

## CLINIC

## Case Study

# Quanta™ Enhances Legacy Dialysis Operations, Expanding Treatment Flexibility and Efficiency



*"The Quanta dialysis system represents a significant advancement in patient care, offering precision and flexibility that enhances treatment outcomes. Its innovative design empowers both patients and healthcare providers, ensuring a seamless and efficient dialysis experience. The system's small footprint allows for easy integration into all clinical settings."*

**Neeraja Tandra, MD**  
Medical Director  
Reston, VA



## Background

With over 13 clinics in Georgia, the Mid-Atlantic, Florida, and Texas, Legacy Dialysis specializes in managing end-stage renal disease (ESRD). This physician-focused company offers comprehensive dialysis services, case management, and clinic operations, ensuring high-quality care for ESRD patients. Additionally, Legacy Dialysis has extensive experience in managing and operating acute dialysis programs for hospitals, as well as home self-care and staff-assisted programs.

## Challenge

Legacy Dialysis faced operational and cost challenges with its previous hemodialysis system, and desired a solution with a better reliability and maintenance profile. These factors were crucial as Legacy Dialysis looked for an innovative dialysis technology to support its expansion goals in acute, post-acute, transitional care, and home settings. The ideal technology would seamlessly integrate across diverse care environments, enhancing service continuity and operational efficiency.

## Solution

At Legacy Dialysis's clinic facility in Reston, Virginia, the Quanta Dialysis System has transformed the delivery of outpatient dialysis services. By utilizing the compact combination of Quanta Dialysis System, mobile cart, and compatible pre-filtration and reverse osmosis system, the facility conserved floor space without sacrificing dialysate flow performance. Additionally, Quanta's low disinfection requirements and modular solution made it easier for Legacy to maintain its fleet.



## Implementation & Training

Implementation of the Quanta system started with a detailed site assessment followed by delivery and installation. Comprehensive staff training was conducted to ensure seamless integration into daily operations. Quanta provided ongoing 24/7 support, minimizing operational downtime and simplifying maintenance requirements. The system's design necessitates **only a weekly heat rinse, a stark contrast to the routine chemical and heat rinse disinfections** required by Legacy's prior technology, thereby reducing the maintenance burden and allowing staff to concentrate more on patient care.

**97.4%**  
treatment  
success rate

**1**  
Quanta device  
hot-swap repair

## Machine Performance

The first Quanta treatments on patients began in August 2024. The fleet of Quanta systems demonstrated a 97.4% treatment success rate and only required 1 hot-swap repair (replacement of the machine back to Quanta's service facility) over the first six months. By reducing downtime and maintenance requirements, Legacy benefited from streamlined operations as well as improved staff satisfaction.

The successful implementation of the Quanta Dialysis System at the Reston facility can be replicated across additional low-infrastructure Legacy locations. Although not all capabilities are utilized at the clinic facility, Quanta's ability to handle IHD, SLED, and CRRT\* modalities positions Legacy to expand into new clinical areas such as acute and post-acute services.



## Results

Installed **5** stations

Onboarded **10** team members (RNs and PCTs), including **3** superusers in **7** sessions

Performed **508** treatments over **6** months

\*\*FDA 510(k) K222067 for CVVHD and SCUF; two modalities of CRRT.