Reducing Harm from Falls Programme Evaluation

A report for the Health Quality & Safety Commission

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## CONTENTS

1 ACKNOWLEDGEMENTS .................................................................................................................. 3  
2 EXECUTIVE SUMMARY .............................................................................................................. 4  
3 INTRODUCTION ........................................................................................................................ 11  
4 THE REDUCING HARM FROM FALLS PROGRAMME ............................................................. 12  
5 EVALUATION AIMS AND OBJECTIVES .................................................................................... 16  
6 STRATEGIC FIT .......................................................................................................................... 18  
7 REDUCTIONS IN HARM FROM FALLS, AND VALUE FOR MONEY .................................. 19  
8 CONSUMER ENGAGEMENT AND BENEFITS .......................................................................... 26  
9 SECTOR ENGAGEMENT AND BENEFITS .................................................................................. 29  
10 SUSTAINABILITY ....................................................................................................................... 35  
11 PROGRAMME DELIVERY .......................................................................................................... 37  
12 BARRIERS AND ENABLERS TO PROGRAMME DELIVERY .............................................. 48  
13 IMPROVEMENTS AND FUTURE DIRECTIONS .................................................................... 54  
14 OVERVIEW AND KEY CONSIDERATIONS ......................................................................... 57  
APPENDIX 1: EVALUATION METHODS ...................................................................................... 60  
APPENDIX 2: SURVEY ANALYSIS BY CARE SETTING ............................................................ 64  
APPENDIX 3: RISK ASSESSMENT AND CARE PLANNING ..................................................... 69  
APPENDIX 4: ALIGNMENT OF RESOURCES TO THE TRIPLE AIM ........................................ 71
1 ACKNOWLEDGEMENTS

We would like to acknowledge the support of the stakeholders who took part in and contributed to this evaluation. This includes staff from the Health Quality & Safety Commission (the Commission), District Health Boards (DHBs), aged residential care (ARC) facilities, primary care organisations and providers, and community based providers who participated in the key informant interviews and focus groups. Their views and experiences have enabled the evaluation to provide a comprehensive insight into the implementation and outcomes of the national Reducing Harm from Falls Programme.
2 EXECUTIVE SUMMARY

This report presents an evaluation of the Health Quality & Safety Commission-led Reducing Harm from Falls Programme (the programme). The programme aims to reduce the harm people can suffer if they fall and hurt themselves, especially older people receiving care, whether in hospital, residential care, or in their own home.

The Commission works towards the New Zealand Triple Aim for quality improvement. The programme was designed to support each aspect of the Triple Aim.

The programme is implemented in collaboration with the Accident Compensation Corporation (ACC), the Ministry of Health (MoH) and Clinical Leads and representatives from District Health Boards (DHBs) from across New Zealand.

2.1 Evaluation approach
In November 2015, Synergia was commissioned to conduct an evaluation to:

- Determine whether the programme was meeting its stated objectives and achieving its intended results.
- Assist in determining what the sector needs from the Commission to support a sustained focus on reducing harm from falls across care settings.

A summative evaluation was conducted across hospital, ARC and primary/community care settings. An economic evaluation was beyond the scope of this evaluation.

2.2 Strategic fit
The programme contributes to the Commission’s strategic priorities through:

- Engaging consumers in developing falls prevention approaches and using consumer stories to promote engagement across the sector.
- Building leadership at national, regional and local levels through evidence-based resources and events, clinical leadership and regional networks.
- Developing the sector’s capability for improvement through developing an evidence base to inform practice, providing education and training, and promoting quality improvement.
- Embedding measurement and evaluation into the programme, including quality and safety markers (QSMs), data monitoring (including the Atlas of Healthcare Variation) and the commissioning of evaluation.
2.3 Reductions in harm from falls and value for money

In-hospital falls data from the Commission indicates the programme has prevented falls and saved costs since July 2012

67 FNOFs were prevented*

2140 bed days from falls were saved

No significant change in community-based falls resulting in hospital admission from 2009/10 to Dec 2015

$3.1m associated costs saved**

$2.8m Total avoidable costs***

* Fractured neck of femur (FNOF).

** The reduction in associated costs is based on an assessment of $47,000 for a fall with FNOF.1

*** The associated costs saved is based on the assumption that all patients who fall and break their hip in hospital return home. Total avoidable costs recognise that some of these patients will be admitted to a residential care facility. Total avoidable costs are based on a conservative estimate that 20% of patients will enter residential care; estimated at $135,000 a time.2

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2.4 Harm reduction across care settings

In reflection of the initial focus of the programme, the outcome data focused on in-hospital falls. Stakeholders involved in this evaluation identified some of the outcomes achieved across other care settings:

“It has made a difference. We managed to reduce our falls with fracture, and we reduced our injurious falls. So we’ve reduced categories of falls which, as I say, we now have a more targeted approach.”

Stakeholders noted the need to build further momentum in reducing falls in ARC and the community.

2.5 Consumer engagement and benefits

Consumer/family/whānau engagement has been a key message of the programme. Patient stories and experiences have been actively promoted as key engagement approaches. Consumers were actively engaged in the development of programme resources.

Consumers were also engaged through risk assessments and individualised care plans. At a DHB/organisational level innovative co-design or tailored models of care have also been developed.

There was limited visibility on engaging specifically with Māori, however most patients have been engaged through risk assessment and individualised care planning.

The programme has recognised Māori health disparities by reducing the age for risk assessment and care planning to adults aged 55 and over.

Consumer benefits included increased awareness of the harm from falls, falls self-management and avoiding a fall.

“It is about a 25% mortality rate within the first year after the hip fracture. About 50% of patients will not be able to return home after a hip fracture. So [falls prevention] is a huge thing for patients and their families.”

2.6 Sector engagement and benefits

DHB data on risk assessment and care planning for falls prevention is a useful indicator of programme engagement in the hospitals:
Conducting risk assessments for older patients has increased

92% of older patients were assessed for their risk of falling in 2015 quarter 4

This was 15% higher than 2013 quarter 1 (77%)

14 DHBs achieved the threshold of assessing over 90% of their older patients at risk of falling

6 DHBs assessed 80% - 89% of older patients for risk of falling

1 DHB assessed less than 75% of older patients for risk of falling

Individualised care planning for older patients at risk of falls has increased

92% of older patients at risk of falling received an individualised care plan in a hospital setting in 2015 quarter 4

This was 12% higher than 2013 quarter 1 (80%)

14 DHBs achieved the threshold of providing individualised care plans for over 90% of their older patients at risk of falling

5 DHBs were providing care plans for 77% - 80% of older patients

2 DHBs were providing care plans for less than 75% of older patients

Stakeholders described a good level of engagement from many ARC facilities and the community. Variations related to the strength of links across care settings in the DHB.
Benefits for the sector included:

- Putting the spotlight on falls – increasing awareness, knowledge and priority of falls prevention.
- Building sector capability through an evidence-base, education and training, and promoting quality improvement.
- Sector leadership at a national, local and regional level.
- Data monitoring to track and promote engagement.

2.7 Sustainability

Stakeholders were generally confident in the sustainability of activities and outcomes, particularly in hospital.

<table>
<thead>
<tr>
<th>Supporting factors</th>
<th>Challenges to sustainability</th>
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<tr>
<td>Data monitoring and use</td>
<td>Limited human and financial resources</td>
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<tr>
<td>Staff training and education</td>
<td>Falls prevention is unsystematic in some care settings</td>
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<td>Organisational support</td>
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<tr>
<td>Strategies are now “business as usual”</td>
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</table>

2.8 Programme delivery

The programme set up and initial implementation were delivered over three key stages:

- 2012: Scoping/planning
  - Envisioning, Enquiry and Engagement
  - Gathering evidence and experience/building relationships and networks

- 2013: Implementation/delivery
  - Engagement and Enabling
  - Raising awareness, gaining commitment, growing relationships/networks and promoting evidence-based interventions

- 2014: Delivery/transition
  - Enabling, Evaluation and Transition
  - Growing capability by providing support and providing or recommending resources. Transition of improved practice into business as usual/sustainability
The programme continues to be implemented in 2016 and was designed to:

- Prevent falls and reduce harm from falls in older people.
- Build national and regional (cross-sector) leadership for a sustained falls focus.
- Connect with key stakeholders, build partnerships and improve sector engagement.
- Galvanise action through a national programme focus – common purpose.
- Provide expert advice and guidance.
- Strengthen clinical leadership and networks.

2.8.1 Programme resources and activities

The programme has developed and promotes a range of resources and activities. This includes information for patients, the April Falls Quiz, clinician toolkits, newsletters, and the 10 topics in reducing harm from falls.

Resources and activities were designed to support the Triple Aim. Resources were well used and valued by the sector. They supported capability building, data monitoring, quality improvement, and falls prevention.

2.9 Barriers and enablers to programme delivery

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<thead>
<tr>
<th>Key barriers</th>
<th>Key enablers</th>
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<tr>
<td>Initial focus on hospitals only</td>
<td>National promotion of falls prevention</td>
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<td>Buy-in from some staff only</td>
<td>Capability building</td>
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<tr>
<td>Capacity of the sector and system</td>
<td>Strong evidence-base</td>
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<tr>
<td>Potential for risk assessment and care planning as a tick box exercise</td>
<td>Falls networks</td>
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<tr>
<td>A lack of consistent integration across the system</td>
<td>Sharing results of data monitoring</td>
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<td>Adapting the programme to local context</td>
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<td>Existing local programmes and strategies</td>
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2.10 Improvements and future directions

Key stakeholders identified the following improvements for the future:

- Increasing emphasis on reducing harm from falls outside the hospital.
- Increasing funding for primary prevention of falls.
- Further increasing quality improvement capabilities across DHBs.
- Using technology to engage more staff in workshops, e.g., webinars.
- Further increasing cohesion and collaboration between regional networks.
2.11 The future role of the Commission

The evaluation highlights the value of the Commission in:

- Maintaining a leadership role to sustain the focus on reducing harm from falls.
- Supporting other agencies to increase engagement outside the hospital.
- Continuing to provide evidence-based resources, training and education to promote best practice.
- Continuing to build quality improvement capabilities across DHBs.
- Maintaining the focus on QSMs and reporting to support sustainability in the hospital.
- Developing QSMs that move beyond the hospital.

2.12 Key considerations

**Maintaining a focus on reducing harm from falls**
- Continue to promote reducing harm from falls.
- Continue to update existing evidence, build capability and maintain clinical leadership.

**Increasing the emphasis on reducing harm from falls outside the hospital**
- Increase engagement with ARCs and primary/community care to promote consistency across the country. This could be through membership on the Falls EAG and/or drawing on the existing relationships with the ACC and MoH.
- Draw on resources and learnings from other regions to develop a model of care for reducing harm from falls in ARCs and the community.

**Developing a system-based response**
- Increasing integration and communication between care settings.
- Refining and sharing effective patient pathways to ensure those identified with a falls risk are referred to the appropriate services, regardless of where they enter the system.

**Data for monitoring and improvement**
- Sustaining existing data monitoring.
- Developing QSMs to support a systems response.

**Future Commission-led national initiatives**

The approach taken by the Commission, MoH and ACC has been highly valued by the sector. Future Commission-led initiatives should consider:

- Developing a strong and trusted evidence base to support engagement.
- Providing a programme that is flexible and responsive to different contexts.
- Being open to learning and change during programme delivery.
- Engaging local champions and influencers who can support momentum at a local level, demonstrate leadership and enhance enthusiasm for change.
- Using data monitoring to support sector engagement.
- Partnering with other key agencies to develop a systems response.
INTRODUCTION

This report presents an evaluation of the Health Quality & Safety Commission (the Commission)-led Reducing Harm from Falls Programme (the programme). The programme aims to reduce the harm that people can suffer if they fall and hurt themselves, especially older people receiving care, whether in hospital, residential care, or in their own home.

This programme is designed to engage the sector in reducing harm from falls by promoting evidence-based practices that prevent falls and reduce falls-related injuries in older people at risk in care settings.

The Commission works towards the New Zealand Triple Aim for quality improvement. The programme was designed to support each aspect of the Triple Aim.

The Commission has provided national leadership and influence in leading this programme, in collaboration with the Accident Compensation Corporation (ACC), the Ministry of Health (MoH), Clinical Leads and representatives from District Health Boards (DHBs) from across New Zealand. Each of these organisations are represented on an Expert Advisory Group (EAG) that guides the strategic direction of the programme and supports its implementation.

The EAG identified the value of an evaluation to understand the implementation and outcomes of the programme. An evaluation was needed to:

- Determine whether the programme was meeting its stated objectives and achieving its intended results.
- Assist in determining what the sector needs from the Commission to support a sustained focus on reducing harm from falls across care settings.

In October 2015, Synergia was selected by the Commission through a competitive tendering process to conduct a summative evaluation to meet these requirements. The evaluation adopted a mixed methods approach that drew on existing data from the Commission, as well as additional data collected by Synergia.

3.1 Report structure

Following this introduction, the report provides an overview of the programme. A more detailed description of the specific components and access to the resources can be found at: http://www.hqsc.govt.nz/our-programmes/reducing-harm-from-falls/

Outcome and process evaluation data is then used to evaluate the implementation and outcomes of the programme across hospital, ARC and primary/community care settings. This is followed by stakeholders’ views on sustainability, recommendations for improvements and key considerations.
4 THE REDUCING HARM FROM FALLS PROGRAMME

The Reducing Harm from Falls Programme is a national programme led by the Commission since mid-2012. The programme was established as one of the first focus areas of a national patient safety campaign. Key factors that influenced the establishment of the programme included:

- The findings of the quality of care indicator mapping project, which found wide variation in approaches to preventing falls and recommended a more consistent approach.
- A 50% per annum increase in the number of in-patient falls reported as serious and sentinel events to the Commission.

The Commission worked in partnership with a wide range of stakeholders to develop and support the programme across the sector. Key partners include ACC, MoH, Clinical Leads and other representatives from DHBs who form an EAG. In reflection of the expanded focus of the programme, a Clinical Lead for primary care was appointed in 2015 for a limited time period.

4.1 Programme focus

The New Zealand Triple Aim was one of the programme’s foundation principles and saw the EAG give specific attention to how the programme would support initiatives at an individual, population and system level.

Target group: The programme was designed to meet the needs of those experiencing the greatest harm from falls and focused on people aged 65 years and over. This group experiences a high incidence of falls combined with a high prevalence of underlying conditions, which increases the risk of falling and injury.

Care settings: As a priority it was necessary to initially focus the programme on the hospital setting. Internationally, many attempts to reduce falls in different contexts have failed. The hospital setting provided an opportunity to develop and test interventions supported through systematic data monitoring.

As planned, the focus on hospitals was followed by a modest extension into ARC facilities in 2013. In 2015 the programme was extended to include primary care and community settings, where the evidence for effecting change and improved outcomes for the older population is strongest.
4.2 An integrated and sustainable approach

Vision
- To embed an integrated and sustainable approach to reducing the harm from falls in older people, which engages older people and their family/whānau in meeting their goals for wellness, independence or coping.

Integration
- To encourage DHBs to work closely with their community, aged care and primary care partners to ensure seamless and improved care for older people and others at risk of falls.

Aims
- To reduce the risk of falling, rate of falls and severity of harm from falls.
- To promote the best possible outcomes for those who have suffered harm related to a fall.

4.3 Understanding outcomes

A key outcome in the hospital setting was achieving a 20% reduction in the number of fractured neck of femur (FNOF) over two years from 1 July 2013 to 30 June 2015, in relation to in-patient falls.

Tracking progress towards this outcome was not well supported by existing reporting systems. The programme highlighted the absence of national monitoring of falls-related data from across the sector. There was a heavy reliance on local incident reporting systems and voluntary reporting of the serious harm falls events to the Commission as Severity Assessment Code 1 and 2 events.

In response, the Commission established QSMs for the programme to influence behaviour and culture change, support ongoing quality improvement in care and system alignment, and as a mechanism to demonstrate programme effectiveness. These markers included the percentage of older patients assessed for their risk of falling and the percentage of patients identified as being at risk of falling who received an individualised care plan.

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3 This recognises that internationally a reduction of between 10% and 30% was achievable.
The programme also seeks to support:

- Effective **sector leadership**.
- **Sector engagement and connectedness**.
- **Integrated initiatives** to reduce the harm from falls (and promote an increasing alignment between falls and fracture prevention).
- **Measurement and evaluation** to monitor programme effectiveness and influence ongoing quality improvement.
- Evidence-based best practice to **build capability** in the sector.
- **Improvement in care and system alignment**.
- A **sustained focus** on reducing harm from falls as a priority for the Health of Older People network and key central agencies (MoH and ACC).

The programme has developed resources and implemented a broad range of activities to support its aims. These are described more in Section 11. They are also summarised in the logic model on the following page. This model identifies the context, key approaches to delivery and intended outcomes of the programme (Figure 1).
Figure 1: The Reducing Harm from Falls Programme logic (theory of change)

**Programme goal:** To reduce harm from falls by supporting interventions which prevent falls and reduce falls-related injuries in older people at risk

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<tr>
<th>Context and need</th>
<th>Resources and activities</th>
<th>Outputs</th>
<th>Outcomes</th>
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<tr>
<td><strong>Resources</strong></td>
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<td>National programme team</td>
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<td>Clinical leads (programme and primary care)</td>
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<td>Regional fall leaders and networks</td>
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<td>Hospital, ARC, community and primary health care professionals</td>
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<td>Visiting health care experts</td>
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<td>Audio visual, web and printed resources showcasing falls prevention content</td>
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<tr>
<td><strong>Activities</strong></td>
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<td>Sector focus</td>
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<td>Establishment of the Expert Advisory Group</td>
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<td>Regional network support to DHBs</td>
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<td>Falls-related events</td>
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<td>Falls quiz</td>
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<td>First topic for the campaign launch and revisited as Topic 5 in 2015</td>
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<tr>
<td>Engagement with health and disability sector leaders and peak bodies</td>
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<td>Quarterly monitoring of QSMs</td>
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<td>Promotion of best practice research findings on falls prevention strategies</td>
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<td>Consumer focus</td>
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<td>Risk assessments</td>
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<td>Individualised care plans</td>
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<td><strong>Hospital, ARC and Community health care professionals</strong></td>
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<tr>
<td>Increased understanding of falls prevention and improved capability across the sector</td>
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<tr>
<td>Consistent approach to preventing falls across the sector</td>
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<td>Tools to engage with consumers/patients early in conversations around falls risk</td>
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<td>Risk assessments undertaken informed by evidence</td>
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<td>Individualised care plans completed (for those identified at risk)</td>
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<tr>
<td>Interventions achieve improvement at an individual, population and system level (reflecting the commitment to NZ Triple Aim)</td>
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<tr>
<td>Strengthened/established regional (cross sector) networks and national agency partnerships</td>
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<td>Better knowledge and positive changes in behaviour</td>
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<td><strong>Short term outcomes</strong></td>
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<td>Increase awareness of falls prevention</td>
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<td>Increase awareness, knowledge and skills among health care professionals of how to prevent falls</td>
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<td>Improved data collection and monitoring of falls-related data</td>
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<td><strong>Medium term outcomes</strong></td>
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<tr>
<td>Alignment of falls and fracture prevention focus/policies across care settings</td>
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<tr>
<td>Increased number of older adults assessed for falls and provided with individualised care plans</td>
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<tr>
<td>Increased numbers of older adults and caregivers making appropriate behaviour and environmental changes</td>
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<tr>
<td>Reduction in number of additional occupied beds</td>
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<tr>
<td>Integrated falls and fracture prevention networks established locally, and regionally with aligned vision</td>
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<tr>
<td><strong>Long term outcomes</strong></td>
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<tr>
<td>Reduction in falls/fracture related presentations to ED</td>
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<tr>
<td>Reduction in falls/fracture related hospital admissions</td>
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<tr>
<td>Falls and fracture engagement tools reflected in all pathways in primary care for the frail/elderly</td>
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<tr>
<td>Improved availability/access to community based falls prevention programmes</td>
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**Enablers and challenges**

- Buy in of health professionals to support the Reducing Harm from Falls Programme
- Appropriate training and resources for staff to conduct risk assessments and develop care plans
- Access to falls prevention services for consumers
5 Evaluation aims and objectives

A summative process and outcomes evaluation was conducted.

The process evaluation objectives were designed to:

- Understand the delivery of the programme from a national, regional and local perspective.
- Understand the delivery of the programme within the different care settings.
- Identify how the programme resources and tools are accessed and used in the care settings.
- Identify the level of engagement across the sector in programme events and activities.
- Identify ideas for modifications and improvements for the programme, and key learnings for other quality improvement programmes.

The outcome evaluation objectives were designed to:

- Identify the contribution of the programme to the Commission’s strategic priorities.
- Understand stakeholder perceptions of the value of the programme.
- Identify the impacts on harm from falls and number of falls.
- Identify the benefits to consumers.
- Identify the extent to which the programme provided value for money.
- Identify the sustainability of the changes made through the programme.
- Identify the support needed from the sector and/or Commission to maintain a focus on falls prevention.

5.1 Evaluation approach and methods

The evaluation adopted a mixed methods approach, involving existing data and documentation from the Commission, as well as additional data collection by Synergia.

While the evaluation was summative in nature, it provides formative feedback in relation to the ARC, primary care and community settings, as these were more recently engaged in the programme.

The evaluation involved:

1. An evaluation design and context phase.
2. An analysis of existing documentation and data on outputs, outcomes and costs from the Commission.
3. An online survey with 197 participants from the sector.
4. In-depth interviews or focus groups with 38 key stakeholders to understand the implementation and success of the programme across hospital, ARC and primary care.
5. Mixed methods data integration and analysis.
Figure 2 presents an overview of the evaluation approach. The column on the left identifies the role of key ethical guidelines. These guidelines are important for ensuring an ethical evaluation that is focused on the needs of participants, commissioners and users (Aotearoa New Zealand Evaluation Association, 2015; Australasian Evaluation Society, 2013).

**Figure 2: Evaluation approach, methods and key phases**

Further detail on the evaluation methods, including their limitations are provided in Appendix 1. The limitations of the approach are also noted in Section 14.
6 STRATEGIC FIT

The programme contributes to the Commission’s strategic priorities through:

- **Engaging consumers** in developing falls prevention approaches and using consumer stories to promote engagement across the sector.
- **Building leadership** at national, regional and local levels through evidence-based resources and events, clinical leadership and regional networks.
- **Developing the sector’s capability for improvement** through developing an evidence base to inform practice, providing education and training, and promoting quality improvement.
- **Embedding measurement and evaluation** into the programme, including QSMs, data monitoring and the commissioning of evaluation.

Evidence for the role of the programme in supporting these priorities is explored through Sections 4, 8 and 9 on reductions in harm from falls (measurement and evaluation), consumer engagement and benefits, and sector engagement and benefits (building leadership, and developing the sector’s capability for improvement).
REDUCTIONS IN HARM FROM FALLS, AND VALUE FOR MONEY

A key outcome for the programme was to achieve a 20% reduction in the number of FNOF over two years, from 1 July 2013 to 30 June 2015, in relation to in-patient falls.

In June 2015, the Commission achieved a sustained significant reduction in in-hospital falls that lead to FNOF. This equates to 25% reduction in falls with FNOF in the 2014/15 period.

This outcome is reflected in the QSM run chart provided by the Commission (Figure 3). This indicates that:

- 64 falls resulted in FNOF in the 12 months ending December 2015.
- Falls continue to show a significant decrease since December 2014.
- Median monthly falls reduced from eight to six.
- This is the third quarter in which this significant improvement has been demonstrated.

Figure 3: Outcome marker, in-hospital falls with fractured neck of femur by month
The Commission’s report on adverse events for July 2014 to June 2015 also provides an insight into the outcomes of the programme. The report identifies the significant reductions achieved in in-hospital falls resulting in FNOF since November 2014 onwards (Figure 4).

Figure 4: In-hospital falls with fractured neck of femur per 100,000 admissions aged 15 and over, 2012-15 (routine hospital data)

The adverse events reports received by the Commission reflect this downward trend. The adverse events data indicates a 14% reduction, from 98 to 84 incidents (Figure 5). The reduction is primarily driven by shifts in the central (Lower North Island) and South Island regions. The data, however, shows an increase in reports of other fall-related injuries. This could be the result of increased reporting or a shift in the level of harm resulting from in-hospital falls i.e. fewer falls resulting in FNOF but less of a shift in the number of falls. The Commission will continue to monitor this data to understand this more.

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The alignment between the adverse events data and the national minimum data set in the Commission’s report indicates that the reporting of adverse events has improved. This was a key message of the programme and demonstrates the sector’s commitment to reporting on all harm.

These outcomes are important given the reductions in harms that they support. For example, FNOF has a significant impact on people’s lives and can result in death, disability, and reduced quality of life and independence. The programme has achieved a significant reduction in, and avoidance of, these harms for patients in hospital.

The data monitoring conducted by the Commission provides a useful insight into the reduction in harm from in-hospital falls that have been observed since the implementation of the programme.

The following infographic provides an overview of the number of falls prevented and associated cost savings from July 2013 to December 2015. Further information on this data can be found at: http://www.hqsc.govt.nz/our-programmes/health-quality-evaluation/projects/quality-and-safety-markers/
In-hospital falls data from the Commission indicates the programme has prevented falls and saved costs since July 2012

67 FNOFs were prevented

2140 bed days from falls were saved

No significant change in community-based falls resulting in hospital admission from 2009/10 to Dec 2015

$3.1m associated costs saved

$2.8m Total avoidable costs

7.1 Understanding cost savings

The Commission acknowledges estimating cost savings for in-hospital falls with a FNOF is difficult. An estimated cost of $47,000 for a fall with an FNOF was used to estimate the associated costs saved in the above infographic.5

The costs of FNOFs can extend beyond bed days. Many older patients with an FNOF may not return to their home, as some are admitted to ARC. These costs are likely to be far greater, with a New Zealand-based estimate suggesting $135,000 per patient.6 The estimated total avoidable costs included in the infographic above are based on the

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Commission’s conservative estimate that 20% of patients who avoided a fall would be admitted to a residential care facility.\(^7\)

### 7.2 Reducing harm from falls in the community

NZIER was commissioned to support the programme in understanding the baseline context for falls and their associated costs.\(^3\) The National Minimum Dataset is used to describe publicly funded discharges for falls in 2009/10. Comparing this data with data from 2015 provides an insight into reducing the harm from falls in the community for falls experienced by those over 65.

The comparison indicated no significant reductions in publicly funded hospital discharges for falls.

When reviewing this data, it is important to acknowledge the programme has only had a more recent focus in ARC and primary/community care settings. Changes in hospital discharges for falls would require a more sustained focus on reducing the harm from falls outside of hospital.

Data provided by the Commission on falls-related FNOF hospital admissions (including Emergency Department, ED) also highlights the need for increasing and/or sustaining the emphasis on reducing the harm from falls outside of the hospital setting. Data from the National Minimum Dataset indicated no significant change in falls-related hospital admissions:

- In 2015 there were 4677 falls-related FNOF hospital admissions (including ED).
- In 2010/11 there were 3965 falls-related FNOF hospital admissions (including ED).

### 7.3 Harm reduction across care settings

Stakeholders involved in this evaluation identified some of the outcomes achieved across other care settings.

The community based programme ‘Upright and Able’ delivered in the Nelson Marlborough region has seen a reduction in falls for patients. An evaluation of this programme indicates that fewer participants identify as being at risk of falling after they have completed the programme. Six-month follow-up data found that just 16% of participants had fallen in comparison to the 51% who had fallen before taking part in the programme.

This programme highlights the value of community based falls prevention programmes and the potential to collect outcome data to monitor progress.

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One region highlighted that they have seen a reduction in the number of presentations at the hospital from ARC facilities. They suggested the funded nurse practitioner who has a focus on falls prevention at the ARC was one of the main reasons for this change.

7.3.1 Stabilisation as an indicator of change
Some of the stakeholders in ARC and the community were not able to identify a reduction in harm from falls or the amount of falls. However, they did identify the benefits of stabilisation, given the increasing age of the population and the growing number of complexities or comorbidities for this patient group.

This notion was supported by stakeholders from the ARC who identified the following as factors that contribute to the rates and severity of falls in older people:

- Increasing complexity of the conditions/characteristics of the people with falls risk.
- Increased level of frailty of older people.
- Increased number of older people with dementia and delirium.
- Increases in the number of older people who need support.
- Longer life expectancy.

7.3.2 Insights from the stakeholder survey
Stakeholders from across the sector suggested the programme had an impact on reducing the harm from falls.

In the online survey, most respondents (84%) indicated the programme had either a big impact (26%) or some impact (58%) at their organisation (Figure 6).

**Figure 6: How much impact do you think the programme has had on reducing harm from falls at your organisation? (n=188)**

- A big impact: 26%
- Some impact: 58%
- Little impact: 13%
- No impact at all: 4%

"I know that our medical acuity in the hospital I work in has increased over the last 7 years. At-risk patients now require an hour and twenty minutes more a day than they did 7 years ago. So the fact that our rate has remained stable, probably does indicate that we are making some difference. We see a lot more 90 year olds, a lot trailer people."
When analysing this data by care setting, respondents from primary/community care were most likely to suggest the programme had little or no impact on reducing harm from falls at their organisation (Appendix 2). This reflects the phased focus of the programme.
Consumer/family/whānau engagement has been a key message of the programme. Patient stories and experiences have been actively promoted as key engagement approaches. Consumers were actively engaged in the development of programme resources.

Consumers were also engaged through risk assessments and individualised care plans. At a DHB/organisational level innovative co-design or tailored models of care have also been developed.

The online survey indicated staff across care settings estimated that 88% of survey respondents were assessing older people for their risk of falling almost always (65%; n=185) or most of the time (23%; Figure 7).

**Figure 7: Survey respondents’ estimates of the implementation of falls risk assessments (n=185)**

- Almost always (90% - 100%): 65%
- Most of the time (70% - 89%): 23%
- Often (50% - 69%): 10%
- Not often (1% - 49%): 2%

Analysing this data by care settings suggested risk assessments were more likely to be completed in hospital and ARC (Appendix 2).

A large proportion of respondents (82%) estimated that care plans for older patients at risk of falling were completed almost always (51%) or most of the time (31%; Figure 8).
In line with risk assessment and the degree of implementation across the sector, the survey and interviews indicated individualised care planning was less likely to be completed for at-risk patients in primary care (Appendix 2).

8.1 More extensive consumer engagement and partnership

Other stakeholders described more extensive engagement with consumers. Some DHBs indicated they were developing co-design approaches to the assessment and management of falls risk. At one DHB, for example, a multidisciplinary team worked with patients who had fallen to assess what happened and what could be done to prevent future falls and their associated harms.

A number of hospitals have developed models of care tailored to the needs of specific groups of patients, such as those with dementia.

8.2 Consumer benefits

The interviews and focus groups identified the value of engaging consumers in risk assessments and care planning.

Staff worked with patients to develop care plans tailored to individual patient needs; shifting from prescriptive risk assessment to individualised care planning.

For patients with significant cognitive impairments, staff engaged family members in their care plan.
Consumer benefits described in the survey and interviews included increased awareness of the harm from falls, falls self-management and avoiding a fall.

“It is about a 25% mortality rate within the first year after the hip fracture. About 50% of patients will not be able to return home after a hip fracture. So [falls prevention] is a huge thing for patients and their families.”

“Consumers are now prepared to ask about falls prevention initiatives; where are my non-slip socks?”

Some stakeholders noted improvements in wellbeing for patients taking part in community based fall prevention programmes. This was described as having a positive impact on their overall health and wellbeing.
9 Sector engagement and benefits

Data available from the Commission identifies the level of risk assessment and care planning conducted within a hospital setting.

This nationally collected data is provided by all DHBs and is available on the Commission’s website. We reviewed this data to identify the proportion of DHBs who were:

- Completing risk assessments for 90% of older patients.
- Completing individualised care plans in a hospital setting for 90% of older patients at risk of falling.

### Conducting risk assessments for older patients has increased

<table>
<thead>
<tr>
<th>92%</th>
<th>of older patients were assessed for their risk of falling in 2015 quarter 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 DHBs</td>
<td>achieved the threshold of assessing over 90% of their older patients at risk of falling</td>
</tr>
<tr>
<td>6 DHBs</td>
<td>assessed 80% - 89% of older patients for risk of falling</td>
</tr>
<tr>
<td>1 DHB</td>
<td>assessed less than 75% of older patients for risk of falling</td>
</tr>
</tbody>
</table>

This was 15% higher than 2013 quarter 1 (77%)

### Individualised care planning for older patients at risk of falls has increased

<table>
<thead>
<tr>
<th>92%</th>
<th>of older patients at risk of falling received an individualised care plan in a hospital setting in 2015 quarter 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 DHBs</td>
<td>achieved the threshold of providing individualised care plans for over 90% of their older patients at risk of falling</td>
</tr>
<tr>
<td>5 DHBs</td>
<td>were providing care plans for 77% - 80% of older patients</td>
</tr>
<tr>
<td>2 DHBs</td>
<td>were providing care plans for less than 75% of older patients</td>
</tr>
</tbody>
</table>

This was 12% higher than 2013 quarter 1 (80%)
9.1 The April Falls Quiz as an indicator of engagement

The Commission’s data on the uptake of the April Falls Quiz is a useful indicator of the sector’s engagement in the programme. The quiz was committed to for a period of 3 years, with feedback reports to DHBs locally and a national report generated to further inform learning in each of those years.

Responses suggest that there has been an increase in risk assessment and individualised care planning for over 75 year olds since 2013.

The report provided by the Commission indicates that in 2015:

- **Most respondents were female (91%), New Zealand European (70%) and aged between 40 and 59 years (51%). This is reflective of the respondents from previous years.**
- **Nurses (62%) were the most represented group**, followed by those in allied health (11%), managers or team leaders (7%) and assistants or caregivers (6%).
- **Most respondents were DHB employees (60%)**, followed by ARC (15%), primary healthcare (8%), and private hospital or clinic (6%).

The April Falls Quiz is a useful indicator of engagement within hospitals due to the high proportion of DHB respondents. The increase in the number of participants for the April Falls Quiz is an indication that it has been accepted by the sector, as part of the focus on falls. The interviews and focus groups also support this. The Commission is also contacted directly in relation to this quiz. The report draws on aggregated data so it does allow this evaluation to provide an insight into engagement across regions and care settings.
9.2 Engagement across regions and care settings

Initial delivery of the programme was quicker to start up in some DHBs, as they had existing initiatives in place to reduce the harm from falls, such as a patient safety campaign.

The size and resources available to support the programme at the DHB also influenced the initial pace and level of engagement.

“Smaller DHBs, they’re all around one person of course. One person might have five portfolios, and in my environment [it] might be covered by fifteen people.”

Stakeholders described a good level of engagement from many ARCs and primary/community care. Variations related to the strength of links across care settings in the DHB, with those with stronger links better able to engage across all care settings.

9.3 Sector benefits

Benefits for the sector included:

- Putting the spotlight on falls – increasing awareness, knowledge and priority of falls prevention.
- Building sector capability through an evidence base, education and training, and promoting quality improvement.
- Sector leadership at a national, local and regional level.
- Data measurement and monitoring to track progress and promote engagement.

9.3.1 Putting the spotlight on falls

Mixed methods data integration highlighted the role of the national programme in:

- Raising awareness and prioritising falls prevention.
- Raising the priority of falls prevention and prioritising it high on the patient safety agenda, particularly in hospitals and ARCs.
- Developing and promoting a broad range of projects to reduce the harm from falls including ‘Ask, Assess, Act’, falls signalling, risk assessment and care planning, as well as the ability to build this into technology systems and patient information.
- Engaging approximately 2500 (at its peak) people and raising the profile of the programme through the April Falls Quiz.

9.3.1.1 Raising awareness and prioritising falls

Most stakeholders highlighted the role and value of the programme in raising the profile of falls and ‘putting falls on the agenda’ for the sector. The programme increased the sector’s awareness of the preventability of falls and the importance of falls prevention. The programme’s resources, education and training were important for supporting this change.

“We have been able to drive falls prevention at all levels using the resources. We are confident, knowing it’s got evidence behind it, we don’t have to reinvent the wheel.”
Changing attitudes and behaviours of staff was harder for some regions and care settings than others. However, stakeholders have reported a shift in mind-set due to the national focus on falls.

The online survey highlighted the impact of the programme on raising staff awareness and knowledge. Most respondents felt the programme had increased staff awareness of the harm from falls, as well as their knowledge of how to prevent falls and their related harms (Figure 9).

**Figure 9: Perceived impact of the national programme on staff awareness and knowledge**

<table>
<thead>
<tr>
<th>Impact</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A major impact</td>
<td>28%</td>
</tr>
<tr>
<td>Some impact</td>
<td>61%</td>
</tr>
<tr>
<td>Little impact</td>
<td>10%</td>
</tr>
<tr>
<td>No impact at all</td>
<td>1%</td>
</tr>
</tbody>
</table>

(\(n=190\))

<table>
<thead>
<tr>
<th>Impact</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A major impact</td>
<td>27%</td>
</tr>
<tr>
<td>Some impact</td>
<td>60%</td>
</tr>
<tr>
<td>Little impact</td>
<td>12%</td>
</tr>
<tr>
<td>No impact at all</td>
<td>2%</td>
</tr>
</tbody>
</table>

(\(n=194\))

The survey also highlighted the value of the programme. There were no significant differences between care settings (Appendix 2).

When asked to describe the key benefits of the programme for the sector, respondents identified:

- Increased awareness of the harm from falls and falls prevention.
- Changes in knowledge, attitudes and behaviour.
- Availability of evidence-based resources.
- Increased sharing and collaboration relating to reducing the harm from falls.
- Better patient outcomes.

While some stakeholders felt knowledge and awareness of falls prevention existed previously, many noted the value of the national focus on reducing the harm from falls.
in influencing change in the sector. For many, sustaining a national focus on harm prevention was also considered important for maintaining this progress.

“Nationally, all the achievements wouldn’t have happened without the national programme and the focus of the national programme. And that’s why I personally feel if it stops, that the work will stop.”

9.3.2 Building sector capability

The programme built sector capability to reduce and monitor harm from falls, and to use quality improvement processes to support effective change. The programme achieved this through:

- Evidence-based resources and events used to promote and encourage engagement in reducing the harm from falls.
- Education and training relating to reducing harm from falls and quality improvement.
- Encouraging and supporting quality improvement processes through resources and local networks to support data-informed decision-making.
- Using clinical networks to support learning from other teams and organisations in the sector.
- Having international experts share their experiences of falls prevention through site visits to New Zealand and webinars.
- Raising the profile of falls and thereby enabling the allocation of resources to support change, such as the local employment of a nurse practitioner role with a focus on falls prevention at one DHB.

9.3.3 Sector leadership

The programme was noted for its role in supporting sector leadership. The following were particularly valued by key stakeholders:

- The cross-agency collaboration between the Commission, ACC and MoH.
- The EAG for supporting the programme at a strategic level, as well as championing the programme regionally and locally.
- Regional falls networks to provide support at a more local level.
- Encouraging integration and leadership across care settings.
9.3.3.1 Establishing a systems response

Some stakeholders described the opportunity to establish a falls prevention system through the collaboration between the Commission, MoH and ACC. This system was described as being designed to respond to the needs of older people who are at risk of falling. It was felt the following could be core elements of a systems-based approach:

- Access to strength and balance services (home based or community group based).
- A fracture liaison service that identifies patients who have had a fracture, assesses their risk of falling and then refers them to appropriate falls prevention.
- Falls coordination – whereby the ACC fracture liaison service identifies people at risk of falling and works with local falls coordinators to support early intervention.
- Supported discharges – where people who are admitted into hospital from a fall are well supported back into their homes on discharge.

It was noted that ACC has committed more resource to older adult falls over the past three years. ACC has worked with the Commission, MoH and DHBs to support a system-wide shift. Key stakeholders noted the value of continuing to adopt and further embed this approach to reduce the harm from falls outside of the hospital setting.

9.3.3.2 Value of the EAG and project team

Stakeholders felt the EAG was a key success, as it provided a good cross-section of representatives from the sector. It was highly engaged in the programme and provided expertise to develop the programme’s resources.

Some stakeholders also commented on the value of having site visits from the national team and particularly the Clinical Lead. This supported local delivery of the programme.

Leadership from the Commission in providing guidance and direction to the EAG and programme was also highlighted as a success.

“The Commission have been very strong on holding the line around this whole time, around falls issues… they’re clearly a leader in creating awareness of the importance of it, and the need to focus on it.”

9.3.4 Monitoring and evaluation

Monitoring and evaluation was important for supporting sector engagement. The Commission achieved this through:

- Tracking and promoting progress through monitoring in-hospital falls, risk assessments and individualised care plans.

The promotion of quality improvement was also successful. Staff valued working across different settings and regions, and sharing their learnings through local networks. This approach supported the programme and the organisations to engage in data-informed decision-making.
10 SUSTAINABILITY

Stakeholders were generally confident in the sustainability of activities and outcomes supported through the programme, particularly in hospitals and ARC. Some stakeholders felt the activities were less likely to be sustainable in a primary/community care setting. This was noted in the interviews, focus groups and survey (Appendix 2).

Over three quarters of survey respondents (76%) felt that the falls prevention strategies they have delivered were very (22%) or quite sustainable (54%; Figure 10).

![Figure 10: Perceived sustainability of harm prevention activities (n=213)](chart)

Stakeholders generally felt the following aspects of the programme were highly sustainable:

- Systems such as the assessment forms, processes and procedures.
- Policies implemented across hospitals and some ARC facilities.
- Placement of falls prevention and management equipment in hospitals.
- Awareness of the preventability of falls and the role of the sector in reducing the harm from falls.
- Quality improvement process to ensure effective practice.

10.1 Factors that will support or challenge sustainability

When discussing sustainability, stakeholders in the survey and interviews were asked to identify the factors they thought would support or challenge sustainability. These are identified in Table 1.

<table>
<thead>
<tr>
<th>Supporting factors</th>
<th>Challenges to sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data monitoring and use</td>
<td>Limited human and financial resources</td>
</tr>
<tr>
<td>Staff training and education</td>
<td>Falls prevention is unsystematic in some organisations/care settings</td>
</tr>
<tr>
<td>Organisational support</td>
<td></td>
</tr>
<tr>
<td>Strategies are now “business as usual”</td>
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</tbody>
</table>
10.1.1 Ongoing commitment to reducing the harm from falls

Stakeholders were willing to maintain a focus on reducing the harm from falls. They noted the role of existing systems and processes delivered through the programme in supporting this.

In practice, however, the challenge of limited resources and competing priorities is ever present. These challenges were particularly salient for smaller DHBs where the responsibility of quality improvement projects can be assigned to a small team.

Stakeholders felt that maintaining a national focus on falls is important for supporting patient safety and to improving the health and wellbeing of older people. Reducing the harm from falls was seen to be something the sector needed to take a long-term focus on.

““We maintain a robust falls management programme, with education, KPI recording through quality systems and analyse trending.”

“Easy to implement and is part of what we do - staff are reminded at handover and huddles. Staff routinely tell patients not to get out of bed without ringing for assistance.”

““Asking staff to do more without more resources is not sustainable long term.”

“We have tended to have more of a scatter gun/reactive response which needs to be more focused in order to implement sustained change.”

“I think it is important not just to have light on it for a while, but there’s got to be some [ongoing] process for looking at…. where we’re going. It’s a journey, it isn’t just a one off where we are doing this for a short period of time.”

A few stakeholders noted that the foundational work required to reduce the harm from falls has been achieved through the programme. They see the role of sustainability to be spread across other agencies such as ACC and MoH to fund local services to support falls prevention in the community and spread the achievements of the programme.
11 PROGRAMME DELIVERY

The programme was designed to:

- Prevent falls and reduce harm from falls in older people.
- Build national and regional (cross-sector)/leadership for a sustained falls focus.
- Connect with key stakeholders, build partnerships and improve sector engagement.
- Galvanise action through a national programme focus – common purpose.
- Provide expert advice and guidance.
- Strengthen clinical leadership and networks.

Figure 11 presents a detailed timeline of the programme from 2012 to 2016.
Figure 11: Reducing Harm from Falls Programme timeline

2012

Scoping and approval process
- Falls prevention approved as the first focus area Open Campaign

Foundational scoping papers
- "Scoping the Cost of Falls"
- "Falling Cost: the case for investment"

Programme infrastructure and planning
Expert Advisory group and Clinical lead appointed

2013

April Falls Campaign launched
- Theme: Falls Prevention is Everyone’s Business and Falls Hurt - building the momentum and creating the change platform
- Open for better care campaign launched with falls as the first campaign topic
- ARC mini collaborative July – Sept 2013

2014

April Falls 2014 launched
Theme: Regional Connections and Approaches
- Northern region and First, Do No Harm - falls related to bedrails.
- Midland region - safe footwear.
- Central region - signalling systems for safe mobilising.
- South Island Alliance - safe care environments.
- Expert Dr Frances Healey visits regional gatherings
- ARC mini collaborative project completed and evaluated

2015

April Falls 2015 launched
Theme: Regional Connections and Approaches
- Extension of programme into primary care
- Stay Independent Toolkit for Use by Clinicians in primary care
- Visiting experts:
  - Prof Lindy Clemson
  - Dr Anne-Marie Hill
- Summative evaluation commences

April Falls 2016 launched
Theme: Prevention, Review and Learning from Falls
- Ongoing engagement / quality improvement resources developed for age related residential care and the hospital.
- Collaboration with ACC and MoH to promote an integrated approach to falls and fracture prevention and management
- Resources developed:
  - Foundational Quality Improvement Toolkit for use in age related residential care
  - Adapting the NHS / Queensland Releasing Time To Care (the productive ward) toolkit for the NZ environment.
11.1 Programme resources

The programme has developed and promotes a range of resources and activities.

The programme’s resources cover core elements in falls prevention and support capability building in the sector through:

- Identifying ways for the sector to support independence for older people and improve their care.
- Providing reliable resources based on current evidence and best practice.
- Providing articles and literature that support learning activities for professional development hours.
- Providing a gateway to further resources and videos developed by the programme.

The resources include information for patients, the April Falls Quiz, clinician toolkits, newsletters, and the 10 topics in reducing harm from falls. The latter has been particularly noted for its value and has had international recognition. This resource covers core topics to support the sector in understanding the importance of reducing the harm from falls, as well as their role in achieving this. The 10 topics are:

1. Falls in older people: the impact.
2. Which older person is at risk of falling? Ask, assess, act.
3. Falls risk assessment and care planning: what really matters?
5. After a fall: what should happen?
7. Vitamin D and falls: what you need to know.
9. Improving balance and strength to prevent falls.
10. An integrated approach to falls in older people: what is your part?

11.1.1 Alignment to the New Zealand Triple Aim

Resources and activities were designed to support the Triple Aim. The Commission led an extensive range of activities and developed key resources to support engagement across the sector (Appendix 4). The alignment of these to the Triple Aim is highlighted below:
11.1.2 Awareness and use of the programme resources

Over two thirds (68%) of the online survey respondents were aware of the falls prevention programme tools and resources (38% strongly agreed and 30% agreed; Figure 12).

Over half of the respondents felt that the resources had increased their awareness and knowledge of falls prevention and management (25% strongly agreed and 34% agreed).
Resources that were most frequently used by survey respondents were:

- Focus on Falls newsletter (44%).
- Annual April Falls Quiz and survey (44%).
- 10 topics in reducing harm from falls (44%).
- Vitamin D prescribing (40%).
- Falls assessment and care planning guide (37%; Appendix 2).

The survey respondents were asked specifically about their use of the Ask, Assess, Act tool. Over half used this tool almost always (34%) or most of the time (25%; Appendix 2).

11.1.3 Website statistics as an indicator of resource use

The programme resources were made available through the Commission’s website. An analysis of the data from the website provides an insight into the use of programme resources. From website analytics, however, it is not possible to identify who has accessed the resources and for what purpose.

Data from the Commission’s website statistics report for November 2015 indicates that:

- The Reducing Harm from Falls website was the fourth most frequently visited page within the Commission’s site with 2489 visitors in November 2015.
- The programme’s webpage had a moderate landing page bounce rate of 41%.
- Some of the programme’s project pages, including the Atlas of Healthcare Variation, and the quality and safety indicators were in the top ten pages accessed in November 2015.
- The Stay independent falls prevention toolkit for clinicians was the second most popular resource accessed in November 2015.

When reviewing the data for the Open for better care website, the data for November 2015 highlighted that:

- The site had 2147 visitors, 2893 visits and 8070 page views.
- Falls was the fifth most popular topic accessed through the Open website during November 2015.
- Vitamin D posters and the consumers’ information leaflet were the fifth most popular resources accessed in November 2015.
Data from a website statistics report for the Reducing Harm from Falls website 2013 to 2015 provides a more specific insight into engagement in the programme and its resources. There was a clear increase in the total views of the Reducing Harm from Falls website from 2013 to 2015 (Figure 13).

**Figure 13: Total page views from Reducing Harm from Falls website 2013-15**

![Graph showing total page views from 2013 to 2015.](image)

The 10 topics were the most frequently viewed and downloaded resources; also demonstrating increases over time (Figure 14).

**Figure 14: Total page views and downloads of the 10 topics 2013-15**

![Graph showing total page views and downloads for the 10 topics from 2013 to 2015.](image)

### 11.1.4 Value of the resources

Survey respondents felt that the following resources were the most useful:

- Focus on Falls newsletter (54%).
- 10 topics in reducing harm from falls (54%).
- Patient information (53%).
• Stay independent falls prevention toolkit for clinicians (49%).
• Analysing and learning from falls (48%).
• Annual April Falls Quiz and survey (47%).
• Falls assessment and care planning guide (47%; Appendix 2).

Most stakeholders acknowledged the resources as being well researched, evidence based and comprehensive. The programme collected international best evidence about what worked in falls prevention, synthesised the information and provided tools for people to use and learn more about reducing harm from falls.

The resources were used by staff in hospitals and some ARC facilities to support training and education to upskill staff.

Stakeholders felt that the 10 topics in particular were a useful resource that provided significant breadth of content for reducing the harm from falls. An EAG member thought the 10 topics were world leading, as this type of resource was not available elsewhere.

“They’re fantastic resources. I really need to make that point quite strongly that a number of the resources that have been developed have been seen as a long-term investment.”

11.1.5 Considerations for future resource development

Resource development is time-intensive. Stakeholders felt that a longer timeframe to develop and publish the resources would have been useful.

Some sector stakeholders noted that although the resources were comprehensive, there was a lot of content to digest. A longer timeframe for releasing the resources would have been useful for the sector to have time to more fully engage in the content. This is evident in the following comment on the 10 topics:

“There is a bit of a challenge in uptake of them and it’s because they’re so solid in the learning that they’re a bit of a hurdle for people to get over.”

One of the key gaps identified is that the resources focus on the hospital context. It would be useful to have some ARC and primary/community care-specific resources.

11.2 Programme activities

All stakeholders identified a range of falls-related activities happening in their organisation. These included:

• Training and upskilling the workforce.
• Sharing resources and learnings between different organisations.
• Development of and/or updating of organisational falls policy.
• The April Falls Quiz.

Survey respondents and interviewees reported that falls prevention activities have increased since the programme started in 2013.
The biggest increases were reported for falls prevention and management education and/or training (78%) and assessments of patients considered to be a high falls risk (73%; Figure 15).

**Figure 15: Reported increases in falls prevention activities since 2013 (n=213)**

Hospital-based respondents were more likely to report increases in education/training (87%), sharing Commission falls resources (67%), and assessments of high falls risk patients (81%) compared to other care settings (Figure 16).8

Respondents from primary/community care settings were more likely to report increases in sharing learnings with other organisations about how to prevent and manage falls (60%).

**Figure 16: Reported increases in falls prevention activities by care setting (n=168)**

---

8 The number of respondents for Figure 16 is less than Figure 15, as not all respondents identified their main care setting.
### Activities across care settings

The following falls-related activities were highlighted in the interviews with stakeholders across the different care settings.

#### Table 2: Activities across care settings

<table>
<thead>
<tr>
<th><strong>Hospital setting</strong></th>
<th><strong>Communication and data use</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Linkage and communication with the regional falls network.</td>
</tr>
<tr>
<td></td>
<td>• Using quality improvement approaches.</td>
</tr>
<tr>
<td></td>
<td>• Conducting care process auditing and incident reports to share information across the DHB to support quality improvement and addressing gaps in best practice.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Policy development</strong></th>
<th><strong>Hospital setting</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Development of and/or updating organisational falls policy, assessment forms and incident reports.</td>
</tr>
<tr>
<td></td>
<td>• Linkage to the hospital moving and handling programme to refresh the falls policy to ensure the hospital is providing the best intervention for the patient.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Education and training</strong></th>
<th><strong>Hospital setting</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Falls prevention module in doctors’ and new graduate nurses’ orientation.</td>
</tr>
<tr>
<td></td>
<td>• Yearly updated training for health care assistants.</td>
</tr>
<tr>
<td></td>
<td>• Development of an internal webpage to house all fall-related resources.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Patient environment and care</strong></th>
<th><strong>Hospital setting</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Procurement and use of new equipment, e.g., low-low beds, sensor beams and non-slip socks.</td>
</tr>
<tr>
<td></td>
<td>• Checking the safety of the bed space/environment.</td>
</tr>
<tr>
<td></td>
<td>• Traffic light system to indicate a patient’s falls risk and/or the extent to which they required assistance with safe mobilising. E.g., arm band, indicator on walking stick/frame or patient over-bed boards.</td>
</tr>
<tr>
<td></td>
<td>• Development of a volunteer programme to provide additional support for patients with delirium.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>ARC setting</strong></th>
<th><strong>Data usage</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Using a quality improvement approach.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Policy development</strong></th>
<th><strong>ARC setting</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Development of and/or updating of organisational falls policy, assessment forms and incident reports.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Patient environment and care</strong></th>
<th><strong>ARC setting</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Funding from ACC and a collective of primary health organisations (PHOs) to employ a nurse practitioner to work in ARC facilities. Part of that role includes falls prevention education, awareness and upskilling.</td>
</tr>
<tr>
<td></td>
<td>• Indicator on the ARC residents’ doors to identify their risk of falling. E.g., flower stickers to indicate level of risk.</td>
</tr>
<tr>
<td></td>
<td>• Supporting transition of care between ARC to hospital (and back).</td>
</tr>
</tbody>
</table>
Northern region DHBs' First, Do No Harm patient safety campaign

This campaign strives to make patient safety a top priority and support a shift in mind-set to eliminating avoidable harm. The aims of the campaign are to promote systematic changes to improve quality and safety and in doing so minimise harm and reduce pressure on health services. Reducing harm from falls is one of the six key areas of the First, Do No Harm campaign. The falls (and pressure injuries) component of the campaign works across the hospital and ARC settings.

11.2.2 Sector-led activities

The interview findings identified a range of sector-led activities that provided additional support and momentum for the national programme. The site visits identified some useful examples of these including:

<table>
<thead>
<tr>
<th>Primary and community care settings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient pathways and a systems response</strong></td>
</tr>
<tr>
<td>• Developing pathways for primary care to make referrals into appropriate services to address patient needs and identify risk factors.</td>
</tr>
<tr>
<td>• Single point of entry service for those identified at risk of falling, and for referrals to community based falls prevention programmes</td>
</tr>
<tr>
<td><strong>Home based support</strong></td>
</tr>
<tr>
<td>• ACC Home Safety Project where nurses can refer patients for an assessment on patients' homes for falls risk. Once completed patients are supported to reduce the risk of falling in their home environment.</td>
</tr>
<tr>
<td><strong>Avoiding hospitalisation</strong></td>
</tr>
<tr>
<td>• St John’s ambulance initiative to support people who have had falls at home but do not require transfer to hospital.</td>
</tr>
</tbody>
</table>

Nelson Bays Primary Health (NBPH) falls prevention programme 'Upright and Able'

This programme consists of a six-week course developed and delivered by NBPH, with support from Presbyterian Support and Nelson Nursing Service. The programme includes
11.2.3 Using data to reduce the harm from falls

Most organisations reported using data to drive improvements in falls prevention and management. Almost all survey respondents strongly agreed or agreed that their organisation collects data on falls (89%). The majority of respondents also indicated they were analysing this data, using it to support action and learning, as well as supporting changes in practice to improve care (Figure 17).

Figure 17: Data analysis activities to support implementation and improvement within organisations

The national focus on data monitoring was highly valued by the sector. Stakeholders also described the local sharing of data across care settings.

Data monitoring was noted for its value in supporting transparency, learning and commitment to the programme through sharing stories of change.

“It [data sharing] is pushing the country to become more transparent, it is pushing the country to look at data and learn from it. I think that that is a big push... it’s a brilliant driver.”

“The ability to continue to generate stories of change so that people believe that they can do things better all the time, rather than feel disillusioned by looking at their data alone. So an ability to reflect and look at change. It is what the Commission is doing currently with this process.”
12 **BARRIERS AND ENABLERS TO PROGRAMME DELIVERY**

Stakeholders described a number of barriers and enablers to the delivery and outcomes of the programme. These are summarised in Table 3 and then explored further.

**Table 3: Key barriers and enablers to programme delivery**

<table>
<thead>
<tr>
<th>Key barriers</th>
<th>Key enablers</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Initial focus on hospitals only</td>
<td>- National promotion of falls prevention</td>
</tr>
<tr>
<td>- Buy-in from some staff only</td>
<td>- Capability building</td>
</tr>
<tr>
<td>- Capacity of the sector and system</td>
<td>- Strong evidence base</td>
</tr>
<tr>
<td>- ‘Hitting the target but missing the point’</td>
<td>- Falls networks</td>
</tr>
<tr>
<td>- A lack of consistent integration across the system</td>
<td>- Sharing results of data monitoring</td>
</tr>
<tr>
<td></td>
<td>- Adapting the programme to local context</td>
</tr>
<tr>
<td></td>
<td>- Existing local programmes and strategies</td>
</tr>
</tbody>
</table>

**12.1 Barriers to programme delivery**

One of the main challenges was the focus of the programme on the hospital setting, and the corresponding quality and safety measures. This was a challenge, as there was strong evidence for reducing harm from falls in the community. An analysis of the Atlas of Healthcare Variation falls domain data confirms that for every fractured hip in the hospital setting there are 30 in the community setting.⁹

Focusing on the community was also considered to be a more sustainable intervention for older patients by some.

> “Preventing falls is about changing a person’s behaviour, as this impacts on what people do, how and why they do it. Trying to change a person’s behaviour in a hospital when they are only there for limited time, three or four days, is challenging. You might be able to prevent a fall but does that impact on a long term behaviour change? I doubt it.”

Stakeholders suggested the rationale for focusing on the hospital setting was the high rates of hip fracture and adverse incident rates in hospitals at the time the programme was established.

Some felt the hospital setting was an effective means of starting to engage the sector in reducing the harm from falls. This is due to the clarity of existing systems and networks in comparison to ARC and primary/community care. The Commission also had existing relationships to build on within hospitals.

The Commission also noted that the programme was primarily driven from a patient safety perspective, so the natural starting point was to focus on the safety of patients in hospital.

12.1.1 Lack of buy-in from some staff
Gaining buy-in from management to support the programme when it was first being implemented in hospitals was initially a challenge, as falls were not seen to be preventable. Staff buy-in to the national programme was also influenced by existing local campaigns. For example, the First, Do No Harm campaign in the Northern Region had a broader falls settings focus than the national campaign.

Initially, local stakeholders felt that there was a push for them to engage in national falls activities without being able to maintain the broader focus beyond the hospital setting. Over time, the programmes and project teams learnt more about one another and the intentions of the national and local programmes. This resulted in sharing learnings and forming a partnership approach to reducing the harm from falls. This enabled the local and national efforts to support one another, creating some efficiencies and reducing duplication.

12.1.2 Capacity of the sector and system
Some stakeholders felt there was a significant push at the beginning of the programme where the Commission was driving resources and interventions out into the sector. The Commission notes that this partly resulted from the programme being developed, and at the same time being the first topic for the Commission’s national patient safety campaign.

This was seen as an intensive period for the sector and it was difficult for some to engage in these activities on top of their existing workload. The sector communicated this challenge to the Commission, which adapted and responded in a manner that maintained engagement.

“The focus went from do all these activities to do the activities that will add value. I think they got that feedback, and they took heed and they modified their approach. I think people were then a little bit more engaged as opposed to being overwhelmed.”
12.1.3 Hitting the target and missing the point

Some stakeholders suggested that the focus on process measures through the QSMs could lead to falls prevention becoming an administrative ‘tick box’ exercise. The reporting and linkage of these measures to a target was identified as something that contributed to this possibility.

“It’s an important part, but what is the change in behaviour with the care that they’ve [patients] got, it’s not just about the assessment. We’ve tended to get people to just do it and tick boxes.”

12.1.4 Lack of integration across the system

Using reduction of FNOFs as an outcome measure was also seen to be problematic by some stakeholders. They felt this measure missed the broader outcomes of the programme.

Some suggested it detracted from the importance of relationships and integration that were essential for supporting the sector in achieving outcomes in falls prevention across the system.

“Our people might say that’s the soft stuff, but that is the stuff of change.”

One stakeholder suggested the targets and measures reduced the strategic focus and approach that could have been achieved through the EAG across the system. They suggested the focus of the data monitoring and evaluation did not support integration across the system.

12.1.5 Care setting-specific challenges

The interviews identified some care setting-specific challenges.

Hospital setting

- Gaining buy-in from management.
- An element of “falls fatigue” across the hospital setting.

ARC setting

- High staff turnover of an unregulated workforce.
- Encouraging collaboration across independent businesses.
- The increasing complexity of patients. This included higher rates of dementia and delirium, as well as higher volumes of patients.
- Implementing the 24-hour watch.
- Inconsistencies in communication between the hospital and ARC on patients’ falls or risk of falling.
- Identifying the appropriateness of some falls prevention activities for ARC residents. For example:
o Using restraints based on a patient's diagnosis and their medications.
o Giving patients the freedom to walk around outside versus keeping them confined to reduce risk.

Primary care

- Time to engage with patients about falls risk and address their reasons for presenting within one consultation.
- Developing appropriate strategies to engage patients in falls prevention activities in the community.

“If you ask someone in primary care have you had a fall – most people will say no, because they don’t want you to put them into a rest home. So I’m not going to tell you I’ve fallen over. So we have had to change our terminology so we can match what the consumers are saying and that is part of our training with the providers to check they are asking the questions the right way.”

12.2 Enablers to programme delivery

Key enablers to programme delivery identified in the survey, interviews and focus groups included:

- National promotion of falls prevention.
- Capability building.
- Strong evidence base.
- Falls networks.
- Sharing results of data monitoring.
- Adapting the programme to local context.

12.2.1 National promotion of falls prevention

Creating a national focus on reducing the harm from falls was identified as a key enabler. The national focus was noted for its role in shifting attitudes, increasing knowledge and influencing the sector to engage in falls prevention activities.

Factors that supported national engagement in the programme included:

- Promotion of tools and resources through communications and April Falls.
- Responsiveness in developing tools and resources for the learning needs of different staff.
- The evidence base that underpinned the programme.

While some stakeholders noted changes were already occurring in some organisations, the national programme further strengthened local activities and was a driver for change in others.
Existing local programmes were also seen as a good foundation for the national programme to build on.

12.2.2 Capability building and a solid evidence-base
Increasing the sector’s knowledge and awareness of reducing harm from falls supported programme delivery. Capability building was facilitated through the promotion and development of programme resources, education and training, and quality improvement processes.

Capability building activities were highly valued and trusted within the sector due to the strong evidence base that underpinned the programme.

12.2.3 Falls networks and data sharing
All DHB regions interviewed had established local falls working groups to oversee the falls programme. The working groups ensured data on falls assessment and care plans were collected, which supported engagement in hospitals.

Some of these working groups extended out to the ARC and community settings, adopting a collaborative approach to reducing harm from falls regionally. These networks supported programme delivery across care settings.

Falls networks also extended across DHB regions. These provided an opportunity to share learnings and effective practice across the sector. Results from falls activity and incident audits across the organisation were shared to identify and address any gaps.

The role of the Commission in influencing the sector through relationship-building and the development of networks was highly valued. The Commission’s inclusive approach to engagement was considered to be particularly valuable for supporting the development and breadth of the programme.

“There have been passionate falls prevention champions who have led the falls prevention programme – the national programme certainly assisted with their passion and legitimised the importance of falls prevention awareness and strategies.”

“The programme has provided information and an impetus for change.”

“I work in a medium size organisation and time for development of resources and training tools is not readily available. I really appreciate the national approach to this.”
Sector engagement was supported by the EAG who provided leadership, guidance and support to local teams without being overly directive or prescriptive. This approach to engagement enabled the sector to adapt the programme to their local contexts. This was important for engagement across the country.

“Include as many people as possible [in the programme]. That’s quite courageous, because if you want to do new things, it’s very tempting to just get people in the room who agree with you. The Commission has done a great job at taking a big, wide view.”
Key stakeholders identified the following improvements:

- Increasing emphasis on reducing the harm from falls outside the hospital.
- Increasing funding for primary prevention.
- Further increasing quality improvement capabilities across DHBs.
- Using technology to engage more staff in workshops, e.g., webinars.
- Further increasing cohesion and collaboration between regional networks.

Increasing the emphasis outside the hospital setting was considered to be important for supporting greater consistency across the sector and a more integrated approach. Some of the stakeholders felt that continuing to develop ARC and primary/community care-specific resources would be important for achieving this.

Stakeholders noted the need to further refine models of care and patient pathways outside of the hospital. For some this was particularly important for achieving change in primary care.

“A national plan that includes resources (financial and systems) to support the roll out of this in primary care would be useful. Currently falls prevention strategies are largely done in hospitals and aged residential care. There is not a specific strategy on how to do this within general practice and other community healthcare providers, e.g., community pharmacy, physiotherapy, podiatry or Whānau Ora collective service providers.”

To bolster capability building, stakeholders suggested the following improvements:

- Developing New Zealand-specific training modules and materials.
- Using an e-learning platform to provide staff with the flexibility to engage in learning around their existing work commitments.
- Using technology to support broader access to workshops.
- Developing care setting-specific seminars and resources, such as a simplified April Falls campaign for primary care.
- Providing equipment to ARC facilities to support falls prevention activities.

Suggested improvements to collaboration and integration included:

- Increasing cohesion across the regional networks to streamline communication and share learnings.
- Quarterly engagement with ARC facilities and primary care to increase engagement, share learnings and promote a systems response.

These improvements were reflected in the online survey. Respondents also felt that increasing staff levels, and providing more training and education were important for further strengthening the programme.
13.1 Future directions

Most stakeholders felt community falls should be the future focus of the programme. Some suggested it would be beneficial to:

- Increase knowledge and awareness of falls prevention in people who are not yet at risk of falling.
- Encourage earlier attendance at strength and balance classes to build up people’s muscle strength to prevent falls.
- Increase the provision of community and primary care falls prevention initiatives.
- Monitor community and primary care-based activities by collecting community level falls data. This could be supported by the Atlas of Healthcare Variation (falls/fracture domain).

In relation to the focus of the programme, the stakeholders also suggested:

- Focusing on healthy ageing and wellbeing to keep older adults active and well, as this will also reduce harm from falls in the longer term.
- Increasing the emphasis on older people ageing at home. Packages of care need to take an integrated approach to support this approach and address some of the environmental barriers to ensuring homes present a low falls risk.
- Promoting the recently developed improvement toolkit for ARC facilities to increase engagement across care settings.

Stakeholders suggested future directions to increase integration and collaboration:

- Continue the cross-agency collaboration between the Commission, MoH and ACC.
- Adopt an alliance approach to increase integration and collaboration.
- Increase integration between primary and secondary care through patient referral pathways, particularly on discharge from hospital.

The following were suggested future directions to support consistency of systems and processes:

- Consistent definition of a fall to support reporting outside of the hospital.
- Partner in developing a clinical care standard for fragility fracture patients (similar to that developed for acute hip-fracture care in hospital, which has been a trans-Tasman initiative).
- Increase delivery and spread of fracture liaison services through the concept of ‘capture the fracture’ to engage those who have suffered a fragility fracture.
- Build on the strengths of existing community programmes and resources.
13.2 The future role of the Commission and other agencies

The evaluation highlights the value of the Commission in:

- Maintaining a leadership role to sustain the focus on reducing harm from falls.
- Supporting other agencies to increase engagement outside of the hospital.
- Continuing to provide evidence-based resources, training and education to promote best practice.
- Continuing to build quality improvement capabilities across DHBs.
- Maintaining the focus on QSMs and reporting to support sustainability in hospital.
- Developing QSMs that move beyond the hospital.

These suggestions were supported by the survey, interviews and focus groups.

In terms of the other agencies, the stakeholders highlighted the role of the ACC and MoH in supporting an increased focus on falls prevention in the community.
14 Overview and Key Considerations

The evaluation has highlighted the implementation and outcomes of the programme. Specifically, the evaluation identified:

- The contribution of the programme to the strategic priorities of the Commission.
- The positive impact of the programme on reducing the harm from falls, particularly in hospitals.
- The value of the programme in terms of estimated cost savings, and other benefits for consumers and staff.
- The contribution of the programme to increasing the sector’s capability, both in terms of reducing the harm from falls and quality improvement processes.
- The benefits of data monitoring and evaluation to support engagement and track progress.
- The sustainability of programme processes and outcomes, particularly in the hospital setting and if a focus on falls is maintained nationally.

In terms of delivery, the evaluation also highlighted:

- The alignment of the programme’s approach to delivery and the New Zealand Triple Aim.
- The value and contribution of the programme’s resources and activities to programme outcomes.
- The high level of sector engagement in falls prevention activities, including risk assessment and individualised care planning across care settings.
- The importance of data monitoring and quality improvement to support effective practice and change.
- Key barriers and enablers to programme delivery.
- The role and value of the Commission in providing leadership, guidance, support and building relationships with the sector.
- The value of the Commission, ACC and MoH in collaborating in a cross-agency approach to reduce harm from falls.
- The appetite for increasing the emphasis on falls prevention outside of the hospital setting, while also maintaining a national focus on falls.

14.1 Key Considerations

Based on the findings evaluation, we identified the following key considerations:

Maintaining a focus on reducing harm from falls
- Continue to promote the importance of reducing harm from falls.
- Continue to update existing evidence and build capability.

Increasing the emphasis on reducing harm from falls outside the hospital
- Increase engagement with ARCs and primary/community care to promote consistency across the country. This could be through EAG membership and/or drawing on the existing relationships with ACC and MoH.
- Draw on resources and learnings from other regions to develop a model of care for reducing harm from falls in ARCs and the community.
- Engage more with primary care and the community to explore falls prevention in this context. E.g., how the programme resources can be used within the structure of general practice and time-limited consults, or testing new approaches for falls prevention management.
- Ensure there is representation on the EAG from ARC, primary care and the community to support sector leadership. This could also be achieved through developing partnerships across these settings.

**Developing a system-based response**

- Increase integration and communication between care settings. This is important for ensuring there is follow-up after risk assessments and care planning.
- Provide guidance and leadership to develop an outcomes framework and guideline for best practice applicable across the sector. This should include system-level indicators.
- Refine and share effective patient pathways to ensure those identified with a falls risk are referred to the appropriate services, regardless of where they enter the system.
- Engage consumers to inform this process and ensure their voice is represented in future developments.

**Data for monitoring and improvement**

- Sustain existing data monitoring.
- Continue to encourage the sector to move beyond data collection and initial analysis to using data to evaluate their interventions and improve practice.
- Develop QSMs to support a systems response.
- Some options could include:
  - Data to identify if care plans have been actioned or followed up.
  - Risk assessments and care planning for older patients as a process indicator for general practice and ARCs.
  - Indicators of integration, e.g., identifying that risk assessments and care plans have been shared with general practice, ARC or family members on discharge.

**Future Commission-led national initiatives**

The approach taken by the Commission, MoH and ACC has been highly valued by the sector. Future Commission-led initiatives should consider:

- Developing a strong and trusted evidence base to support engagement.
- Providing a programme that is flexible and responsive to different contexts.
- Being open to learning and change during programme delivery.
- Engaging local champions and influencers who can support momentum at a local level, demonstrate leadership and enhance enthusiasm for change.
- Using data monitoring to support sector engagement.
- Partnering with other key agencies to develop a systems response.

When considering the above, it is important to note the limitations of the evaluation. This included the small sample size for the survey and its engagement of predominantly hospital-based stakeholders. The integration of this survey with the findings from the interviews, focus group and April Falls Quiz was important for informing the interpretation
of the findings. It is this mixed methods approach that strengthens the insights from the evaluation.
APPENDIX 1: EVALUATION METHODS

The evaluation design and context phase

The evaluation design and context phase was used to engage key stakeholders in refining the evaluation plan and developing an evaluation framework. The evaluation framework identified the data collection methods and evaluation criteria, including key process and outcome indicators.

This phase involved engagement with the EAG and the key project team from the Commission, as well as key stakeholders involved in the development and analysis of the QSMs.

Data collection

Table 4 provides a summary of the key data collection methods.

Table 4: Key data collection methods, sources and their contribution to the evaluation

<table>
<thead>
<tr>
<th>Method</th>
<th>Data sources</th>
<th>Contribution to evaluation</th>
</tr>
</thead>
</table>
| Analysis of existing programme documentation and data | ● Previous formative evaluation reports  
● Programme resources, including website  
● Number of FNOFs  
● QSMs  
● Analysis of cost savings | ● Overview of the implementation of the programme across 20 DHBs  
● An analysis of the outcomes achieved in the hospitals and across the sector |
| Online survey                           | ● 197 survey responses from hospital (47%), ARC (23%), primary care (15%) and other settings (15%)  
● 12% response rate. This response rate is slightly lower than average. This could be due to the survey being implemented in December and January. | ● Value and use of the programme resources  
● Changes in knowledge, attitudes and awareness of falls and quality improvement methodologies  
● Changes in harm from falls and number of falls  
● Perceived sustainability of programme activities |
| Key stakeholder interviews/focus groups | ● 12 key stakeholder interviews  
● 26 health professionals were involved in interviews or focus groups across three key sites:  
  - Capital & Coast DHB (15 interviews)  
  - Nelson Marlborough DHB (6 interviews)  
  - Hauora Taïrāwhiti (6 interviews) | ● Perceived implementation and outcomes of the programme from stakeholders across the multiple levels and care settings |
Online survey participants

Figure 18: Survey respondents care setting (n=197)

| Hospital, 47% | Residential care, 23% | Primary/community, 15% | Other, 15% |

Figure 19: Roles of survey participants

- **Nursing**: 36%
- **Manager**: 21%
- **Other**: 16%
- **Allied Health**: 13%
- **Educator**: 8%
- **Medical**: 4%
- **Assistant or caregiver**: 2%

0% of responses
0-3%
3-6%
6-9%
9-12%
12-15% of responses
Key stakeholder interviews and focus group participants

Table 5 provides a summary of the number of each type of stakeholder that participated in the key stakeholder interviews and focus groups.

Table 5: Key stakeholder interviews across programme levels and settings

<table>
<thead>
<tr>
<th>Type of key stakeholder</th>
<th>Number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commission project team</td>
<td>2</td>
</tr>
<tr>
<td>EAG members</td>
<td>10</td>
</tr>
<tr>
<td>DHB staff</td>
<td>11</td>
</tr>
<tr>
<td>ARC facility staff</td>
<td>7</td>
</tr>
<tr>
<td>Primary/community care staff</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>38</strong></td>
</tr>
</tbody>
</table>

14.2 Mixed methods data analysis

Mixed methods data integration and analysis was important for integrating the findings from the existing data and documentation with the learnings and insights from the online survey, interviews and focus groups. Data integration moves the evaluation beyond reporting the findings of individual data sets to providing a comprehensive insight into the evaluation aims and objectives.\(^{10}\) To support this, the results section drew on the evaluation objectives to integrate the different data sources addressing the evaluation aims.

Limitations

When reviewing the findings from this evaluation it is useful to note the following limitations:

- The online survey reached predominantly hospital sector stakeholders. This is reflective of the higher level of engagement of the programme in hospitals. This has resulted in smaller sample sizes in the survey for ARC and primary/community care stakeholders.
- The online survey was specifically sent to contacts identified through the Commission. This was designed to ensure respondents were able to answer questions relating to programme activities, uptake of resources and their value. The survey does not reflect the perspectives of a random sample from across the sector and is likely to include the views of those who were more engaged in the programme.
- This evaluation was not designed to engage consumers. This process would have been useful for understanding the value of the risk assessments and care planning from their perspective.
- This evaluation did not have access to any data identifying the follow-up and/or implementation of care plans to support falls prevention. Therefore, the evaluation cannot identify if these care plans have been implemented.

The outcome and cost data reflects the achievements and savings relating to in-hospital falls (associated with FNOF) for older patients only. Outcome data on reducing harm from falls in the community and ARC was not available. This means changes in these contexts are based on the perspectives of key stakeholders.

Despite these limitations, the evaluation has drawn on the perspectives of key stakeholders from across the country through the online survey, as well as in-depth interviews with stakeholders from hospital, ARC and primary/community care. This has supported the evaluation to identify what has happened at a national level, as well as the specific considerations for different organisational contexts and care settings.

To capture the consumer perspective more fully, future evaluations could track consumers through the system. This would provide a valuable insight into the value of risk assessments and care plans from a consumer perspective, and if they are actioned. This would also explore the integration across care settings and identify opportunities for strengthening this process.
**APPENDIX 2: SURVEY ANALYSIS BY CARE SETTING**

**Figure 20: Views on impact of programme on falls at organisation by care setting**

<table>
<thead>
<tr>
<th>Impact Level</th>
<th>Hospital (n=93)</th>
<th>Primary/community (n=30)</th>
<th>Residential care (n=45)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No impact at all</td>
<td>4%</td>
<td>8%</td>
<td>0%</td>
</tr>
<tr>
<td>Little impact</td>
<td>15%</td>
<td>23%</td>
<td>2%</td>
</tr>
<tr>
<td>Some impact</td>
<td>49%</td>
<td>50%</td>
<td>72%</td>
</tr>
<tr>
<td>A big impact</td>
<td>31%</td>
<td>19%</td>
<td>26%</td>
</tr>
</tbody>
</table>

**Figure 21: Survey respondents’ estimation of risk assessments by care setting**

- Aged residential care (n=41)
- Primary/community (n=23)
- Hospital (n=91)

Legend:
- Almost always (90% - 100%)
- Most of the time (70% - 89%)
- Often (50% - 69%)
- Not often (1% - 49%)
Figure 22: Estimation of individualised care plans for older patients at risk of falls by care setting

Aged residential care (n=32)

Primary/community (n=21)

Hospital (n=90)

0% 20% 40% 60% 80% 100%

Almost always (90% - 100%)  Most of the time (70% - 89%)
Often (50% - 69%)  Not often (1% - 49%)

Figure 23: How valuable do you think the programme is for the sector? (n=194)

Highly valuable

Quite valuable

Not very valuable

Not at all valuable

0% 10% 20% 30% 40% 50% 60% 70%
Figure 24: Views on the value of the programme by care setting

- Residential care (n=45)
- Primary/community (n=30)
- Hospital (n=93)

0% 20% 40% 60% 80% 100%

Highly valuable  Quite valuable  Not very valuable  Not at all valuable

Figure 25: Perceived sustainability of harm prevention activities by care setting

- Residential care (n=45)
- Primary/community (n=30)
- Hospital (n=93)

0% 20% 40% 60% 80% 100%

Very sustainable  Quite sustainable  Not very sustainable  Not at all sustainable  I don't know
Figure 26: Programme resources used by online survey respondents

- Vitamin D Prescribing (n=215)
- Signalling System (n=206)
- Suite of Falls Videos (n=205)
- Focus on Falls newsletter (n=223)
- Falls Assessment and Care Planning guide (n=212)
- Atlas of Healthcare variation (n=216)
- Annual April Falls Quiz & Survey (n=221)
- Patient Information (n=218)
- Analysing and Learning from Falls (n=212)
- Stay Independent Toolkit for Clinicians (n=209)
- 10 Topics (n=228)
- Ask, Assess, Act pocketcard (n=220)

Figure 27: Perceived usefulness of the resources accessed by the survey respondents

- Vitamin D Prescribing (n=215)
- Signalling System (n=206)
- Suite of Falls Videos (n=205)
- Focus on Falls newsletter (n=223)
- Falls Assessment and Care Planning guide (n=212)
- Atlas of Healthcare variation (n=216)
- Annual April Falls Quiz & Survey (n=221)
- Patient Information (n=218)
- Analysing and Learning from Falls (n=212)
- Stay Independent Toolkit for Clinicians (n=209)
- 10 Topics (n=228)
- Ask, Assess, Act pocketcard (n=220)
Figure 28: Use of the Ask, Assess, Act tool (n=155)

- Almost always (90% - 100%): 34%
- Most of the time (70% - 89%): 25%
- Often (50% - 69%): 16%
- Not often (1% - 49%): 26%
APPENDIX 3: RISK ASSESSMENT AND CARE PLANNING

Data available from the Commission identifies the level of risk assessment and care planning conducted within a hospital setting.

The nationally collected data on risk assessment indicates:

- 92% of older patients were given a falls risk assessment in quarter 3 in 2015. This is a 15% increase on the baseline (quarter 1 of 2013; 77%).
- 16 DHBs achieved the threshold of assessing 90% of older patients in quarter 3 of 2015 (Figure 1 below from the Commission’s website).

Figure 29: Process marker, percentage of older patients assessed for the risk of falling

11 Patients aged 75+ (55+ for Māori and Pacific peoples).
In terms of care planning, 92% of older patients at risk of falling received an individualised care plan in a hospital setting. The data indicates that nationally the percentage of patients at risk of falling who received an individualised care plan has increased from 80% in quarter 1, 2013 to 92% in quarter 3, 2015.

Increases in the number of patients who received individual care plans increased for 16 of the DHBs. The other four DHBs saw a reduction in individual care planning over time, although two of these were still providing care plans for over 80% of older patients at risk of falling.

In quarter 3, 2015, the data indicates that:

- Twelve DHBs were providing individualised care plans for over 90% of their older patients at risk of falling.
- Eight DHBs were not reaching this threshold. Two of these were providing care plans for less than 75% of older patients at risk of falling.

Figure 30: Process marker, percentage of older patients assessed as at risk of falling who received an individualised care plan that address these risks
APPENDIX 4: ALIGNMENT OF RESOURCES TO THE TRIPLE AIM

Table 6 provides a description of programme resources and the Triple Aim focus of each resource.

Key to the Triple Aim categories:

Individual - Improved quality, safety and experience of care
Population - Improved health and equity for all populations
System - Improved health and equity for all populations

Table 6: Programme resources and their Triple Aim focus

<table>
<thead>
<tr>
<th>Resource</th>
<th>Triple Aim focus</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Falls Hurt</strong></td>
<td>Individual</td>
</tr>
<tr>
<td>This document, produced in conjunction with ACC, is for DHBs to give to patients on admission to hospital and contains information on what patients can do to stay safe in hospital, and to prevent falls at home.</td>
<td></td>
</tr>
<tr>
<td><strong>Consumer information brochure: Vitamin D supplements</strong></td>
<td>Individual</td>
</tr>
<tr>
<td>Vitamin D supplements information has been developed jointly by ACC, the Commission, MoH and the Cancer Society.</td>
<td></td>
</tr>
<tr>
<td><strong>Signalling system for safe mobilising</strong></td>
<td>Individual</td>
</tr>
<tr>
<td>This system of symbols is intended to enable all staff in contact with patients to easily see what assistance they need to mobilise safely. It is designed to support staff in focusing on the patient’s particular needs and to involve them in how to keep safe when moving about in the ward or unit.</td>
<td></td>
</tr>
</tbody>
</table>
The risk of falling does increase with age, but the good news is, you can do something about it. Sit down with a family member or friend and go through this simple list as a room-by-room check of your home and garden. Remember to make a note of anything that might need to be fixed or changed.

---

**Resource**

<table>
<thead>
<tr>
<th>ACC home safety checklist 5218</th>
</tr>
</thead>
<tbody>
<tr>
<td>The risk of falling does increase with age, but the good news is, you can do something about it. Sit down with a family member or friend and go through this simple list as a room-by-room check of your home and garden. Remember to make a note of anything that might need to be fixed or changed.</td>
</tr>
</tbody>
</table>

**Triple Aim focus**

| Individual |

---

**Stay Independent toolkit for clinicians - consumer brochure**

| Stay independent consumer brochure is part of the stay independent toolkit for clinicians was developed for the New Zealand setting by bpac™ from the Centers for Disease Control and Prevention (CDC) STEADI (Stopping Elderly Accidents Death and Injuries) materials. |

**Triple Aim focus**

| Individual |

---

**Stay Independent toolkit for clinicians**

| Stay independent toolkit for clinicians was developed for the New Zealand setting by bpac™ from the Centers for Disease Control and Prevention (CDC) STEADI (Stopping Elderly Accidents Death and Injuries) materials. |

**Triple Aim focus**

| Population |

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**Ask, assess, act**

| The Ask, assess, act resources are based on a synthesis of these guidelines. |
| The 2013 NICE clinical guideline 161[1] which has this online falls pathway for assessment of falls in older people. |
| The 2011 AGS/BGX clinical practice guideline[2] which has this annotated algorithm for screening and assessment. |

**Triple Aim focus**

<p>| Population |</p>
<table>
<thead>
<tr>
<th>Resource</th>
<th>Triple Aim focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>DHB risk assessment and care plans - review and discussion document</td>
<td>Population System</td>
</tr>
<tr>
<td>Falls risk assessment tools and care plans</td>
<td>Population</td>
</tr>
<tr>
<td>Dame Kate Harcourt Resources</td>
<td>Population</td>
</tr>
<tr>
<td>Focus on Falls newsletter</td>
<td>Individual Population System</td>
</tr>
</tbody>
</table>

**DHB risk assessment and care plans - review and discussion document**
Falls risk assessment tools and care plans in New Zealand DHBs - review and discussion document.

**Falls risk assessment tools and care plans**
INTRODUCING THE WHANGANUI FALLS PREVENTION CARE PLAN
DHB assessment tools and care plan examples used in Whanganui DHB.

**Dame Kate Harcourt Resources**
Dame Kate Harcourt story book and photo album is a resource for use by providers in their falls prevention programmes. It contains key messages about falls prevention at home, Dame Kate’s story, and a set of photographs grouped in themes and matched with falls messages and suggested captions.

**Focus on Falls newsletter**
A quarterly publication for everyone interested in understanding and preventing falls in older people.
## Quality improvement toolkit for use in ARC

The Commission developed this quality improvement toolkit in partnership with Care-Metric and **First, Do No Harm** for use in age related residential care (ARRC) to help facility teams build their skills to undertake quality improvement work. The toolkit provides a foundation-level introductory guide to key aspects of quality improvement science.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Triple Aim focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality improvement toolkit for use in ARC</td>
<td>System</td>
</tr>
</tbody>
</table>

## April Falls Quiz and survey

The quiz is an engaging way for people to test their knowledge about falls, and as a survey of knowledge and attitudes about falls, it measures sector knowledge of falls risks and prevention. The quiz is still online for learning purposes.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Triple Aim focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>April Falls Quiz and survey</td>
<td>Individual Population</td>
</tr>
</tbody>
</table>

## Atlas of Healthcare Variation – falls domain

The goal of this domain was to explore any areas of wide variation between DHBs and identify possible areas for local quality improvement.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Triple Aim focus</th>
</tr>
</thead>
</table>

## 10 topics

The 10 topics cover core issues in falls prevention. They help support independence for older people and improve their care; update current evidence and best practice; provide in-brief, interesting articles that can count as learning activities for professional development hours; and introduce resources and videos developed by the programme.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Triple Aim focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 topics</td>
<td>Individual Population System</td>
</tr>
</tbody>
</table>