

Clinical Standards For Fracture Liaison Services in New Zealand 2026

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Foreword

Since their introduction in 2016, the *Clinical Standards for Fracture Liaison Services (FLS) in New Zealand*^{1,2} have provided the foundation for ensuring that people who sustain fragility fractures receive systematic, world-class secondary fracture prevention. With each new edition, the Standards have evolved in line with emerging evidence, international best practice, and the changing needs of New Zealand's health system.

A major reset of the national FLS quality improvement programme, announced in late 2020 and progressively implemented from 2021 onward³, marked the transition to a more coordinated, measurable, and nationally consistent model of secondary fracture prevention supported by quality benchmarking and continuous improvement.

The third edition reflects a decade of remarkable progress. Universal FLS coverage is now within reach, benchmarking through the Australian and New Zealand Fragility Fracture Registry (ANZFFR)⁴ is firmly established, and multidisciplinary teams across the country are delivering measurable improvements in patient outcomes and refracture prevention.

These advances sit within a broader national agenda, as articulated in Osteoporosis New Zealand's *Stronger Together: A Collaborative Strategy for Bone Health in New Zealand* (2025)⁵, which calls for sustained excellence in secondary fracture prevention, prevention of first fragility fractures, and the promotion of bone health throughout life.

Executive Summary

Fragility fractures are among the most serious and costly health challenges facing New Zealand. Each year, more than 21,000 people aged 50 years or over sustain a fragility fracture, including nearly 4,000 hip fractures⁵. Hip fractures are painful and debilitating: only half of patients regain full mobility⁶, one quarter require long-term residential care⁷, and one in four do not survive beyond one year⁸. The 191,000 hospital bed days⁹ required annually for fragility fracture care exceed the combined bed-day burden attributable to acute coronary syndromes¹⁰ and stroke^{11,12}, while costing ACC \$360 million in 2023⁹, a figure projected to exceed \$720 million by 2035 without effective intervention.

Fracture Liaison Services (FLS) are the gold standard in secondary fracture prevention¹³. They ensure that every patient who sustains a fragility fracture is systematically identified, assessed, treated according to national guidelines, and referred to falls prevention services where appropriate.

International and New Zealand evidence confirms that FLS significantly reduces refracture rates and demand for hospital bed days, increases treatment initiation and adherence, and saves lives¹³⁻¹⁷.

Since their introduction in 2016, New Zealand's *Clinical Standards for Fracture Liaison Services*^{1,2} have provided a nationally consistent framework for service delivery and quality improvement. The third edition builds on this foundation, reflecting a decade of progress:

- **Universal access is within reach** — FLS now covers over 98% of the population aged 50 years or over⁵.
- **Registry-driven improvement is embedded** — the Australian and New Zealand Fragility Fracture Registry (ANZFFR)⁴, launched in March 2022, enables benchmarking of care delivered by FLS in real time, with rapid uptake in participation making New Zealand an international exemplar^{18,19}.
- **Global recognition has grown** — 20 New Zealand FLS are accredited by the IOF Capture the Fracture® Best Practice Framework²⁰⁻²², positioning the country as a world leader in systematic secondary fracture prevention.
- **Trans-Tasman alignment is underway** — Australia published its first Clinical Standards for FLS in late 2025²³, heavily informed by New Zealand's framework. By mid-2026, both countries will be working from a closely aligned set of expectations.
- **National collaboration continues** — the *Live Stronger for Longer* programme²⁴ sustains FLS delivery, supports community falls prevention, and raises public awareness. ACC's leadership and investment have been instrumental in the success of the programme. However, fragility fractures occur because of preventable bone disease, and the benefits of prevention extend across the wider health and aged care system, highlighting the need for broader health sector ownership and sustainable multi-stakeholder investment.

The third edition of the Clinical Standards:

- **Sets clear expectations** for the consistent identification, assessment, treatment, and follow-up of fragility fracture patients.
- **Defines Key Performance Indicators (KPIs)** to support data-driven continuous quality improvement across all FLS.
- **Aligns with national strategy** - *Stronger Together: A Collaborative Strategy for Bone Health in New Zealand*⁵ - and international best practice.

By embedding these Standards, New Zealand will sustain its position as a global leader in secondary fracture prevention, reduce the devastating personal and economic burden of fragility fractures, and provide a model for other nations confronting the challenges of a rapidly ageing population.

Background and Rationale

Fragility fractures are one of the most urgent health challenges facing New Zealand's rapidly ageing population. Each year, more than 22,000 fragility fractures occur among people aged 50 years or over, including nearly 4,000 hip fractures⁵. Hip fractures are painful, debilitating, and often life-changing: only half of patients regain full mobility⁶, one quarter require long-term residential care⁷, and one in four do not survive beyond one year⁸.

The system-wide impact is profound. In 2022, fragility fracture patients accounted for more than 191,000 hospital bed days – equivalent to a 525-bed hospital at full capacity – which would be the sixth-largest in the country⁹.

To place this in context, the acute hospital demand generated by fragility fractures exceeds the combined bed-day burden attributable to acute coronary syndromes¹⁰ and stroke^{11,12}. The economic burden is equally stark: falls and fractures cost the Accident Compensation Corporation (ACC) \$360 million in 2023⁹, with costs projected to more than double to \$720 million by 2035 in the absence of interventions.

Fracture Liaison Services (FLS) are globally recognised as the gold standard for reducing refracture risk¹³. Endorsed through the International Osteoporosis Foundation's (IOF) *Capture the Fracture® Best Practice Framework*²⁰⁻²², these services deliver systematic, evidence-based care. In New Zealand, FLS now operates at scale covering more than 98% of the population aged 50 years or over⁵. Participation in the Australian and New Zealand Fragility Fracture Registry (ANZFFR)⁴, including use of the *Refracture Tracker* tool, enables continuous quality improvement and real-time benchmarking against national and global quality standards.

Purpose of the Standards

These Standards serve three key purposes:

1. **Consistency of care** – ensuring every person with a fragility fracture receives timely, evidence-based assessment and management, regardless of where in New Zealand they are treated.
2. **Quality improvement** – providing FLS teams with measurable benchmarks (Key Performance Indicators) to drive ongoing refinement of service delivery and patient care.
3. **Accountability and advocacy** – supporting funders, policymakers, and providers in sustaining and expanding services, recognising that FLS are a cost-effective investment that reduces demand on hospitals, aged residential care and ACC.

Alignment with National Strategy

The third version of the Clinical Standards is directly aligned with the goals of *Stronger Together: A Collaborative Strategy for Bone Health in New Zealand*⁵. The standards are also closely aligned with the wider priorities of Health New Zealand²⁵ and the New Zealand Government, including prevention, integrated community-based care, equitable access, quality improvement, and long-term health system sustainability.

At the Parliamentary launch²⁶ of *Stronger Together* in November 2025, both Prime Minister Rt Hon Christopher Luxon and Associate Minister of Health Hon Casey Costello publicly endorsed the importance of improving bone health and preventing fragility fractures as part of a sustainable approach to healthy ageing and health system stewardship.

By adopting and implementing these updated *Clinical Standards for Fracture Liaison Services*, New Zealand is consolidating its position as a global leader in secondary fracture prevention and setting an example for other nations facing similar demographic challenges.

Fracture Liaison Services

*"The purpose of a Fracture Liaison Service (FLS) is to ensure that all patients aged 50 years or over, who present to urgent care services with a fragility fracture, undergo fracture risk assessment and if required receive individually tailored interventions to reduce the risk of further fracture in accordance with prevailing national clinical guidelines. The FLS also ensures that falls risk is addressed among older patients through referral to appropriate local falls prevention services"*²⁷

A fragility fracture is defined as a fracture resulting from low trauma, such as a fall from standing height. The most common sites include the hip, wrist, humerus, pelvis, and spine, although many spine fractures remain undiagnosed. Fragility fractures are a leading cause of disability and loss of independence among older people, with profound personal, health system, and economic consequences.

Evidence from New Zealand^{18,19} and internationally¹³⁻¹⁷ confirms that FLS significantly improves rates of bone health assessment, treatment initiation, and adherence. Crucially, they reduce refracture and mortality rates, delivering better patient outcomes and major cost savings for ACC and Health New Zealand.

The Australian and New Zealand Fragility Fracture Registry (ANZFFR)

The launch of the ANZFFR⁴ in March 2022 marked a step change in secondary fragility fracture prevention across New Zealand. By design, the Registry enables systematic benchmarking of FLS performance against the *Clinical Standards for Fracture Liaison Services in New Zealand* in real time.

Key milestones:

- **Rapid uptake:** In its first year of ANZFFR operations (July 2022 – June 2023), New Zealand FLS identified 55% of the estimated national fragility fracture caseload¹⁸. In the second year, this rose to 72% (2023/24 cohort)¹⁹ and by the third year to 77% (2024/25 cohort)²⁸, the fastest patient acquisition rate achieved by any fragility fracture registry worldwide.
- **Comprehensive reach:** Since launch, the Registry has benchmarked care for more than 50,000 patients in New Zealand²⁹, establishing itself as a cornerstone of continuous quality improvement.
- **Refracture Tracker:** This real-time tool alerts FLS teams when patients sustain subsequent fractures, ensuring timely intervention and demonstrating the value of the national secondary fragility fracture prevention quality improvement programme.
- **Global exemplar:** New Zealand's experience has influenced international thinking about how to scale and sustain registry-enabled, data-driven quality improvement.^{5,30}

The ANZFFR is more than a monitoring tool: it is a patient management system and an engine that enables FLS teams to continuously evaluate performance and demonstrate better patient outcomes and value to funders and policymakers.

Current Status and Future of the *Live Stronger for Longer* Programme

Since 2017, the *Live Stronger for Longer* (LSFL) programme²⁴ has demonstrated what can be achieved through sustained collaboration between ACC, Health New Zealand, Osteoporosis New Zealand (ONZ), the Health Quality and Safety Commission (HQSC), clinicians, researchers, and community providers. Together, these partners have established one of the world's most comprehensive national approaches to the prevention of falls and fragility fractures in older adults³⁰⁻³².

ACC's leadership and investment have been instrumental in establishing universal access to International Osteoporosis Foundation-accredited FLS across New Zealand³³, alongside community falls prevention initiatives and public awareness programmes that support older New Zealanders to maintain independence and quality of life.

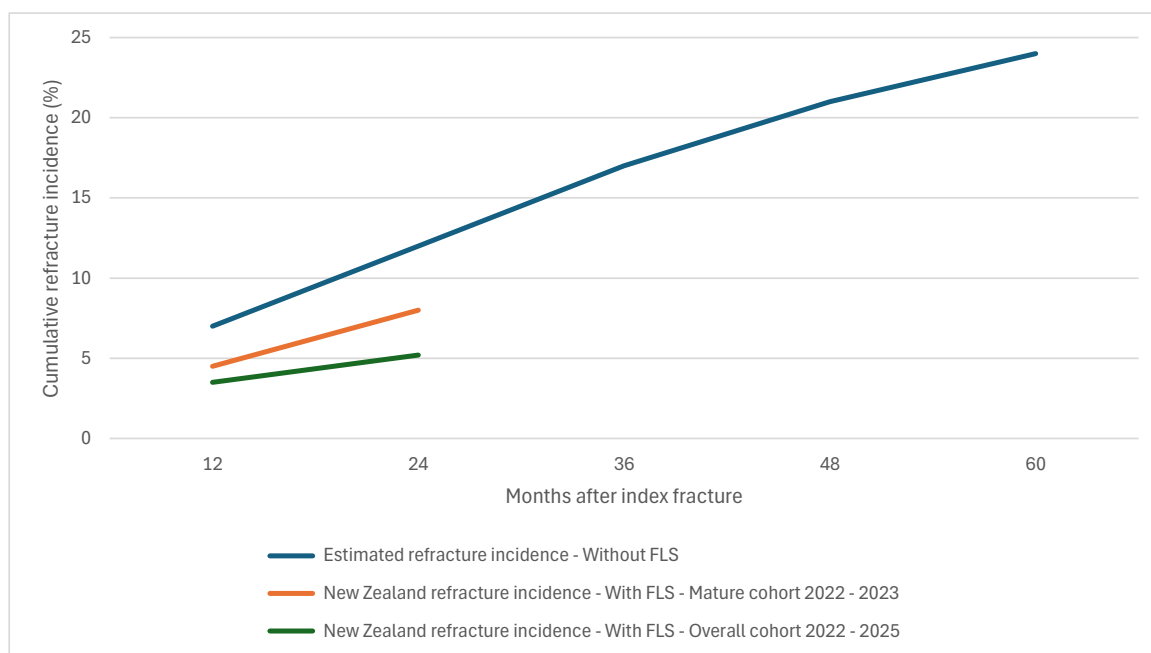
Importantly, FLS address the underlying osteoporosis and bone fragility that make individuals more likely to sustain fractures in the event of a fall. While falls prevention remains central to ACC's injury prevention remit, fragility fractures are the clinical consequence of osteoporosis, a preventable and treatable chronic disease. The benefits of fracture prevention therefore extend well beyond ACC, reducing demand across acute hospitals, rehabilitation services, aged residential care, and community health services.

Emerging Evidence that FLS in New Zealand are Reducing Refractures

The national ANZFFR Refracture Tracker^{4,28} is now providing early but compelling evidence that New Zealand's world-class FLS network is materially reducing refracture rates at a population level.

International observational cohorts³⁴⁻³⁸ from populations without systematic FLS coverage consistently demonstrate that approximately 7% of patients sustain a refracture within 12 months of an index fragility fracture, 12% within 24 months, and 20-26% within five years. As illustrated in the graph below, ANZFFR data²⁸ from New Zealand demonstrate substantially lower refracture rates among patients managed within the national FLS system.

Refracture rates in New Zealand versus international cohorts without systematic FLS coverage^{28,34-38}



While refracture rates are expected to increase progressively over time; because osteoporosis treatments and falls prevention interventions reduce, but do not eliminate, future fracture risk; these early findings compare very favourably with international observational cohorts lacking systematic secondary fracture prevention services.

Importantly, international imminent fracture risk studies³⁴ consistently demonstrate that approximately half of all refractures that will ever occur happen within two years of the index fracture. Consequently, reducing refractures during this early high-risk period is likely to yield substantial downstream reductions in hospital admissions, disability, aged residential care utilisation, and healthcare expenditure.

The Next Phase of National Collaboration

The establishment of a nationally coordinated FLS network and the ANZFFR represents a major achievement for New Zealand's health system and demonstrates the value of sustained cross-agency collaboration.

As the *Live Stronger for Longer*²⁴ programme matures, there is now an opportunity to consolidate these gains through a sustainable long-term funding and governance model that reflects the broad health system benefits generated by fragility fracture prevention. This includes reducing pressure on acute hospitals, rehabilitation services, and aged residential care, while supporting healthier ageing and maintaining independence for older New Zealanders.

ACC remains committed to the prevention of older adult falls and to collaborative approaches that improve outcomes for older New Zealanders.²⁸ However, the prevention and management of osteoporosis and fragility fractures align closely with the broader remit of Health NZ and the wider health system.

ANZFFR data^{4,28} increasingly suggest that the greatest opportunities for improving patient outcomes now lie in strengthening the pathways between fracture identification, investigation, treatment initiation, and long-term community management. Access to DXA scanning remains a major constraint in some regions, while stronger integration between FLS teams and primary care will be essential to ensure treatment recommendations consistently translate into sustained osteoporosis management.

Increasing use of intravenous zoledronic acid reflects growing recognition of its clinical advantages, including prolonged fracture protection and reduced reliance on long-term adherence to oral therapies. Although PHARMAC's removal of Special Authority restrictions has significantly improved access, variability in funding and delivery arrangements for intravenous administration remains a barrier in some settings.

A sustainable, cross-agency investment approach will be essential to ensure that New Zealand's world-class FLS network and the ANZFFR continue to reduce health system demand, deliver measurable improvements in patient outcomes, and make the health system sustainable for future generations.

International Benchmarking and Recognition

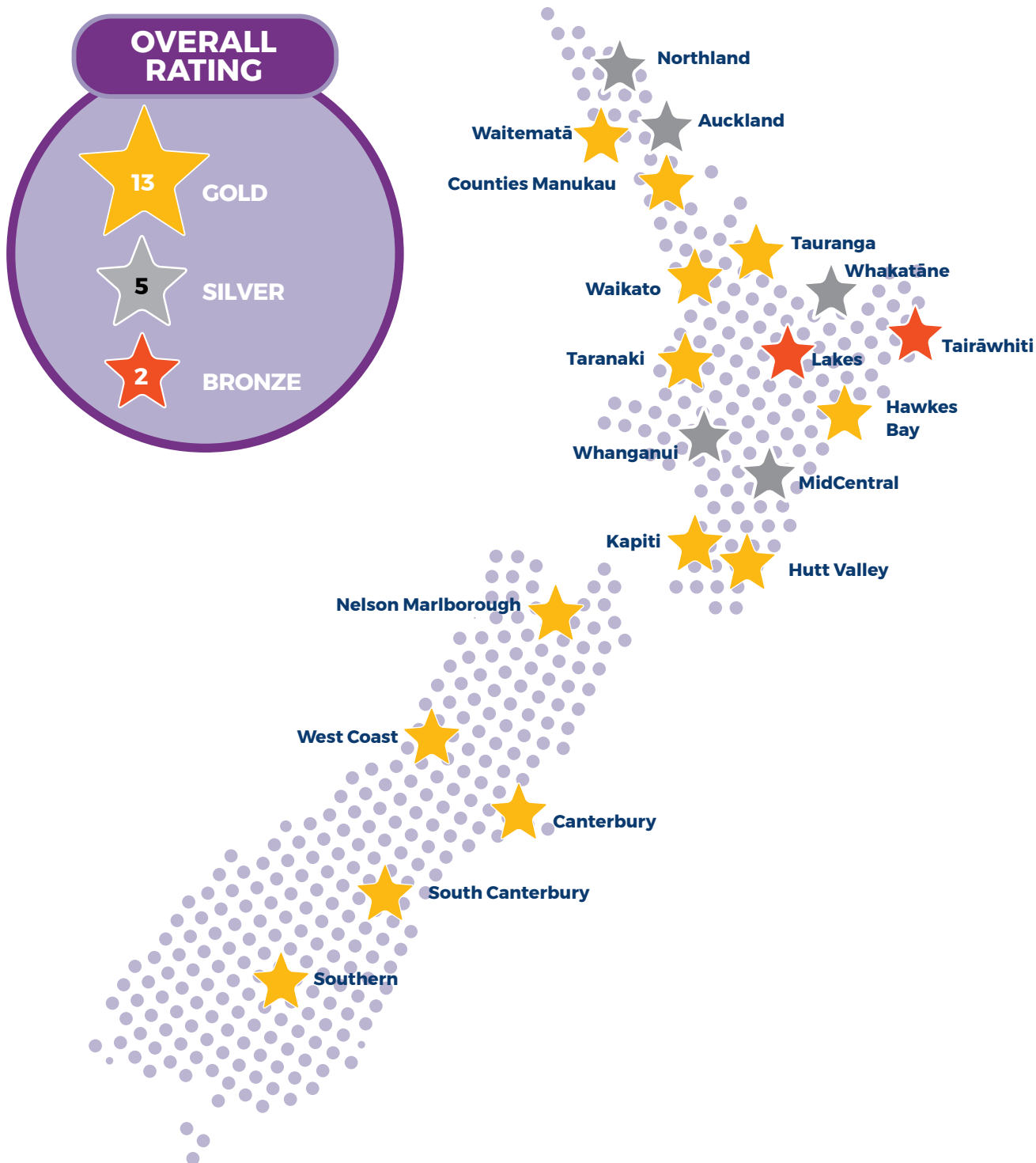
New Zealand's FLS have gained increasing recognition on the IOF *Capture the Fracture® Map of Best Practice*³³, which now features 20 accredited services nationwide, collectively serving more than 98% of the population aged 50 years or over⁵. This positions New Zealand among the world's leaders in systematic secondary fragility fracture prevention.

International benchmarking provides more than recognition: it confirms that New Zealand FLS consistently delivers care that meets global best practice standards, while peer-review feedback highlights opportunities for ongoing improvement.

Equally important, New Zealand's experience has provided the international community with a compelling demonstration of what can be achieved through coordinated national action, as acknowledged by eminent global leaders in the foreword to *Stronger Together*⁵. The progress achieved here shows that when healthcare providers, government agencies, and community organisations unite behind a shared vision, dramatic improvements in secondary fragility fracture prevention can be realised in a relatively short period. The *Live Stronger for Longer* programme²⁴ exemplifies this collaborative model and has inspired other national osteoporosis societies to consider adopting similarly comprehensive approaches.

This model is now influencing practice, particularly in Australia, who published their first Clinical Standards for FLS in November 2025²³, drawing heavily on the New Zealand framework. Once the third edition of the New Zealand Standards are released in mid-2026, both countries will be working from a closely aligned set of expectations — an unprecedented opportunity for trans-Tasman collaboration and mutual learning.

In addition, a growing number of countries — including Ireland³⁹ and the United Kingdom⁴⁰ — are using the same or similar Key Performance Indicators (KPIs) as are used in New Zealand. This convergence opens the exciting prospect of future international collaborative ventures and cross-country comparisons, where data can be meaningfully evaluated.



Consultation Process

As with previous editions, the third edition of the Clinical Standards was developed through a broad consultation process involving healthcare professional societies, government agencies, and other stakeholder organisations. Feedback from this process was carefully reviewed to ensure the Standards remain relevant, evidence-based, and widely supported across the health sector.

We extend our sincere thanks to colleagues from the following organisations for undertaking comprehensive reviews of an earlier draft, providing thoughtful and constructive advice on how the document could be strengthened, and subsequently offering their organisation's endorsement.



He Kaupare. He Manaaki.
He Whakaora.
prevention. care. recovery.



Fracture Liaison Network
New Zealand



ANZBMS



HEALTH QUALITY & SAFETY
COMMISSION NEW ZEALAND
Kupu Taurangi Hauora o Aotearoa



ANZFFR



IOF
International
Osteoporosis
Foundation



PHYSIOTHERAPY
NEW ZEALAND
Kōmiri Aotearoa



ANZHFR

Australian & New Zealand Hip Fracture Registry



APCO
ASIA PACIFIC CONSORTIUM
ON OSTEOPOROSIS



NZOA

New Zealand
Orthopaedic Association



NEW ZEALAND SOCIETY
OF ENDOCRINOLOGY



Endocrine Nurses' Society
of Australasia Inc.



The Royal New Zealand
College of General Practitioners
Te Whare Tohu Rata o Aotearoa

FFN

Fragility Fracture Network



Fracture
Alliance

Making the first break the last

Standard 1: Identification

All fragility fractures in people aged 50 years or over will be systematically and proactively identified by the FLS.

Key Performance Indicators (KPIs):

KPI 1: Identification of non-spine fragility fractures.*

Numerator: The total number of non-spine fragility fractures* identified by the FLS.

Denominator: The expected annual number of non-spine fragility fractures can be estimated by multiplying by five the number of hip fractures that occur annually in the FLS catchment area⁴¹.

*Non-spine fragility fractures are defined as all non-spine fragility fractures excluding fractures of the face, skull, scaphoid and digits. NB: This does include hip fractures.

KPI 2: Identification of spine fragility fractures.

Numerator: The total number* of clinically acute spine fragility fractures identified by the FLS.

Denominator: The expected annual number of clinically acute spine fragility fractures can be estimated by multiplying by 0.75 the number of hip fractures that occur annually in the FLS catchment area⁴¹.

*A spine fragility fracture should only be recorded once as a site of index fragility fracture.

Standard 2: Investigation

People with a fragility fracture will undergo timely assessment for future fracture risk including bone health (i.e. osteoporosis) and falls risk.

Key Performance Indicators (KPIs):

KPI 3: Initial investigation including fracture risk assessment within 12 weeks.

Numerator: The annual number of people who undergo initial investigation including fracture risk assessment within 12 weeks of the index fracture.

Denominator: The total number of people with fragility fracture identified (i.e. non-spine and spine fragility fractures combined).

Please note: It is recognised that bone mineral density (BMD) testing by dual-energy X-ray absorptiometry (DXA) is not required in many people who sustain a fragility fracture, and so DXA is documented separately as KPI 4.

KPI 4: DXA within 12 weeks.

Numerator: The annual number of people who have a DXA scan within 12 weeks of the index fragility fracture.

Denominator: 50% of the total number of people with fragility fracture identified (i.e. 50% of non-spine and spine fragility fractures combined).

Please note: The IOF-FFN-KPI set⁴¹ defines the denominator as the “Number of patients for whom DXA is recommended according to regional or national guidelines.” The *Guidance on the Diagnosis and Management of Osteoporosis in New Zealand*⁴² states “Although DXA is recommended after fragility fracture, treatment must not be delayed if DXA is unavailable.”

KPI 5: Falls risk assessment within 12 weeks.

Numerator: The total annual number of people who received a falls risk assessment within 12 weeks of the index fracture.

Denominator: The total number of people with fragility fracture identified (i.e. non-spine and spine fragility fractures combined).

Standard 3: Information

People with fragility fracture, their family members and whānau or carers will be provided with information – in their own language and in plain language – on bone health, lifestyle measures (including exercise, alcohol and smoking), nutrition (a balanced diet including protein and calcium), sun exposure (vitamin D) and the relationship between osteopenia, osteoporosis and fracture risk.

Key Performance Indicators (KPIs):

KPI 6:	Provision of an information package within 12 weeks.
Numerator:	The annual number of people with a fragility fracture who receive a package of information delivered by the FLS within 12 weeks of the index fracture.
Denominator:	The total number of people with fragility fracture identified (i.e. non-spine and spine fragility fractures combined).
Please note:	Information should be provided in the person's preferred language, in plain language, and in a format that suits the person, their family members, whānau or carers (e.g. written or electronic). The Osteoporosis New Zealand brochure <i>All About Osteoporosis</i> ⁴³ , supported by ACC and endorsed by the Ministry of Health, is an example of an evidence-based patient information resource.

KPI 7:	Self-assessment of bone health by family members of people with fragility fracture.
Numerator:	The annual number of people with fragility fracture provided with information on the Know your Bones™ tool to be shared with family members.
Denominator:	The total number of people with fragility fracture identified (i.e. non-spine and spine fragility fractures combined).
Please note:	Meta-analysis has demonstrated that a parental history of fragility fracture (particularly a family history of hip fracture) confers an increased risk of fracture that is independent of BMD ⁴⁴ . Accordingly, increasing awareness of bone health among adult children of people with fragility fracture and siblings of people with fragility fracture could be beneficial to those family members. The free Know your Bones™ online self-assessment tool ⁴⁵ can be used by family members to assess their own bone health.

Standard 4: Intervention

People with a fragility fracture determined to be at high risk of sustaining future falls and/or fractures will be offered appropriate osteoporosis specific treatment and be referred for interventions to reduce falls risk.

Key Performance Indicators (KPIs):

KPI 8:	As appropriate, completion and communication of an osteoporosis specific treatment recommendation within 12 weeks.
Numerator:	The annual number of people with fragility fracture who receive a recommendation for osteoporosis specific treatment and have a treatment plan communicated to their primary healthcare provider within 12 weeks of the index fracture*.
Denominator:	The total number of people with fragility fractures identified (i.e. non-spine and spine fragility fractures combined).
Please note:	Osteoporosis specific treatments include bisphosphonates (oral and IV), denosumab and teriparatide. Calcium and/or vitamin D supplementation is not considered an osteoporosis specific treatment. As an alternative to bisphosphonates, oestrogen therapy may be considered as first-line therapy for women within 10 years of menopause.

*This includes the cumulative total of people with fragility fracture that were:

- recommended an osteoporosis specific treatment as a result of the index fracture that were not receiving treatment prior to the fracture, or
- treated with an osteoporosis specific treatment prior to the index fracture and that prior treatment was recommended to be continued, or
- treated prior to the index fracture and a recommendation was made to change the prior treatment to another osteoporosis specific treatment during the index fracture episode of care.

KPI 9:	Recorded follow-up within 20 weeks.
Numerator:	The annual number of people with a fragility fracture with recorded follow-up within 20 weeks of the index fracture.
Denominator:	The annual total number of people with a fragility fracture eligible* for 20 week follow-up, minus the number of people who have died within 20 weeks of fracture.

*Those who are eligible for 20 week follow-up include those referred for, or recommended osteoporosis specific treatment, or are awaiting investigation results to make a treatment **minus** the number of people who died within 20 weeks of fracture.

KPI 10:	Commenced or continued osteoporosis specific treatment within 20 weeks.
Numerator:	The annual number of people with a fragility fracture who commenced or continued with osteoporosis specific treatment within 20 weeks of the index fracture.
Denominator:	The total annual number of people with a fragility fracture eligible* for 20 week follow-up, minus the number of people who had died within 20 weeks of fracture.

*Those who are eligible for 20 week follow-up include those referred for, or recommended osteoporosis specific treatment, or are awaiting investigation results to make a treatment decision.

Please note: This indicator serves to confirm that follow-up within 20 weeks (KPI 9) resulted in actual treatment of those people with a fracture who are clinically indicated to receive treatment.

Osteoporosis specific treatment includes bisphosphonates (oral and IV), denosumab and teriparatide. Calcium and/or vitamin D supplementation is not considered an osteoporosis specific treatment. As an alternative to bisphosphonates, oestrogen therapy may be considered as first-line therapy for women within 10 years of menopause.

KPI 11:	Strength and balance programme commenced within 20 weeks.
Numerator:	The annual number of people with fracture who initiated or resumed participation in an approved strength and balance programme* or other physical rehabilitation programme within 20 weeks of the index fracture.
Denominator:	The annual cumulative total number of people with fragility fracture who: • were recommended a strength and balance programme, • were referred to the care of a falls service, or • attended a falls service immediately prior to sustaining the index fracture • minus the number of people who had died within 20 weeks of fracture.

*A strength and balance programme which may be community-based, home-based or delivered in a rehabilitation setting.

Standard 5: Integration

The FLS, in partnership with the person with fragility fracture and their primary healthcare provider, develops a personalised long-term condition management plan, ensuring a coordinated and seamless handover of care to support ongoing fracture prevention and bone health.

Key Performance Indicators (KPIs):

KPI 12: Provision of a long-term condition management plan within 52 weeks.

Numerator: The number of people with a fragility fracture for whom any further investigation or intervention is deemed appropriate, who receive a long-term condition management plan within 52 weeks of the index fracture.

Denominator: The total number of people with fragility fracture identified (i.e. non-spine and spine fragility fractures combined).

KPI 13: People taking osteoporosis specific treatment at the 52-week follow-up.

Numerator: The number of people taking osteoporosis specific treatment 52 weeks after the index fracture.

Denominator: The total number of people with a fragility fracture eligible* for 52-week follow-up, **minus** the number of people who had died within 52 weeks of fracture.

*Those who are eligible for 52-week follow-up include those referred for, or recommended osteoporosis specific treatment, or are awaiting investigation results to make a treatment decision.

Please note: Osteoporosis specific treatments include bisphosphonates (oral and IV), denosumab and teriparatide. Calcium and/or vitamin D supplementation is not considered an osteoporosis specific treatment. As an alternative to bisphosphonates, oestrogen therapy may be considered as first-line therapy for women within 10 years of menopause.

Standard 6: Quality

The FLS will undertake ongoing performance review enabled by participation in the NZ-arm of the Australian and New Zealand Fragility Fracture Registry and ensure appropriate Continuing Professional Development (CPD) for FLS staff.

Key Performance Indicators (KPIs):

KPI 14: Continuing Professional Development for FLS staff.

Numerator: The number of FLS staff who undertook at least one specific FLS-related CPD activity in the previous year.

Denominator: The total number of FLS staff involved in delivery of clinical aspects of the FLS (i.e. FLS Clinical Leads FLS Coordinators and FLS Administrators) at the time of Facility Level Audit completion.

KPI 15: ANZ Fragility Fracture Registry Participation.

Numerator: Number of KPIs 1-13 with more than 80% complete data entered into the NZ-arm of the ANZ Fragility Fracture Registry.

Denominator: 13 KPIs.

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 **OSTEOPOROSIS**



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