



## Teaming Up with Lurie Children's to Make an Independent, Acute Dialysis Program a Reality

Ann & Robert H. Lurie Children's Hospital's (Lurie Children's) Division of Nephrology performed 3,433 acute dialysis procedures in 2021 and is one of the top 10 pediatric programs in the country.

### CHALLENGE

In March of 2022, Lurie Children's began investigating transitioning from an outsourced Acute Dialysis program to an independent program completely owned and operated by Lurie Children's with 24/7 in-house dialysis nursing coverage. They saw this as a timely opportunity to be a more nimble, therapeutic care team. To ensure the hospital could continue providing this valuable service to its community, Lurie Children's developed an action plan to become self-sufficient within 90 days.

Crothall's Healthcare Technology Solutions (HTS) was already the hospital's healthcare technology management provider, successfully managing and maintaining more than 20,000 biomedical, laboratory, and imaging devices. Lurie Children's asked Crothall to collaborate on a comprehensive plan to bring the dialysis program in-house in its needed timeframe, including assisting with equipment identification and assessment. The HTS team was on-board immediately, seeing an opportunity to further showcase its value as the "Premier Healthcare Support Service Provider."

“The healthcare technology management team was a central part of developing the acute program. From equipment acquisition, installation, and education, Jarmaine and his team helped support a successful launch. Their dedication and active presence allow us to continue to deliver on our vision to be a transformational force in care and innovation to achieve a healthier future for every child, as well as advance the types of dialysis therapies we can provide to our tiniest patient to young adults.”

— Theresa Mottes, APRN-NP, CPNP-AC, CDN | Acute Care Pediatric Nurse Practitioner, Nephrology (Kidney Diseases)

## SOLUTIONS

Using its knowledge and experience providing corrective and preventive maintenance of dialysis equipment at other prestigious hospitals, Crothall teamed up with Lurie Children’s nephrology division to help make their vision of an independent Acute Dialysis and Pheresis Therapies (ADAPT) Program a reality. During the transition period, our team did the following:



### **Provided Technical Expertise.**

Crothall identified a subject matter expert to support Lurie Children’s local team and instill confidence among key hospital stakeholders. Eric Raghunandan, Crothall’s HTS on-site director who oversees the dialysis equipment service for multi-site dialysis program at New York City Health + Hospitals, provided several recommendations to Lurie Children’s Dialysis & Clinical Operations Lead of Inpatient Dialysis. He addressed various requirements, including water analysis needed for safe procedures and overall standards required by The Association for the Advancement of Medical Instrumentation (AAMI). He also provided sample policies and procedures for maintenance and a daily equipment maintenance checklist template to encourage discipline and ensure consistent results.



### **Participated in Key Decisions.**

Because Lurie Children’s needed to acquire all new dialysis equipment, it invited our HTS team to be part of its multidisciplinary project team, researching and supporting decisions on equipment purchases. This team was instrumental in tackling personnel and personnel structure, regulatory compliance, infection prevention and control, equipment, supplies, and financial analysis.



### **Installation and Maintenance.**

Once approximately 60 new medical devices arrived, our team conducted a complete inventory of the dialysis equipment. It documented each manufacturer, model, asset ID, serial number, and coverage level. It also recorded any malfunctioning equipment, contacted the manufacturer, scheduled corrective action, installed, and initiated a comprehensive preventive maintenance schedule.



### **Introduced Proactive Service Rounds.**

The team takes a proactive role in identifying corrective repair needs. Staff members conduct formal rounds throughout the day, inspecting the condition of the equipment, noting needed repairs, and liaising with equipment users. Any needed repairs are identified, logged, and prioritized.



### **Water Testing.**

In preparation for go-live, Crothall’s team ordered water testing supplies, engaged the preferred laboratory, and ensured necessary space and resources were available to complete testing. Before releasing the units for first patient use, we completed a four-week validation process on the Hemodialysis and WRO machines to ensure the units were efficient for dialysis.



### **Trained Key Personnel.**

Crothall designed a custom training program for its team based on the unique mix of dialysis equipment Lurie Children’s intended to purchase for its program. Over a five-month period, Crothall’s biomedical technician dedicated to Lurie Children’s dialysis program attended multiple classes held by the equipment manufacturer. Jarmaine S. completed a total of 98 hours of training to become proficient in preventive maintenance, corrective maintenance, and water testing for Lurie Children’s new fleet of dialysis equipment.



“Our ability to utilize Crothall’s breadth of resources enabled us to deliver value to a hospital that provides important care for thousands of children each year. We always want to help hospitals succeed in their mission, so the opportunity to assist Lurie Children’s demonstrates how Crothall can adapt quickly and provide a new service when a partner has a critical need.”

— Kelley Harris, Director of Business Development | Clinical Engineering #HTM Leader, Crothall Healthcare

“Yesterday’s Joint Commission survey went so smoothly due largely to the hard work Jarmaine and his crew put into our program. Compared to surveys in previous years, the stress level was much lower knowing the command and expertise Crothall had on all the machines and intricate sampling processes! Thank you again for being such a wonderful resource and partner.”

— Sarah Hartman BSN, RN, Manager of Acute Dialysis and Pheresis Team

## RESULTS



### **Regulatory Approval.**

Successful Joint Commission survey with no findings in March 2023.



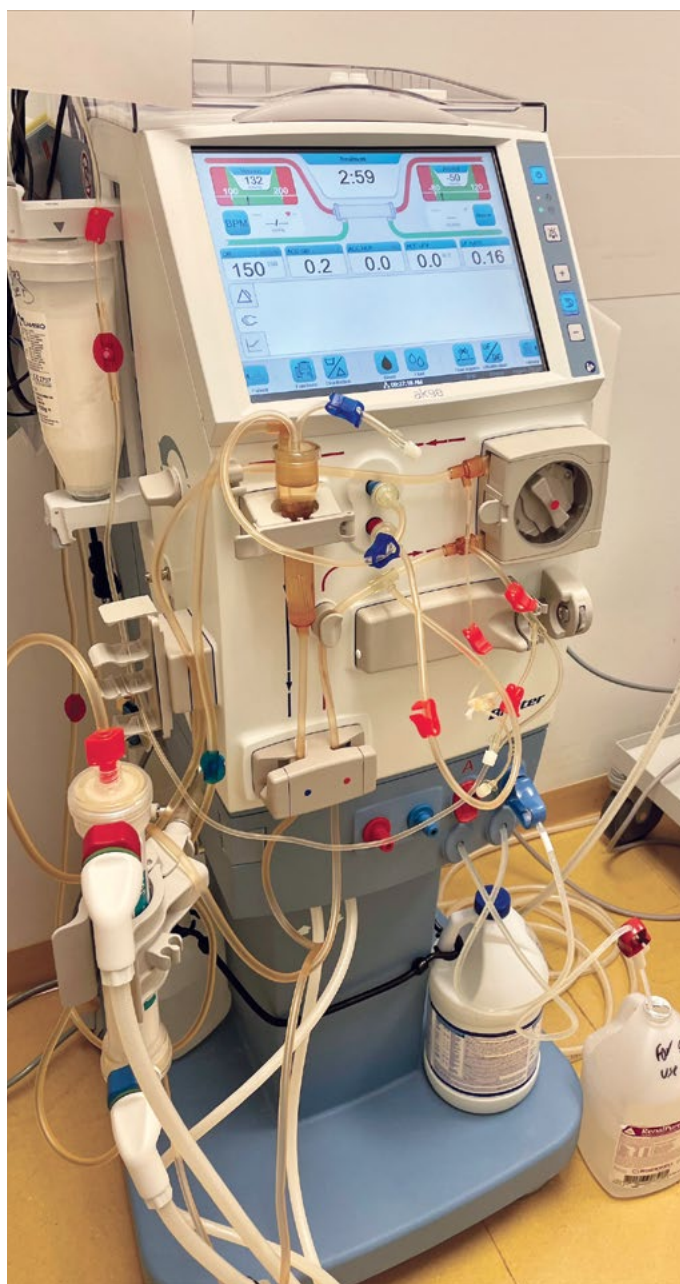
### **Significantly Faster Response Time.**

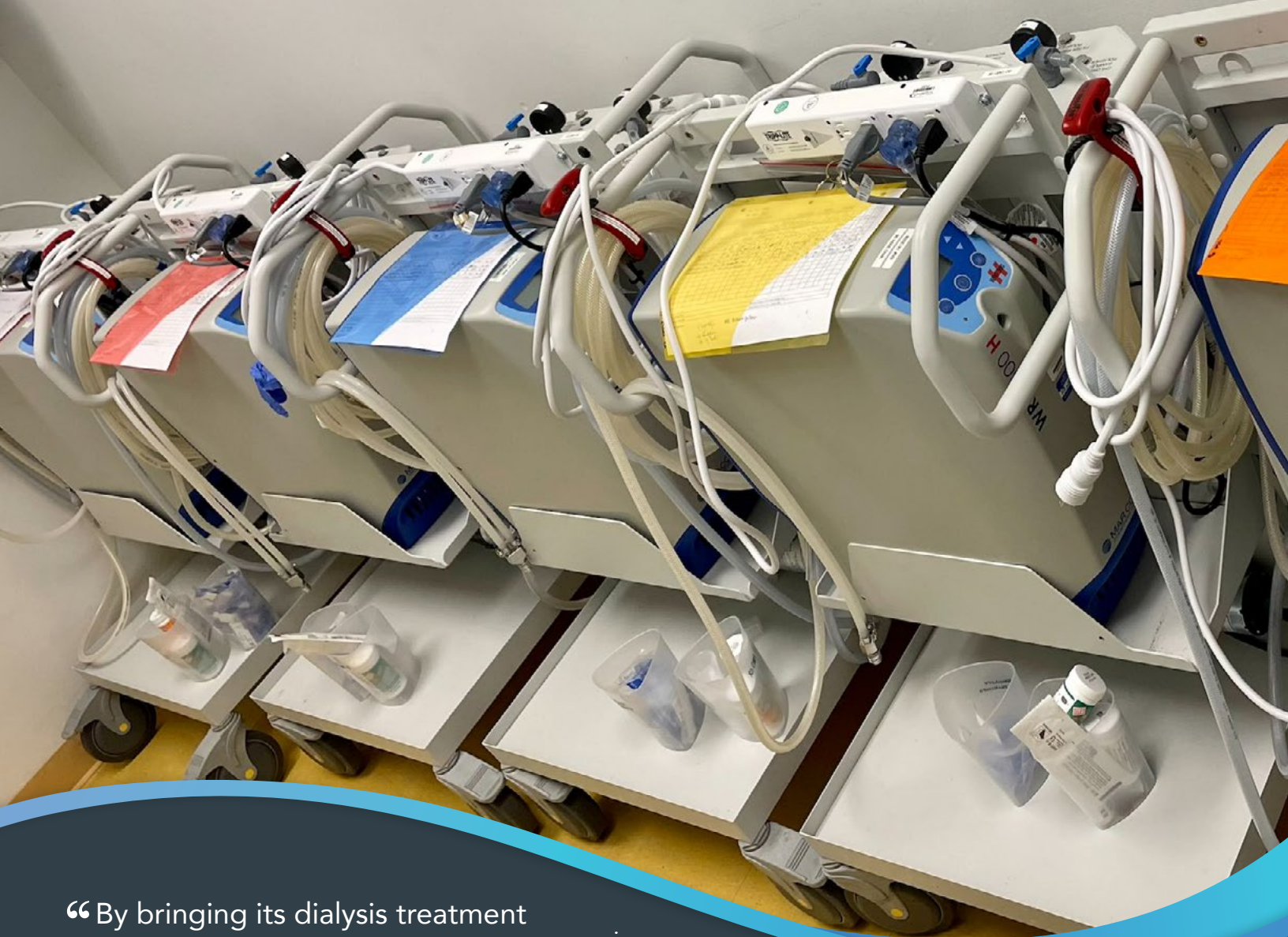
Less than a half hour during business hours and less than 2 hours during nonbusiness hours, driving faster resolution and increased throughput. Daily rounding by technicians reduced the number of service calls from clinical staff.



### **Maximized Revenue Potential.**

Hospital-based technicians enable the clinical team to see more patients without waiting for off-site technicians to service equipment. In November 2022, the first month of independent operation, the hospital performed 257 dialysis procedures – the highest number of any month in 2022.





“By bringing its dialysis treatment program in-house, Lurie Children’s is able to generate more revenue and have greater control over and visibility into the services it provides. Our long-standing relationship with the hospital and its management team was a major reason we could work together and develop an independent Acute Dialysis program that will help patients for a very long time.”

— James Aulisio, Regional Vice President

## Partner with Crothall Healthcare

Maximize uptime and enhance the clinical engineering programs at your healthcare facility through Healthcare Technology Solutions. Contact us to learn more about the benefits of standardizing your healthcare technology management and clinical engineering services to one provider with Crothall Healthcare.

Contact Us

crothall  
healthcare 

The premier healthcare support service provider nationwide