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Conference Abstract

## Promoting patient empowerment and sustainability in kidney care using telemedicine

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### Abstract

**Introduction:** The speciality of renal medicine lends itself to adopting the telemedicine model for providing better patient care and enabling patient involvement. The growing emphasis on home based therapies and the challenges of providing a safe service with adequate governance and risk management leads us to explore remote monitoring solutions. These solutions place the patients in the centre of their care whilst retaining their independence and choice.

We are introducing a renal telemedicine Service for the management and support of service users on home haemodialysis, peritoneal dialysis and those with stable transplants. We propose to use currently available technologies that provide video, into the patient's home, to promote a patient centred pathway for the management and the monitoring of home based therapies. The aim is to maximise independence whilst at the same time optimising outcomes and safety.

**Methods:** The current model of follow-up care for patients with functioning transplants and those on dialysis is hospital based. This requires multiple clinic attendances to support, monitor and optimise care. This is true even for patient choosing home based therapies and for patients with functioning transplants. These patients are more likely to prefer a self-care model with targeted support provided on a face-to-face basis in their own homes. This would encourage patient empowerment and enhance self-care. A renal telehealth (video and physiological parameters) service will enable multidisciplinary support to be provided in patient's homes. This will be in combination with treatment related data being available at the time of review for analysis, interpretation and improvement. It is anticipated that shared care will encourage greater patient independence and involvement. This in the longer run will result in better outcomes. The service provides flexibility for the service user to initiate a care episode, access learning resources and individualised care plans. This is a major change in focus that improves patient experience, satisfaction and may well improve concordance.

**Results:** The presentation will report on both qualitative and quantitative analysis of the benefits of the approach including:

The improved patient outcomes due to reduced travel requirements on predominantly elder patients.

The reduced impact on carer's lifestyles in managing the patient remotely.

The greater engagement of patients and carers in having remote access to expert support.

Reduction of congestion in hospital clinics and providing support for “fitter” patients at home.

Embedding video in the clinician's workflow leading to improved effectiveness.

The approach compliments the ethos of selfcare and the selfmade patient.

The introduction of real time data acquisition with collaborative analysis over the audio-visual interface results in a better understanding of blood pressure trends, fluid controls and quality of dialysis delivered.

**Conclusion:** There are no established telemedicine service models specifically focussing on renal patients where the intention is to promote self-management of the motivated patient. This project is pioneering this application and the learning will be very valuable in both scaling up the approach and in diffusing it. The ability to extend the approach to incorporate specialties such as diabetes and cardiology points the way to integration of care.

## Keywords

**patient empowerment; telehealth; renal; self management**

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## PowerPoint presentation:

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