

## Indicator methodology

### General notes

- All sub-analyses that return a value of five or less, and their corresponding rates, are suppressed for privacy reasons.
- Dollar amounts are rounded to the nearest \$100.
- Ethnicity data is presented as prioritised ethnic group (Māori, Pacific, Asian and Other). Other includes unknown ethnicities.
- All indicators are for people aged 50+ years only, unless otherwise specified.

### Data requests

Please contact [Falls.Dashboard@hqsc.govt.nz](mailto:Falls.Dashboard@hqsc.govt.nz) to request the data underlying the dashboard.

### Feedback

We welcome your feedback on the dashboard and the indicator methodology. Please send any feedback to [Falls.Dashboard@hqsc.govt.nz](mailto:Falls.Dashboard@hqsc.govt.nz).

## Landing page

### Domain 1: ACC claims for falls

Number of fall injuries – refer [Indicator 1a](#).

### Domain 2: Fewer serious-harm falls

Number of serious-harm falls – refer [Indicator 2a](#).

### Domain 3: Improved recovery (hospital)

Average length of stay – refer [Indicator 3a](#).

### Domain 3: Improved recovery (home)

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### Domain 4a: Integrated care (community)

Number of people in community classes – refer [Domain 4](#).

### Domain 4b: Integrated care (home)

Number of people in home programme – refer [Domain 4](#).

## Domain 1: Fewer falls injuries

### 1a: ACC new falls claims

#### Rationale

This indicator shows the number and rate of older people who had ACC claims accepted for an injury caused by a fall. This indicator includes minor injuries through to more serious injuries like fractures (some of which may result in a hospital admission). ACC claims are made across a range of health care settings, so this indicator is our broadest available measure of the number of falls among older people.

This measure also shows claims for falls that either did or did not result in a fracture separately. It is assumed that fractures cause more serious harm, and are more likely to lead to hospital admission, than non-fractures.

#### Detailed methodology

Description	Number and rate of new ACC claims for falls, by fracture type
<b>Current status</b>	April 2017: Measure implemented. January 2018: Measure now available as a rolling twelve-month total, and the national total now includes claims with an unknown DHB.
<b>Numerator</b>	Total number of new and accepted ACC claims due to a fall
<b>Denominator</b>	Number: None Rate per 1,000 population: Population estimates, smoothed across quarters
<b>Data source(s)</b>	ACC; Stats NZ
<b>Collection period</b>	Quarterly and rolling twelve months, based on the date of the fall
<b>Inclusions</b>	Total accepted, new claims from ACC45 form, with a cause of any of the following: <ul style="list-style-type: none"> <li>- Slipping, Skidding on Foot,</li> <li>- Tripping or Stumbling,</li> <li>- Loss of Consciousness/Sleep,</li> <li>- Something Giving Way Underfoot,</li> <li>- Misjudgement of Support,</li> <li>- Loss Balance/Personal Control</li> </ul>
<b>Exclusions</b>	This indicator excludes falls that did not result in an ACC claim being made or accepted.
<b>Analysis</b>	Sub analysis: <ul style="list-style-type: none"> <li>- Type of fracture: fracture, non-fracture</li> <li>- Repeat: The client had made a separate claim for a fall in the previous 12 months</li> <li>- DHB of domicile</li> <li>- Age: 50-64, 65-74, 75-84, 85+ years</li> <li>- Ethnicity: Māori, Pacific, Asian and Other (including unknown)</li> <li>- Gender: Male, Female</li> </ul>

## 1c: ACC active falls claims cost

### Rationale

This indicator shows the cost of ACC claims due to a fall. This is a complementary measure to show impact when viewed alongside outcome data. For ACC it is also a measure of benefit and contribution to sustaining the wider ACC scheme.

### Detailed methodology

Description	Cost of active ACC claims due to a fall injury, by claim type
<b>Current status</b>	October 2017: Measure implemented. January 2018: Measure now available as a rolling twelve-month total, and the national total now includes claims with an unknown DHB.
<b>Numerator</b>	<p>Quarterly cost (excluding GST) of accepted and active ACC claims due to a fall.</p> <p>Costs are separated into the following groups:</p> <ul style="list-style-type: none"><li>- <b>Entitlement claims</b> Claims considered to cover moderate to serious injuries requiring entitlement beyond medical treatment only. Examples of these payments include compensation for loss of earnings, allowances for attendant care and childcare, provision of wheelchairs and other equipment, and modifications to home and vehicles. Claims are recorded as an entitlement claim if they have previously received an entitlement, at any point in the lifetime of the claim. They did not necessarily receive an entitlement during the corresponding period. The figures are subject to change as some claims which to date have not received an entitlement may do so in the future.</li><li>- <b>Medical fees only claims</b> Where ACC has made payments to cover medical treatment costs such as those provided by a GP, physiotherapist or dentist in the period but the client has not received entitlements or Other payments in the period. These claims may be counted as entitlement claims in future periods, if an entitlement is received after medical fees.</li><li>- <b>Other claims</b> Claims which have received payments from the category Other (such as death benefits, independence allowances, lump sums or miscellaneous expenses) or both Medical fees and Other payments.</li></ul>
<b>Denominator</b>	Rate per 1,000 population: Population estimates, smoothed across quarters
<b>Data source(s)</b>	ACC; Stats NZ
<b>Collection period</b>	Quarterly and rolling twelve months, based on the date of the payment

Description	Cost of active ACC claims due to a fall injury, by claim type
<b>Inclusions</b>	<p>Costs of accepted claims from ACC45 form. This includes the cost to ACC of all treatment and entitlements incurred for that claim, except for acute care at public hospitals (see exclusions).</p> <p>Cause was any of the following:</p> <ul style="list-style-type: none"> <li>- Slipping, Skidding on Foot,</li> <li>- Tripping or Stumbling,</li> <li>- Loss of Consciousness/Sleep,</li> <li>- Something Giving Way Underfoot,</li> <li>- Misjudgement of Support,</li> <li>- Loss Balance/Personal Control</li> </ul>
<b>Exclusions</b>	<p>The cost of emergency treatment at public hospitals is not included, as this is bulk funded. As a result, the costs of emergency treatment are not allocated to individual claims.</p> <p>This indicator does not include falls that did not result in an accepted ACC claim.</p>
<b>Analysis</b>	<p>Sub analysis:</p> <ul style="list-style-type: none"> <li>- Claim type: Entitlement, Medical fees, Other</li> <li>- DHB of domicile</li> <li>- Age: 50-64, 65-74, 75-84, 85+ years</li> <li>- Ethnicity: Māori, Pacific, Asian and Other (including unknown)</li> <li>- Gender</li> </ul>

## Domain 2: Fewer serious harm falls and fractures

### 2a: Acute falls hospital admissions by fracture type

#### Rationale

This indicator shows the number of hospital admissions for fractured neck of femur (NOF), other fractures, and non-fractures. This indicator provides further insight into the relative levels of harm.

Elective admissions and falls that occurred in hospital are excluded from this analysis.

#### Detailed methodology

Description	Number and rate of acute/arranged falls hospital admissions, by fracture type
<b>Current status</b>	<p>April 2017: Measure implemented.</p> <p>October 2017: Modified to identify stays more consistently with the Ministry of Health's methodology, and to include stays that started with an acute or arranged admission only.</p> <p>January 2018: Measure now available as a rolling twelve-month total, stays are now shown by discharge date rather than admission date, and the national total now includes events with an unknown DHB.</p>
<b>Numerator</b>	<p>The number of acute and arranged admissions (stays) in hospital as the result of a fall, by type of injury.</p> <p>Type of fall injury is based on the first event in the stay.</p> <p><i>Fractured neck of femur:</i> ICD10 code S720* to S722* in diag 1-30</p> <p><i>Other fracture:</i> ICD code S*2*, T02* and T12* and excluding fractured neck of femur in diag 1-30</p> <p><i>Non-fracture:</i> No fracture code recorded in diag 1-30</p> <p><b>Calculating stays</b></p> <p>Consecutive events, that together make a stay, are calculated with similar methodology to the Ministry of Health's System Level Measure '<a href="#">Acute Hospital Bed Days</a>'.</p> <p>Events are considered part of the same stay if:</p> <ul style="list-style-type: none"> <li>- The NHI was the same</li> <li>- The previous event had a transfer end type (DA, DF, DO, DP, DT, DW, ET)</li> <li>- The end date of the previous event was prior to or within one day of the next event</li> <li>- There was an external cause code of a fall (W00-W19) that occurred either on or before the event start date.</li> </ul>
<b>Denominator</b>	<p>Number: None</p> <p>Rate per 1,000 population: Population estimates, smoothed across quarters</p>
<b>Data source(s)</b>	National minimum dataset (NMDS); Stats NZ
<b>Collection period</b>	Quarterly, based on date of discharge of the last event in the stay.

Description	Number and rate of acute/arranged falls hospital admissions, by fracture type
<b>Inclusions</b>	Stays included in this measure are those that: <ul style="list-style-type: none"> <li>- started with an acute or arranged event (Admission type codes AA, AC, ZA, or ZC)</li> <li>- started with an event that had an external cause code of a fall (W00-W19), and that occurred either on or before the event start date.</li> </ul>
<b>Exclusions</b>	Stays excluded from this measure are those that: <ul style="list-style-type: none"> <li>- had an unknown DHB, age, or gender.</li> <li>- consisted of only non-casemix events (EXCLU purchase unit). Non-casemix events are otherwise included, as long as there is a casemix event within the stay.</li> <li>- started with a non-acute event code (ie, excluding falls that clearly occur in hospitals, like those measured in the HQSC Quality &amp; Safety Measures).</li> </ul>
<b>Analysis</b>	All sub-analyses are based on the information recorded in the first event in the stay.  Sub analysis: <ul style="list-style-type: none"> <li>- Injury type: Fractured NOF, other fracture, non-fracture</li> <li>- DHB of domicile</li> <li>- Age: 50-64, 65-74, 75-84, 85+ years</li> <li>- Gender: Male, Female</li> <li>- Ethnicity: Māori, Pacific, Asian and Other (including unknown)</li> </ul>
<b>Other notes</b>	This indicator differs from the <a href="#">HQSC Falls Atlas</a> Indicator 2, as it counts all acute/arranged hospital admissions (stays), rather than people with more than one fall only counted once.

## 2b: Acute falls hospital admissions by place of residence

### Rationale

The falls that result in the most serious harm may require a hospital admission, especially for older people. It is important to know where these falls occur to guide service development and quality improvement. People in aged residential care will tend to be more frail and vulnerable than those not, and the potential approaches to reducing falls in different settings vary.

### Detailed methodology

Description	Number and rate of acute/arranged falls hospital admissions, by place of residence
<b>Current status</b>	<p>April 2017: Measure implemented.</p> <p>October 2017: Modified to identify stays more consistently with the Ministry of Health's methodology, and to include stays that started with an acute or arranged admission only.</p> <p>January 2018: Measure now available as a rolling twelve-month total, stays are now shown by discharge date rather than admission date, and the national total now includes events with an unknown DHB.</p> <p>July 2018: Updated to link to aged residential care data with hospital admissions, to provide a more accurate account of the number of people living in ARC who were admitted for a fall.</p>
<b>Numerator</b>	<p>This indicator replicates the one above (2a), but shows the place of residence at the time of admission.</p> <p><i>Aged residential care:</i> Was living in ARC at the time of admission.  <i>Community:</i> Was <u>not</u> living in ARC at the time of admission.</p>
<b>Denominator</b>	<p><i>Aged residential care:</i> Total number of ARC residents who were in ARC for the whole quarter.  <i>Community:</i> Population projections minus number of ARC residents.</p>
<b>Data source(s)</b>	National minimum dataset (NMDS), Client Claims Processing System (CCPS).
<b>Collection period</b>	Quarterly, based on date of discharge of the last event in the stay.
<b>Inclusions</b>	As per indicator 2a.
<b>Exclusions</b>	As per indicator 2a.
<b>Analysis</b>	<p>All sub-analyses are based on the information recorded in the first event in the stay.</p> <p>Sub analysis:</p> <ul style="list-style-type: none"> <li>- Place of residence: ARC, community</li> <li>- DHB of domicile</li> <li>- Age: 50-64, 65-74, 75-84, 85+</li> <li>- Gender and ethnicity not available</li> </ul>
<b>Other notes</b>	This indicator differs from the <a href="#">HQSC Falls Atlas</a> Indicator 2, as it counts all acute/arranged hospital admissions (stays), rather than people with more than one fall only counted once.

## Domain 3: Improved recovery

### 3a: Falls hospital bed days, by fracture type

#### Rationale

This indicator replicates 2a, but shows bed days (ie, the total amount of time spent in hospital) instead of admissions. It is a proxy for the hospital resources that are used by different types of fall admissions. Improving the rehabilitation process inside hospital can reduce the time spent in a hospital bed.

This indicator aligns closely with the System Level Measure Framework contributory measure for Acute Hospital Bed Days.

#### Detailed methodology

Description	Number of hospital bed days due to a fall injury, by fracture type
<b>Current status</b>	<p>April 2017: Measure implemented.</p> <p>October 2017: Modified to identify stays more consistently with the Ministry of Health's methodology, and to include stays that started with an acute or arranged admission only.</p> <p>January 2018: Measure now available as a rolling twelve-month total, stays are now shown by discharge date rather than admission date, and the national total now includes events with an unknown DHB.</p>
<b>Numerator</b>	<p>This indicator replicates the one above (2a), but shows the total bed days by type of injury instead of place of occurrence.</p> <p>The total bed days for all events in acute and arranged admissions (stays) in hospital as the result of a fall, by type of injury.</p> <p>Type of fall injury is based on the first event in the stay.</p> <ul style="list-style-type: none"> <li>- <i>Fractured neck of femur</i>: ICD10 code S720* to S722* in diag 1-30</li> <li>- <i>Other fracture</i>: ICD code S*2*, T02* and T12* and excluding fractured neck of femur in diag 1-30</li> <li>- <i>Non-fracture</i>: No fracture code recorded in diag 1-30</li> </ul>
<b>Denominator</b>	<p>Number: None</p> <p>Rate per 1,000 population: Population estimates, smoothed across quarters</p>
<b>Data source(s)</b>	National minimum dataset (NMDS); Stats NZ
<b>Collection period</b>	Quarterly, based on date of discharge of the last event in the stay.
<b>Inclusions</b>	As per indicator 2a.
<b>Exclusions</b>	<p>As per indicator 2a.</p> <p>Additionally, total bed days excludes:</p> <ul style="list-style-type: none"> <li>- Bed days for residential care (health speciality code D10-D19, D30-39, D50-59, or D70-79)</li> <li>- Leave days</li> </ul>



Description	Number of hospital bed days due to a fall injury, by fracture type
<b>Analysis</b>	<p>All sub-analyses are based on the information recorded in the first event in the stay.</p> <p>Sub analysis:</p> <ul style="list-style-type: none"> <li>- Injury type: Fractured NOF, other fracture, non-fracture</li> <li>- DHB of domicile</li> <li>- Age: 50-64, 65-74, 75-84, 85+</li> <li>- Gender: Male, Female</li> <li>- Ethnicity: Māori, Pacific, Asian and Other (including unknown)</li> </ul>

### 3b: Acute ALOS for falls hospital admissions by fracture type

#### Rationale

This measure shows the average length of time that a person spent in hospital after an out-of-hospital fall. It is calculated by dividing the total number of bed days (indicator 3a) by the number of admissions (indicator 2a). Improving the rehabilitation process inside hospital can reduce the time spent in a hospital bed.

#### Detailed methodology

Description	Average length of stay for falls hospital admissions, by fracture type
<b>Current status</b>	<p>April 2017: Measure implemented.</p> <p>October 2017: Modified to identify stays more consistently with the Ministry of Health’s methodology, and to include stays that started with an acute or arranged admission only.</p> <p>January 2018: Measure now available as a rolling twelve-month total, stays are now shown by discharge date rather than admission date, and the national total now includes events with an unknown DHB.</p>
<b>Numerator</b>	The number of falls hospital bed days (Indicator 3a)
<b>Denominator</b>	The number of falls hospital admissions (Indicator 2a)
<b>Data source(s)</b>	National minimum dataset (NMDS)
<b>Collection period</b>	Quarterly, based on date of discharge
<b>Inclusions</b>	As per indicator 2a and 3a.
<b>Exclusions</b>	As per indicator 2a and 3a.
<b>Analysis</b>	<p>All sub-analyses are based on the information recorded in the first event in the stay.</p> <p>Sub analysis:</p> <ul style="list-style-type: none"> <li>- Injury type: Fractured NOF, other fracture, non-fracture</li> <li>- DHB of domicile</li> <li>- Age: 50-64, 65-74, 75-84, 85+</li> <li>- Gender: Male, Female</li> <li>- Ethnicity: Māori, Pacific, Asian and Other (including unknown)</li> </ul>
<b>Other notes</b>	This indicator differs from the <a href="#">HQSC Falls Atlas</a> Indicator 4, as it counts all acute/arranged hospital admissions (stays), rather than people with more than one fall only counted once.

### 3c: Hospital care for people with hip fracture

#### Rationale

The Hip Fracture Care Clinical Care Standard recommends that surgery is performed within 48 hours of the patient presenting to hospital, if no clinical contraindication exists and the patient prefers surgery. Reporting 48 hours is our goal.

Low mobility during hospitalisation is associated with death, and declining function in activities of daily living at discharge and at one month follow-up, which induces a risk of staying dependent in these activities (Pedersen et al. 2013).

When interpreting the first measure, it is important to remember there may be a number of reasons why surgery was delayed, such as medical instability, or a need for further investigation.

The second measure is a measure of whether a staff member made an effort to begin mobilisation with the patient on the first post-operative day. This is a measure of service delivery and does not measure whether the patient was actually able to mobilise because the patient may still be too unwell after surgery to be able to mobilise.

#### Detailed methodology

Description	Hospital care for people with hip fracture
<b>Current status</b>	Implemented in November 2019.
<b>Numerator</b>	The number of people who had specified hospital care in the days after surgery.
<b>Denominator</b>	The number of residents in the registry population.
<b>Data source(s)</b>	Australian & New Zealand Hip Fracture Registry
<b>Collection period</b>	Quarterly
<b>Inclusions</b>	Fractured NOFs operated within 48 hours – hip fracture patients operated within 48 hours as a percentage of people admitted with a fractured neck of femur as the result of a fall, and who had a hip operation in the quarter. - Time to Surgery <= 48 hours  Opportunity to mobilise 1 day after surgery - hip fracture patients provided with the opportunity to mobilise on day one post hip fracture surgery. - ‘Opportunity given day 1 post surgery’
<b>Exclusions</b>	- Null or not recorded
<b>Analysis</b>	Sub-analysis: - DHB of service - Age: 50-64, 65-74, 75-84, 85+ - Gender: Male, Female - Ethnicity: Māori, Pacific, Asian and Other (including unknown)
<b>Other notes</b>	None

### 3d: Number of new starts on bisphosphonates

#### Rationale

Bisphosphonates are a class of drugs that reduce bone density loss. Bisphosphonates should be considered for older people who have fallen and fractured, to reduce their future risk of fracture. 'New starts' identifies people who were not covered by bisphosphonates in the previous two years.

#### Detailed methodology

Description	Number of new starts on bisphosphonates
<b>Current status</b>	January 2018: Measure implemented. March 2018: Updated to correct an error in the calculation caused an undercount of the number of new starts.
<b>Numerator</b>	<p>The number of people newly started on bisphosphonates.</p> <p>A <b>new start</b> is defined as when a bisphosphonate was dispensed to person who was not covered by a bisphosphonate in the previous two years. Two years is the recommended duration for a drug holiday from bisphosphonates.</p> <p><b>Calculating coverage</b> Different bisphosphonate drugs have different dosing intervals. For example, zoledronic acid is typically administered annually. To account for this, the median gap between dispensations for each person and each bisphosphonate chemical ID was calculated. This median was calculated from all bisphosphonates dispensed between 2011 and 2017 to the population aged 50+ years. Then, for each person, coverage was approximated by adding the drug's median dispense gap to the date that the drug was dispensed for that person. For example, if a person was dispensed zoledronic acid on 1 January 2017, they were covered for 400 days (the median dispense interval for zoledronic acid), until 5 February 2018.</p>
<b>Denominator</b>	Volume: None Rate: The number of ACC claims for a fracture
<b>Data source(s)</b>	Pharmaceutical Claims Collection; ACC
<b>Collection period</b>	Quarterly
<b>Inclusions</b>	All bisphosphonates dispensed (chemical IDs: 1037, 3938, 4015, 3868, 3939, 6033, 1487, 3913) for people aged 50+ years.
<b>Exclusions</b>	This measure does not include bisphosphonates that were dispensed in hospital. Interpretation of this measure should consider local practice for bisphosphonate dispensing.

Description	Number of new starts on bisphosphonates
<b>Analysis</b>	<p>All sub-analyses are based on the information recorded in the first event in the stay.</p> <p>Sub analysis:</p> <ul style="list-style-type: none"> <li>- DHB of domicile</li> <li>- Age: 50-64, 65-74, 75-84, 85+</li> <li>- Gender: Male, Female</li> <li>- Ethnicity: Māori, Pacific, Asian and Other (including unknown)</li> </ul>
<b>Other notes</b>	<p>The methodology for bisphosphonate coverage was initially developed by Rodney Jones, Data Scientist at Healthshare Ltd.</p>

### 3e: Percentage of ARC residents on vitamin D

#### Rationale

Internationally, Vitamin D is widely recommended for reducing falls and fall-related injuries in older people. Vitamin D supplements are thought to prevent falls by improving muscle strength and psychomotor performance in older people at risk of Vitamin D deficiency.

Nationally, there has been a long-established programme to increase the uptake of prescribed Vitamin D supplements to older people in aged residential care (ARC).

#### Detailed methodology

Description	Percentage of ARC residents who were dispensed vitamin D
<b>Current status</b>	April 2017: Measure implemented. July 2018: Measure methodology updated. The original methodology calculated the number of ARC residents who were dispensed vitamin D in the previous 12 months, regardless of where they were living in those previous 12 months. The new methodology calculates the number of people who lived in ARC for the whole quarter, and were dispensed vitamin D in that quarter. This new methodology produces a slightly lower result (approximately 2% lower, at the national level) than the previous methodology.
<b>Numerator</b>	The number of residents who lived in ARC for the whole quarter, and were dispensed vitamin D in that quarter.
<b>Denominator</b>	The number of residents in ARC for the whole quarter.
<b>Data source(s)</b>	Pharmaceutical Claims Collection; Client Claims Processing System.
<b>Collection period</b>	Quarterly
<b>Inclusions</b>	ARC residents who were in ARC for the whole quarter, with service category of: <ul style="list-style-type: none"> <li>- Resthome-Age</li> <li>- Hospital-Age</li> <li>- Dementia-Age</li> <li>- Psycgeri-Age</li> </ul>
<b>Exclusions</b>	None
<b>Analysis</b>	Sub-analysis <ul style="list-style-type: none"> <li>- DHB of domicile</li> <li>- Age</li> </ul> Gender and ethnicity not available due to poor data quality in the CCPS dataset.
<b>Other notes</b>	This measure was previously provided by the Ministry of Health to ACC on a quarterly basis.

### 3f: Early outcome success measures at 120 days

#### Rationale

To monitor patient outcomes post-surgery.

#### Detailed methodology

Description	Early outcome success measures at 120 days
<b>Current status</b>	Implemented in November 2019.
<b>Numerator</b>	The number of people who had early success at 120 days after admission (with hip fracture).
<b>Denominator</b>	The number of residents in the registry population.
<b>Data source(s)</b>	Australian & New Zealand Hip Fracture Registry
<b>Collection period</b>	Quarterly
<b>Inclusions</b>	<p>Home to home – hip fracture patients living in a private residence prior to admission who return to live in a private residence at 120 days after admission. - ‘Home to Home 120’, ‘From Home but not returned’</p> <p>Survival - hip fracture patients who are alive at 120 days after admission. - ‘Yes’</p> <p>Walking ability - who return to their pre-fracture mobility at 120 days after admission. - ‘Return to mobility’</p> <p>Bone protection medication - hip fracture patients who have been given bone protection medication - bisphosphonates. - ‘Yes - Bisphosphonates, strontium, denosumab or teriparitide (with or without calcium and/or vitamin D)’</p>
<b>Exclusions</b>	<p>Null or not recorded</p> <p>Home to home – ‘From Home but no 120 residence’, ‘Not from Home’</p> <p>Survival – None</p> <p>Walking ability – None</p> <p>Bone protection medication – ‘No bone protection medication’</p>
<b>Analysis</b>	<p>Sub-analysis:</p> <ul style="list-style-type: none"> <li>- DHB of service</li> <li>- Age: 50-64, 65-74, 75-84, 85+</li> <li>- Gender: Male, Female</li> <li>- Ethnicity: Māori, Pacific, Asian and Other (including unknown)</li> </ul>

Description	Early outcome success measures at 120 days
<b>Other notes</b>	Home to home includes patient is discharged to live with a relative or in a community group home or boarding house code 'private residence'. Private rehabilitation units are not applicable in New Zealand.



## Domain 4: Integrated care

The measures in Domain 4 come from quarterly reporting provided by DHBs and community organisations.

Measure	Rationale and definition
<b>Community group strength &amp; balance</b>	
<b>Places</b> Number of places offered	To gauge whether sufficient opportunities are being provided for older people to gain benefits, with an aspiration for the majority of the at-risk population by the end of year three. Places will be counted per quarter, i.e. continuously offered places can be re-counted in the subsequent quarter.
<b>Reach</b> Number of new individual people participating in the classes	To gauge whether we are seeing “at population level” numbers of older people coming through the programme. This measure tells us how many unique people have begun participating in Community Group Strength and Balance classes in each quarter. This change was made in October 2018 due to the previous counting method being too difficult to apply by our class providers locally.
<b>Super-reach</b> Number of people who participated for 10 weeks (this is directly linked to positive benefits for older people).	To help identify reasons to celebrate success (this is quite an achievement). To provide a link between the planned outcomes and benefits. To understand the challenges of keeping people on the programme. These participants will be counted per quarter. Someone who achieved 10 weeks and doesn’t stay on the programme will likely lose the gained benefit quickly (unless they graduate to some other form of appropriate continuous exercise). Someone who stays on the programme will sustain the benefit, relative to someone who doesn’t stay on the programme. Therefore, everyone who does 10 consecutive weeks in a subsequent quarter, can be re-counted within each subsequent quarter.
<b>Other services (In-home strength &amp; balance, and fracture liaison services)</b>	
Participated In Home Strength and Balance Service	To ensure the appropriate exercises are provided (with additional support) to reduce the risk of falling or prevent the next fall.
Fracture Liaison Service	Seen by the fracture liaison service (or similar). To ensure the assessment of bone health and referral to appropriate falls prevention programme.