

# ORGAN TRANSPLANTATION TODAY

SEPTEMBER 2023

## ► **Complex Liver Patient Saved by Multispecialty Intervention**

### Key Points:

- Broader criteria for accepting transplant patients
- Expanded capabilities to transplant acutely ill patients
- Multidisciplinary capabilities to address severe challenges in complex patients

### Presentation

A 33-year-old woman from Atlantic Highlands, New Jersey presented to Virtua's Advanced Transplant & Organ Health program in February 2022 with decompensated cirrhosis and worsening liver failure, from which she had suffered since 2021. Another transplant center in the state had disqualified her for possible listing for a liver transplant due to prior months of alcohol abuse related to reactionary grief at the recent loss of family members.

Virtua's transplant team evaluated her medically and psychosocially. She exhibited multiple comorbidities, including varices from portal hypertension, which in combination with severe reduction in coagulation factors led to low hemoglobin levels as a result of GI bleeding. She also experienced hepatic encephalopathy, secondary to elevated ammonia levels, and was dependant on her support person for activities of daily living. Pending adequate management of these issues and continued alcohol abstinence, the team declared her a candidate for liver transplant.

"Our center-specific alcoholic liver disease protocol acknowledges that the six months of sobriety required by some transplants centers is not significantly related to continued sobriety or outcome of transplant," said Virtua transplant surgeon Ann Thompson, DO. "Instead, our more-flexible criteria for accepting patients into the program is research-supported and is saving lives."

### Listed, Transplanted, Rescued

Virtua's transplant team worked for several months with

the patient to resolve exclusionary conditions that included wound and infection issues. In July 2022, when the patient had completed screening and medical work-up, the team approved her listing for liver transplant with a moderately elevated Model for End-Stage Liver Disease (MELD) score.

The following month, she received a deceased-donor liver. She did well in, and immediately after, surgery. On Sept. 2, however, the patient experienced an unexpected and ultimately unexplained event, coding with a cardiac arrest in the ICU. The multidisciplinary team at Virtua Our Lady of Lourdes Hospital—including hepatology, critical care, and cardiothoracic surgery—came to her rescue. The team cannulated her and placed her on extracorporeal membrane oxygenation (ECMO) to temporarily support her heart-lung function.

The patient responded well, the team removed her from ECMO, and vascular surgeons performed a patch angioplasty of her arterial access. She had a tracheostomy placed and was quickly weaned from the ventilator. The team discharged her to Virtua's acute rehabilitation center on Sept. 23.

### A Young Life Saved

Today, the patient's hepatic function is normal, and she enjoys an active and independent life, which she attributes to the care she received from her team at Virtua. Now only taking immunosuppressant medications, she plans to continue her education and renew her work life.



A donor liver is held prior to transplant at Virtua Our Lady of Lourdes Hospital. Donor livers vary in shape and size.

Contact Virtua Advanced Transplant & Organ Health:  
Kidney/Pancreas 856-796-9370 | Liver 856-796-9340

## Multiple Advancements in Organ Transplantation

Virtua Advanced Transplant & Organ Health—South Jersey’s only provider of kidney, liver, and pancreas transplants—**recently received a \$2 million federal Community Project Funding award to expand its clinical capabilities**, including doubling and modernizing its exam rooms and purchasing new diagnostic equipment.

### Kidney

- ▶ Virtua’s nephrology program recently **expanded to add 13 providers and four locations**, treating patients across the spectrum of kidney disease.
- ▶ **Deceased- and living-donor kidney transplant:** Organ availability is increased with participation in paired exchange and remote donor programs, as well as safe transplantation of kidneys from donors with hepatitis C.
- ▶ **Robotic-assisted living kidney organ retrieval:** A robotic-assisted procedure is easier for donors to undergo, with a faster recovery time.
- ▶ **Renal auto-transplantation:** Advanced organ and vascular capabilities at Virtua enable the surgical team to repair a compromised kidney and re-implant it in the patient.

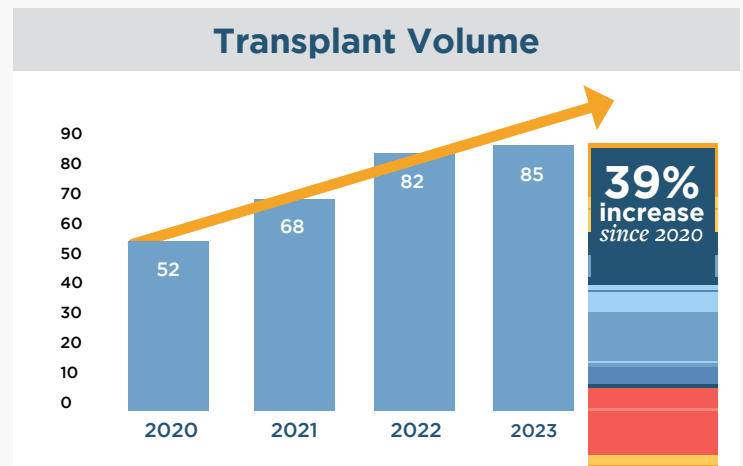
### Liver

- ▶ Virtua hepatologists and surgeons work together to **address all forms of liver disease**, offering hepatobiliary surgery aimed at restoring function, including for cases of cancer.
- ▶ **Deceased-donor liver transplantation:** The program plans to offer living-donor liver transplants in the future.
- ▶ **Combined liver-kidney transplant:** Virtua is the only center in New Jersey providing this option.

- ▶ **Split-liver transplant:** Two separate lobes of a deceased donor organ are transplanted into two different recipients, expanding transplant options for patients of smaller body size. Virtua transplanted its first adult with a split-liver organ in March 2023.

### Pancreas

- ▶ **Simultaneous pancreas and kidney transplant:** Most pancreas transplant patients also receive a new kidney in order to resolve diabetic uremia due to renal failure as a complication of insulin-dependent diabetes mellitus.
- ▶ **Pancreas alone:** This operation treats patients who have diabetes but early-stage or no kidney disease.
- ▶ **Pancreas after kidney:** This transplant protects the kidney for patients with worsening diabetes.



With expanded capabilities and criteria, the number of organs transplanted annually at Virtua is increasing steadily. Transplant statistics for 2023 are as of Sept. 8.