



**Blueprint objective** 3. A health workforce that exists to serve and meet population health needs.

**Case example** Falls prevention through university health student participation at Greenhills Aged Care Facility Murwillumbah

**What is the community need or problem being addressed?**

It is estimated that over 251,000 individuals aged 65 years or older fall at least once a year in Australia. On average 507,000 of these annual falls are in NSW affecting up to 27 per cent of the 65 years and over population. In 2010, 143,000 of these falls resulted in injuries requiring medical treatment with an estimated cost to NSW Health of \$558.5 million. Those living in residential aged care are in a high-risk category for falls. In 2010 they accounted for 15 per cent of the total health care cost of falls. Reducing the incidence of falls not only has economic benefits, it also has a positive effect on aged care residents such as:

- Improving quality of life and positive mental health;
- Providing greater functional independence; and
- Increasing residents' ability to participate in community and other events and activities so reducing social isolation.

Although often preventable, such falls are on the rise<sup>1</sup>.

The University of Sydney Health Faculty worked collaboratively with Greenhills Lodge, an Aged Care facility in Northern Rivers NSW, to pilot a falls prevention program. During 2016 and 2017, the Lodge had 44 residents with 94 recorded falls occurring in the year prior to the project. Of these falls, 74 (78 per cent) resulted in injury and required first aid or medical attention. Falls were occurring at a rate of every five to six days. Residents commonly had co-morbidities such as osteoporosis, osteoarthritis, prior hip fracture and dementia. The average Berg Balance Scale across the 44 residents was 34/56 indicating the need for a mobility aid (generally a four- wheeled walker). All residents were within the falls category risk of medium to high and most had a history of falls leading to trauma.





**What is the approach being implemented?**

Clinical placements for physiotherapy students in aged care facilities in the Northern Rivers districts were developed through a collaborative partnership between the University of Sydney and the University Department for Rural Health (UDRH) in Lismore. Greenhills Aged Care Facility was recruited as a pilot placement site to trial a physiotherapy student falls reduction program. This provided access to physiotherapy expertise beyond that available through the Aged Care Funding Instrument (ACFI) that limits physiotherapy services to the provision of pain management.

The Falls Prevention Program aimed to reduce the number of falls residents have as well as improving their overall independence and quality of life. The facility previously had four morning exercise classes a week with one Activities Officer (AO) which all involved a Seated Activity Program (SAP). The SAP helped residents maintain upper limb strength and cardiorespiratory endurance but was not able to address individual needs or lower body strength and balance.

The physiotherapy students developed individualised programs to address each resident's unique needs including adding exercises to target body strength and balance. These programs included:

- Individual assessment of residents' physical capabilities and needs;
- Redesign of exercise programs e.g. adding music, increasing the range and complexity of activities including moving in different environments and strengthening the social nature of the program; and
- Co-delivery of the exercise program with the AO to ensure resident safety, participation and an individualised approach within a group environment.

**What have been the key enablers to the success of this approach?**

Key enablers included:

- Strong partnership and engagement from Greenhills Lodge;
- Funding support through the UDRH via the Multidisciplinary Rural Health Training Scheme (MRHTS) funding to support disciplinary supervision and interdisciplinary learning activities off-site that support quality practice in aged care;
- Ensuring year round placement of students for service continuity;
- Cost efficiency due to the low risk nature of the placement which enabled less intensive and multidisciplinary supervision mode; and
- Students understanding and valuing the focus on developing broad leadership and professional skills as well translation of research into practice in the aged care environment.





**What have been some of the challenges to the success of this approach?**

The biggest challenges to date have been to:

- Document in the resident's notes the treatments provided by the students as any improvement in the resident's physical capabilities reduces funding under the ACFI; and
- Ensure there are enough students to send on placement blocks throughout the year, particularly given that the MHRTS does not allow international students to be placed.

**What is needed to scale-up the successes?**

- Resourcing to enable the model to be implemented in more services through:
  - Increased MDRHT for rural areas;
  - Funding to extend the project into metropolitan regions; and
  - Removal of the disincentive for improving residents' level of functioning via the ACFI model.
- Collaboration with other university programs to increase the pool of physiotherapy students who can participate.
- Finalising the evaluation (see feedback below) to highlight the positive impact of the program.

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**Acknowledgement Feedback from the Manager at Greenhills**

*I would like to take this opportunity to thank The University of Sydney for the opportunity provided to Greenhills Lodge to host physiotherapy students through 2017. The program was a huge success and benefit to our residents, the focus was on falls prevention and strengthening. The students developed a falls prevention program that focused on exercise, education and strength training. The students continued with the development and provision of the program through each rotation of students. This assisted in monitoring and documenting the progress and identifying the gaps and where additional services were needed or could be implemented.*

*The students communicated the program and the results to management and the physio in the last week of their placement. The falls decreased drastically whilst the students were at Greenhills, residents and staff reported improved mobility and strength and this contributed to the decrease.*

*I would like to see students at Greenhills in 2018, they are a huge asset to our residents*

**References**

<sup>1</sup>Watson W, Clapperton A, Mitchell R, 2010, *The incidence and cost of falls injury among older people in New South Wales 2006/07*, viewed 1 May 2018, <http://www.health.nsw.gov.au/falls/Publications/incidence-cost-of-falls.pdf>.

