

# Reablement

## Exercise proves popular with residents

Our experience shows that programs of resistance training bring physical, cognitive and financial benefits, writes **Dr Tim Henwood**.

The Federal Government's mandating of reablement and restorative care within the delivery of aged care services is a significant part of the aged care reform agenda.

When coupled with the movement to a consumer directed care model, services that bring clients health and wellbeing have become of growing importance.

For the proactive organisations, this has seen the emergence of better trained staff and a movement towards a service model that embraces appropriate exercise as a therapy.

Further driving this are a number of professional allied health bodies that have been lobbying the government armed with significant evidence about the physical, cognitive and economic benefits of a reablement and restorative care approach.

This evidence is undeniable that when adults enter into regular, ongoing, targeted exercise, health and wellbeing can change positively and quickly.

However, of the many forms of exercise available, progressive resistance training is the most powerful in the battle against disability, risk of falls, morbidity and health service utilisation. Yet it continues to be the most underutilised.

This story is common across different groups of people, with the concept of resistance training conjuring up images of massive, muscular men grunting in front of mirrors.

Due to this perception, and a few other barriers to participation, there is a low level of engagement in resistance training among the general population.

Nevertheless, for the old and very old, resistance training holds the key for prolonged wellbeing – with gains in muscle strength that translate to improved capacity in activities of daily living.

Evidence also suggests a reduced risk of disease symptoms including dementia and osteoporosis, and improved social inclusion, dignity and quality of life that further translates to a reduction in carer needs and burden.

Benefits aside, machine-based training is incredibly safe, with adults sitting securely in a piece of equipment producing a force and the machine doing everything else.

So safe, in fact, it is commonly said the benefits far outweigh the risks and extend to all, independent of age, disability and disease.

Confident in the wide reaching benefits and value to older Australians, in particular those who experience a level of disability and are accessing government supported aged care, we have been running a series of studies, adding to the undeniable evidence.

### STUDY 1

Supported by a Department of Health grant, in partnership with Burnie Brae and Healthy Connections, The University of Queensland, Bond University, HUR Australia and St Vincent's Health Australia, we are delivering a clinic-based progressive resistance plus balance program – the Muscling Up against Disability (MUAD) project.

Community-dwelling adults aged 65 years and older who have Commonwealth Home Support Packages attend twice weekly training for 24 weeks. To date, over 240 adults have entered the study, with the last group due to enter the exercise program in August 2016.

While the final data collection won't be complete until August 2017, preliminary results show an increase of up to 360 per cent in the machine resistance and changes in isometric leg strength greater than 110 per cent.

To put this into context, these are muscle changes that directly translate to improved capacity in standing from sitting, mobilising and climbing, and all markers of independence.

In addition, participants' testimonials tell us that people have a renewed feeling of worth, more energy, are more confident on their feet and are experiencing less pain. While the study has a way to go, there is little doubt we are changing people's lives for the better.

Importantly, this is implementation research. The program is being delivered and managed by Burnie Brae, which is Queensland's largest community centre and whose mission is to promote client health and wellbeing.

Confident of the value to older adults with aged care packages, Burnie Brae has established an exercise clinic with the intention to run the program as an ongoing and sustainable aged care service.



Dr Tim Henwood



Progressive resistance training is the most powerful in the battle against disability, risk of falls and morbidity.

### STUDY 2

Again using HUR equipment and an almost identical exercise program as delivered in the MUAD project, Jennie Hewitt, a PhD student enrolled at the University of Sydney, has investigated the value of progressive resistance plus balance exercise in the prevention of falls and falls risk among residential aged care adults.

She is collecting data from 221 participants who were assigned at random to either the exercise or a control group across 16 facilities in northern NSW and south east Queensland.

Jennie's preliminary data analysis shows a 48 per cent reduction in falls among the exercise group. This is significant given falls continue to be the greatest driver of accident related hospital admission among older adults, attract a significant financial outlay by the government and commonly leave older individuals with mobility and disability issues.

### STUDY 3

Within the SUNBEAM projects we ran a small sub-study about the program's impact on sarcopenia.

As a geriatric syndrome, sarcopenia, which is the loss of muscle mass, muscle strength and physical performance, plays a key role in disability, falls risks, physical inactivity and mortality.

In Australian residential aged care, 40 per cent of residents are sarcopenic, with the prevalence increasing time in care.

In contrast, our sub-study demonstrated that with resistance training the increase in prevalence could not only be stopped but participants' could increase their muscle strength and mobility

### New initiative to get residents walking

Curtin University is partnering with Western Australian aged care provider Amana Living on a collaborative research project designed to get older people moving, enhance their wellbeing and improve their quality of life.

The Residents in Action Trial will promote walking among older people living in Amana Living retirement villages. The goal is to encourage greater physical activity, reduce sitting and enhance mental health among residents.

Researchers from Curtin say they will recruit active residents as ambassadors for the project and train them in using motivation techniques to support their peers.

It's hoped this approach will ensure the residents learn skills they can use to sustain an active and healthy life over the longer term.

Stephanie Buckland, CEO of Amana Living, says it is well documented that remaining active in later life is key to having a healthy mind and body.

"This project has the potential to demonstrate how peer support can help older people stay active for longer so the cornerstone of this project is in recruiting ambassadors to motivate their friends," she says.

The project will take place across 14 Amana Living retirement villages over two years and be completed in partnership with Australian Catholic University and Victoria University.



Aman Living Moline Village resident Ila Banks with Curtin researcher Cecillie Thogersen-Ntoumani.

"For the old and very old, resistance training holds the key for prolonged wellbeing – with gains in muscle strength that translate to improved capacity in activities of daily living."

capacity, drawing them away from sarcopenia and towards a reduction in disability and improvement in capacity in activities of daily living.

Here I have given only three examples.

While the amount of work investigating the impact of progressive resistance plus balance training in the aged care sector is not vast, the evidence is positive and undeniable.

This form of exercise brings physical, cognitive and financial benefits to the client, the provider and to the Federal Government.

Yet even in the presence of significant evidence it continues to be underutilised, or worse, a gym or exercise clinic is installed at an aged care facility but sits unused.

Getting a gym or clinic is just the first step. For programs to work and clients to benefit, trained staff must be available to deliver programs, clients must be educated about the benefits and all staff need to be supportive.

Moreover, when organisations employ a top down and bottom up approach to health and wellbeing, programs work and clients get well.

In our research we use this approach and not only see client health improve but program adherence and staff satisfaction remains high, as does program uptake.

The providers who have employed progressive resistance plus balance exercise as a service model of care are a rare breed who deserve acknowledgement for embracing the evidence.

These organisations are prioritising their clients' health and turning their back on an aged care culture that has made disability normal.

I have little doubt they value their decision to incorporate resistance training into the service model of care. Given the organisational value and the benefit to clients, it is astounding more providers of aged care services have not embraced this approach. ■

**Tim Henwood is principal at AgeFIT solutions and honorary senior research fellow in the school of human movement at The University of Queensland.**