Assistive Technology – A part of the rehabilitation solution

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Introduction

Assistive technologies include items ranging from complex electronic devices that control parts of a home through to orthotics and wheelchairs that enable people with a disability to undertake activities of daily living. The literature continues to grow in reflecting the cost-benefits of appropriate use of technologies to compensate for loss of physical, cognitive or sensory function. In many cases the appropriate use of technology can enable a person to "age well" and with dignity, as many technologies are now unobtrusive and designed for general use by the population.

Scope of the Challenge

Over 1.7 million Australians rely on Assistive Technologies (AT) to live independently, yet almost 50% do not have them and the vast majority of Australia's technologies are imported often resulting in suboptimal solutions and over-extended support services. In addition there is a growing body of evidence that many people who need government support to get this technology now wait excessively long periods for technology that is essential to not only their daily activities, but also to their ongoing health. With an ageing population and the growing demand for independence and early discharge following injury or disability, it is now time for assistive technology to be truly appreciated as a vital part of achieving optimal function for many Australians.

Demonstrating the value

This poster will present the details of an international project currently underway that is based in Australia to clarify some of the costs and benefits and the economic drivers for assistive technology provision. The research group is drawn from University, service provision and advisory services in three states as well as contributors from Canada and the United Kingdom. It is also a multidisciplinary study involving allied health, rehabilitation engineering and economic professionals.

The work of the study team is expected to highlight some of the current barriers in Australia (in particular) that undermine both timely and efficacious delivery of appropriate technology to people who need it. In addition consideration will be given to the different funding drivers that can alter the way services are delivered. This study has already defined eight archetypal "clients" to illustrate the different groups receiving assistive technology. Our international collaborators will be reflecting on comparative data from Canada and the United Kingdom and where appropriate, extending the data collection in those countries.

Conclusion

A common challenge in modern health care is to demonstrate whether solutions that have been used for many years and become routine practice actually contribute positively to an individual's rehabilitation and functional outcomes. Some assistive technologies are treated generically (eg wheelchairs) without appreciating the impact that appropriate prescription, selection, training, delivery and maintenance can have on the user's functional level. This poster will describe current research work aimed at providing qualitative and quantitative information on these topics.

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