



Title of Innovation

Mater Hospital Brisbane

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Adelaide



Key Problem

- Increasing admissions (including re-admission) of elderly frail clients
- Admitted with age related changes including reduced:
 - Vision, vestibular function, peripheral sensation, reaction time, strength, co-ordination, endurance, and flexibility
 - Reduced balance ability and function
- Added vulnerability for increased illness in hospitalised elderly patients
- Approx. 33% 65+ yo's and 50% 85+ yo's **will fall** at least once in any given year

Key Problem:

- Limited opportunity for elderly inpatients to maintain/improve function, prevent falls, and minimise LOS

Aim of this innovation

Economic analysis:

- A review (Lord et al, 2007) of 578 injury-causing falls
- Average cost per fall:
 - No hospital intervention - \$205
 - ED visit required - \$1,040
 - Hospital admission - \$12,300

Overall aim:

- Improve function, prevent falls, decrease length of stay, and safely optimise the patient journey

Key Changes Implemented

- Facilitated MD team involvement via:
 - Close liaison with Healthy Ageing Service Geriatric team for appropriate inpatient referrals to the Circuit Class
 - Educating Doctors, Nurses, Other Allied Health staff on the benefits of Circuit Class and to prioritise/encourage Pt attendance
- Increased Physiotherapy screening of all inpatients for Circuit Class suitability
- Main risks identified and Circuit Class exercises tailored to the patient
- Classes have physical, cognitive and social components

Key Changes Implemented

- Implementation of bi-daily week day Circuit Class, 60mins sessions
- Re-arranged the workload of Physiotherapy Assistants (PTA's) to run the Circuit Class
- PTA's take all classes
- Focus on patient health/welfare, health care costs and patient journey safety (MHS EET strategy - safest hospital in Australia)

Outcomes so far

- Recent implementation to be evaluated 6 months post-implementation
- A similar program called Eat-Walk-Engage, implemented in a General Medical Ward for 18 months, showed:
 - Average length of stay reduced by 3 days
 - Improved nursing documentation in targeted domains
 - Consistent performance of mobilising and cognitive strategies
- Also supported by evidence:
 - Cochrane Review (Gillespie et al, 2009)
 - Systematic review (Sherrington et al, 2008) of 44 RCTs
- Good quality evidence for positive effect on falls prevention with multifactorial interventions including appropriate exercise intervention (ie balance and function training)

Lessons Learnt

- Appropriate exercise programs are effective in reducing falls rates
- Particularly if a balance component is included in the program
- Therefore, to be effective, programs should include:
 - **Balance exercises**
 - **Functional strength activities (eg stairs, sit to stand)**
 - **Moderate intensity resistance training**
 - **Endurance for general fitness**
 - **Opportunities for social interaction and for learning through observation**

Lessons Learnt

- Thorough Physiotherapy assessment to screen patients for Circuit Class
- Class content should be tailored to optimally challenge the patient safely
- It is a cost effective approach
 - **Physiotherapy Assistants to see multiple patients for treatment rather than individually**
- Suitable for multiple conditions
- Adaptable to differing levels of ability
- Aim is to would be to refer for ongoing outpatient balance rehabilitation and falls prevention programs but currently limited to referral options.

