Introduction

A New Zealand national quality improvement programme, focused on preventing falls and reducing harm from falls, was first mooted by hospital services in 2012. It was supported by the Lead Directors of Nursing Group and informed by a ‘mapping’ project on the status of falls and pressure injuries management across New Zealand public hospitals the same year. One of the key issues identified was the need for national leadership and guidance on consistent, evidence-based approaches to both falls and pressure injury prevention and management across the health and disability sector.
The burning platform for change

The Health Quality & Safety Commission engaged the New Zealand Institute of Economic Research to identify where falls occur, how age relates to the risk of falling and where costs lie. This report informed the development of the programme and priorities within it.¹

Another catalyst for action was the steady increase in the number of falls reported to the Commission as serious adverse events during 2007–11.

There was increasing publicity and concern that inpatient falls in public hospitals, reported as serious adverse events, had increased by 50 percent each year between 2007–08 and 2010–11. The latter year was the catalyst for starting a national focus in this area and a commitment from the Commission Board chair to make reducing harm from falls a priority in a national patient safety campaign.

The graphs below present the trend over time of both reported serious harm from falls and, more specifically, those that resulted in a broken hip.

The burden and cost of falls

Half of those who walked without help before fracturing a hip will no longer be able to walk independently in the year following the fracture.¹

Fracturing a hip while in hospital can extend a person’s length of stay by over a month.

Of those who suffer a hip fracture

- 27% will die within a year²
- 10–20% will be admitted to residential care³
- ½ will require support with daily living or mobilising⁴

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*$47,000 conservative estimated cost¹

SEE INSIGHT NO 8: REDUCING HARM FROM FALLS IN HOSPITALS
In the beginning

A cross-sectoral national expert advisory group was established to help guide and lead programme development. With the appointment of a national clinical lead, we partnered with the sector in creating a vision for the programme that addressed all aspects of the New Zealand Triple Aim. This required us to consider the individual’s needs; what potential population health approaches would look like and how we addressed system improvements to support a better experience of care and optimise care outcomes for older people at risk of falls across care settings.

The national Reducing Harm from Falls programme started in late 2012, and was launched as part of the Commission’s Open for better care national patient safety campaign in April 2013.

The vision

The Commission created a vision – to keep people safe from falling, with an initial focus on reducing harm from falls in the hospital setting. This was a challenging place to start, with many questioning what difference could be made. This was compounded by the fact that the evidence on what works best is strongest in the community setting. There was a strongly held view that the programme would focus on the inpatient setting, and then expand to community settings, taking a whole-of-system view.

Programme purpose

The programme’s purpose has been to reduce harm from falls by supporting interventions that prevent falls and reduce fall-related injuries. The target audience is older people at risk, defined as those aged 75+ (Māori/Pacific peoples aged 55+) in care settings (i.e., hospital inpatients, people in aged residential care and those at home receiving care).
Programme drivers

Reducing harm from falls

Key areas of focus in the hospital setting

Our theory of change

'The Commission’s theory of change was that it needed to support a shift to an adaptive model of falls prevention, where patients, families, whānau and healthcare staff work together to understand what helps each individual older person reduce their falls risk.'

'The Commission’s programme also took an evolutionary approach to the focus of improvement efforts, with an initial priority area of hospitals and care homes later encompassing integration of falls prevention efforts along the patient’s pathway, and then onwards to community falls prevention, which is likely to help secure sustainability.'

Aspirational aim statement

The original aim of the programme was to achieve, nationally, a 20 percent reduction in fall-related hip fractures in hospital settings over two years from 1 July 2013 to 30 June 2015 (recognising that international evidence showed a reduction of 10–30 percent was achievable).

Outcome results

Since late 2015, the rate of falls in hospital that led to a broken hip (known as a fractured neck of femur) has been 30–40 percent lower on average than it was before the programme started in 2013.5

Every week in 2010–12, on average, 2 patients fell and broke their hips in New Zealand hospitals. This rate has now almost halved.

Between July 2013 and 31 December 2016, there were 85 fewer in-hospital falls resulting in a broken hip. This saved $4 million in direct costs.

On average, an avoided broken hip gives an extra 1.6 years of healthy life.

This adds up to an additional 140 years of healthy life,* worth $25 million.

* Standardised calculation used to arrive at this number of years. The calculation for the quality of life is $180,000 per year of life. The base calculation is 1.64 years of life gained for every broken hip avoided.
Focus on measurement for improvement

As part of the Commission’s role in monitoring the effectiveness of our quality improvement programmes, we have established a suite of indicators and markers. In relation to the falls programme, this comprises two process markers and an outcome marker for the hospital setting.

Process markers:
- percentage of patients aged 75+ (or 55+ for Māori or Pacific peoples) that are assessed for their risk of falling (via completing a falls risk assessment) (with the aim/threshold being a minimum of 90 percent)
- percentage of older patients assessed as at risk of falling who are then given an individualised care plan that addresses these risks (with the aim/threshold being a minimum of 90 percent).

Outcome marker:
- in-hospital falls resulting in a fractured neck of femur.

The graph below shows the relationship between completed risk assessments, and individualised care plans as at December 2016.

Clinical leadership and networks

We have relied on a passionate and expert group of people who sit on a national expert advisory group, supported by regional falls leaders. This has been important in maintaining momentum and drive for the programme.

The programme has also engaged with a wide range of groups that have played an important role in prioritising falls prevention at senior levels of their organisations. This has included leadership from the directors of nursing, directors of allied health, the health of older people networks and the four regional patient safety alliance networks across the country.

With long-term sustainability in mind, it is vital that these networks continue to embed a distributed leadership model across the sector. The networks help falls prevention and ongoing quality improvement remain top priorities across all health services, and at every level of the organisations involved.
It is recognised that falls is not solely a nursing issue. The Commission has promoted ‘falls as everyone’s business’ through a focus on falls prevention and ‘April Falls’ activities each year. The concepts have been embraced by the sector and April Falls is now in its fifth year. We encourage engagement with multi-disciplinary teams (nursing, allied health, geriatricians/doctors/pharmacists) and have promoted the falls ‘10th topic’ (see right), identifying essential elements of an integrated falls prevention programme.

It is important that local and regional integrated falls groups and networks (with cross-sector representation) are well embedded to sustain a focus on both the hospital environment, and also the broader ‘whole-of-system’ view. A sustained focus means falls prevention will remain a priority area in the future.

Our results are internationally recognised: ‘The Health Quality & Safety Commission’s initiative is the first in the world to describe credible reductions on a national scale in the most serious type of harm—the fractured hips from falls in hospitals that lead to long-term loss of independence for most patients who experience them, and are followed by death within weeks or months for too many.’

‘Falls prevention is a different, everyday sort of heroism, rather less likely to reach the front pages of the newspapers; the patients saved from harm and the teams who helped them forever nameless. The publication of the Commission’s “Reducing harm from falls” results is a reminder that such quiet heroism is equally to be celebrated.’


The future
The Commission has a long-term commitment to falls prevention, as this is a high-harm area. We will maintain a strong evidence and measurement focus, with quarterly commentaries on in-hospital results.

We are also delighted to be active partners with the Accident Compensation Corporation and the Ministry of Health in adopting a ‘whole-of-system’ approach to falls and fracture management in New Zealand. This approach will see an integrated service delivered to our older and most vulnerable populations. It will include implementation of fracture liaison services, early supported discharge from hospitals, in-home and community-based strength and balance classes, medication review, visual acuity checks, Hip Fracture Registry and osteoporosis guidelines across primary, secondary and community care.

A best practice and outcome framework has been developed that will comprise a set of indicators developed across these key domains:

1. Independent and well at home
2. Fewer fall injuries
3. Fewer serious harm falls and fractures
4. Improved recovery (hospital and home)
5. Integrated falls and fracture care across the system.

As part of an iterative development process, the first outcome report and supporting technical document will be available by the end of May 2017 under the ‘Live Stronger for Longer’ banner. This will be open to sector feedback.
Partnering across agencies, and with the sector, is essential to achieve the best outcomes for older New Zealanders. The national outcomes framework will be used to support quality improvement across the system at a local, regional and national level.


FOOTNOTES
5. In this document we use statistical process control to differentiate sustained, meaningful changes (or special cause variation) from this random ‘noise’, also known as common cause variation. In general, we use the simple run chart to track change over time. Six points one side or other of the median line denotes a significant ‘MNT’ in results.

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