# Tunstall

# HUG Project: world first home dialysis program

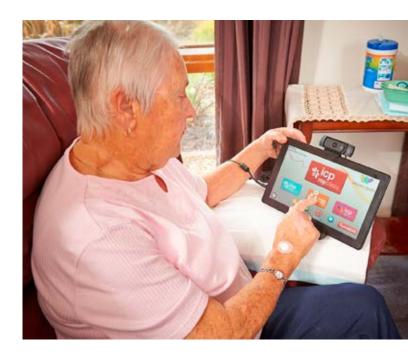
A world first home dialysis program, the Home Therapies utilising Telehealth Guidance and Monitoring (HUG) Project with Western Health Department of Nephrology, aimed to offer greater support for patients at home and raise rates of home dialysis in Victoria.

Western Health provides hospital and community-based services to approximately **800,000** people across the western Melbourne region. HUG project sponsor Professor Craig Nelson, head of the nephrology unit at Western Health, helped to establish the project in order to improve service delivery and patient satisfaction, based in part on similar pilot projects in the UK.

The project employed the latest in connected health technology to give new patients the confidence to manage their health at home.

## The Challenge

In-home dialysis allows patients to undergo treatment outside of a hospital setting, reducing the impact on daily living and quality of life.



Clinicians and administrators can also utilise in-home dialysis to reduce costs and increase efficiency in care delivery.

Previous in-home dialysis care saw episodic intervention, spaced weeks or months apart. Hospital readmission was almost guaranteed, as care negatively impacted patient's lives and lacked the ongoing support of a more intensive care environment.

Prior to the project, take up for home dialysis with Western Health was around 16 per cent, and



more than 40 per cent of those participants would abandon home dialysis, due to stress or other impacts on their life.

HUG project sponsor Prof. Craig Nelson set out the aims of the HUG project:

- To offer greater support to patients at home.
- To reduce isolation from the health service.
- To raise the rate of home dialysis to the Victorian Department of Health benchmark of 30 to 35 per cent.

Video conferencing was the main function of this project, enabling the care team to remotely troubleshoot clinical problems, monitor compliance, and check dialysis technique. The project involved 20 patients over 12 months, seeking to reduce unnecessary hospital admissions, increase home dialysis take-up rates and improve home dialysis compliance.

The HUG project aims to offer greater support to patients at home, reduce isolation from the health service and raise home dialysis rates.

Prof. Craig Nelson
HUG project sponsor



## The Solution

The home renal dialysis program combined video conferencing, patient specific health interviews for peritoneal and haemodialysis, with a hybrid support model integrating Tunstall technology with Baxter dialysis equipment and HUG medical expertise.

Tunstall's Integrated Care Platform (ICP) was the core of the package, collecting and collating data from a range of medical equipment in the home, including the dialysis equipment.

"It is a secure data transfer; we spent a lot of time with [Tunstall] to make sure that was the case," Prof. Nelson said.

Training was provided by the Tunstall Connected Health Nursing team for relevant staff and patients, including use of the equipment and analysing the results. Supporting all this was a 24/7 response model ensuring patients could always access care and advice when needed.



#### Connected Health



#### - Prof. Craig Nelson

The HUG nursing team took patients through a simple interview, examining health data and making enquiries regarding fluids, exit site care and any others issues patients were experiencing.

Through the health data and interviews, the team were able to analyse the results and make clinical recommendations, all conducted remotely.

Using video conferencing alongside treatment allowed nurses to guide patients in managing their care, and assessing patient health and wellbeing.



#### **Connected Health**

#### The Results

Thanks to the dedicated medical team and intelligent program design, the project was a resounding success. The combination of video conferencing and home dialysis helped to reduce unnecessary hospital admissions by more than 50 per cent.

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By demonstrating the benefits of clinician-led home care, the project increased the proportion of home dialysis among patients from 16 per





cent to the target of 33 per cent, and additionally increased patient compliance and longevity of home dialysis.

The project also confirmed the value of video conferencing for a range of needs, including wound management, dietetics and psychological support, clinical triage, and technical support.

The success of the project, through improved service efficiency, patient satisfaction and outcomes, resulted in the HUG Project transitioning from a pilot to an ongoing valued program with Western Health, and has been the basis for an expanded interest and uptake of telemonitoring across the country.

The HUG Project was funded by the Department of Health, Renal Health Clinical Network, in Victoria.

For more information about Tunstall's connected health solutions, contact our friendly customer service team on 1800 603 377 or at info@tunstallhealthcare.com.au

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