New beginnings: design to support engagement

Samantha Neylon and Ruth Payne describe the process of transforming a former convent building into a purpose-built dementia-friendly care home supporting a Montessori approach to dementia care, and lessons learnt

illa Maria Catholic Homes (VMCH) is a notfor-profit organisation providing aged care, retirement and disability services to over 9000 people across Victoria. VMCH Corpus Christie Aged Care Residence, in the Melbourne suburb of Clayton, undertook a \$900,000 project to refurbish the adjacent Cluny Convent into Cluny House, a 12-bedroom Memory Support Unit which opened to residents in July, 2019. Being a former convent, all the building's existing elements were suitable for minor internal modifications to easily convert to a dementia-specific unit. Therefore demolition was not considered nor would



The refurbished VMCH Corpus Christie Aged Care Residence in Melbourne. All photos: Michelle Despot from M Style & Co

it have been feasible.

Cluny House has been designed to support the organisation's Montessori approach to dementia care (see box p15). This approach has a key focus on residents 'doing and participating' through the provision of an environment

rich in opportunities for independent engagement. This enables the person living with dementia to have a meaningful place within their community, make autonomous choices and contribute to life in their home.

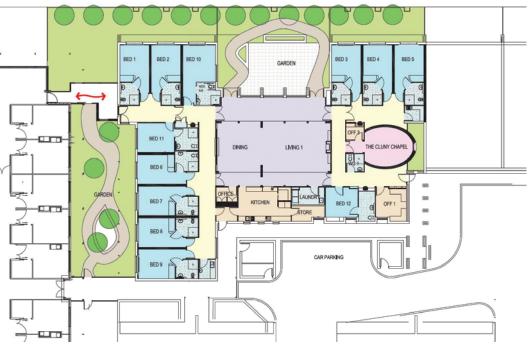
The scope of works included:

- Reconfigure the existing layout to include an additional three bedrooms with ensuite bathrooms.
- Upgrade fire compartmentation and services required to comply with the National Construction Code 9c building classification (aged care), as the building was originally classified as Class 3 (hostel).
- Upgrading the interiors in line with recommendations for a Memory Support Unit based on VMCH's Montessori learnings to date.
- Remodelling the existing kitchen so that staff and residents could use it effectively and safely.
- Addition of a domestic laundry for use by residents.
- Construction of a new passageway connecting Corpus Christi and the new Memory Support Unit to improve access for both staff and residents.
- New landscaping in the north-facing garden with appropriate features for residents with dementia to engage.

These works are reflected in the Cluny House floor plan at left.

The project brief

VMCH approached Perthbased living environment specialist company deFiddes, which provides personcentred design solutions for residential aged care,



Floor plan of the 12-bedroom refurbished Cluny House Memory Support Unit, which opened in 2019

retirement, dementia and disability care, to refurbish Cluny House with a homely, updated aesthetic. Finishes, loose furniture and accessories were selected in a mid-century modern style to evoke memories for residents living with dementia and create a comfortable, calming and enabling environment, whilst ensuring the Montessori approach could be effectively delivered by the Cluny House staff.

Taking inspiration from the location and build typology of this single-storey dwelling, the intention was to deliver a contemporary, yet intimate and homely design sympathetic to the cohort of residents from predominately Australian and European backgrounds who would be living there. It was important that the environment felt comfortable and welcoming, not intimidating or unfamiliar, and also included a subtle nod to the Mediterranean.

This was achieved using recognisable themes in each zone, with supporting artworks and accessories to incorporate sensory and lifestyle elements. Key dementia design components including colour, contrast, perception, scale and form were considered.

Independence, engagement

Architectural features and finishes were selected to be hard-wearing whilst echoing the design aesthetic. An



The open plan living and dining areas add the following to end of caption are divided into zones to provide cues for residents

outstanding feature of Cluny House is the short corridors which lead to communal areas with additional points of interest, such as an internal garden nook and textured wall hangings. The recessed shelving along the corridors holds memorabilia such as chinaware, glassware and trinket boxes for residents to observe and engage with. These items change according to current resident preferences and aid with wayfinding and ease of moving around the home.

The project also required the redesign of bedrooms and ensuites with the addition of a resident laundry and separate activity area. Key components of the brief were access to outdoors, storage, and ample natural light and clear visual access.

The predominantly open



The joinery incorporated storage wherever possible. The combination of easily-opened drawers, bench tops and open shelving supports ease of access, visual cueing and independence for residents

plan living and dining areas are divided into zones to make it easier for residents to recognise what each space is used for. Furniture and accessories are placed in such a way as to facilitate simple decision making and provide cues for task participation by residents. The carefully delineated spaces also provide a sense of intimacy and domestic scale.

The joinery incorporated storage wherever possible. The combination of easilyopened drawers, bench tops and open shelving supports ease of access, visual cueing and independence for residents.

The installation of internal windows to all the communal areas and hallways, and easyopening doors, further embedded this concept. Additional clinical requirements such as handwash stations were built into the walls as part of the joinery to soften their appearance and have them recede into the background.

All the furniture was assessed and approved by a seating specialist occupational therapist from the deFiddes team to provide an appropriate range of seating options to accommodate residents of different sizes and mobility. Furniture was selected based on functionality, comfort, safety and longevity, whilst also taking into account the required design and form to suit the mid-century modern style.

Whilst the accessories were themed to suit the residents' relationship with the era, the sensitive approach conveys meaning which endures beyond that time. Interior finishes including wall vinyls and paint colours, along with corresponding artwork and accessories, were specifically selected to assist resident wayfinding and familiarity.

For example, terracotta and blue, in keeping with a Mediterranean palette, have been used as a feature wall colour and in the furniture fabrics. Birds and florals were among the themes used to identify different areas of the home, with artwork and accessories reflecting those themes. The psychology of colour and the effect it has on moods and behaviours were considered, such as the introduction of the cool (blue) and warm (terracotta) in areas to either calm or stimulate.

In line with the Montessori approach, the kitchen needed to be domestic and accessible so residents could participate in meal preparation and serving should they wish to do so. Key to this was the open design of the kitchen and the use of removable heated units which only sit on the benchtop during meals. This ensures the kitchen is familiar and inviting to residents without large built-in commercial-size bainmaries and servery units. A resident laundry was designed and installed to facilitate the Montessori approach, where residents are provided with opportunities to contribute to the running of the house.

Also integral to the VMCH mission is supporting residents' spiritual needs and the existing chapel at Cluny House was refurbished to provide a contemplative sanctuary.

Noticeable changes

Helen Haynes, VMCH Montessori Change Lead, has reported that the new environment at Cluny House, coupled with the Montessori approach, has produced noticeable changes in residents in a short amount of time.

"The residents are able to wake up and choose to eat breakfast, which they serve themselves, at a time which suits them," Helen said. "They can even come to the dining room in their dressing gown if they feel like it. The selfservice dining has proved very successful; residents select their meal and put it on their own plate. Having the choice also means they tend to eat more, so there's also less need for supplement drinks."

Helen also reported a reduction in responsive behaviours, with residents taking more interest in activities and tasks. This has enthused staff who look forward to seeing even more improvements and supporting residents to reconnect with aspects of their life as they



The kitchen at Cluny House is designed to enable residents to participate in meal preparation and serving should they wish to do so

knew it before the onset of dementia.

Exciting challenge

Kathryn Lamond, deFiddes' senior interior designer, walked through the site before building works began to get a feel for the space and a clear vision to support the brief provided. Kathryn said it was an enjoyable and exciting challenge to come up with specific selections for Cluny House and she found the process to be very rewarding.

"When I visited Cluny House again just before the residents were due to move in, I was overwhelmed by the serene and calming sense of the space and how it all came together," Kathryn said. "I remember feeling extremely excited and satisfied and



The existing chapel at Cluny House was refurbished to provide a sanctuary and space for contemplation

couldn't wait to tell the rest of the team. It was a very special project and it was done with the greatest intent to create a space for residents that really did help them feel at peace and at home, and I felt immediately we all had achieved this vision."

Achieving positive resident outcomes was the ultimate goal for both organisations, beautifully captured by a Cluny House resident who said "This feels like home".

Lessons learnt

As with any project, there are lessons to be learnt and often these are only identified once the space is being occupied and used:

- Storage was considered and implemented, however more space is required for the Lifestyle team to store their resources.
- In hindsight, installing automatic doors would have facilitated residents' easy and unsupervised access to the courtyard, further enabling their independence and ensuring they could move freely around Cluny House as if they were in their own home.
- Similarly, the location of the laundry is not ideal. It would have been better positioned closer to the garden so it would be easier for the

residents to hang out their washing.

- Additional open shelving in the nooks at the end of corridors would provide more opportunities for resident engagement, either independently or with others.
- The addition of smaller 'withdraw' or solitary sitting areas (other than the chapel) off the main living areas would have been beneficial to provide the option of smaller intimate nooks – but that was not within the scope of this project.

VMCH has since completed another two Memory Support Units which have incorporated these valuable lessons.

The key learning identified by deFiddes was to recommend all future refurbishment projects include pre and post measures in the scope of works so that the value of projects can be quantified and qualified – particularly from the residents' perspective. Some of the measures recommended for assessment and evaluation before and after a refurbishment include:

• Lighting: what were the lux levels (unit of illumination of one square metre area) originally and what are they once the upgrades have been implemented? Do residents and staff observe or report any improved functional outcomes as a result? It has been reported that the lux levels are often too low for optimum visibility through older eyes, in addition to limited ability to adjust lighting to suit different task requirements, so studies examining this would be beneficial.

- Furniture: how do the specifications of new furniture compare to the original furniture and accommodate people of different sizes and shapes? For example, are residents observed to sit comfortably for longer periods with ease of movement?
- Wayfinding: is there a change in the residents' ability to find their way around the care home? Are the staff more or less involved in assisting residents to rooms such as bedrooms?
- Resident engagement: is there a change in the frequency and type of independent engagement by the residents with the new environmental interventions? Are there particular elements which seem to provide the most stimulation?

Assessment tools

There are a number of assessment tools that evaluate the environment, as well as those that evaluate quality of life and resident outcomes. The list of available assessment tools is extensive, The Montessori approach: resource tips

The Montessori approach to dementia care (referred to in this article) is based on the educational methods pioneered by the Italian physician Dr Maria Montessori over 100 years ago. The person-centred approach is strengthsbased and promotes independence in activities of daily living and sensory stimulation. To find out more, check the resources below.

Purposeful Activities for People with Dementia

This Dementia Australia resource includes six films showcasing the Montessori approach to care and how it can enrich the lives of people living with dementia. It comes with an accompanying workbook with key points for reflection, and is available at: https://bit.ly/purposeful-activities

Montessori... but isn't that for children?

This 45-minute video from Dementia Training Australia provides an overview of the key Montessori principles and presents a selection of case studies to show how a prepared environment, activities, roles and routines can enrich the lives of care home residents. Resource available here: https://bit.ly/but-isntthat-for-children

Origins of Montessori Programming for Dementia

In this journal article, Dr Cameron Camp explains how the Montessori approach can be

but could include the following: Dementia Services Development Centre's Dementia Design Audit Tool (DDAT); Dementia Training Australia's Environmental Assessment Tool (EAT); HammondCare's DesignSmart; the Residential Aged Care Built Environment



A range of seating options were chosen to accommodate residents of different sizes and mobility

Audit Tool (RACBEAT); Adult Social Care Outcomes Toolkit (ASCOT); and ICEpop CAPability measure for Older people (ICECAP-O).

These assessments could be completed before and after refurbishment works to compare and contrast project interventions and the benefits they bring to residents. Ideally these evaluations would then be shared - and not just within the project team, but widely amongst the residential aged care sector. Continuous learning and improvement is essential to build on the existing knowledge base in order to improve living environment outcomes for people living with dementia.

Conclusion

This project collaboration between VMCH and deFiddes to deliver a customised design consistent with residents'

translated into development of activities for people with dementia, and shares learning from a range of research studies related to the implementation and evaluation of Montessori methods in dementia care. Read the article here: www.ncbi.nlm.nih.gov/pmc/articles/ PMC3600589/

Montessori for dementia

Dementia Australia's Centre for Dementia Learning runs a three-hour training course delivered onsite for staff teams in any care setting entitled 'Montessori for dementia', which introduces the main components of the Montessori approach and presents strategies to implement Montessori-based programs for people living with dementia. Find out more at: https://dementialearning.org.au/course/montes sori-for-dementia/

Montessori Ageing Support Services (MASS)

Montessori Ageing Support Services (a division of the Montessori Australia Foundation) is the national peak body for supporting quality of life for older Australians through the Montessori approach. It oversees training, consulting, promotion and endorsement of enriched Montessori environments for older people receiving care services. More information: www.massa.org.au/about-mass

> preferences, memory support, latest products and evidencebased research has provided Cluny House residents with a premium home now and into the future.



Dr Samantha Neylon (left) is Clinical Director at De Fiddes. She has worked in service development, management and occupational therapy in the aged care and disability sectors for over 20 years. Contact her at Samantha@ dfdesign.com.au; Ruth Payne is an architect and Senior Development Manager at Villa Maria Catholic Homes (VMCH), specialising in the field of design for older people, particularly people living with dementia. Contact her at Ruth.Payne@vmch.com.au