



## Telehealth: supporting self-management of health and community based care

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Conference abstract

## Telehealth: supporting self-management of health and community based care

*Suzanne Martin*, Reader, Health Sciences, University of Ulster, York Street Belfast Co., Antrim BT15 1ED, UK

*Eileen Thomson*, Deputy Chief Executive, Cedar Foundation, Malcolm Sinclair House, 31 Ulsterville Avenue, Belfast BT9 7AS, UK

*Stephen Mathews*, Chief Executive, Cedar Foundation, Malcolm Sinclair House, 31 Ulsterville Avenue, Belfast BT9 7AS, UK

*Paul McCullough*, Reader, School of Computing and Mathematics, University of Ulster, York Street Belfast Co., Antrim BT15 1ED, UK

*Gaye Lightbody*, Lecturer, School of Computing and Mathematics, University of Ulster, York Street Belfast Co., Antrim BT15 1ED, UK

*Melanie Ware*, Researcher, School of Computing and Mathematics, University of Ulster, York Street Belfast Co., Antrim BT15 1ED, UK

*Maurice Mulvenna*, Professor, School of Computing and Mathematics, University of Ulster, York Street Belfast Co., Antrim BT15 1ED, UK

Correspondence to: *Suzanne Martin*, Reader, Health Sciences, University of Ulster, York Street Belfast Co., Antrim BT15 1ED, UK, E-mail: [s.martin@ulster.ac.uk](mailto:s.martin@ulster.ac.uk)

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## Abstract

**Introduction:** Telehealthcare is fundamental to supporting self-management of health and community based care. For people with complex physical disability the technical challenge is often around how to achieve accessible systems alongside limited or deteriorating functional ability. This paper presents user focused research into a brain computer interface (BCI) helping to sustain community based supported living.

**Aims:** To develop a flexible BCI system for use by people with acquired brain injury at home, by providing a range of BCI paradigms to enable functional control over existing home based technologies.

**Methods:** Using qualitative methods of participatory research with a strong lead user focus five participants based at a cedar supported living option have provided data to highlight user needs. In addition, significant user testing within the home environment has validated technical design.

**Results:** User needs and preferences related to functional requirements and preliminary results from testing the BCI (SSVEP) can be presented.

**Conclusions:** Systems for telehealth have become more ubiquitous for people with cognitive impairment. Telecare services for older people are fairly well developed, however, there are a significant number of people with deteriorating physical function who require issues of access to be explored. BCI offers one solution.

## Keywords

brain computer interfaces, eInclusion, acquired brain injury

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