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# Implementing digital skills training in care homes: a literature review

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#### **ABSTRACT**

This article is the first of a two-part series that together inform and describe the introduction of digital skills training (DST) using a dedicated console computer provided for staff and residents. This formed an important part of a programme of culture change in a large care home with nursing in Glasgow, Scotland. In this article, a review of relevant literature shows that over the past decade there has been a substantial increase in the use of digital technology by care staff and their third age patients and residents living in community settings that include care homes. This growth in users is likely to have been influenced by the policy focus of the European Commission [EC] which, having filtered down to the member countries' governments, presents a persuasive argument to counter the future impact of increased numbers of people of advanced age upon finite health and social care resources. In doing so, issues that inhibit or enhance the progress of the acquisition of digital skills in care homes are considered, including the identification of exemplar schemes

#### THE NEED FOR DIGITAL TECHNOLOGY SKILLS IN CARE HOMES.

A Social Care Institute for Excellence (SCIE) report has suggested that:

'Technology can complement – not replace – personal care. It has the potential to transform people's lives, keep them independent for longer and achieve better value for money.'

(SCIE, 2015, p.4)

This statement is set against a background where the above Report has also noted that although 84% of adults use the internet, only 2% of the population have any digital enabled transactions with the NHS. Thus, it seems that acquisition of technology and skills alone does not necessarily mean that these will be applied in health and care transactions. Access to WiFi in care homes was specifically raised as a recommended move forwards (SCIE, 2015) and is a sizeable task

alone. In the United Kingdom (UK), there are an estimated 5,153 nursing homes and 12,325 residential homes (Laing and Buisson, 2014). These cater for some 426,000 older and disabled people of whom some 405,00 are aged 65 and more (Age UK, 2015a). In the UK social care sector there are an estimated 1.46 million people directly employed in adult social care (approximately half of these work with older people); by 2025 the number required is predicted to increase by up to 65% (Skills for Care, 2015). In 2014, the basic wage for 78% of social care assistants was £6.45 per hour (Kennedy, 2014) placing them amongst the lowest paid UK workers. Care homes' services are complicated by two-tier provision in the UK. Six out of every ten older people occupy beds in residential homes staffed solely by social care assistants with low-level health-care skills training and only four reside in homes with access to on-site nurses (Szczepura, 2011).

In addressing the challenges of sustaining quality of care and containing costs in a future with increased demand for health and social care, EC policy-makers and the UK government are seeking technology solutions to support the integration of health, social and wellness sectors (European Commission, 2011; UK Government Digital Service, 2014). In the European Commission's recent Consultation Green Paper (European Commission, 2015a and 2015b), the uptake of community-based technology was reported generally as being low, despite pockets of success such as Telecare in Scotland (Newhaven Research 2011; Scottish Government, 2012). Among the reasons suggested for this is the fact that the introduction of technology enabled care [TEC] has been:

'technology-led rather than society-led' (Deloitte Centre for Health Solutions, 2015).

Several authors have suggested that the introduction of new technology risks failure where there

is a lack of consultation at the design stage, including an analysis of user needs, experiences and living conditions (Saariluoma, 2010; Leikas et al, 2013). Within the complex diversity of care home settings (size, type of building and ownership of home and differences in the health status of residents), it has been hypothesized that new technology may be resisted if it does not take full account of the reality of the residents' disablements and consequential care requirements or the ways of working of care staff (Wild et al., 2014).

Further barriers to the uptake of technology can include the isolation of care homes staff from main-stream health education, possibly because of lack of funding to provide training above a nurse's statutory training level or in basic care provided for care assistants (RCN 2011). These difficulties are compounded by the increased dependency of older residents (who reportedly are often inappropriately placed), coupled with a shortage of permanent nursing staff, high staff turnover and low recruitment (RCN, 2011). In care homes, cultural resistance to change and a lack of evidence-based practice can arise from the quality of leadership provided by the home manager, acting as either a catalyst or a barrier to innovation (Wild, Szczepura and Nelson, 2010). However it is recognized that this is a challenging and demanding role marked by competing demands and lack of recognition (Orellana, 2014; Kydd et al, 2014). Josh et al., (2012) describe credible leaders with the most influence in changing culture as those who communicate with staff, listen to the story of change as it unfolds and recognize new opportunities. But changing practice alone will not change culture, unless there is a climate in which innovation is encouraged (Manthey, 2002).

A survey of employers and employees in care homes and domiciliary care carried out by the Social Care Institute for Excellence [SCIE] and Ipsos Mori, (2013a) aimed to evaluate whether the 'Get Connected' programme had increased the use of digital technology in social care

community settings. The survey found that 94% of social care staff employees now had access to the internet and approximately half of them used a computer at work on a daily basis. In a further related survey report published by SCIE and Ipsos MORI (2013b), with a focus on the use of e-learning in the social care sector, employers recorded that e-learning materials of relevance to social care were used by some half of their staff. Although the more traditional methods of training (face-to-face or on-the-job training) were reported to be more prevalent, some two-thirds of respondents said that they also included some form of e-learning. Just over two-fifths of employers viewed e-learning as effective for both managerial and operational staff: representing an increase from a similar report in 2010 (SCIE and Ipsos Mori 2010). Thus, despite (or perhaps because of) the concurrent downturn in the UK economy, the uptake of elearning (often free) seems to have flourished in this sector, with some employers reportedly showing a preference for e-learning over other approaches because of its flexible timing and pace and location of learning. In a report by Dunn, Bradell and Sunderland (2014) for Skills for Care, based upon surveys of a mix of community-based social care facilities including care homes, 95% of staff claimed that they used digital technologies, primarily in support of organisational and managerial aspects of care but less so in care planning and record-keeping. However, some one third of social care managers reported that their staff were deficient in digital skills (with the converse self-reported by care staff respondents); a particular issue related to online security.

Various reports to date suggest that younger rather than older staff are more likely to be computer literate and that this is linked to their wider personal use of 'smart' mobile phones. In the Skills for Care Report (Dunn, Bradell and Sunderland, 2014), the social care respondents who made use of digital technologies were also described as being culturally innovative,

supportive of open learning and willing to encourage the use of peer 'champions' to advance their use.

#### THE USE OF COMPUTERS BY OLDER PEOPLE

According to the Office of National Statistics some 4.8 million people in Britain aged over 64 do not have basic digital skills to go online (ONS, 2014), and 32% of adults aged 65 and over have never used a computer (ONS, 2015). Internet use has become increasingly important to older people no less because more services are moving to online access (Age UK, 2015b)

Zickuhr and Smith, (2012) suggest that the most likely negative influences undermining older people's acceptance of digital technology when living in their own homes in the community are: increased age, having poor education, and having a low income: as similarly supported by other authors (Elliot et al., 2015). It is possible that for older people, having lived a large part of their lives before the digital age, this has diminished their opportunity to experience the benefits of computer-usage either at work or at home. Feist et al. (2010) report that 30% of a sample of people aged over 54 would "use new technologies if they were easier to use" but 60% of participants aged over 79 felt "too old" to learn about new technologies. Negative stereotyping of older people within society at large could also act as an inhibitor to access (Hawthorne, 2007). Other barriers could be older people's fear of the unknown (Hawthorn, 2007); their lack of confidence (Marquie, Jourdan-Boddaert and Huet, 2002); and their inability to know how computer-led services and products can promote autonomy until seen as personally relevant and useful to their lives (Rice, Newell & Morgan, 2007). However, other research suggests that, when given the opportunity to use digital technology, older people can successfully learn new

skills (Priest, Nayak and Stuart-Hamilton, 2007), although they may be prone to forget new learning and take longer to progress (Dickinson, Arnott & Prior, 2007). Where there has been prior experience of the use of similar products, older people are likely to learn to use new digital technology faster than those with no previous experience (Lewis, Langdon and Clarkson, 2007). Conversely, a persistent barrier to internet usage can arise when older people's views are negatively shaped by their past experience of mechanical and electro-mechanical equipment (Sackman and Winkler, 2013). Curran, Walters and Robinson (2008) have found that digital usage is not inclusive of all would-be users, as many online sites proved to be inaccessible for people with disabilities, even though these barriers could be overcome with minor modifications. Similarly, Sackman and Winkler, (2010) suggest that if older people are to increase their usage of social media, new formats that are user-friendly need to be developed.

Despite the above challenges, the internet can offer benefits to the well-being of older people by lessening social loneliness (Barg et al., 2006; Cacioppo et al., 2006; Sum et al, 2008;), in particular through access to supportive social interaction (Slegers, van Boxtel, and Jolles., 2008; Cottton, Anderson and McCullough, 2013). US research findings suggest that internet use may have a protective effect against depressive symptoms for those with compromised health without functional impairments, although internet use by older people may not directly enhance mental health or well-being (Elliot et al. 2013). Brody, Cahn and Caputi (2013) conclude from their review of older people's use of technology, that negative stereotyping of older people that portrays them as avoiding technology and incapable of its use are outdated. They say that:

'With proper encouragement, clear explanations of the personal benefits and an appropriate time schedule, older people certainly have the potential to become equally effective in using technology and computer as younger age groups.'

Two examples involving older people highlight both recognition of their ability to learn digital skills and to derive benefits from the same. In the first, a charity called ACE IT based in Edinburgh has been running the 'Moose in the Hoose Project' (for information go to: www.aceit.org.uk). This introduces computer skills and access to the internet for care home residents and those attending day care centres across Edinburgh. The project utilises the past skills of older volunteers to support those of new learners. It also highlights the need for homes and centres to develop a learning-conducive environment in which to house these activities. In the second example, older people living in sheltered accommodation in Lambeth, London have created a 'digital community' that aims to enable older residents to become as confident about digital technology as those who are younger (Al Harbi and Khan, 2010). As well as having broadband access, the residents use assistive technology in the form of a large touch screen computer, an android tablet, digital cameras; large print keyboards and trackball mice to overcome the handicapping effects of arthritis or tremor. The residents have launched their own website, supported by experts to help them with the design features but not with content, which Having a housing scheme manager living onsite who is they prepared themselves. knowledgeable (of the residents and digital technology) is seen as a mainstay for this enterprise.

#### CONCLUSIONS FROM THE LITERATURE REVIEW

In conclusion, the literature suggests that for both staff and residents in the care home environment, the acquisition of digital skills can provide a huge opportunity to explore knowledge on a wide scale than hitherto. Familiarity with an in-house 'Champion' would seem to remove the stigmatising barrier of ignorance that can inhibit this form of new learning, even though often the benefits have to be seen before a sustainable commitment to becoming a 'user'

can occur. Gaining digital skills is the first part of the TEC journey: as the means but not the end, as will be further explored in Part 2 of this series of articles.

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