



**Institute for  
Musculoskeletal  
Health**

*A research partnership between Sydney Local Health District and the  
University of Sydney in musculoskeletal health and physical activity*

# Preventing falls in nursing homes - Australian perspectives

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**Health**  
Sydney  
Local Health District



THE UNIVERSITY OF  
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# Session outline

## 1. Impact of Australian policy updates

- Aged Care Act 2025
- Quality Indicators Program
- AN-ACC
- New Fall Prevention Guidelines

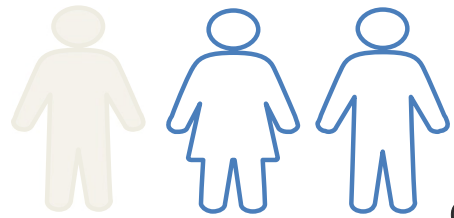
## 2. Exercise and nutrition interventions

- Sunbeam Program
- Dairy and protein supplementation

## 3. Telehealth innovations supporting ongoing fall prevention programs

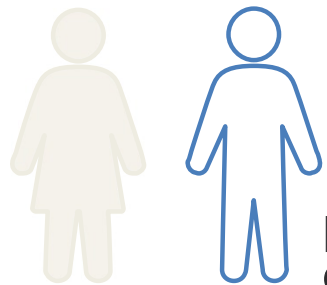


# Preventing falls requires a team approach



1 in 3

community dwelling adults  
>65years fall each year<sup>1</sup>



1 in 2

people living in residential aged  
care - 10-20% multiple fallers



A growing problem because of  
our ageing population<sup>2</sup>

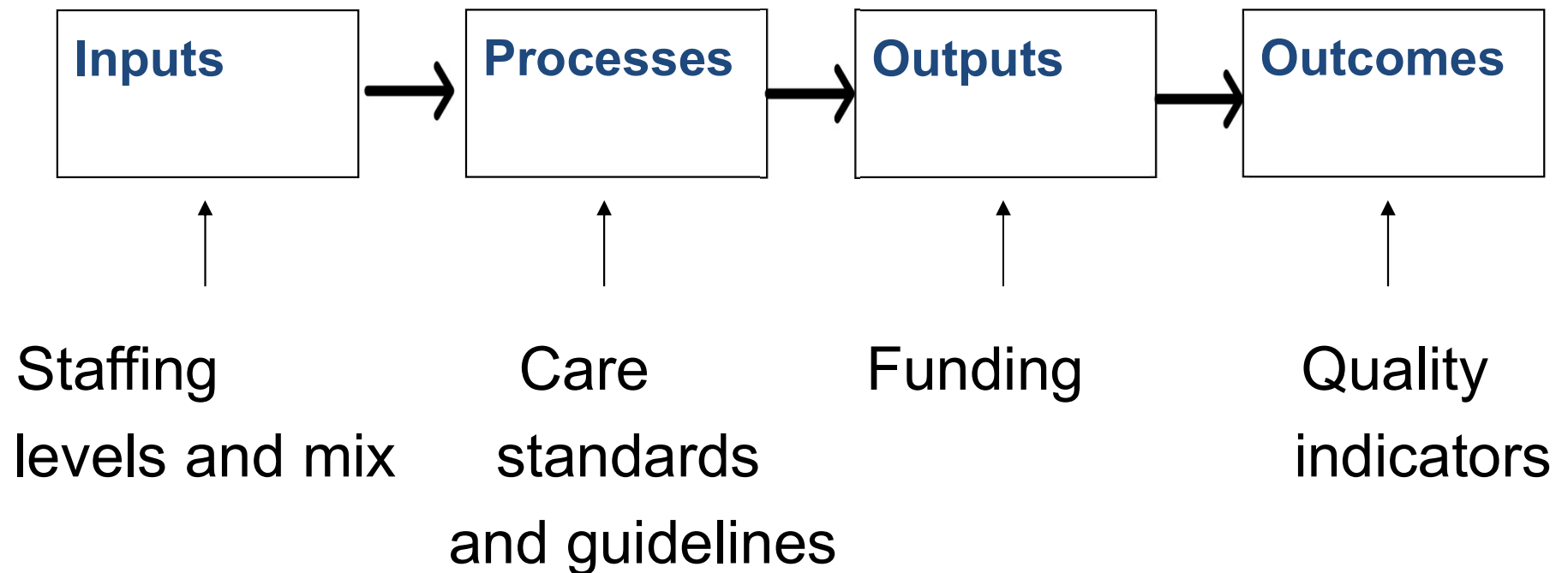
1 in 4 Australians > 65 by 2051  
2021 falls cost \$4,7 billion<sup>3</sup>

1. Australia to 2050: future challenges. The 2010 Intergenerational Report. Canberra: Commonwealth of Australia; 2010.

2. Lord SR, et al. An epidemiological study of falls in older community-dwelling women: the Randwick falls and fractures study. Aust J Public Health 1993

3. AIHW. Falls in older Australians, 2020-21

# Fall prevention opportunities in aged care



All are underpinned by the legislative, economic and policy context and key intersections such as health and social services



# Care minutes in RACFs

RACFs will need a registered nurse on-site and on duty 24 hours a day, 7 days a week

RACFs will need to deliver at least 200 care min/resident/day, including 40 minutes with a RN

Care minutes are the direct care time delivered to residents by registered nurses, enrolled nurses and personal care workers (including AINs) excluding allied health and lifestyle



# Care minutes in RACFs

Allied health care minutes  
dropped from 11 min to 4  
min/resident/day



# Aged Care Quality Standards

agedcarequality.gov.au



Australian Government  
Aged Care Quality and Safety Commission

Engage  
Empower  
Safeguard

# Funding Fall Prevention under AN-ACC?

## Block Funding Approach

### No Specific Allied Health Items

### Provider Responsibility

Facilities must fund allied health from within their general budget to meet care needs and Quality Standards.

### AH options :

- Medicare Chronic Disease Mx (n=5 sessions)
- Private health Insurance?





# Mandatory Quality Indicator Program (QI Program)

Commenced 1 July 2022

For providers to have robust, valid data to measure and monitor their performance and support continuous quality improvement in the care they provide to aged care recipients.

Over time, to give consumers transparent information about quality in aged care to assist decision making.

## QI Program quality indicators



### Pressure injuries

- Percentage of care recipients with pressure injuries, reported against six pressure injury stages.



### Physical restraint

- Percentage of care recipients who were physically restrained.



### Unplanned weight loss

- Percentage of care recipients who experienced significant unplanned weight loss (5% or more).
- Percentage of care recipients who experienced consecutive unplanned weight loss.



### Falls and major injury

- Percentage of care recipients who experienced one or more falls.
- Percentage of care recipients who experienced one or more falls resulting in major injury.



### Medication management

- Percentage of care recipients who were prescribed nine or more medications.
- Percentage of care recipients who received antipsychotic medications.



### Activities of daily living

- Percentage of care recipients who experienced a decline in activities of daily living.



### Incontinence care

- Percentage of care recipients who experienced incontinence associated dermatitis.



### Hospitalisation

- Percentage of care recipients who had one or more emergency department presentations.



### Workforce

- Percentage of staff turnover.



### Consumer experience

- Percentage of care recipients who report 'good' or 'excellent' experience of the service.

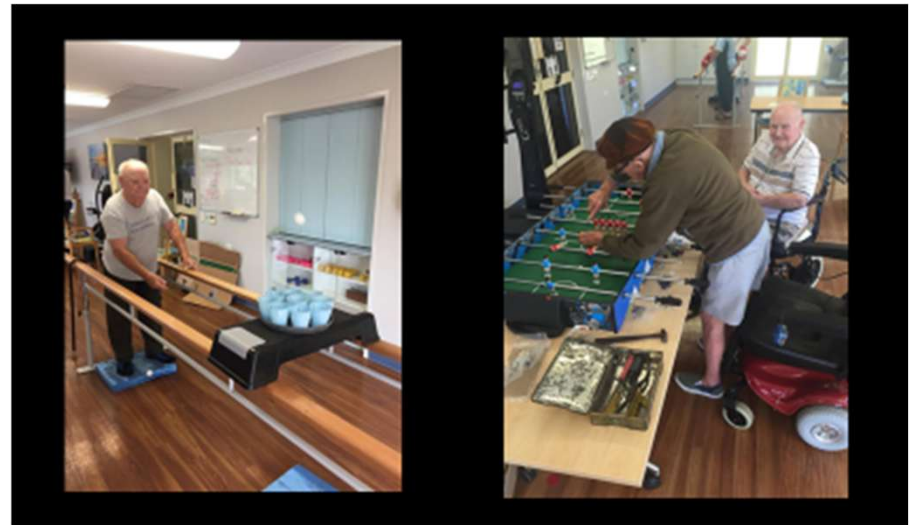


### Quality of life

- Percentage of care recipients who report 'good' or 'excellent' quality of life.

# Aged Care Act 1997 is no longer fit for purpose

The Department is now developing a new Aged Care Act which will place older people at the centre of the aged care system and provide the framework for fundamental change within the aged care sector.



Commence 1 July 2025

# Aged Care Act 2025

**Rights-Based Approach:** Centers around the rights and needs of older individuals, ensuring dignity and respect in care delivery.

**Strengthened Aged Care Quality Standards:** Mandates evidence-based practices, including proactive falls prevention strategies and reablement programs.

**Multidisciplinary Care Planning:** Encourages collaboration among health professionals (e.g., medical practitioners, nurses, physio, OTs etc) to deliver comprehensive care

**Enhanced Provider Accountability:** Establishes a new regulatory model to ensure providers adhere to quality standards, with a focus on continuous improvement and risk management.





# Rehabilitation in aged care

Individual therapy plans by qualified health professionals

Focus: maintain or restore independence in daily tasks

No resident charges for rehabilitation assessments

Includes arranging allied health visits





# Proposed amendments for specified care and services rehabilitation

- Designed with the individual and family by health professionals
- Delivered individually or in groups
- Supervised or delegated by qualified professionals

Aimed at maintaining or restoring function and independence through:

- **Maintenance therapy** to support daily living
- **Restorative care** to regain function before transitioning to maintenance

**BUT NOT INCLUDING INTENSIVE, LONG-TERM REHABILITATION SERVICES REQUIRED FOLLOWING (FOR EXAMPLE) SERIOUS ILLNESS OR INJURY, SURGERY OR TRAUMA.**

# Support at Home Program (SaH): Opportunities for fall prevention

**July 2025**, the *SaH* will replace the Commonwealth Home Support Programme (CHSP), Home Care Packages (HCP), and Short-Term Restorative Care (STRC), creating a single streamlined system for aged care in the community.

**Integrated Care Planning** enables MDT assessment and care

**Funding for Reablement and Restorative Care** – 20,000 pa 12wks

**Improved Access** based on assessed needs with a focus on measurable outcomes and goals

**Single Assessment System** through the new Aged Care Assessment System, which will identify allied health needs and refer appropriately

**Provider Flexibility**

# Australian fall prevention guidelines – sneak peek

Many falls can be prevented with the systematic implementation of tailored interventions – personal and environmental.

Engagement of multi-disciplinary team members, older people and their significant others is crucial.



# Exercise recommendations

**Tailored supervised exercise** delivered at a moderate intensity should be provided for those willing and able to participate.

Continuation of exercise is required as effects diminish once programs end.

Age and Ageing 2023; 52: 1–13  
<https://doi.org/10.1093/ageing/afad217>

**Exercise for falls prevention in aged care: systematic review and trial endpoint meta-analyses**

Suzanne M. Dyer





# So, what is happening?

1. Quality fall risk assessment and review
2. Allied Health assessment is valued
3. New nutrition programs emerging
4. Exercise programs variable



Dr Sandra Iuliano  
Senior Research Fellow, University of Melbourne



Dr Jennie Hewitt  
University of Sydney

# Fall assessment in action

**Screen all older people annually** for falls risk using a **validated tool**.

If someone has fallen, use a **simple balance or gait test** – poor performance triggers a full risk assessment.

A **comprehensive fall risk assessment** must identify factors like:

- Cognitive impairment
- Delirium risk
- Vision and medicines affecting falls

## Multidisciplinary approach

Use the assessment to **create a tailored fall prevention plan**, including:

- Specific interventions (exercise, home modifications, medication changes)
- Clear communication with the older person, carers, and the multidisciplinary team
- Treat balance and mobility issues

# Post fall management

**All falls must be investigated**, even if no injury is seen.

Provide **immediate care**, check for injuries, and escalate if needed.

**Reassess fall risk** and **update the care plan**. Include a **medication review** and check factors like mobility, vision, cognition, and environment.

**Communicate** fall events and risks during transitions of care.

**Conduct a post-fall analysis** to identify causes and prevention strategies.

**Serious falls** require a full **in-depth review**.



# Nutrition and Falls Prevention



## Method:

Added about **one extra serve** of dairy a day, giving residents an extra **560 mg of calcium** and **12 g of protein**.

## Key Findings:

- 46% reduction in hip fractures.
- 11% reduction in falls.

## Implications:

- Nutrition must be embedded as a core strategy for falls prevention alongside exercise and physiotherapy.





# Sunbeam fall prevention program: 55% fall reduction



Progressive resistance & high challenge  
balance program

Exercises are individually prescribed and  
upgraded by Physiotherapists

Two 1-hour sessions/week for 25 weeks,  
then ongoing maintenance

Performed in groups of up to 10  
residents



# Exercise components – strength and balance

## DOSAGE

2-3 sets

8-12 reps

Load: “moderate-somewhat hard” resistance

Progressive

## STATIC BALANCE

feet side by side to one leg stand

## DYNAMIC BALANCE

Reaching outside the base of support, simple dance routines, walking obstacle course

## Otago Exercise Program

Knee strengthening



Marching



Sit to stand



Squat



Balance training



Leg curls



Hip abduction



Figure of 8



# Economic value of Sunbeam

## Falls prevention

1 in 3 Australians aged 65 plus fall each year – making it the leading cause of deaths for this age group.

FALLS  
PREVENTION



AVERAGE COST: \$1,680  
AVERAGE QUALITY LIFE GAINS: \$3,000  
AVERAGE NET BENEFIT: \$1,320  
=  
COST BENEFIT RATIO: 1.8 TO 1



# Seated recreational exercise is everywhere



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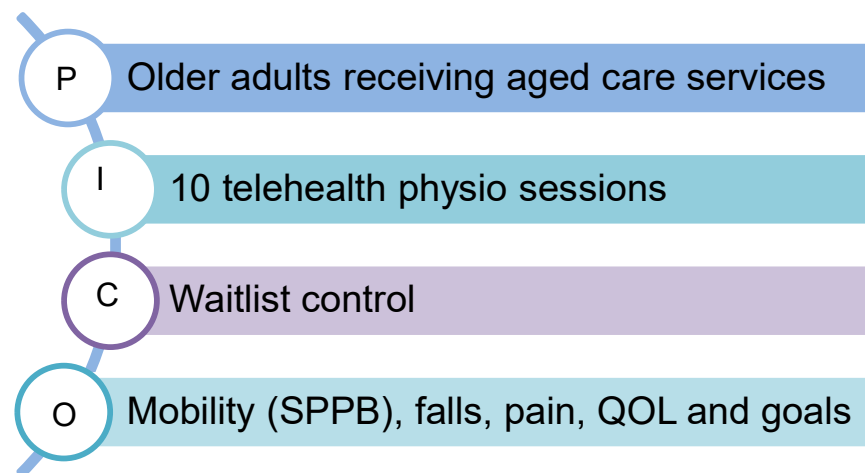
# Telehealth: increasing access to fall prevention programs

TOP UP aims to support an increase in Australia's Aged Care evidence base for physiotherapy telehealth to improve mobility for older adults with and without dementia receiving aged care services.

- Hybrid Type 1 effectiveness and implementation trial

*effectiveness study conditions offer an ideal opportunity to explore implementation issues and plan implementation strategies for uptake in aged care*

- 6/12 intervention
- 242 participants, waitlist control
- **Co-design and partnership methodology**
- Economic analysis 2025



# TOP UP key intervention components



10 Physio telehealth sessions over 6 months over Zoom



2 hours of exercise per week supported by online exercise



Progressive, tailored balance and strength moderate-intensity exercise (Otago informed)



Care staff (coaches) support participants one hour per week



# TOP UP's key finding

**Mobility:** +2.1/12 points improvement in mobility (SPPB) (95% CI 1.4 to 2.7)

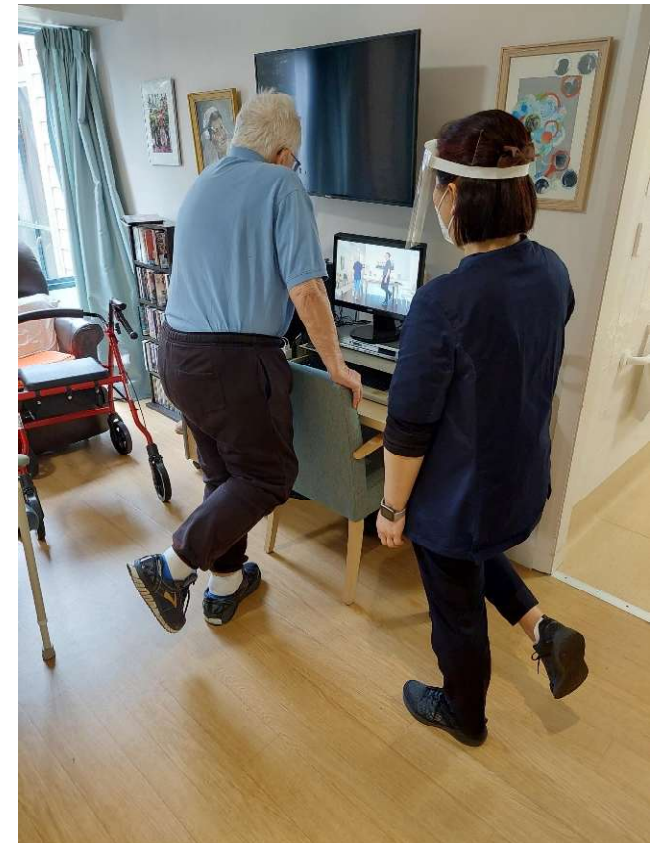
## **Fall Outcomes:**

- 38% fewer fallers (Risk Ratio 0.62; 95% CI 0.42 to 0.92)
- Fall rate reduced by 40% (Incidence Rate Ratio 0.60; 95% CI 0.35 to 1.01)

**Improved quality of life** (+6.2/100 points EQ-5D VAS; 95% CI 1.8 to 10.7)

**Reduced pain** (-1.1/10 points VAS; 95% CI -1.8 to -0.3)

**94% of participants recommend telephysiotherapy**



# 2024 FitBit 4-week feasibility study

**Study aim:** Are Fitbits used to track steps feasible and acceptable?

**Methods:** 16 participants (mean age 83)

## **Key Results:**

High engagement: 5/5 for ease of use, motivation, and enjoyment

Barriers: health issues interrupting adherence, fatigue, small screen size, and technical issues

## **Conclusion**

Step trackers are feasible and motivating for frail older adults, with the potential to support PA





# Meet Les – new admission

**Age: 91**

**Diagnosis:** OA, brain tumour

- HX left frozen shoulder
- R TKR 2010
- minimal joint pain
- brain surgery and radio therapy
- recent fall




**Social History:**

- wife recently died
- RACF 2 years





# So,.... this is happening?

1. MDT assessment – on admission, 3/12, PRN 
2. Wellness exercise – 30 min seated x3/wk, RAO 
3. Restorative exercise  
– small groups based on Sunbeam 
4. Individual rehab by physio **limited/nil**
5. Telehealth **emerging**

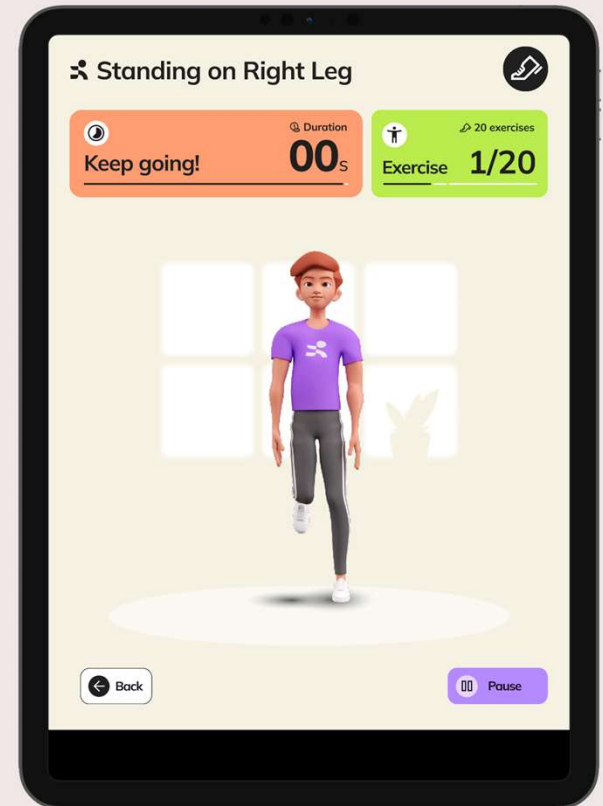
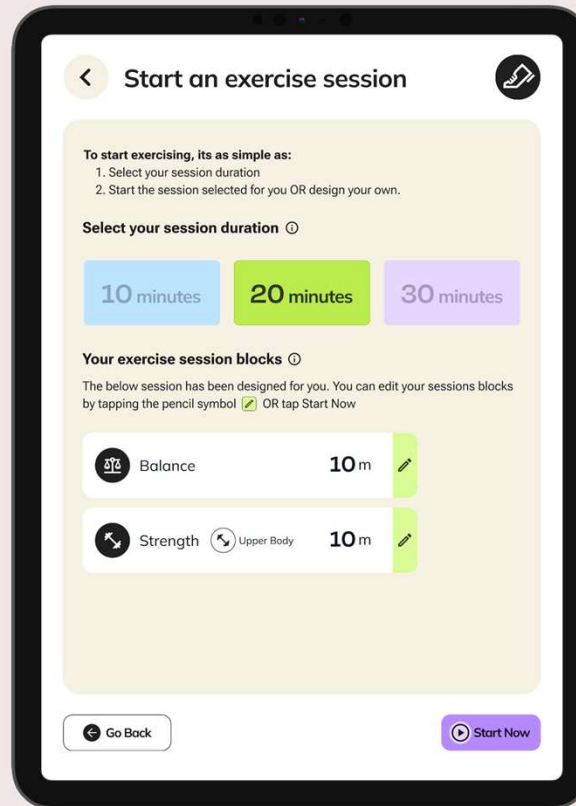
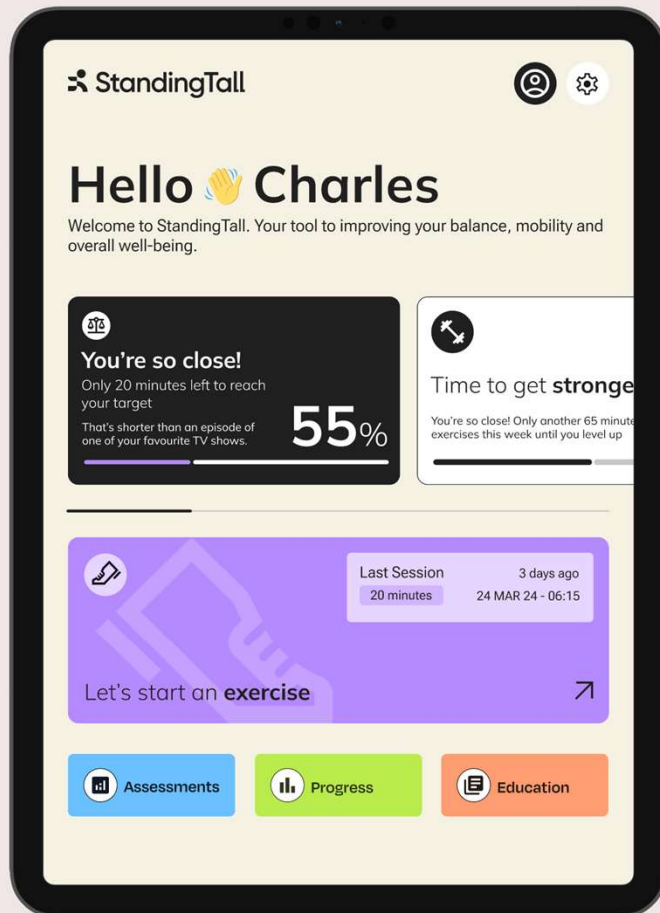
# So, what does the APA want?

1. One full-time physiotherapist on staff per 50-bed residential aged care facility.
2. Access to physiotherapist-led falls prevention programs, delivered twice weekly for 12 weeks at six-monthly intervals, for aged care residents at risk.
3. Physiotherapy falls risk assessments through Medicare, and 10 physiotherapy visits under Chronic Disease Management plans.
4. Falls prevention programs for all older adults who have presented to an emergency department and/or been admitted to hospital following a fall.



*I think it's fabulous. I wouldn't have imagined that I would be given the opportunity to get physio. Physically, I can walk further. My breathing is better. I'm stronger, it gives you more independence*

# StandingTall is almost here!



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