



# Dialysis at home— powered by connected health

Empowering patients  
Improving quality of care



## Client background

The client is a premier global healthcare company with a turnover of over 17 billion dollars, delivering the highest quality care to people with renal and other chronic health conditions. The client is known for their keen focus on technological and clinical innovations within the industry, which they leverage to improve the lives of patients.

The client enables care for more than 290,000 patients through their global network and is one of the forerunners in the industry, providing a fully integrated care system to patients.

## Industry landscape

The mortality rate of dialysis patients is continually on the decline. Care delivery is getting personalized and there is an increasing market demand for self and home dialysis therapies due to factors such as savings in costs and demand for better and personalised health outcomes.

Connected Health is a set of product and service capabilities that facilitate electronic delivery of renal dialysis treatment from the patient's home.

## Opportunity

The client responded to the market demand for home dialysis therapies. There was an emerging demand for higher transparency by the clinicians in order to ensure quality of care.

## Challenges

The client wanted to improve the overall patient experience and minimize the burdens of therapy.

Often patients and care partners with physical impairments or limited technology expertise find it challenging to perform certain operational and diagnostic tasks, leading to errors. The burden

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of therapy lay with the patients who then faced daunting tasks like vitals monitoring and health assessments. The client also faced the overwhelming task of managing therapy related supplies for patients, in high volumes and frequencies.

## Solution/implementation

Wipro identified the solution to the problem as creating an integrated approach towards care delivery, and decided to implement a Connected Health solution, which would enable our client to automate and digitize patient care.

We enabled connectivity between home dialysis machines, gateways and the Connected Health Service IoT cloud systems. Our architecture mechanism collects and processes patient vitals from weighing scales and blood pressure monitor cuffs, and transmits the information to the gateway. The IoT cloud communicates with the Connected Health system to receive prescriptions, upload data, generate alerts and notifications, as well as enables software updates.

Apart from this, the solution was designed to adhere to the high security and compliance standards of the industry while being flexible enough to incorporate future needs of scaling up business and changing industry stipulations.

## Business impact



Improved usability and reduced cognitive load on patients, which enhanced and improved user experience



Reduced visits to the hospital



Enabled remote patient monitoring for doctors



Reduced product returns and service costs for the care providers



Improved care delivery and better quality of product and services, leading to greater customer satisfaction



Automated processes, leading to fewer errors caused by manual activities



Real time visibility that affords continual assessment of reliability and quality, and provides adverse event alerts



Compliance with Protected Health Information (PHI) as per HIPAA guidelines, increasing security of all transactions



Wipro successfully enabled connectivity between home dialysis machines, gateways and the Connected Health Service IoT cloud systems, thereby automating and digitizing patient care. Our solution was designed to adhere to the Protected Health Information (PHI) as per HIPAA guidelines, increasing security of all transactions; while also being flexible enough to incorporate any future needs of scaling up business or the changing industry demands.

### Rahul Agarwal

Global Head – Delivery, Life Sciences,  
Health Business Unit  
Wipro Limited.

**Wipro Limited**

Doddakannelli, Sarjapur Road,  
Bangalore-560 035,  
India

Tel: +91 (80) 2844 0011

Fax: +91 (80) 2844 0256

**wipro.com**

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For more information,  
please write to us at  
**info@wipro.com**

