - 12/31/16</td>
<td>95.18%</td>
<td>92.50%</td>
<td>93.55%</td>
</tr>
<tr>
<td>Transplant Rate</td>
<td>DD Only 1/1/17 - 12/31/18</td>
<td>25.1</td>
<td>14.1</td>
<td>13.7</td>
</tr>
<tr>
<td>(WL Mortality)</td>
<td>1/1/17 - 12/31/18</td>
<td>3.6</td>
<td>5.4</td>
<td>5.2</td>
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</table>

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**Liver**

<table>
<thead>
<tr>
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<td>All Donors 7/1/15 - 12/31/16</td>
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<td>88.91%</td>
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<tr>
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<td>All Donors 1/1/16 - 6/30/18</td>
<td>97.96%</td>
<td>97.38%</td>
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<td>93.55%</td>
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<tr>
<td>Transplant Rate</td>
<td>DD Only 1/1/17 - 12/31/18</td>
<td>25.1</td>
<td>14.1</td>
<td>13.7</td>
</tr>
<tr>
<td>WL Mortality</td>
<td>1/1/17 - 12/31/18</td>
<td>3.6</td>
<td>5.4</td>
<td>5.2</td>
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<table>
<thead>
<tr>
<th>JAN. 2019 Public PSR Release</th>
<th>Recipient Cohorts*</th>
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<th>NATL AVG</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 YEAR GRAFT SURVIVAL</td>
<td>All Donors 1/1/16 - 6/30/18</td>
<td>97.34%</td>
<td>95.43%</td>
<td>95.59%</td>
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<tr>
<td>3 YEAR GRAFT SURVIVAL</td>
<td>All Donors 7/1/15 - 12/31/16</td>
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<td>86.82%</td>
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<td>1 YEAR PATIENT SURVIVAL</td>
<td>All Donors 1/1/16 - 6/30/18</td>
<td>99.31%</td>
<td>97.44%</td>
<td>97.55%</td>
</tr>
<tr>
<td>3 YEAR PATIENT SURVIVAL</td>
<td>All Donors 7/1/15 - 12/31/16</td>
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<td>13.3</td>
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<tr>
<td>WL Mortality</td>
<td>1/1/17 - 6/30/18</td>
<td>2.5</td>
<td>5.6</td>
<td>5.4</td>
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The Transplant Center at SSM Health SLU Hospital: 2019 Highlights
Opioid Crisis and Organ Transplants

Finding the silver lining: How the opioid crisis is impacting organ transplants.

It's 2020, and we're living in an era where the opioid crisis has created a great deal of turmoil in not only our communities, but also the health care community that's grappling with how to deal with these overdoses and the aftermath it's created. The National Institute on Drug Abuse estimates that approximately 130 people die each day from overdosing on prescription medications.

The rise in opioid use has resulted in opioid-related overdose deaths – 33,000 in 2015, which is an all-time high – as well as a surge in hepatitis C virus (HCV) cases due to injection drug use.

“On the flipside, there is also this unexpected, yet grim opportunity that's presented itself,” said Henry Randall, MD, MBA, FACS, professor of surgery and executive director of SSM Health SLU Hospital's Abdominal Transplant Center. “Despite how morbid it might sound, these drug-related deaths have the potential to increase organ availability. Here’s why: opioids are killing younger people – most are in their 20s, 30s, and 40s. Compared to the typical organ donor, who is older, these organs are younger and will likely last longer.”

Historically, with nearly 30 percent of drug overdoses occurring in hospitals or health care facilities, less than two percent became organ donors. In fact, in the year 2000, the highest donor rate from overdose patients was 5.6 percent, while 33 states had less than one percent of donor deaths attributed to overdoses.

Previously, there was significant concern about the transmission risk of transplantation-related infections, particularly with hepatitis C. Today, however, transplant surgeons are conducting more transplants with organs deemed as less than ‘perfect,’ thereby expanding the donor pool and saving more lives.

With the medical advances in diagnostics and treatment, transplant surgeons have minimized the risks associated with transplanting an organ from a hep C positive donor. Numerous studies have demonstrated that hepatitis C therapy combined with achieving sustained viral response (SVR) after 12 weeks of therapy result in dramatic decreases in hepatic decompensation events, HCC and liver-related mortality.

These changes are impacting transplantation. In 2017, overdoses accounted for more than 20 percent of donor deaths in 11 states. In 2018, there were more than 36,500 transplants performed, with 10,721 receiving one or more organs from deceased donors. That's more transplants than ever before, according to UNOS. The most striking statistic of all is that 13 percent of U.S. organ donors now come from opioid overdose deaths.

Things are trending in the right direction, yet there is still room for improvement to increase organ utilization and allocation. UNOS has outlined 10 initiatives it’s working on to address organ placement acceleration, including the use of advanced data tools, new technology and collaborative improvement projects. For example, UNOS is supporting the Kidney Accelerated Placement Project (KAPP), which is a new pilot project that creates a pathway to reduce discards by accelerating the placement of extremely hard-to-place kidneys via the Organ Center.

“We’re relying on these types of tools to boost organ utilization across the board,” said Dr. Randall. “With the technological advances and information sharing today, we’re able to better pinpoint which donor organs can produce better outcomes, including those from opioid overdoses.”
Kidney Transplant Program Overview

The need for kidneys continues to be a central issue in the field of transplants – both in the U.S. and worldwide. Nearly 100,000 Americans are on the waiting list for a kidney transplant. Sadly, approximately 12 people die each day waiting for a kidney.

A recent study published in the journal, JAMA Internal Medicine, indicates that nearly 3,500 donated kidneys are discarded every year in the U.S. – an average of 10 per day. Between 2004 and 2014, the U.S. discarded 17.9 percent of the kidneys, which had been recovered; this equates to almost 28,000 donated kidneys over the course of that 10-year period.

While these statistics seem alarming, they are somewhat misleading. Kidneys can be discarded for a number of reasons. Oftentimes, they are abandoned because the donor either had hypertension, diabetes, a heart attack or tested positive for hepatitis C. These conditions can compromise the quality of certain organs, including the kidneys, which means they may not last as long or perform as well as those from a healthier donor.

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As a patient, you don’t want to take just any kidney – you (and we) want to be sure that the donated kidney you receive will give you the best chance for success in the long run,” said Rosemary Ouseph, MD, medical director of SSM Health SLU Hospital's kidney transplant program.

Fortunately, research has shown that some of these formerly discarded kidneys may be more viable than previously thought. The Transplant Center at SSM Health Saint Louis University Hospital is focusing its efforts on improving these rates of kidney transplants, particularly with hepatitis C cases. The hospital specializes in transplanting kidneys from hepatitis C donors into hepatitis-negative recipients.

“We knew this was another way to expand the donor pool. In the past, these kidneys were perceived as ‘lesser quality,’ however, we now know that these hep C-positive kidneys are very viable and a much better alternative than dialysis,” said Dr. Ouseph. “More importantly, the outcomes speak for themselves. Patients who receive these kidneys do exceptionally well.”

SSM Health SLU Hospital is also one of the only kidney transplant centers in the region transplanting donated kidneys into HIV-positive patients.

“Organ transplantation is especially critical for those patients living with HIV,” said Dr. Ouseph. “In the past, not all patients with HIV had the opportunity to get a transplant, because they couldn’t travel long distances to a center specializing in transplants for HIV-positive patients. Now, these patients have the option of undergoing a kidney transplant here versus traveling to Chicago.”

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This approach is part of the Transplant Center at SSM Health SLU Hospital's effort to boost the kidney transplant rate, so more patients can avoid dialysis. It’s also why the Center’s kidney transplant program is largely focused on increasing awareness about the living donor option.

“We know that kidneys that come from living donors last longer than those that come from deceased ones – 15-20 years, on average. They are generally healthier, which means better short- and long-term outcomes,” said Dr. Ouseph. “One of our nephrologists, Dr. Krista Lentine, is leading an incredible effort to expand our living donor program and increase overall awareness.”

The future of kidney transplantation holds great promise. In March 2019, surgeons at Johns Hopkins Hospital in Baltimore, Md. performed the first kidney transplant between a living HIV-positive donor and an HIV-positive recipient. This type of medical breakthrough promises to help increase the number of available organs for the more than one million Americans living with HIV. SSM Health SLU Hospital plans to follow suit in the near future.

The recent signing of the kidney care mandate in Washington D.C. is also bringing much-needed attention to the field. Additionally, there are some incredible things on the horizon in terms of artificial kidney development and the use of artificial intelligence to help reduce the rate of discarded kidneys.

“At SSM Health SLU Hospital, we are proud to be part of bringing some of these advancements to life,” said Dr. Ouseph. “We’re excited for what’s to come. Stay tuned.”

Nearly 100,000 Americans are on the waiting list for a kidney transplant.
Kidney Transplant Testimonial – Michael Hall

A lifetime of chronic kidney issues

For Madison, Alabama resident, Michael Hall, 42, he has never known life without chronic kidney issues. His world has always revolved around the limitations of his condition. Hall was born with only one kidney, and unfortunately, that kidney started failing when he was a young child, leading to frequent bladder infections and urinary tract infections. It was functioning at 40 percent.

“By the time I was in first grade, I had to undergo a urostomy, wearing a bag to collect my urine,” recalled Hall. “It was the only way to keep my one kidney healthy. Unfortunately, it was also a hassle, especially when the bag would leak. I didn’t want people to know I had it either.”

Hall spent his childhood, adolescence and young adult years contending with the urostomy and urine bag. It was part of his every day. He didn’t know life without it.

Then, in June 2015 at 38 years old, Hall was diagnosed with renal failure, which required dialysis. In addition to working 40-plus hours a week, he would undergo dialysis three days a week at four hours per treatment.

“This sounds crazy, but there was a silver lining with dialysis: it reduced my total urine output, which meant I didn’t have to worry about my urine bag leaking as much,” said Hall. “It was a really nice side effect, if you can call it that.”

Entering the kidney waitlist

That would be short-lived though: Hall would soon need a new kidney. In December 2015, six months after starting dialysis, he was placed on Vanderbilt University’s transplant list. He was told it could take anywhere from three to five years for a kidney to become available.

“I was on board with getting a new kidney under one condition: I didn’t want a kidney that would require the urostomy bag. I needed that reassurance,” said Hall.

An unexpected connection to SSM Health SLU Hospital

In the meantime, Hall continued to undergo his dialysis treatment as he waited for the news of a new kidney. In August 2018, his boss, Hossaa Bartlett, who was aware of his medical situation, approached Hall to let him know that his son, Bart, just happened to work for the Transplant Center at SSM Health Saint Louis University Hospital. He thought the two should connect.

“I mean, what are the odds, right?” said Hall. “I reached out to Bart to get some insight and guidance from him about the entire transplant process. He was really encouraging.”

Four months later, Hall received bad news from Vanderbilt – his time on the transplant list was extended by five more years. Keep in mind, he had already waited three years. The idea of waiting for another five years was unsettling.

“I immediately called Bart to tell him, and that’s when he mentioned dual listing. I could undergo testing to get on SSM Health SLU Hospital’s transplant list, ideally boosting my chances of getting a kidney,” said Hall.

In March 2019, Hall traveled to St. Louis for testing. He echoed the same concerns to SSM Health SLU Hospital’s transplant team – he wanted the assurance that he wouldn’t need an urostomy bag with a new kidney.

“Mike suffered from prune belly syndrome (PBS), which meant he had difficulty of the abdominal muscles around the bladder. He had frequent infections to the point where the kidney wasn’t functioning properly,” said Mustafa Nazzal, MD, a SLUCare transplant surgeon at SSM Health SLU Hospital.

“Additionally, the bladder had been sitting there unutilized, so we knew that could create some surgical challenges. However, we felt confident that with diligent preoperative planning, we could connect the new kidney to the ureter.”

Less than five months later, Hall was officially on SSM Health SLU Hospital’s transplant list. Six weeks later, Hall got the call he’d been waiting nearly six years to receive: he was matched with a donor kidney.

“Once I had the confirmation, my sister and I were in the car three hours later heading to St. Louis,” said Hall.

The gift of a new kidney

Hall underwent one more round of dialysis prior to his transplant surgery to help detoxify his system. His surgery began shortly after midnight on September 20, 2019 and took approximately six-and-a-half hours. Dr. Nazzal and his team were able to successfully connect Hall’s original ureter to his new kidney’s ureter, which meant he would no longer need a urostomy bag. Better yet, the new kidney started working immediately.

“Mike’s surgery went beautifully,” said Dr. Nazzal. “Since his case is pretty rare, we didn’t have a great deal of data to work from. We can’t anticipate everything, but by preparing as a team and working with our urology colleagues, his transplant surgery was ultimately success.”

Hall stayed in ICU for three days before being transferred to a recovery unit for the next few days. He returned to work less than two months later and undergoes biweekly lab testing.

“I’m still in shock at how it all worked out. It was meant to be, but it’s pretty surreal,” said Hall. “I feel great! This is the best I’ve ever felt. To be fair, I’ve never had a healthy kidney, so this is the first time in my life I’ve ever experienced that.”

Hall has so much to look forward to now. He is getting ready to book a beach vacation – the first one where he won’t have to worry about an urostomy bag.

“I am forever grateful to my boss for connecting me with Bart and the transplant team at SSM Health SLU Hospital,” said Hall. “It’s one of the best hospitals I’ve ever been to, and I appreciate how all of the doctors and staff cared for me. Bart was also an incredible resource, helping me navigate the process. They all changed my life 100 percent.”
Kidney Transplant Recipient Testimonial – Ken Smith

The beginning of a difficult kidney transplant journey

Smith’s kidney transplant journey began in 1979 when he was diagnosed with focal segmental glomerulosclerosis (FSGS) at the age of 10. FSGS is a chronic glomerular disease that damages the glomeruli (the tiny filtering units inside the kidney that blood is cleaned), causing scarring in the kidney. It can be due to an infection, or drug, or a disease that affects the entire body, like diabetes, HIV infection, sickle cell disease or lupus. In Smith’s case, doctors believe his FSGS may have been triggered by a case of rheumatic fever he had as a child.

There are FSGS treatments available, which can slow the progress of the disease, however, for some patients, their FSGS gradually gets worse, leading to kidney failure. The only solution at that point is either dialysis or a kidney transplant. Unfortunately, Smith’s FSGS quickly progressed over the next three years, requiring dialysis for one year before eventually failing and putting him back on dialysis in 1989. Regular dialysis treatments, three days a week, became part of his regular routine for the next 10 years.

A dedicated dialysis patient

Smith somehow managed to balance all of this with a busy schedule. Over the course of 30 years, he earned a Bachelor Science (1993) and Master of Arts (2005), worked full-time, and started a family, without missing a single dialysis treatment.

“From pre-transplant to post-transplant, I appreciate this. From no life to having a job, being able to travel and just live life,” said Smith.

Dr. Nazzal was pleased with how quickly the kidney started functioning. Smith would spend the next five days recovering in the hospital before being discharged home. He returned to work just two months later. Better yet, Smith felt really good and more alert than he had in a long time. Even his color changed from a grayish hue to a lighter, softer pink.

“I have a young son, and I got tired of not being able to take long bike rides or just run around with him. My dialysis treatments were holding me back, literally and figuratively.”

Finding hope and a resolution

Smith would continue his dialysis at home for another 10 years – that’s 20 consecutive years of dialysis. He was back on the transplant list, but his high antibodies count combined with low blood pressure created a major hurdle.

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After all, Smith had a lot to live for – his wife, Katy, and their nine-year-old son, Augustin, as well as his job as the natural resource manager at Mastodon State Historic Site in Imperial, Mo. In May 2015, he and Kate met with Mustafa Nazzal, MD, a SULCare transplant surgeon at SSM Health Saint Louis University Hospital, which included a positive discussion about the possibility of another transplant.

“Given Kert’s history with FSGS and multiple failed kidneys, we knew his next transplant would require much more consideration with post-operative medication and monitoring,” said Dr. Nazzal. “However, we were cautiously optimistic that he could experience a positive outcome this time around. We just had to wait for the right kidney to become available.”

They didn’t have to wait long. Three months later, on August 24, 2019, while shopping at Target with his son, Smith received a call from Cody Wooley, BSN, RN, coordinator for SSM Health SLU Hospital’s Living Donor Program, who informed him that the hospital might have a kidney available. She told him to go home and wait for a follow-up call.

“I knew there was a possibility that it wouldn’t work out, so I prepared for the worst while hoping for the best,” said Smith. “To better prepare, I underwent a dialysis treatment at home, just in case.”

Wooley called him back shortly thereafter to inform him that this was a really good match and to come to SSM Health SLU Hospital the next morning to undergo blood work and begin preparing for surgery.

“On a scale of one to 20, with one being the best match, this kidney was ranked as a two,” said Smith. “That’s when I felt that this was meant to be, and everything was going to work out.”

A new kidney and a new outlook

On August 26, 2019, Smith successfully underwent his fourth kidney transplant.

Smith had become a professional dialysis patient. By 2009, after 10 years of undergoing in-center dialysis treatments, he decided to build a small room in his basement with a hemodialysis machine, so he could create his own treatment schedule.

“Dialysis creates a tither of sorts, which can severely limit your ability to travel and just live life,” said Smith. “I have a young son, and I got tired of not being able to take long bike rides or just run around with him. My dialysis treatments were holding me back, literally and figuratively.”

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“My family and I just booked a trip to Disney World in Florida, and for the first time in a long time, I don’t have to worry about my dialysis treatments.”

Smith is taking two anti-rejection medications and blood pressure medication to help inhibit the FSGS from recurring. Dr. Nazzal and his team are monitoring Smith with weekly lab work and checkups every six weeks. They are also working to get Smith approved for special medications to help reduce the recurrence of his FSGS.

“If from pre-transplant to post-transplant, I appreciate how my medical team at SSM Health SLU Hospital continually collaborates with each other and with specialists at other hospitals, looking for the newest treatments to help manage my FSGS and making sure that this kidney is ultimately successful,” said Smith. “All the while, they never gave up on me. They truly are second-to-none when it comes to transplant care.”

Most people can’t imagine undergoing a kidney transplant. After all, it’s a major, life-changing surgery. But, what about two, three or even four kidney transplants?

Although a particularly exceptional scenario, it’s one that is all too familiar to Ken Smith, 51. He’s undergone four transplants over the course of nearly 40 years. It’s been a difficult road, but one he has traveled well and even come to appreciate.

How one man took back his health, life and freedom after failed kidney transplants and more than 20 years on dialysis.
Living Donation Program

Living donor kidney transplantation is the best treatment option for patients with kidney failure. Kidneys that come from living donors often produce excellent results for recipients, since they are healthier and can be more quickly available.

Living donor kidney transplantation is transformative for patients and families,” said Krista Lentine, MD, PhD, SLUCare nephrologist, researcher and medical director of living donation at SSM Health Saint Louis University Hospital. “It is such a privilege to witness the awe-inspiring altruism of organ donors and the courage, hope and gratitude of those who seek and receive transplants in our daily work.”

The laparoscopic approach to the donation surgery is also an important advance in facilitating recovery and return to normal activities. The SSM Health SLU Hospital team includes two highly skilled laparoscopic donor surgeons: Chintalapati Varma, MD, FRCS, FACS, a SLUCare abdominal transplant surgeon, surgical director of pediatric liver and renal transplantation, and Minh-Tri Nguyen, MD, a SLUCare abdominal transplant surgeon.

In St. Louis, there are nearly 1,000 people waiting for a kidney.

Rosella Jumangit’s life was changed through a kidney transplant from donor Caroline Massey.

“Typically, a living donor goes home after two days in the hospital,” said Dr. Varma. “Within a couple of months, most donors return to all normal activities.”

At SSM Health SLU Hospital, the Living Donor Program team is working to remove barriers to living donation and increase transplant opportunities for more patients in need. Dr. Lentine – a world-renowned researcher who co-chaired the international work group that developed guidelines for living donor care – and the transplant team at the hospital are leading the way. They have partnered with various organizations, including MidAmerica Transplant, the National Kidney Foundation, and the Scientific Registry of Transplant Recipients, to support initiatives that are advancing and optimizing organ donation.

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— Krista Lentine, MD

The benefits are numerous and include:
• Shorter time on dialysis before transplantation. Patients are able to get off dialysis sooner or even avoid it all together.
• Procedure can be scheduled at a time that works best for the donor and recipient. Planning the date of transplant surgery in advance also allows optimal attention to any medical issues before surgery.
• Fewer complications after transplant and immediate function of the transplanted organ.
• Improved transplant graft survival. The average living donor transplant lasts 18 to 20 years versus eight to 10 years for a deceased donor transplant.
• Overall better recipient quality of life.

Additionally, living donor kidney transplantation can allow individuals in need to bypass the lengthy waiting list. For some, the wait can take years. Currently, there are more than 100,000 people on the national kidney transplant waiting list in the U.S. In St. Louis, there are nearly 1,000 people waiting for a kidney. Sadly, approximately 12 transplant candidates die every day or become too sick before a deceased donor organ becomes available.

In the U.S., approximately 30 percent of all transplanted kidneys come from living donors. Through the act of donation, a healthy person can help a person with end-stage kidney failure return to a healthier, more functional life.

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Living Donation Program (continued)

The Big Ask, The Big Give
For example, SSM Health SLU Hospital partnered with the National Kidney Foundation to offer, ‘The Big Ask, The Big Give’ educational workshops – locally and in outreach communities we serve.

“Sharing the need for an organ donor can be a daunting task,” said Dr. Lentine. “A key goal of ‘The Big Ask, Big Give’ workshop is to teach family members and friends to serve as advocates who can share the need on behalf of the kidney patient.”

In this innovative four-hour workshop, the SSM Health SLU Hospital’s living donor team educates kidney patients and their loved ones about kidney failure, transplant and living donation, and how to share about the need for an organ donor with the patient’s social network.

“We also want donors to know that our primary goal is to carefully assess their health and help them decide if donation is right for them,” said Cody Wooley, BSN, RN, coordinator for SSM Health SLU Hospital’s Living Donor Program. “Every living donor that we work with at the hospital is assigned a different medical team from the recipient. This ensures that the donor’s needs and concerns are addressed separately from those of the recipient. We work as the donors’ advocates.”

‘The Big Ask, The Big Give’ program is open to all kidney patients in the community. In August 2019, Dr. Lentine, Wooley, and the National Kidney Foundation team held an outreach workshop in Springfield, Mo. It was so well received that the team plans to make this an annual event. The program is working – more and more donors are coming forward and helping to save lives.

Research, policy and advocacy
Dr. Lentine and her team are also heavily involved in research, policy and advocacy to improve living donor and transplant patient care. Dr. Lentine chaired the United Network for Organ Sharing Living Donor Committee, the group that helps create core policies for the care of living donors in the U.S. Participating in national policy dialogue aligns with the program’s mission to optimize the evaluation, informed consent, and follow-up care of living donors.

With Dr. Lentine as a steering committee member, the SSM Health SLU Hospital program is also one of 10 transplant centers in the country chosen to participate in the Scientific Registry of Transplant Recipients (SRTR) Living Donor Collective. This pilot project seeks to develop the first prospective national living donor registry. The registry is designed to follow the health and well-being of living donors over their lifetimes.

In collaboration with groups such as the American Society of Nephrology and the National Kidney Foundation, Dr. Lentine has lobbied in Washington, DC, and at the Missouri state capitol for removal of financial disincentives to living donation – such as better reimbursement of expenses incurred in the donation process and protection from insurance discrimination. The team also conducts research funded by the National Institutes of Health to examine novel tools for predicting health outcomes in living donors.

“‘The more we understand risk and disclose it transparently, the more we can advance living donation within a defensible system of practice,” said Dr. Lentine.

Together, these research and policy efforts help remove barriers to living donation, promote living donor safety, and help more healthy, willing persons consider sharing the gift of life with those in need. These are also the same critical elements needed to facilitate a successful living donation program. And that’s exactly what the physicians, surgeons and coordinators at SSM Health SLU Hospital are doing.
Living Kidney Donor Testimonial – Monica Witherspoon

Choosing to give the gift of life: one woman’s journey to becoming a kidney donor.

What gift can you give to the woman who gave you your life? For St. Louis resident, Monica Witherspoon, 34, she chose to give her mom the ultimate gift by donating one of her kidneys.

“For me, the decision to give my mom a kidney was a no-brainer,” said Witherspoon.

Witherspoon’s mom, Marilyn, 61, began experiencing kidney issues more than two years ago. It started with what seemed like a common cold and then turned into a chronic cough. Her creatinine levels had also decreased. Unfortunately, no treatments seemed to work.

Doctors advised Marilyn that she was in the early stages of renal failure. The only logical connection seemed to be her history with sarcoidosis of the liver, which she was diagnosed with more than 20 years ago. Sarcoidosis is an inflammatory disease in which granulomas, or clumps of inflammatory cells, form in various organs, causing inflammation.

When mom needs a kidney

Although surgery seemed to help, the disease eventually affected Marilyn’s kidneys, causing kidney failure due to excessively high calcium levels in the blood or urine. She started dialysis with the understanding that she would eventually need a kidney transplant.

“When the conversation around a kidney transplant started, I knew it was in my mom’s best interest to receive a kidney from a family member or friend,” said Witherspoon. “That way, she wouldn’t have to wait on the list for years like so many others.”

The family was amazed by how many people expressed interest in helping Marilyn. From family members and friends to work colleagues and church members, there were a number of people who offered to get tested to see if they were a match. Yet, Witherspoon felt a sincere calling to be the one to ultimately help her mom.

“I decided early on that I wanted my mom to be better and that I would be the one to do it. I didn’t want her to be sick anymore, and I wanted her to live a long, healthy life,” said Witherspoon. “I also put this in God’s hands and rested on my faith knowing that He is truly a miracle worker, I also knew that we were in good hands with our medical team at SSM Health SLU Hospital!”

The screening process

Although they are the same blood type, Witherspoon knew she would have to undergo extensive testing to determine if she was a match. In April 2019, she began the evaluation process at SSM Health Saint Louis University Hospital, meeting with Krista Lentine, MD, PhD, SLUCare nephrologist, researcher and organ donation advocate, and her transplant team.

For Witherspoon, the comprehensive screening process included a number of medical appointments, blood testing, urine testing, a three-day test, an ultrasound on her bladder, dietary assessments and recommendations, as well as a psychological examination, to name a few. These are all part of the standard protocol to fully evaluate kidney donors to help determine if they’re in good physical and mental health to undergo the surgery.

“The evaluation process is meant to protect the donor, ensuring that he or she is healthy enough to donate a kidney,” said Dr. Lentine. “While there are inherent risks of living donation and with any surgery, the rigorous evaluation process provides a systematic way of determining any specific, known risks for the donor.”

A strong support system

Throughout the three-month process, Witherspoon remained steadfast in her commitment to donating her kidney. Anytime she had questions, she reached out to Cody Woolery, BSN, RN, coordinator for SSM Health SLU Hospital’s Living Donor Program.

“Whenver any of my test results would come in, I often called or texted Cody to clarify what that meant,” said Witherspoon. “She would readily respond to me, answer my questions, and put my mind at ease. That support was critical for me.”

For Woolery, she considers it just part of her job, and she’s happy to be able to offer that type of support to her patients.

“We care for our donor patients separately from the recipients, who have a different team caring for them. We don’t ever want our donors to feel like they are just a kidney. We get to know them and care for them on a personal level,” said Woolery.

Giving the gift of life

On July 31, 2019, Witherspoon and her mom underwent kidney transplant surgery at SSM Health SLU Hospital. Chintalapati Varma, MD, FRCS, FACS, a SLUCare abdominal transplant surgeon, surgical director of pediatric liver and renal transplantation at SSM Health Saint Louis University Hospital, performed Witherspoon’s surgery to extract her kidney, which went beautifully.

Once the kidney was transplanted into Witherspoon’s mom and connected, it began working immediately.

For Witherspoon, the surgery was actually much easier and less painful than she expected. Dr. Varma was able to remove her kidney by going through her C-section scar, which is how her three children were delivered.

“My recovery felt very similar to what it was like after I had my C-sections,” said Witherspoon. “In a way, it seemed it was meant to be. It’s like I had those C-sections to prepare me for this journey of donating my kidney.”

The surgery went as expected in Witherspoon’s mind. Although she felt sore physically, she didn’t notice anything related to missing her kidney. The emotional toll, however, was another story.

“In the months leading up to surgery, I didn’t feel any major emotions,” said Witherspoon. “It was when I woke up after the transplant, that everything hit me. I was relieved that it finally happened and just trying to process everything. I had absolutely no regrets. And when I saw my mom shortly after, it was glowering, I knew it was all worth it.”

Witherspoon would spend three days in the hospital before being discharged home to continue recovering. Her sister, Tiffany, stayed with her for the next two months to help her recover and take care of her three kids.

Witherspoon returned to work three months later and is doing well seven months post-transplant. She listens to her body, takes care of herself, and slows down when she needs to. She is also encouraged seeing how well her mom is doing with her new kidney.

“That made it all worth it, and I would do it again in a heartbeat,” said Witherspoon.

The entire experience has left Witherspoon inspired and wanting to share her experience with others.

“I came to realize how many people are desperately in need of a kidney. Yet, no one talks about it, especially in the African American community,” said Witherspoon. “Since I became a donor, I talk about it non-stop. And now others are starting to open about it. Want people to know it’s not as scary as you think it is. I want to be a point of reference and support for others on this same journey.”

Marilyn and Monica Witherspoon

“Thank you to everyone who made this possible. No matter how you choose to give the gift of life, your impact is incredible.”
More than 1,500 patients die every year waiting for a liver.

1,200 patients are taken off the waiting list because they’ve gotten too sick to undergo the surgery.

Approximately 8,000 liver transplant surgeries are performed in the U.S. every year.

In 2019, SSM Health SLU Hospital’s liver transplant specialists performed 32 complete liver transplants.

Liver Transplant Program Overview

Liver transplantation: How HCV antiviral treatments help expand access for patients.

The liver is the largest internal organ in the human body, performing more than 500 functions and producing 1,000 enzymes and other proteins that are essential for good health. A person cannot live without his or her liver. When the liver has failed, and transplantation is necessary, a donated liver – from a living donor or an otherwise healthy person who has passed away – may be the best option.

Liver donations are critical for those who are on the waiting list. In fact, more than 1,500 patients die every year waiting for a liver, while another 1,200 patients are taken off the waiting list because they’ve gotten too sick to undergo the surgery. Fortunately, with new treatments and initiatives, there has been some improvement in the area of liver transplants.

The liver transplant program at SSM Health SLU Hospital

The following are the key factors SSM Health SLU Hospital transplant specialists use to help determine if a patient needs a liver transplant:

- Severity of condition
- Other medical conditions the patient has
- A history of tuberculosis and chronic infections like HIV
- Overall physical condition
- Mental well-being
- Level of support from family or friends

“In recent years, we’ve seen a slight increase in the number of adult liver transplants, which is largely due to more deceased donors and living donors entering into the transplant system,” said Chintalapati Varma, MD, FRCS, FACS, a SLUCare abdominal transplant surgeon, surgical director of pediatric liver and renal transplantation at SSM Health Saint Louis University Hospital. “On the other hand, the number of liver transplant candidates on the waiting list has also dropped, particularly amongst those with hepatitis C virus (HCV), thanks to new antiviral drugs being used to treat the virus. SSM Health SLU Hospital has helped play an integral role in these HCV antiviral treatments.”

According to the American Liver Foundation, approximately 8,000 liver transplant surgeries are performed in the U.S. every year. In 2019, SSM Health SLU Hospital’s liver transplant specialists performed 32 complete liver transplants – six more than in 2018 – with high-quality outcomes. The goal is to do even more liver transplants in 2020.

“I’m also hopeful that we can expand our liver donor program at SSM Health SLU Hospital to someday include living donors,” said Dr. Varma. “With the success that we’ve seen with our living kidney donation program, there is an opportunity to do something similar with live donor and split liver transplantation.”

A living liver donation gives the recipient the opportunity to receive an organ sooner. People on the transplant list regularly wait months to years to receive an organ from a deceased donor. With a compatible living donor, a transplant patient may receive a live donor liver within weeks.

SSM Health SLU Hospital’s transplant program does not currently include live donor transplants for liver patients; however, this is something that the transplant team is working towards for the future.

“For a patient who has end-stage liver disease, receiving a live, healthy portion of a donor’s liver may ultimately help his or her liver disease symptoms resolve immediately. It’s an incredibly promising option for some patients,” said Dr. Varma.
Liver Transplant Testimonial – Karl Reinlein

How the unexpected diagnosis of NASH disease and liver cancer led to a life-changing transplant.

Non-alcoholic steatohepatitis (NASH) is the liver manifestation of a metabolic disorder and is the most severe form of non-alcoholic fatty liver disease (NAFLD). NASH is closely related to the triple epidemic of obesity, pre-diabetes, and diabetes. But its symptoms are often silent or non-specific to NASH, making it difficult to diagnose. As a result, NASH patients can remain unaware of their condition until late stages of the disease.

That was the case for Karl Reinlein, 71, of St. Louis County. He had led a very active, healthy lifestyle, playing tennis and biking regularly. He didn’t fit the profile of someone who might have NASH disease. He also didn’t experience any unusual symptoms. It wasn’t until a routine blood test at one of his annual checkups in 2008, which raised a red flag. His blood enzymes and cholesterol were much higher than they had been in the past.

“My primary care physician referred me to Dr. Bruce Bacon at SSM Health Saint Louis University Hospital for a liver biopsy,” said Reinlein. “That’s when I was diagnosed with NASH disease. It was a little bit concerning, but I felt good and was hopeful that the disease wouldn’t progress.”

The effects of NASH disease

For the next several years, Reinlein remained largely unaffected by his NASH disease. Eventually, it did progress, causing inflammation and scarring of the liver (cirrhosis). Patients with NASH-related cirrhosis are at higher risk of end-stage liver diseases, such as loss of liver function (decompensation), liver failure, and liver cancer.

In 2017, Reinlein received some devastating news: he was diagnosed with hepatocellular carcinoma (HCC), which is a form of liver cancer. Further testing revealed a large nodule — the size of a ping pong — on his liver.

“That definitely caught me off guard,” said Reinlein. “I still felt pretty good and remained very active, so cancer just didn’t seem like a possibility.”

In December 2017, Mustafa Nazzal, MD, a SLUCare transplant surgeon at SSM Health SLU Hospital, surgically removed the tumor on his liver. There were also some other smaller lesions (between three and five centimeters) on Reinlein’s liver, which were treated in January 2018 with trans-arterial chemoembolization (TACE). This is a treatment that blocks or slows down the blood supply to tissues or an organ.

Given the extent of damage to Reinlein’s liver due to NASH disease and the subsequent liver cancer, a transplant was the only cure.

“In advanced stages of NASH disease, like Karl’s case, liver transplant may be the only option,” said Dr. Nazzal. “The disease is devastating. In fact, NASH is expected to become the leading cause of liver transplantation in the U.S. over the next five years.”

Weighing your options

With the risks and complications associated with a liver transplant, Reinlein wanted to fully understand his options, so he visited two other hospitals for second and third opinions.

“One of the hospitals felt too busy for me with so many people. They had quality doctors, but they seemed rushed from dealing with too many patients. The other hospital confirmed I was receiving the same treatment and diagnosis they would provide. I ultimately — and confidently — chose to go with SLU Hospital for my liver transplant,” said Reinlein.

“Eventually, when I came to SLU Hospital for clinicals, I was grateful that I saw a team of clinicians. I was amazed by the number of doctors and nurses who were working on my case. Each one of them really took me of guard,” said someone who might have NASH disease. He still felt have NASH disease. He

In January 2018, Reinlein was officially put on the transplant list, we had to be sure that his liver cancer was in remission,” said Dr. Nazzal. “That was our goal. He was a really good candidate for a transplant, and we didn’t want the liver cancer to jeopardize his chances.”

In January 2018, Reinlein was officially put on the UNOS transplant list. Then, in July 2018, UNOS followed up on his case and requested a full body scan to ensure that he was still cancer-free.

“Unfortunately, the scan indicated a spot on my lung, which required a biopsy,” said Reinlein. “My doctors were really concerned that it might be cancer that had spread. It was a bleak, emotionally shattering moment.”

Turns out, the spot wasn’t cancerous. Reinlein and his team of doctors were relieved. He could remain on the transplant list. Two months later, his wait was finally over: a liver had become available.

A life-changing liver transplant

On September 26, 2018, Chintalapati Varma, MD, FRCS, FACS, a SLUCare abdominal transplant surgeon, surgical director of pediatric liver and renal transplantation at SSM Health SLU Hospital, worked together with Dr. Nazzal to successfully complete an 11-hour liver transplant procedure on Reinlein. When they removed his diseased liver, they were shocked to see how scarred and deteriorated it had become.

“To put it simply, his liver was so badly damaged that it was essentially a ticking time bomb just waiting to become fully blown cancer,” said Dr. Varma. “It was good that he got the new liver when he did.”

Reinlein spent the next four days recovering in the ICU at SSM Health SLU Hospital. A testament to his active lifestyle, he was up walking around the unit the next day.

“All the staff – even the cleaning staff would call me by name – nurses, receptionists,” said Reinlein. “Trust me, I’m not an easy guy to please. Unilaterally, everyone I encountered during my stay was so kind and considerate. It made the entire process as bearable as it could’ve been.”

A new lease on life

When Reinlein returned home, he spent the next two to three months recovering. He didn’t experience any side effects or other related issues. He was playing tennis again 90 days post-transplant. Better yet, his new liver has been a game-changer in terms of his health.

“My blood tests today are like they were when I was in my 20s. It’s renewed me in so many ways,” said Reinlein. “I don’t take this gift I was given for granted. I’m really going to take care of this liver. It’s the respect I want to give to the person who gave me this gift.”

Reinlein undergoes an MRI every three months, but he remains cancer-free to this day. And he doesn’t take a single day, tennis match or bike ride for granted.

“Karl’s outcome is exactly what we had hoped for,” said Dr. Varma. “To see him doing so well today is a testament to his own commitment to staying healthy and active.”
Impact of Hepatitis C

Effective hepatitis C treatment is changing the transplant field.

HCV-positive donors can donate to HCV-negative recipients.

Hepatitis C virus (HCV) infection causes approximately 40 percent of all chronic liver disease in the United States. According to the Centers for Disease Control and Prevention (CDC), out of 100 people infected with hepatitis C, approximately 60 to 70 will develop chronic liver disease — specifically, hepatitis and fibrosis — and five to 20 will develop cirrhosis over a period of 20 to 30 years.

An estimated one to five out of 100 people with chronic HCV will die of cirrhosis or liver cancer resulting from the infection. Liver failure due to HCV is one of the most common reasons for liver transplantation in the United States.

The only effective treatment for liver cirrhosis and its complications is a liver transplant, however, there is a major shortage of organs for transplantation. There are nearly 13,000 patients on the liver transplant wait list, but only 8,000 or so available for transplant.

In 2014, new, revolutionary medications for HCV were introduced — direct antiviral agents — that can achieve a cure in more than 95 percent of patients with HCV. This helped to cure a lot of patients; however, there is still a large number of patients with liver cirrhosis that cannot be reversed, who end up needing a liver transplant.

Despite the new treatment for HCV, 12 percent of deceased donors were HCV-positive, according to the Mid-America Transplant organization. This could be due to the opioid epidemic. Although these are mostly young donors with very healthy organs, most of the time, their organs are discarded due to concern of infecting the recipient with HCV.

In 2019, with the implementation this new protocol of transplanting healthy organs from HCV-positive deceased donors to HCV-negative recipients, SSM Health SLU Hospital performed 12 to 15 liver and kidney transplants from HCV-positive donors to HCV-negative recipients.

“Another side of this is that there are younger HCV-positive donors today due to the opioid overdose epidemic,” said Dr. Nazzal. “Therefore, patients are benefiting from not only getting the liver or kidney they need faster, which we can treat, but they’re also getting a younger liver or kidney.”

Both physicians and patients should be encouraged to take a closer look at HCV-positive deceased donors, especially for sicker patients, knowing they can treat or even prevent the HCV post-transplant. For these patients with declining quality of life, they know this may be their only chance to feel better and get healthier. Most patients facing such dire medical circumstances are also willing to take their chances if it means they can get the liver or a kidney they so desperately need.

Effective antiviral HCV treatment is a game-changer

Thanks to the advances in effective antiviral HCV treatment — pioneered by Bruce Bacon, MD, a SLUCare transplant hepatologist at SSM Health Saint Louis University Hospital — we have started a new protocol to use HCV-infected donor organs if otherwise they are healthy organs. We even extended the transplant protocol for HCV-positive donors to give organs to HCV-negative recipients.

With HCV treatment, patients who undergo 12 weeks of therapy experience a sustained viral response (SVR) with a 95 percent cure rate and very few side effects. Additionally, numerous studies have demonstrated that HCV therapy and the achievement of SVR result in dramatic decreases in hepatic decompensation events, HCC and liver-related mortality.

The new transplant protocol calls for HCV-negative recipients to receive HCV antivirals starting shortly after surgery. Thus, achieving an early cure and preventing any long-term complications of HCV.

Since HCV-positive donors are now a viable option for HCV-negative recipients, there should be fewer discarded organs from these often-overlooked patients. It’s a significant number. Moreover, patients are getting transplanted faster, and this is especially important for patients with severe complications from liver disease that would otherwise die on the waiting list.

The HCV treatment has also impacted the pre-transplant process. In the past, an HCV-positive patient who needed a liver would be treated before undergoing a transplant.

“Since we have the infrastructure to treat HCV, we decided in 2018 to stop treating HCV recipients who were on the waiting list,” said Mustafa Nazzal, MD, a SLUCare transplant surgeon and associate professor in the Department of Surgery, Division of Abdominal Transplant Surgery at Saint Louis University School of Medicine. “That way, we could give them an HCV-positive liver and treat them with the 12 weeks of therapy afterwards. This boosted their chances of getting a liver. Post-transplant, we administer the 12 weeks of medication to treat their HCV. We were the first hospital in Missouri to implement this approach.”
Presence in Springfield, Mo.

Improving access to kidney and liver transplant care by traveling to where the patients are.

Organ disease is a major public health issue. Today, 26 million Americans suffer from kidney disease, which can eventually lead to kidney failure. In most cases, transplant is often the preferred treatment. Unfortunately, the transplant waiting lists are long, and the advanced care required for the transplant process isn’t always easily accessible.

The challenges of limited access to transplant care

For anyone in need of a kidney or liver transplant, access to advanced medical care is critical – both pre- and post-transplant. For patients in outlying areas around the country, this level of care has been largely out-of-reach, forcing them to travel great distances. Furthermore, if they eventually undergo a transplant, their organs may still fail if they aren’t able to get the post-transplant care needed to maintain and monitor their health.

Historically, Springfield, Mo. is one of those areas, where access to transplant care has been limited, requiring long distance travels. These patients have been able to get nephrology and dialysis services from a variety of local hospitals and practices. However, kidney transplants are not performed in the Missouri Ozarks region. So, local patients with kidney failure are often referred to major transplant facilities in Kansas City, Columbia and St. Louis. The closest transplant center to Springfield is located in Kansas City, 164 miles away – nearly three hours away.

When advanced transplant care does the traveling

SSM Health Saint Louis University Hospital has been treating transplant patients from the Springfield area for many years. Chintalapati Varma, MD, a SLUCare transplant surgeon, recognized the challenges that these patients had to face with accessing treatment. Working with the hospital’s transplant team, he recommended launching a satellite specialty clinic at Ozarks Community Hospital in February 2018 – only 10 miles away from downtown Springfield.

“Our goal is to ease the stress that our patients experience with having to make so many trips to St. Louis,” said Dr. Varma. “Although we can’t prevent them from traveling to St. Louis altogether, this clinic allows them to get that critical care without having to drive such long distances as often.”

SSM Health SLU Hospital transplant team members – including a transplant nephrologist, surgeon, hepatologist and coordinator – are available at the clinic on the last Friday of every month, serving potential transplant patients: patients listed for transplants; and transplant recipients.

Rosemary Ouseph, MD, medical director of SSM Health SLU Hospital’s kidney transplant program, makes the trek nearly every month to Springfield. She, along with Dr. Varma, have been an integral part of the clinic’s success, working with patients to prepare them for the transplant process.

The benefits of meeting transplant patients where they are

“One of the advantages of having our Springfield Clinic is that transplant candidates can get a better gauge of the entire process before making the commitment. They can also bring along a family member without having to make such a long trip,” said Dr. Ouseph. “They also get the chance to meet their transplant team and become comfortable with us.”

Scheduling their pre-surgery appointments at the Springfield Clinic allows patients to learn what to expect — including navigating SSM Health Saint Louis University Hospital’s campus – prior to making the weeks-long transplant trip to St. Louis. It also makes it easier for them to have post-transplant follow-up appointments via telemedicine closer to home. Ultimately, bringing these services to the community means each patient’s care is expedited and their outcomes tend to be more positive overall.

“The whole transplant team has been gratified with the response to this clinic and are happy to make the trek to Springfield. It’s the least we can do for the community,” said Dr. Ouseph.

The Springfield Clinic is making a difference by fulfilling a need for transplant patients in Springfield and beyond, including Joplin, Branson and northern Arkansas. From February 2018 to February 2019, the clinic experienced a 316 percent growth in kidney referrals and 175 percent growth in kidney evaluations. For the same time period, the clinic saw a 113 percent growth in liver transplant referrals and 63 percent growth in liver evaluations.

From February 2018 to February 2019, the clinic experienced a 316% growth in kidney referrals.

“Our presence in Springfield has also helped increase awareness overall about transplants,” said Dr. Ouseph. “By establishing relationships with nephrologists in the area, we’ve been able to provide critical support, while making the process faster and more seamless. We work together as a team to ensure better patient satisfaction and outcomes. We recently had our first telemedicine post-transplant appointment, which went really well. This gives us a chance to assess a patient’s vitals, review medications, and make any adjustments as needed.”

What’s next

Given the success of the satellite clinic in Springfield, SSM Health SLU Hospital is currently exploring the possibility of opening a liver clinic in the Cape Girardeau area in the coming months. Much like Springfield, Cape Girardeau lacks convenient access to the advanced liver care that’s so critical for pre- and post-transplant patients.
Springfield Kidney Transplant Patient – Curtis Martin

Springfield, Mo. patient undergoes lifesaving kidney transplant thanks to living donation from his wife’s relative.

Kidney disease affects an estimated 37 million people in the U.S. – approximately 15 percent of adults. Springfield, Mo. resident, Curtis Martin, 38, is one of those people. Since he was diagnosed 15 years ago, he practically had no symptoms until 2018. The loss of function was gradual, but, for Martin, it soon became life-threatening.

“Kidney disease is a silent disease for most people,” said Martin’s wife, Bethany. “It didn’t affect our daily life for a long time... until it did.”

Martin was soon told by his nephrologist that he would need a kidney transplant. This shocked him and his wife. Not to mention that most people who knew them weren’t aware that he had kidney disease.

Guidance on how to ask

Getting the word out about Martin’s need for a kidney would prove to be another feat altogether. They knew a living donor would be the best route to avoid a lengthy wait on the national transplant list. But how does one go about asking another to consider making such a generous gift?

Fortunately, a workshop in the area – ‘The Big Ask: The Big Give’ – hosted by the National Kidney Foundation offers guidance on this difficult subject. It’s a platform that brings patients with chronic kidney disease and potential donors together. Through the workshop, kidney patients on the waiting list, their families and friends, learn how to:

• Find a living kidney donor
• Educate family and friends about living donor kidney transplant
• Tell their story through social media outlets and other channels.

Finding a match

In December 2018, Martin received good news: he learned that his wife’s uncle, Steve Blacksher, was a match and could donate one of his kidneys to Martin. Initially, Blacksher was worried that, given his age – 58 – he might be too old. However, he was reassured by his medical team that his good health was a positive factor.

That’s when everyone agreed to move forward with the transplant.

“I’m a preacher, so I’m giving you a little bit of a preacher thing here. But, to know that I was able to be a part of God’s plan for healing for Curtis and be a part of that, really made an impact on me,” said Blacksher. “It’s hard to explain, but it has been a big change in my life as well.”

According to Blacksher, God gave us two kidneys, and a healthy person can live with just one. For him, it was simply giving the ‘gift of life.’

Coordinating the continuum of transplant care

The kidney transplant team at SSM Health Saint Louis University Hospital worked closely with Martin’s nephrologist, Stephen Garcia, MD, in Springfield to coordinate the transplant process. The hospital operates a satellite kidney clinic in the area to better serve patients, providing easy access to routine doctor visits for southern Missouri kidney patients, before and after transplant surgery.

Martin successfully underwent a kidney transplant, which has given him a new lease on life: “It feels great to be normal again. I was pretty good for a while and then all the sudden I wasn’t anymore, so to feel normal again and to be going every day and to be going like I used to every day is a wonderful thing,” he said. “You don’t realize how much you miss being able to do it until you can.”

Martin, Blacksher and their family have become advocates for living donation, sharing their story with media and to attendees at ‘The Big Ask: The Big Give’ workshop. They know there are many others out there, who are struggling like Martin was and desperately need to find living donors rather than waiting for a deceased one to become available.

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Preparing for the Grand Opening of the New Hospital in 2020

Project is on track to open in September.

This past year has been exciting for SSM Health Saint Louis University Hospital, and 2020 will prove to be even better. The new $550 million hospital and ambulatory care center is currently in the construction phase, which is expected to last through May 2020. Once construction is complete, training in the new facilities will begin for all employees.

Then, on September 1, 2020, the new hospital campus is scheduled to be officially open. It will feature more than 800,000 square feet of space, 316 private patient rooms, an expanded Level I trauma center and emergency department, larger intensive care units, expanded patient parking, green space and areas for future campus expansion.

The new SSM Health Saint Louis University Hospital will continue to focus on high-acuity patients, cardiovascular care, oncology, stroke, transplant and trauma. The hospital’s transplant team was intimately involved in the design and layout of the Transplant Center’s new space. For example, two of the operating rooms were designed with living donation in mind. They are adjoined by a short hallway, which allows an organ to be retrieved from a living donor and then transferred to the recipient in an adjoining operating room without ever leaving a sterile environment.

“As we continue to grow our living donor program, we’re able to offer donors and recipients the reassurance that the transplantation process can be done safely and effectively in the most optimal surgical setting,” said Krista Lentine, MD, nephrologist and director of the hospital’s living donor program.

In September 2019, leaders from both SSM Health Saint Louis University Hospital, Saint Louis University and the City of St. Louis joined together to celebrate the burial of a 100-year time capsule to be opened by future nurses and doctors of the new academic medical center in 2119.

For nearly six months, employees and community members carefully selected items to put in the 6-cubic foot time capsule. The rectangle box is made from watertight, chemical resistant, composite plastic that is able to withstand large temperature fluctuations and protect the more than 150 items selected to speak to the audience opening the time capsule in the future.

The campus is located on 15 acres adjacent to the current facility off Grand Boulevard between Rutger and Lasalle streets. To date, the project has logged more than 1.3 million workforce construction hours and has had a peak workforce team of more than 700 trades people.

The project is part of a commitment made by former SSM Health President/CEO William P. Thompson on the first day the organization assumed ownership of the hospital, September 1, 2015. He announced an ambitious five-year plan to construct a new hospital and ambulatory care center that incorporates national best practices in patient-centered design while delivering an improved patient experience.