

Meaningful Spaces: DTA's virtual care home

Andrew Stafford and **Michael Page** report on a new virtual reality resource for dementia training in medication management and environmental design in residential care settings

medication management, and environmental design in the residential care setting* (see details at the end of the article).

Experienced dementia care clinician and trainer Michael Page (co-author of this article) worked with then DTA Directors Professor Richard Fleming and Dr Andrew Stafford (co-author here) over a 15-month period to develop DTA's first VR-based training resource, entitled Meaningful Spaces. The project team worked closely with Australian digital agency Viewport, which specialises in virtual and augmented reality simulations, to build the Meaningful Spaces VR application.

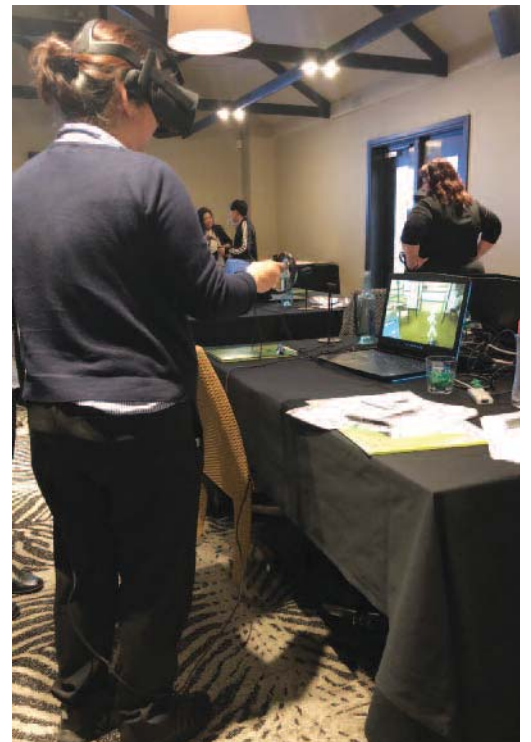
The Meaningful Spaces pilot

In June this year the Meaningful Spaces workshop was piloted in Adelaide with 25 staff from Ananda Aged Care, a South Australian residential care provider. When the pilot began, Ananda Aged Care was involved with a broader DTA TTP, and piloting the new resource with the staff group participating in the TTP was a natural synergy between the two organisations.

Participants worked in pairs during the half-day workshops, supporting each other to navigate the VR scenarios before sharing their experiences with the other workshop participants (see box p26 for a detailed description).

Feedback from the pilot was profoundly positive, with many respondents reporting greatly increased awareness of some of the unique challenges faced by people living with dementia in RACFs. One participant commented, "I learned a lot from the VR training. It was eye-opening for me as I got to see and felt what it was like having dementia for a short period of time".

Ananda Aged Care's Clinical Director



Ananda Aged Care staff taking part in the Meaningful Spaces VR workshop pilot in June this year. Photos courtesy Dementia Training Australia

Dr Pooja Newman was a participant in the pilot, and stated, "The VR pilot was an incredible opportunity with clever insights into how the thought and detail of buildings of homes for the aged is so paramount. Virtual reality really is the cusp to an exciting phase of learning and experiences that will be very powerful for our sector".

Michael Page, who led the development of the Meaningful Spaces workshop, said it was extremely satisfying to see 25 staff really immerse themselves in the experience of VR. "They genuinely demonstrated new insight into the lived experience of a resident with dementia, and the potentially harmful effects of unhelpful design and inappropriate medication administration, and conversely how small changes can improve quality of life. Following the workshop, staff felt

empowered to use their knowledge in identifying unmet needs and responding to them more effectively and empathetically. I am confident this knowledge will translate to improved care for our residents". ■

Future plans

Based on the positive outcomes of the pilot, DTA is now exploring a national rollout of the Meaningful Spaces workshop. Meaningful Spaces will initially only be offered to organisations engaged with DTA through its TTP program; for more information about these training packages, visit the DTA website at www.dta.com.au.

* Dementia Training Australia's (DTA) services include a Medication Management Consultancy and the Designing for People with Dementia (DPD)

The Meaningful Spaces pilot workshops

Meaningful Spaces was piloted in Adelaide as face-to-face workshops during which 25 staff from Ananda Aged Care undertook several VR-based scenarios. The workshops were facilitated by DTA trainers with experience in medication management and environmental design.

Each of the workshops during the trial at Ananda ran for half a day. Between each scenario there were significant debriefing periods, during which participants shared their experiences and the facilitator provided information on key aspects of medication use and / or environmental design.

Each of the VR scenarios allowed participants to experience some of the altered perceptions common in those living with dementia. This was designed to stimulate empathy – to give insights into the world that people living with dementia are trying to comprehend. It also allowed workshop participants to improve their understanding of the role of the built environment and medications in shaping responses to unmet needs.

The scenarios were problem-based, requiring participants to navigate through a residential aged care facility (RACF) and perform a number of simple tasks; for example, to find the garden, dining room, or a bathroom. The virtual RACF exposed participants to two main types of scenarios: 1) a poorly designed environment, and 2) an enabling environment (see photos above right), based on the principles of sound environmental design that can support living with dementia (Fleming & Purandare 2010). In comparison with the enabling environment, the poorly designed environment was characterised by noise, dim lighting, minimal signage, obscured



These still images from inside the Meaningful Spaces VR app show what the user sees with the headset on when navigating through a virtual RACF. Participants are exposed to two scenarios: a poorly designed environment (see left-hand photos above) and an enabling environment for people with dementia (see right-hand photos above).

Photos courtesy Dementia Training Australia

lines of sight, and limited contrast between objects and surrounds.

The VR scenarios also allowed workshop participants to see the different types of environment through the simulated viewpoint of someone experiencing the adverse effects of psychotropic medications. These included ataxia (an inability to walk in a straight line), vertigo (dizziness) and mydriasis (blurred vision).

The aim was to evoke empathy for people with dementia who may be experiencing side effects of these medications, and build awareness on the issues surrounding overuse of these medications.

Reference

Fleming R, Purandare N (2010) Long-term Care For People With Dementia: Environmental Design Guidelines. *International Psychogeriatrics* 22(7)1084-1096.

service. Both are offered as part of a DTA Tailored Training Package. The Medication Management Consultancy assists care providers to review antipsychotic use against recommended practice. The DPD service offers on-site education on principles for creating a dementia-friendly environment. Details: www.dta.com.au

References

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At the time of writing, Dr Andrew Stafford (left) was a Director of Dementia Training Australia (University of Western Australia); Michael Page is the Resident Focused Care Advocate and Workforce Development Manager at Ananda Aged Care