

member can compensate for many deficits in other domains, or equally, undermine any improvements in the other domains.

When assessing an environment, consider how it appears to the senses. For example:

- **Sight:** Lighting should be uniform with no areas of dark or deep shadow. Can doorways, entrances, exits and corridors be easily identified? Are there clear changes in colour and texture between floors and walls. How clear is the signage? Signs should be clearly visible, large enough to see and read, and use common symbols.
- **Hearing and sound:** Does sound echo from interior surfaces, making it difficult to understand people speaking? Often repositioning furniture or soft furnishings can make a big difference.

It is also worth considering the *time of day* when people will be accessing the venue. For example, while the approach to the premises may be well lit during the day,

reflected sunlight at particular times of the day may be blinding and on dusk, street lights may cast deep shadows. Thus, only looking at the venue for a short time mid-morning may conflict with the real experience.

Other areas to consider include *refreshments and the timing and logistics of their delivery*. For example, what types of food are available? Can it be delivered to rooms? Is access to food service areas congested at meal-times?

It is also important to consider *the surrounding environment* and how the venue relates to it. An important area emerging in many studies is the availability of green space. As an observation of the meetings our committee has attended, the most productive have had significant areas of green space nearby. This has enabled our members to unwind and relax during breaks or pre- and post-meeting sessions.

Remember, making venues more dementia friendly makes them more accessible to everyone and helps break down the stigma associated with dementia. ■

Dementia-friendly design resources

Environmental Design Resources

This extensive suite of resources from Dementia Training Australia, written by Richard Fleming and Kirsty Bennett, was originally published in 2017. It now also contains the Environmental Assessment Tool for acute care settings, added in 2020: <https://bit.ly/3MZEcAd>

Making It Dementia Friendly Guidebook

This 2018 guidebook was written by Dennis Frost and produced by the Southern Dementia Advisory Group (DAG). It discusses the impact dementia may have on our ability to interact with the environment as well as strategies for not only assessing venues but implementing change. Freely available at: <https://bit.ly/3OI6aHq>

Is This OUTSIDE Public Space Dementia Inclusive? A Checklist For Use By Dementia Groups

This free resource from HammondCare's The Dementia Centre offers nine key questions to think about when assessing whether an outside public spaces is dementia inclusive. Available to download at: <https://bit.ly/3xKLVfP>

Taking action to support veterans with dementia

Claudia Meyer, Xanthe Golenko and Judy Lowthian are evaluating the implementation of a program of music and reminiscence therapy, sensory modulation and exercise as a means of reducing responsive behaviours and improving functional capacity and the symptoms of depression for Australian Defence Force veterans living with dementia. Their findings will then inform guidelines to assist care homes to deliver the program.

Veterans of the Australian Defence Force have unique health and aged care needs, recognised within the Australian Government Aged Care Diversity Framework.¹ Veterans with post-traumatic stress disorder (PTSD) are twice as likely as other veterans to develop dementia,^{2,3} with symptoms of dementia often presenting with a different manifestation to veterans without PTSD through physical aggression, sleep disturbance, anxiety and walking without purpose.^{4,5}

Dementia-related emergence or exacerbation of PTSD is not fully understood, with the symptoms and experience potentially extremely distressing and challenging, not only for the veterans, but also for those living with and caring for them.⁶

Our two-year research study (2021-2022), the *Weaving Evidence into Action for Veterans with Dementia* (WEAVE) project, was funded through a bequest specifically to improve the lives of veterans living with dementia within Bolton Clarke's Galleon

Gardens care home on Queensland's Gold Coast. The project involved veterans with dementia, their families and staff members (residential and clinical care managers, nurses, personal care workers, a diversional therapist and an activity officer).

This work built on a systematic review of reviews⁷ that identified the evidence and ease of implementation of non-pharmacological interventions for people living with dementia and a literature review supplemented by interviews and focus groups with veterans and family members to understand mental health conditions common in veterans to inform development of a Veteran Family Mental Wellbeing Series of videos. (These videos are available on Bolton Clarke's website at www.boltonclarke.com.au/additional-services/veteran-family-mental-wellbeing-series/).

The four interventions

Four of the interventions identified in the literature review were chosen for implementation by trained

staff and volunteers in the care home's allied health and lifestyle programs:

- Music therapy – professional therapeutic use of music and its elements.
- Sensory modulation – designed to stimulate all the senses, as well as reducing stimuli as required (ie, if someone is triggered by certain sensations).
- Reminiscence therapy – discussion of past activities, events and experiences with another person or group of people, including life story work.
- Exercise – planned, structured and repetitive movement to improve or maintain physical fitness using specialised gym equipment.

The outcomes of interest, measured with validated tools, were: (1) reducing responsive behaviours (ie, the expression



Ted, a veteran living with dementia at Bolton Clarke's Galleon Gardens care home, during an exercise session with physiotherapist Mina Min. All photos courtesy Bolton Clarke

of something of importance to the person with dementia



WEAVE project participants with their life story books created during the reminiscence therapy sessions which use a biographical reminiscence approach to capturing stories from people's lives



through actions, words or gestures in response to an environmental stimulus); (2) improving / maintaining functional capacity (cognitive and / or physical capacity); and (3) improving symptoms of depression.

Involving residents, family, staff

Critical to this project was the co-design of *how* these interventions were to be delivered, ensuring they were

fit-for-purpose and relevant to the veterans with dementia, their family members and staff / management of the care home. Nine residents and two family members actively participated in two co-design sessions, to generate ideas of program delivery through discussion using prompts, photographs and activities. Eleven staff members from management, lifestyle, allied health, nursing, personal care and hotel services, and two volunteers, contributed ideas on programming requirements, program champions, and the engagement of veterans to participate.

The training phase

Training, with input from an instructional designer, was provided to all care home staff to ensure there was a consistent approach to working with veterans with dementia. This training had learning outcomes to:

- Examine the impact of dementia on veterans, including the interaction with PTSD.
- Identify potential triggers for responsive behaviours among veterans with dementia (eg, excessive noise, pain).
- Examine models for explaining responsive behaviours, including

Resources and further reading

Dementia Among Veterans

The 2021 report *Dementia in Australia* includes a short section setting out what is known about dementia among veterans in Australia: <https://bit.ly/39UAtX2>

Dementia and Changes in Behaviour

This help sheet – one of a set of resources aimed at veterans and their families – explains how dementia can change behaviour and suggests non-medication-based strategies to consider: <https://bit.ly/VMHOD>

The Interplay Between Post-traumatic Stress Disorder and Dementia

This systematic review by Desmarais *et al* (2020) concludes that PTSD and dementia have a bidirectional relationship: having PTSD increases the risk of late-onset dementia, and having dementia increases the risk of developing delayed-onset PTSD: <https://doi.org/10.1016/j.jagp.2019.08.006>



One of the weekly music therapy sessions held during the WEAVE project at Bolton Clarke's Galleon Gardens care home



■ From left: Dr Claudia Meyer is a physiotherapist, an Adjunct Research Fellow with Monash University's Rehabilitation, Ageing and Independent Living Research Centre and Flinders University's College of Nursing and Health Sciences, Senior Research Fellow at the Bolton Clarke Research Institute and an Honorary Associate with LaTrobe University's Centre for Health Communication and Participation; Dr Xanthe Golenko is a Research Fellow with the Bolton Clarke Research Institute, and an Adjunct Research Fellow with Griffith University; Professor Judy Lowthian leads a multidisciplinary research team as Head of Research and Principal Research Fellow at Bolton Clarke, the largest national not-for-profit aged and community care provider in Australia. She is an Adjunct Professor with University of Queensland's Faculty of Health and Associate Professor with Monash University's School of Public Health & Preventive Medicine

methods for de-escalation (eg, responding to unmet need).

- Examine the components of the WEAVE program and how they potentially impact the desired outcomes for veterans with dementia.
- Determine actions to engage Galleon Gardens veterans, family members, staff and volunteers in the WEAVE program.
- Identify strategies for working as a team for the best outcomes for veterans with dementia.

disentangle the effect of one intervention from another, given that the brief via the bequest was to benefit as many veterans as possible. Hence, all veterans with dementia could participate, with family members for support as needed, in as many or as few of the program offerings as they wished.

The program was conducted over 24 weeks, from May to October 2021, with exercise offered twice weekly, reminiscence and sensory modulation daily, and music therapy weekly.

Data was collected from 37 (out of a possible 42) veterans with dementia who

participated (with full Bolton Clarke Human Research Ethics Committee approval) at four time points: baseline, eight weeks, 16 weeks and 24 weeks. Demographic data, number of falls, polypharmacy and use of antipsychotic medication was collected alongside the following tools:

- Neuropsychiatric Inventory⁸
- Barthel Index⁹
- DeMorton Mobility Index¹⁰
- Psychogeriatric Assessment Scale¹¹
- Cornell Scale for Depression in Dementia.¹²

Evaluation

In addition to this evaluation of program effectiveness and impact at the individual level, a process evaluation also captured valuable findings regarding acceptability, feasibility, and 'fidelity' measures (how well the process kept to the original design).

These data are currently being analysed and prepared for publication. However, the photos on these pages reflect the enthusiasm and enjoyment of the activities experienced by residents who participated in the project.

Next steps

Bolton Clarke's Galleon Gardens care home continues

to offer the program to veterans living with dementia.

Our team will also be producing a program implementation manual with guidelines to assist other care homes to deliver the program. ■

Acknowledgments

Thanks to Dr Elizabeth Cyarto, a Bolton Clarke Research Institute team member involved in project design and data collection, prior to moving to the Lifestyle Manager role. A huge thanks to Gwen Bonney (diversional therapist, lifestyle co-ordinator) and Mina Min (physiotherapist), who were instrumental in setting up the program 'on the ground' at the Galleon Gardens care home, with the support of Bernadette Roney (Residential Care Manager) and Linda McClements (Clinical Manager).

Points for practice

- As far as practical, evidence-based programs should form the basis of lifestyle and allied health programs within residential care. However, context is critical, and programs should be tailored to be fit-for-purpose without losing core elements of their original design.
- A whole-of-care-home approach is encouraged to ensure the principles of the program are used consistently, with management and staff working as a team to enhance the engagement and participation of veterans.
- It's important to raise awareness among all levels of staff that the needs of veterans with dementia are unique and go beyond what staff may usually look for or be in people living with dementia. Training should provide staff with a broader understanding of how to respond to behaviour related to unmet need.



The reference list for this article is on the AJDC website at <https://bit.ly/julaugsept-2022-article-references>, or scan this QR code to access.