

## A multimodal model for wellbeing:

Evaluating the Motiview cycling program in residential care





#### Sources of friction and limitation



Workforce shortages

1

Individual experience and regulation

2

Flexible infrastructure design and usage

3

Healthy ageing

4





Australians living in residential aged care are inactive 85% of the time.

Reduced physical activity is associated with poor psychological and physical health, with cascading risks to independence, wellbeing and mortality.





## Harbison's dementia innovation model



The Harbison Memory Clinic

1

Whole of Life Dementia Support model

2

Motiview virtual cycling initiative

3

**SPICE Program** 







#### **SPICE Program**

# Sustainable Personalised Interventions for Cognition, Care & Engagement





## Welcome to Motiview







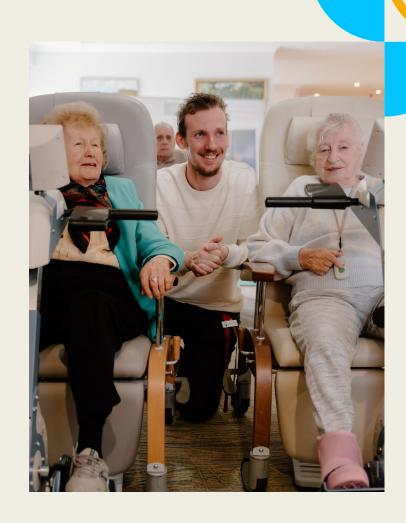
## Harbison's dementia innovation model

We searched the globe and found Motitech, a company founded after a project by the Agency for Nursing Homes in Bergen, Norway to stimulate older people and people with dementia to improve their lives through physical activity.

The project demonstrated that increased physical activity positively affected the behaviour, sleep patterns, appetite, pain management, use of medications, anxiety and depression of older people.

We now bring this program to Australia – uptake has been rapid with 13 sites already adopting Motiview and reporting positive outcomes for participating residents.









#### **Analysis and conclusions**



Physical activity leads to increased fitness, lower depression rates, and greater social connection.



Physically active elderly men and women have radically higher health-related quality of life scores than sedentary colleagues.



Shifts in quality of life through frequent exercise can occur in relatively short periods of time – a matter of weeks.





#### How did we measure this?

O1. Performance in the Sit-to-Stand-5 test considerably improved. Similarly, residents "were able to walk further in 2-min post-competition".



02. Participants reported that cycling was helping with health conditions such as blood circulation and strengthening their leg muscles.



03. Staff also reported similar benefits with one saying "I [saw] people come from the brink of losing their ability – to be able to move, be able to stand, be able to walk".



At around \$1,000 per year per resident to licence, equip and run, and assuming a modest 10% improvement in health-related qualify of life of residents, this equates to a return on investment of \$3.11 for every dollar spent.

Breakeven is 5.5%.





## When offered, 50% of residents actively participate in Motiview

"I can walk! I was having trouble walking to the other side (of the facility) and now I can go on my own!"

#### Participant 4 Male in Brookman study

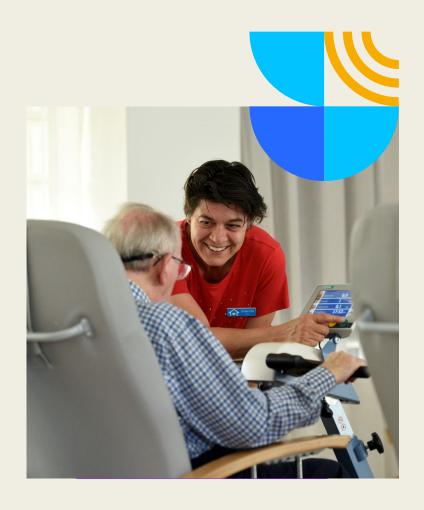
"I'd never ridden a bike before in my life. The last day I rode...50 kms in one go...staff said to me 'You got second in the world!.. Amazing!"

#### Participant 25 Female in Brookman study

"The camaraderie...they're riding alongside their friends, but they're also competing against them...spurring each other on."

Participant 2 in Brookman study (Leisure Staff)







#### How does it work



#### **Take**

any stationary bike or pedal exerciser, any tablet to run the software and a large screen....





#### And we add...

Engaging cycling videos to walk down memory lane or travel somewhere new.

A global network.

Gamification and reward.



















## Thank you.





