

CONFERENCE ABSTRACT

SMILE – Supporting multi-morbidity self-care through Integration, Learning and eHealth

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Remote monitoring devices and nurse triage assessment and monitoring can reduce health related costs and improve health for at-risk populations. Monitoring devices including blood pressure monitors, blood sugar monitors, oxygen monitors, weighing scales, activity monitors were allocated to participants of this study.

Caredoc, in conjunction with Netwell CASALA, introduced remote nurse triage support of adults with multiple chronic conditions, self-managing their conditions at home using wearable technology. Participants electronically record their healthcare data at home as appropriate to their heath condition. Participants alerts are monitored daily by the telephone triage nurse.

The aim is to empower participants with knowledge to take ownership of their potentially debilitating conditions, to learn to manage their symptoms better and improve their overall quality of life.

The project is for people over 18 with two or more conditions of Diabetes, COPD, CHF and heart disease. Monitoring devices were allocated to participants based on their requirements. Participants record their healthcare data at home and submit the readings from devices to a specifically designed software program.

SMILE is the next iteration of the ProACT project and runs for 6 months; due for completion in April 2020.

This project is scalable and transferable across all health sectors social, primary and acute. This program of remote health monitoring could be utilised in mental health services in mood monitoring, pregnancy related conditions (diabetes, hypertension, weight measurement, foetal heart monitoring).

Based on the ProACT qualitative analysis, participants:

- found the technology challenging initially, but now feel capable of using it, alone and with minimal support
- like the nurses having access to all their data and they don't have to explain things to the nurse when they call
- Compliance with medication, exercise etc has improved and participants feel motivated in managing their conditions

- Participants report feeling more capable of doing things for themselves as they do not necessarily want family involved, their main motivation is to stay independent.
- Participants reported initial anxiety due to the knowledge of their readings, particularly when readings were high. But they have learned how to deal with this anxiety due to a combination of their increased knowledge on what the readings mean, what they should do in these circumstances, and the support from the triage nurses has contributed to this.
- Triage nurses have identified deteriorations in their client's condition and have advised appropriate early action such as "attend your GP" or in a small number of cases go directly to hospital for assessment.

SMILE aims to quantitively analyse the information and includes:

- Reduction of 20% in unscheduled care for participants
- Overall health improvement for 60% of participants (CASP-19)
- Analysis of vital sign data to analyse condition stabilisation

Qualitative lessons learned:

- Gentle reminder tools motivate participants
- Sharing excitement with achievements is an important aspect of the program and highlights the benefits of continuous monitoring
- Directing participants to the appropriate health professional leads to appropriate attendances at GPs and hospital