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Conference Abstract

Integrating care for the chronically ill using at home telehealth monitoring

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Abstract

The CSIRO has received funding from the National Telehealth Pilot Program to undertake a study of telehealth for the management of the chronically ill in the community. This study is being carried out at six locations in five states, ranging from community-based, nurse-led programs to a hospital-focused, chronic-disease management program supported by highly trained doctors and specialist nurses and seeks to investigate all aspects of using at home telehealth services to better manage chronic disease.

The study will introduce telehealth services and observe how each test site integrates these into their established models of care. Based on an Intervention-Control design, 150 chronically ill patients with multiple co-morbidities will be monitored with an additional 300 patients acting as controls.

Healthcare outcomes, changes in patterns of utilisation of GP and other healthcare services, socio-economic costs of delivering care, impact on clinical workforce, patient and clinician acceptance of the service and the organisational change management that was required to influence and change established workplace culture will be studied.

The CSIRO study is finishing at the end of December of 2014. Preliminary data will be presented together with a number of examples where at home tele-monitoring of vital signs identified early signs of an exacerbation in the patients' condition and led to the timely orchestration of care which avoided unnecessary hospitalisation.

CSIRO is also developing a sophisticated risk stratification and decision support system which identifies statistically significant changes in patients' vital signs and questionnaire responses giving clinical care coordinators the opportunity to focus their attention to those patients most at risk of hospitalisation. Advanced data analytics together with clinical decision support will allow telehealth to be deployed in very large numbers nationally without placing an excessive workload on the monitoring facility or the patient's own clinicians.

Outcomes from this trial will contribute to government policy frameworks and lead to funding mechanisms which will assist in finally progressing large-scale national deployment of telehealth services in Australia.

Keywords

telehealth; chronic disease; at home telemonitoring; integrated care

PowerPoint presentation

https://www.conftool.net/integratedcare2014/index.php?page=downloadPaper&form_id=103
