



Helsinki University Hospital

# Moving care from hospital to the home



**Helsinki University Hospital (HUS) has innovated with a partner ecosystem to develop a unique digital solution that makes home dialysis treatment simpler and more sustainable for both patient and professional.**

## Challenge

HUS needed to create an effective home dialysis process that was manageable for both patients and healthcare professionals.

## Solution

Fujitsu's Remote Health Service allows clinicians and patients to share information in real time.

## Outcomes

- Personalized remote health care saves costs and delivers better outcomes
- Healthcare professionals get more time to care as information and communication is centralized

**“Digital health and data technology supports HUS to shift from reactive treatment to proactive prevention. Fujitsu’s solution helps us motivate patients, save costs, and deliver better care for everyone.”**

Mika Matikainen, Director of HUS Abdominal Centre, Head of Urology, HUS

Industry: **Healthcare** People: **26,000**  
Location: **Finland**  
Website: **www.hus.fi/en**

## About the customer

Helsinki University Hospital (HUS) is Finland's largest operator in secondary care. This position gives HUS the opportunity to solve the most demanding specialist medical care challenges in the country. The CleverHealth Network development projects bring together the health technology competence of Finnish enterprises, leading experts in health care and high-quality health data collected by HUS.



**€2M**

expected annual savings  
once goal of 40% of kidney  
dialysis patients using  
home dialysis solution is  
achieved

## Making healthcare more accessible and more affordable

In 2019 the Finnish registry for kidney diseases forecast a 27% increase in dialysis patients by 2030. The study anticipated a corresponding need for >100 new dialysis nurses in Finland if home therapies did not increase. Under this scenario, more patients would need to receive dialysis treatment in ways that would not put more pressure on the healthcare system.

"We need to increase the number of patients who can treat themselves at home," explains Agneta Ekstrand, Head Physician, Nephrology, HUS. "There are many studies that show patients who are treated at home have a better quality of life and better survival rates. Home treatment saves money too, as dialysis treatment in hospitals is both very time consuming and expensive."

## Improving patient and professional experiences

HUS engaged Fujitsu to help establish an effective Home Dialysis solution that patients start to use at the pre-dialysis stage and continue with throughout their treatment. The application gathers monitoring data via dialysis equipment and sensors and facilitates communication between the patient and care teams.

The patient's treatment is monitored automatically using Fujitsu's Remote Health Service. The solution gives patients and clinicians access to information like blood pressure, weight, and dialysis outcomes. The service has a Healthcare professional user interface, a patient user interface with user-friendly graphs, and an ordering system for medical supplies.

Advanced analytics are used to alert clinicians with real-time alerts and KPIs when patients are at risk of deterioration and all care information is transferred to the interface either automatically or through patient-filled electronic forms, making paper forms a thing of the past.

Now patients feel supported and comfortable to undertake dialysis in the comfort of their homes with the confidence that healthcare professionals can monitor their progress remotely.

## Better care for everyone

"Our partnership with Fujitsu started many years ago," explains Mika Matikainen. "The collaboration focuses on connected ecosystems, data sharing and digital technology that enables person centered care. This model of care is delivered virtually, improving efficiency and access for everyone."

The home dialysis digital system is the first in the world that can be integrated into medical record systems and that uses a single interface for both patients and care professionals. The system is also unique as it can be adapted to other chronic diseases and potentially used to help smaller healthcare units in the home care of such diseases.

"With the Home Dialysis solution, we are enabling proactive and personalized treatment that makes patients' daily lives at home safer and enables treatment processes that are significantly more cost-efficient and sustainable, as people's travel time is vastly reduced," Mika Matikainen finishes.

Customer:



**Fujitsu**

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