



## Podcast transcript:

# Interventions for preventing falls in older people in nursing care facilities and hospitals

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## *Clinical considerations*

David: “One of the many concerns for older people in hospitals and other residential facilities is the risk of a fall. Ian Cameron from Sydney Medical School in Australia describes a new Cochrane review of preventative strategies.”

Ian “Falls are common in nursing care facilities – about half of older people living in these settings fall each year. Hospitals are also hazardous places for older people, with falls counting among the common adverse events.

Older people in nursing care facilities and hospitals are not typical of older people generally. They are much more likely to have multiple illnesses including dementia and have higher levels of disability. Through my clinical work, and that of my co-authors on this Cochrane Review, we were well aware of these differences between older people living in the community compared to those in hospitals or other residential settings. We wondered if there might also be differences in successful falls prevention strategies between these settings and the community.

There was an existing Cochrane falls prevention review, coordinated by Lesley Gillespie, which has been very popular and influential. It was, however, becoming very large, and Lesley and her colleagues agreed to split it, and to ensure coordination in the writing of the two reviews. Both use a common methodology for analyzing the data, developed by Clare Robertson and both use the Prevention of Falls Network Europe’s classification for describing falls interventions. I would particularly like to acknowledge Geoffrey Murray who did a very large amount of work on the Review, classifying the studies according to the taxonomy and summarising their findings.

The resulting nursing care facilities and hospitals review is of moderate size with about 25,000 participants in 41 included studies. We present the results separately for nursing care facilities and hospitals because there are practical reasons to keep them apart. Generally, older people are in nursing care facilities for a much longer time than in hospitals, and they have major disabilities and multiple illnesses that are not of recent onset. By contrast, older people in hospital are currently ill or injured, or have had a recent onset

illness or injury. Most older people in hospital will return to living in the community.

So, what are our major results?

In hospitals, multifactorial interventions reduced the rate of falls and the risk of falling by about 30%. The risk of falling was more than halved by supervised exercise interventions in subacute hospitals, but this comes from a research base of only 131 participants in three trials.

In nursing care facilities, seven trials of supervised exercise had inconsistent results, with many differences across the trials and their findings. Things were not much clearer for the trials of multifactorial interventions and when we combined the results of these, the overall findings were not significantly different between the intervention and control groups. However, we subsequently decided to do an analysis separating the multifactorial interventions provided by a multidisciplinary team from those implemented by a single practitioner. This revealed a reduction in the rate of falls of about 40% when a multidisciplinary team were involved, and a 15% reduction in the risk of falling. Vitamin D supplementation also reduced the rate of falls in nursing care facilities, but there was almost no difference between people taking the vitamin or a placebo for risk of falling.

We were surprised that we could not be more definite about the role of multifactorial interventions, and exercise as a single intervention, in nursing care facilities. This seems partly due to the variety of the multifactorial interventions that have been tested, but we're not sure of the reason why there seems to be little or no benefit from exercise. One possibility is that a large number of older people living in nursing care facilities have dementia, which might limit the effectiveness of some interventions."

David: "You can read more about the results for other interventions, effective and otherwise, in the full version of Ian's review, which is available at [www dot the Cochrane library dot com.](http://www.dottheCochraneLibrary.com)"