



# FESTIVAL OF CONTAGIOUS IDEAS 2016



NEW SOUTH WALES  
**HEALTH INNOVATION**  
Symposium 2016

## Bob Leece Transforming Health Award

# Confident and connected at home on haemodialysis Nepean Blue Mountains Local Health District

### Challenge

Supporting haemodialysis patients in their home can be resource-intensive and challenging, particularly when patients are spread over a large geographical area.

- Home haemodialysis patient data presented to a doctor or a nurse in an exercise book can be cumbersome and difficult to interpret
- Current clinical practice means that reliable and timely patient information that is accessible to clinical staff may be delayed, with clinical decision making impeded
- Patients also fear being alone and vulnerable when dialysing at home and this can impede the uptake of home haemodialysis when it is the preferred method.

### Solution

We developed a telehealth solution which allows the nurses to remotely monitor haemodialysis data, patients' mood, early complications and to gauge patients' wellbeing/ psychosocial issues. It comprises:

- An app on the patients' own device to record their dialysis activity and to receive notifications/alerts
- Azure cloud server to host the patient data (with consent)
- An online dashboard to provide real-time data to nurses and to produce reports for the doctors.



### Results

On a three-month trial for Western Renal Service patients, the occasions of patient review increased by 270 per cent per week. On a weekly average, 12 patients' treatment data were remotely assessed, resulting in 11 hours and 544 kilometres of travel saved, and 14 hours of home visit time saved for nurses and patients



Our solution enhances communications and strengthens



nurse-to-patient connection, thereby increasing the patient's sense of safety and empowerment.

Updates to our solution now supports video conferencing. This was successfully trialled in a secondary site at South Western Sydney Local Health District. Its design is scalable to meet the demands of other units