

Chapter 14

Preventative Healthcare: A Proposed Holistic Assistive Technology Model Based on Industry Practice

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ABSTRACT

Australia's ageing population has escalated the demand for current health services and the trend could compound to unsustainable levels under the current health system. This chapter proposes a preventative healthcare model based on assistive technology to strengthen wellbeing at the individual and community level. The proposed model could minimise premature and inappropriate admission of Australians to care facilities while enhancing their independence and self care. It could also present a cost effective approach for policy makers by helping to alleviate the escalating costs of the health system. Importantly, this program offers an effective and sustainable alternative for delivering future health services.

INTRODUCTION

LifeTec Queensland is a not-for-profit consultative organisation that delivers professional advisory and educational services on the appropriate application of assistive technology (<http://www.lifetec.org.au>). LifeTec health professionals who include occupational therapists and speech pathologists provide state-wide information, consultation and education services to assist people to choose assistive technology which meets their needs and improves their independence and quality of life.

Because LifeTec is a not-for-profit organisation, it can work in close partnership with suppliers of assistive technology without entering into commercial arrangements. This independent approach helps define LifeTec as a valuable provider of quality advice on assistive technology to its clients.

Assistive technology intervention is a strategy which can facilitate the independence and wellbeing of people and contribute to preventative health models (McCreadie & Tinker, 2005). Assistive technology refers to devices or systems that provide people with practical solutions to everyday life activities. It includes a wide range of devices, systems or designs that also allow a

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Figure 1. Some common assistive technology that can assist people of all ages, including (a) large screen clock and large number dial phone; (b) adaptable tap turner; (c) computer access joystick, trackball and mouse configurations; (d) speech generating devices; (e) battery operated one handed jar opener; (f) mobility equipment



person to perform a task they would otherwise not do, or increase the ease and safety of performing a task. Assistive technology covers an array of both high and low technology solutions. These include mobility equipment, jar openers and tap turners, computer access hardware and software, bathroom and hygiene equipment, communication devices, home modification and accessible building design, eating equipment, personal alarm systems, and recreational aids. A small selection of low technology assistive devices is illustrated in Figure 1.

Although many devices appear to meet the desired needs of people, high levels of assistive technology abandonment are well documented (Wessels, 2003; Scherer, 2002). Inappropriate

selection of assistive technology and social reasons are behind these high levels of abandonment. Many social and practical reasons induce people to purchase ‘off the shelf’ assistive devices without seeking clinical advice to inform their selection. For some, a reluctance to seek advice is part of a denial of disability (Livneh, 2009). This is especially the case for those people who may suffer from chronic conditions.

The goal for assistive technology professionals should not be to merely reach people with a disability, but to reach everyone who can benefit from technology. Traditionally, assistive technology has been marketed to those with disabilities; however, a larger group has emerged who do not necessarily identify as having a disability. This

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