



Designs on dementia

Pat Wynd still has the picture in her head, put there forever when she worked at New Plymouth's old Barrett St hospital. It was a troubling image of people with dementia.

“They spent all day walking backwards and forwards along this corridor. Sometimes, when the sun was out it made patterns on the floor, and they would bend down and try to pick the patterns up. They lived in a dream.”

Pat has a dream, too. It's a vision that's grown steadily more vivid over the last several decades, many of which she has spent ensuring the elderly – and those with dementia – have somewhere decent to live. She is the owner-operator of Maida Vale Retirement Village in Bell Block.

Pat will soon build New Zealand's ultimate home for dementia care, a \$13.5 million facility in the North Taranaki countryside, a place where residents will live in homes whose design will be guided by one of the world's top centres of dementia research.

Just as importantly, much of the seven-hectare rural site will be secure so residents can walk among trees and shrubs, feed sheep and chooks and visit a shearing shed.

WORDS: *Jim Tucker*

A university in Scotland has greatly informed Pat's plans for new and better ways to look after people with dementia. Late last year, she and granddaughter Jaymie Wynd, Village Manager at Maida Vale, went to the University of Stirling to attend seminars at the Dementia Services Development Centre (DSDC).

They gathered an extensive file of information on how best to accommodate people with dementia, absorbing all there was to learn from an academic institution that has been researching the topic for 25 years.

Their timing was propitious – Stirling has just created an app called Iridis that checks dementia care projects at the design stage and offers advice on whether what is planned meets best practice.

Stirling is one of the world's leading centres on what best practice is, applying decades of inquiry to creating guidelines that ensure a comfortable environment for those whose dementia has reached stage three. That's when a person can no longer function without significant help, and must be kept safe from tendencies to wander off.

In the more distant past, that meant confining them to small spaces that allowed limited access to the outdoors, says Pat. More recently, bigger and more appealing care wards have been built at retirement villages, but some are located away from the ground floor and easy reach of secure gardens and the kind of outside features – like farm sheds – that can provide familiarity and reassurance to those with dementia.

A clue to current trends can be gained from the Ministry of Health website section on dementia care. It sets out extensive guidelines on ideal accommodation, but the examples it shows appear (with one exception) to have limited outdoor space.

Pat's research trip - which included consulting Professor Lesley Palmer, the university's chief architect - showed her the full extent of what's needed in dementia facility design if residents are to feel safe, happy and secure.

She has spent a lot of time observing "happy wanderers" at her own retirement village, so already had some ideas on what's needed. "We have had a number of people assessed as stage three here and they needed to be moved to a secure unit. I've seen what they really need to have a good quality of life.

"Being able to go outside and wander through gardens and trees without feeling hemmed in by high fences is a must for their state of mind. That's why I looked for a large piece of land with mature plants and interesting features, a place that we can fence off in a way the fence itself is obscured."

Her planned village – located at Lepperton, down a long driveway off Mountain Rd (State Highway 3a that connects Waitara and Inglewood) - will take a couple of approaches to the need for outdoor access.

One is the securing of most of the seven hectares of planted land, which includes a pond, and the other is a sophisticated structure with a glass-roofed walkway that looks into a central garden.

That will be surrounded by five groups of 10 to 12 residential units, comprising normal-sized chalet rooms and larger ones. Each group will have direct access to the garden in the middle.

The grounds will have a few farm animals and poultry, and a building fitted out like a shearing shed and pens. There will be a replica shopping centre, and a faux bus stop to accommodate a tendency by some dementia sufferers to want to know they can go somewhere if the mood takes them.

Pat's purchase of the land four years ago included popular roadside café Tawa Glen at the front of the property. She hesitated about buying that part, then decided it would be an asset to the new village as a place relatives and visitors could take residents for a meal.

The driveway from SH3a to the village, incidentally, will be named Percy Sydney Drive, and the village called Percy Sydney Care Home, after Wynd's generous uncle, who before he died encouraged her to pursue the dementia project.

Layout of the proposed new village is radical by New Zealand standards. Five u-shaped groups of houses will cluster around the perimeter of a hexagon, the central garden. The sixth side will be occupied by the administration block.

The central garden will be faced by every housing cluster, with an entrance from each to a special roofed walkway that will go around its circumference. At the centre of each u-shape cluster will be a common lounge, kitchen and service area, with an exit corridor leading to the "covered street" surrounding the garden, which is also traversed by pathways.

The smaller rooms (26 sq m) are expected at this stage to cost about \$200,000 for a licence to occupy, with the bigger units (39 sq m) going for around \$280,000.

A quarter of that money goes towards management, maintenance and other costs associated with running the village. That's a standard arrangement with retirement villages, although licence rates can vary up to 30 percent.

The units will be sold off the plan. Two of the groups will be built initially, with others added as pre-sales are made. The project has undergone a complex and lengthy resource consent process that is now completed.

Pat smiles wryly at one of the issues raised – over her plan to have cookers installed in each unit.

There was great concern that giving dementia residents access to such things could be hazardous. That was until she told them none of those kinds of appliances would be hooked up to power or gas - they were there to give residents reassurance about the normality of their surroundings. Meals will be provided.

With everything ready to go, Pat expects construction to begin in October and the first residents in place a year later. It will be the realisation of something she has been thinking about for a decade (it took her two years to find a suitable site).

"We have people here (Maida Vale in Bell Block, which Pat and husband Ed have owned for 18 years) with dementia, and when they start to be happy wanderers

it becomes a problem. Although we use GPS trackers, their safety becomes compromised. They can get out on the road,

"We try to keep them here as long as we can, but once we can't contain them, they have to go to what they call a stage three, which is a locked dementia unit. The decision is made by the district health board assessors.

"We don't have a locked unit at Maida Vale and there are no fences, so at that point we're not allowed to keep them.

"The exception is when the family is prepared to sign documents to say they'll take full responsibility for Mum or Dad if a car hits them or anything like that.

"I feel there's got to be somewhere for these people that gives them more opportunity to get outside and do the things they've always done.

“Historically, our locked dementia units have just been one end of a wing with a bolted door, and that’s it, unless they’re lucky and there’s a little courtyard with a fence around it. These were not purpose-built for dementia, and I believe they’re just not suitable.

“Ours will all be built on one level, and it should be lovely for everybody. We do have to have a big fence around the perimeter, but we can put trees in front of that and nobody will notice.”

The shopping centre will include a hair salon and will otherwise be done up in a country style to match the location.

Anybody who’s been a farmer will be able to shepherd the sheep. There will be cows and poultry, as well. “They won’t need any medicine to sleep at night because they’ll be getting exercise.”

A part from stressing the importance of calming outdoor surrounds, University of Stirling’s experts provide extensive advice on what the indoors should be like for dementia residents.

People with the illness struggle to understand and navigate their built environment due to sensory, mobility or cognitive impairments, says Lesley Palmer, the DSDC’s chief architect.

The DSDC has become a world-leading authority on dementia design, says Professor Palmer. “Scotland is world-renowned for both its progressive dementia policy and its innovative work around dementia design, with our international partners looking to us for guidance, leadership and support.”

She says it’s only in the last five years UK architects, contractors and building commissioners have started to apply new dementia accommodation principles to properties outside of the conventional care environment.

Thanks to policy change and increased public awareness, the UK is now seeing buildings being adapted to the needs of the older generation, and specifically for those living with dementia.

People with dementia rely more on their senses, says Professor Emma Reynish, Stirling’s chair of dementia studies, so her colleagues have explored the importance of colour.

An associated organisation, the Thomas Pocklington Trust, has funded work that’s come up with guidelines on helping dementia patients with poor eyesight.

“Colour and contrast can both be used to enable people with sight loss and dementia to identify different rooms and key features inside and outside their homes,” say the guidelines Pat will consult when talking to the New Plymouth company designing her centre, Ardern Peters Architects.

The guidelines advise that colour and contrast can facilitate independent living by supporting people to find their way around and use facilities and fixtures such as lighting without help.

Take the colour of furniture and fittings: “Having furniture in colours which contrast with walls and flooring helps people recognise where they are. It can be easier to locate and use switches, sockets, railings and handrails that are of contrasting colour to the wall.”

Highlighting the edges of kitchen cabinets helps avoid accidental injury. Coloured rubber mats and crockery that contrasts with tablecloths help define the edges of plates and dishes.

Coloured seats contrast the toilet with other nearby surfaces. Stair edges can be contrasted with stair treads and risers to visually reinforce the change from flat surfaces to steps.

Natural light can visually stimulate residents because it provides higher light levels than electric lighting. Changes in daylight during the course of a day can signal the passing of time and help maintain sleeping patterns.

Task lighting such as strip lights under kitchen cabinets in the kitchen can be helpful, as can lights in shower areas and extra lights for external doors and keyholes.

Signs need to be clear, mounted low enough, have words and a picture, and contrast with the background. Large analogue clocks are important.

Noise is another key issue to be considered.

Ambient noise from sources like fans in bathrooms, the boiler room, traffic, staff, phones, visitors, lawn-mowers and line-trimmers, even hard shoes on floors, can disorientate residents.

Their attempts to communicate may be disrupted and their sleep patterns broken.

All those considerations are covered in resources such as a set of audit guidelines Pat has bought from the university.

These have many pages of check boxes she and the designers will use to ensure the new facility is ideal for those who will live there.