

RECOMMENDATIONS FOR THE USE OF TOUCHSCREEN TECHNOLOGY WITH PEOPLE WITH DEMENTIA WITHIN CARE HOME SETTINGS

Background: Touchscreen technology such as the iPad has the potential to provide an easily accessible medium for restorative memory interventions for people with dementia. In response to this, a number of pilot projects have been commissioned across the West Midlands and South West regions, using iPad touchscreen devices with older adults with dementia in residential and nursing care home settings. The devices have been used in one-to-one and group settings and have involved both life-story and reminiscence work. A systematic evaluation of these projects was carried out by the University of Worcester during 2011, with the intention of assessing the effectiveness and impact of the use of touchscreen technology on the day-to-day lives of people with dementia and the staff engaged in their care.

Method: Staff and residents' experience of touchscreen technology was explored using a combination of topic guided interviews, focus groups, case studies and field observations

Results: In summary the results indicated the following advantages of using touchscreen technology:

- Provides excellent medium for supporting reminiscence, for example through recording a life history;
- The positive emotions associated with such recall of memories can play an important role in enhancing care;
- Aiding recall to support activities of daily living such as making food choices;
- Engagement in iPad activities leads to increased interactions between residents, staff and family members;
- Interpersonal interactions are also increased indirectly through talk about the technology;
- Shared experience of the technology provides a focus for communication between older and younger generations;
- Staff-resident rapport increases as staff get to know their clients better through joint use of the technology;
- These new learning opportunities and interpersonal interactions had a positive impact on residents' quality of life;
- Case study data indicates a potential rehabilitative role for touchscreen technology in dementia;
- iPads were perceived as easier to use than traditional computers.

The challenges of using touchscreen technology included:

- Corporate issues related to problems getting WiFi access;
- Staff confidence in their own technological skills;
- Complexity of the interface for unsupported individual use of the iPad;
- The weight of the device, and problems seeing the screen because of its reflective surface.

Conclusions and Recommendations: The evidence gathered for this evaluation lends support to the idea that touchscreen technology can make a positive contribution to helping people to *live well with dementia*. In particular, we would recommend the following uses for touchscreen technology:

- Supporting reminiscence on a one-to-one basis using applications such as Life Journal;
- One-to-one sessions will also enhance staff-resident relationships and enable more person-centred practice;
- Supporting reminiscence through group activities using *apps* such as *You Tube* to search for and play music or films that older adults will recognise from their youth;
- Group sessions further encourage interaction between residents and so create a positive social environment;
- Using applications such as Skype to enhance communication with family and friends who are geographically distant;
- Using technologies to aid recall in order to support activities of daily living.

To ensure the technology is used to its full advantage it is also recommended that:

- Easy access to WiFi networks is offered within the care home;
- Training is provided to ensure staff have the confidence and skills to support their clients;
- Residents are given one-to-one scaffolded support when working on an individual basis;
- Difficulties related to ergonomics are addressed (often this is as simple as providing a cushion for support).

The wider implementation of touchscreen technology in the care of older adults with dementia should be encouraged as follows:

- Highlighting the direct advantages to daily care provided by *apps* that enhance reminiscence and recall;
- Emphasizing the indirect 'value-added' benefits of touchscreen technology including:
 - improved staff-resident rapport and increased person-centred practice;
 - increased interpersonal interactions leading to a more positive social environment;
- Exploring schemes which will support care homes to fund devices, for example through fundraising activities or sponsorship deals to help meet costs.

Further prospective evaluation is recommended in order to establish the evidence base, particularly in regard to a rehabilitative role for touchscreen technology in the care of older adults with dementia in residential and nursing care home settings