Telehealth Technology: A Suitable Patient Focussed Intervention in Patients on Dialysis



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Introduction

Long term conditions form a major part of the total health care provision in the developed world. The introduction of telehealth in many chronic conditions has improved quality of life and well being of patients. This type of approach has not been extensively utilised in patients with end stage renal disease (ESRD).

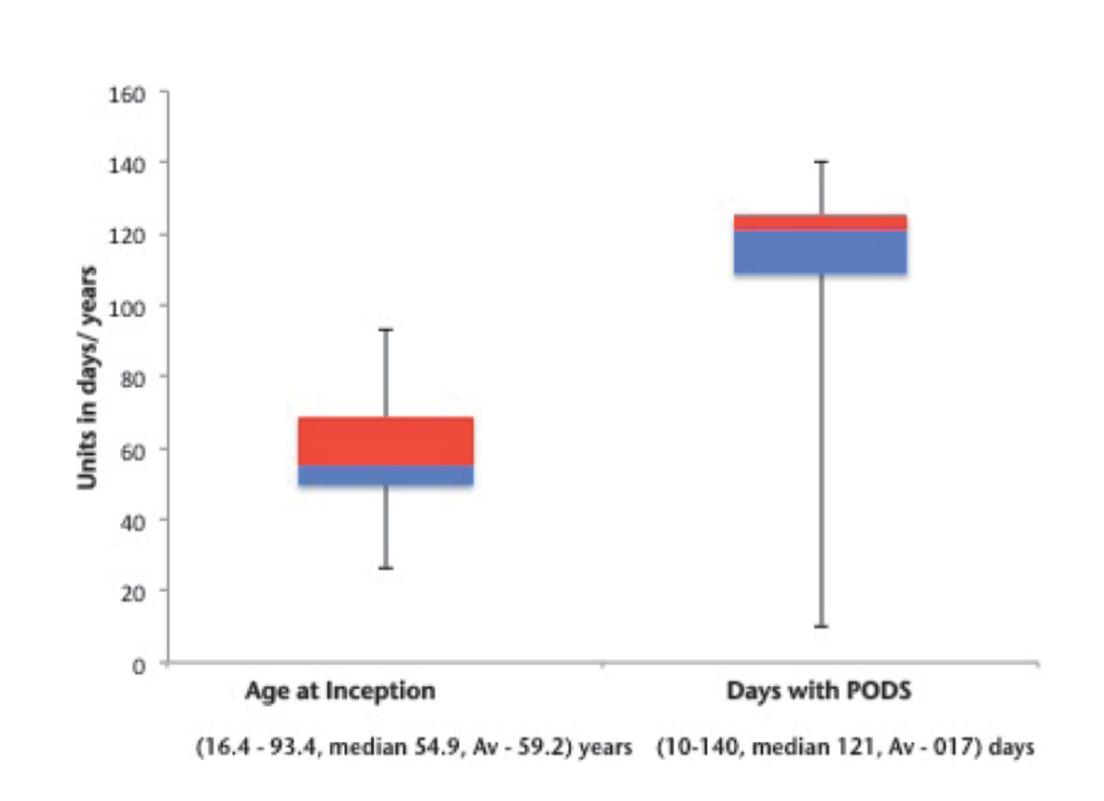
Aim

The aim of this pilot study is to explore the role of telehealth technologies in self-management of patients with ESRD on peritoneal dialysis and assess user satisfaction by 'Quebec User Evaluation of Satisfaction with assistive Technology' (QUEST Version 2.0) questionnaire (1).

Results

The project began on August 2014 and 22 patients, 9 females and 13 males, have participated till date. 86% of patients have retained and continue to use the POD.

Age & days with PODs

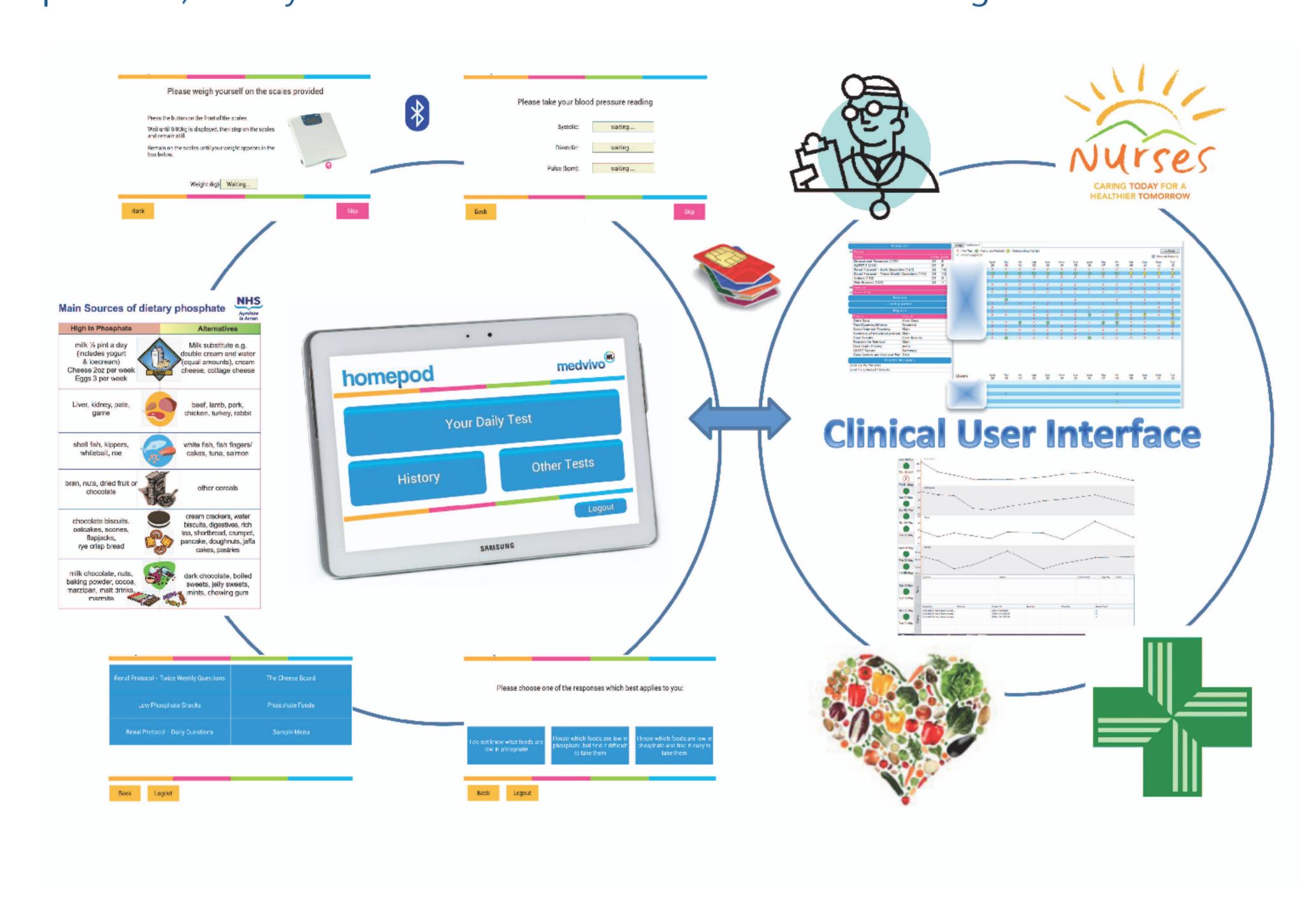


We have received a total of 556 alerts (26.4 per person) over 133 days. The average alerts per day were 4.17 for all patients.

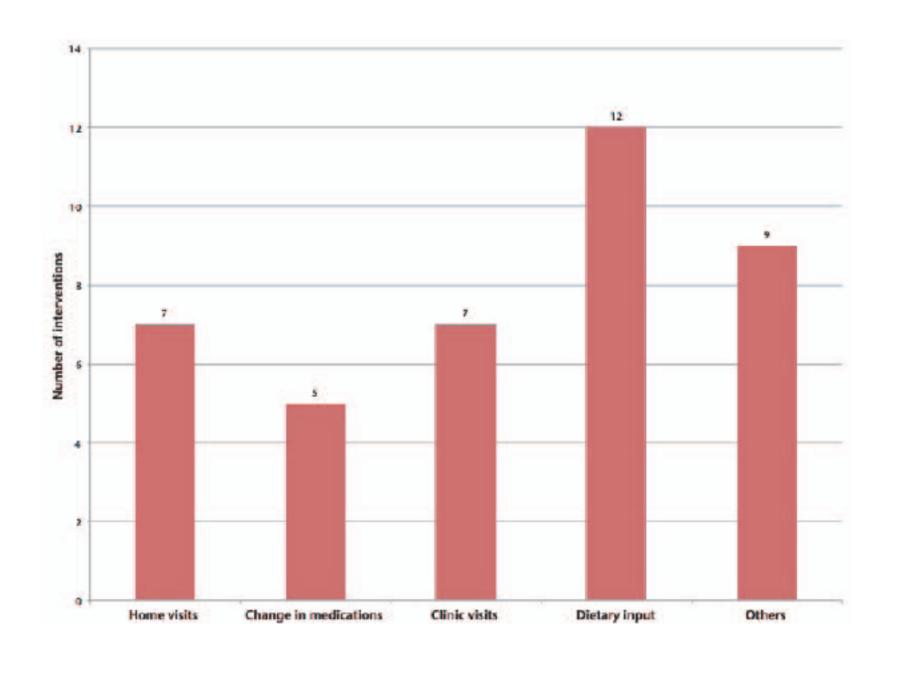
14 potential admissions have been avoided, mainly by early recognition of weight gains from fluid, and patients have self-managed at home on 28 occasions.

Methods

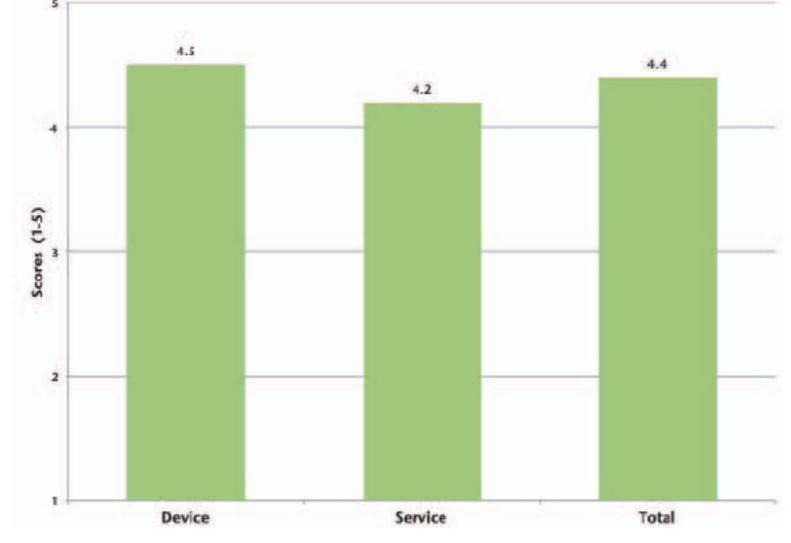
We have developed a computer tablet (POD) based technology with specialised software that enables remote monitoring, communication and continuous learning in patients with end stage renal disease (ESRD). It allows early detection of medical problems; dietary issues and intolerances to medications amongst others.



Intervention from POD's



QUEST Subscale scores



The three most important features for patients were ease of use, effectiveness and safety.

Conclusion

Telehealth is useful to monitor patients with ESRD on PD. It is acceptable in various age groups and provides an additional resource for patients to self -manage their condition. Satisfaction scores and retention rates suggest a high level of acceptability by patients. Further avenues in developing such technologies should be explored in renal patients.

References

1. Demers L, Weiss-Lambrou R, Ska B. Development of the Quebec User Evaluation of Satisfaction with assistive Technology (QUEST). Assist Technol 1996;8(1):3-13.

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