



# Osteoporosis New Zealand Strategic Plan

**2016-2020**

# Introduction

Osteoporosis New Zealand (ONZ) is a charitable trust operated by an employee and a skilled board of volunteers who are dedicated to improving care and outcomes for people suffering from the bone-wasting disease known as osteoporosis. As human bone structures deteriorate from middle age onwards, risks increase of bone fractures (breaks and/or cracks) that impose great suffering on affected individuals, as well as substantial costs to society.

ONZ's aim is for New Zealanders to have stronger, better bones and to avoid or suffer fewer fractures. We do this by providing information and educational material for the public, and making recommendations to Government and to the medical profession for improved management strategies in relation to osteoporosis.

ONZ has forged active collaborative relationships with partner organisations in New Zealand, Australia and further afield. These encompass those involved in bone health, osteoporosis, bone fractures, government health sector agencies and clinical bodies. Working collaboratively with other organisations to raise the awareness of osteoporosis and advance common objectives will remain a major focus for ONZ.

## Osteoporosis New Zealand

### ONZ Vision:

*Better bones, fewer fractures*

### ONZ Mission:

To prevent bone fractures caused by osteoporosis, and the resulting impact on people's quality of life, by:

- engaging with the public, health professionals, policymakers and the private sector;
- undertaking programmes of awareness, advocacy and education;
- promoting, publicising and assisting with funding of research into osteoporosis in New Zealand.

### ONZ Values:

#### Prevent suffering

*Our primary concern is for the suffering and loss of those affected (or likely to be affected) by osteoporosis-related bone fractures.*

#### Respect expertise:

*Our actions will reflect the respect we have for the professional expertise of qualified medical practitioners, researchers, academics and their staff.*

#### Recognise resource constraints:

*We recognise the practical financial limits of budgets and priorities in New Zealand's public healthcare system.*

#### Collaborate:

*We will collaborate with the health sector and our communities to achieve optimal outcomes for current osteoporosis sufferers and those at risk.*

# Background

## Osteoporotic Fractures:

Fractures from osteoporosis are common. At least **1 in 3 women** and **1 in 5 men** will suffer from an osteoporotic fracture during their lifetime. After having an osteoporotic fracture, the chance of having another fracture doubles. It is essential that osteoporosis is diagnosed and treated to prevent further fractures.

Hip fractures are the most serious fractures caused by osteoporosis. Importantly, half of people who break their hip have broken another bone – the wrist, spine, or shoulder – before breaking their hip.

Half of hip fracture sufferers will require long-term care and a quarter will suffer an early death.

The first osteoporotic fracture provides an opportunity to seek treatment to prevent further fractures, especially painful and potentially life changing hip fractures.

*Respond to the first fracture (broken bone) to prevent a second.*

## Ageing Population:

Age is a risk factor for osteoporosis. The older you get, the greater your risk of osteoporosis. After maximum bone density and strength is reached (generally around age 30), bone mass begins to decline naturally with age.

The risk of sustaining a fracture increases exponentially with age due not only to the decrease in bone mineral density, but also due to the increased rate of falls among the elderly.

New Zealand, like many countries, has an ageing population, with an increasing proportion of people in the older age groups and a declining proportion of children.

### Growing proportion of older people

Year	65 years +	% population over 65 years
1996 - Actual	422,667	11.7%
2006 - Actual	495,603	12.3%
2013 - Actual	607,032	14.3%
2023 - Forecast	885,600	17.9%
2033 - Forecast	1,173,200	22.0%
2043 - Forecast	1,341,000	23.8%

Source: 2013 Census QuickStats about people aged 65 and over.

## Background *(cont.)*

### The Problem

Public awareness of osteoporosis is limited. Most people never think about their bones, they have never seen them so just take their skeleton for granted. Many have never heard of osteoporosis and those that have often get confused with osteoarthritis.

Osteoporosis is, however, a growing public health problem. The risk of sustaining a fracture increases exponentially with age due not only to the decrease in bone mineral density, but also to the increased incidence of falls among the elderly.

The elderly represent the fastest growing segment of the population. As life expectancy increases for the majority, the financial and human costs associated with osteoporotic fractures will increase dramatically unless effective preventive measures are taken.

Each year some 4,500 older New Zealanders break a hip. The burden imposed by these fractures is severe for those who suffer them, for their families and for the nation's economy.

Half of all hip fracture sufferers will require long term care, and a quarter will suffer an early death.

The total cost of osteoporotic fractures in 2013 has been estimated at over NZ\$400 million, of which \$NZ145 million is spent on hip fracture care alone.

The burden of osteoporosis will increase rapidly as the 1 million baby boomers retire and age.

New Zealand must have a coordinated, nationwide strategy and systems to manage the increasing numbers of older New Zealanders at risk of fragility fractures.

### The Solution

ONZ, through our collaborative relationships with partner organisations has commenced implementation of a coordinated nationwide strategy and systems to manage the increasing numbers of older New Zealanders at risk of fragility fractures. This includes educating the public on how to delay the condition and so prevent fracturing as much as possible.

This strategy has been informed by policy, guidance and quality improvement initiatives ongoing in Europe and North America, and more recently some Asian countries.

ONZ's Strategy addresses the clinical management of fractures, the prevention of ongoing osteoporotic fractures as well as raising public awareness to prevent fractures in the first place. It is clearly illustrated in the Strategic Pyramids which follow overleaf.

The objectives and programmes for each distinct population in the pyramid are outlined in the boxes to the right. We proposed a systematic top down approach.

## BoneCare 2020

In October 2012, ONZ published **BoneCare 2020**, which made the case for implementation of a systematic approach to hip fracture care and prevention for New Zealand.

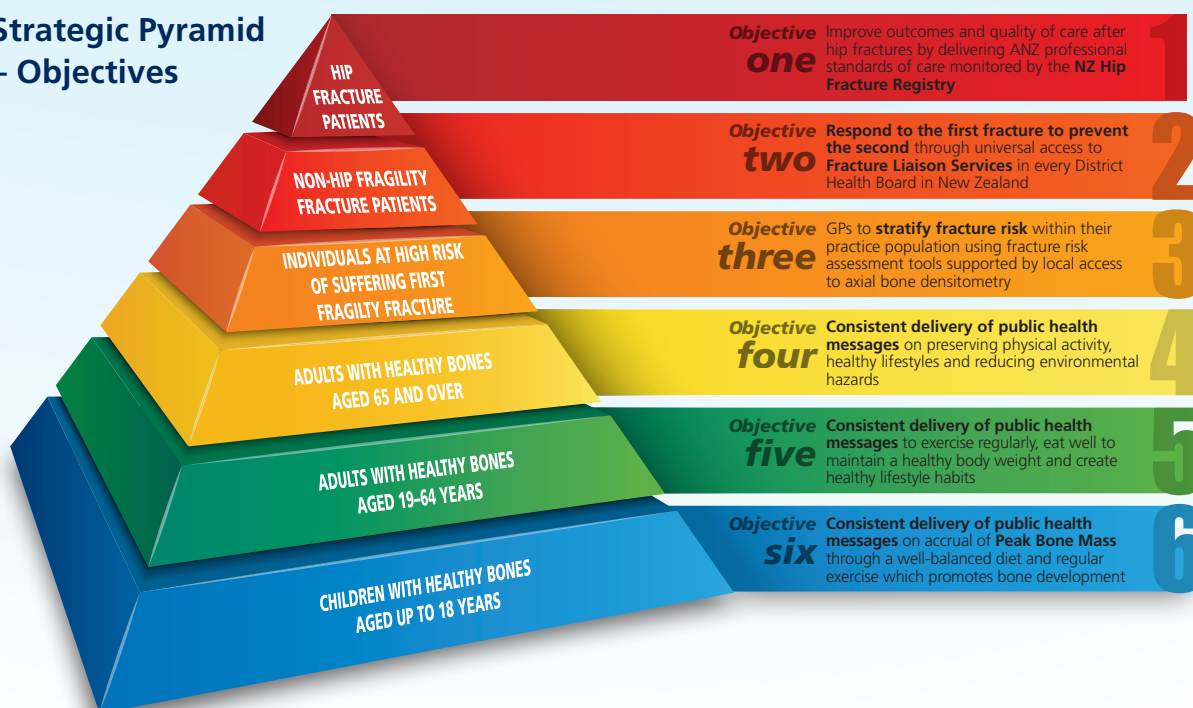
Key components of our strategy included establishment of a NZ Hip Fracture Registry, to enable nationwide benchmarking of Australian and New Zealand professional standards of acute hip fracture care, and implementation of Fracture Liaison Services (FLS) in all District Health Boards (DHBs) to reliably deliver secondary fracture prevention.

ONZ is now half way through Phase 1 of the strategic journey outlined in **BoneCare 2020** – the implementation of the highly focused secondary fracture prevention strategy. ONZ now needs to move to Phase 2 which will address primary fracture prevention.



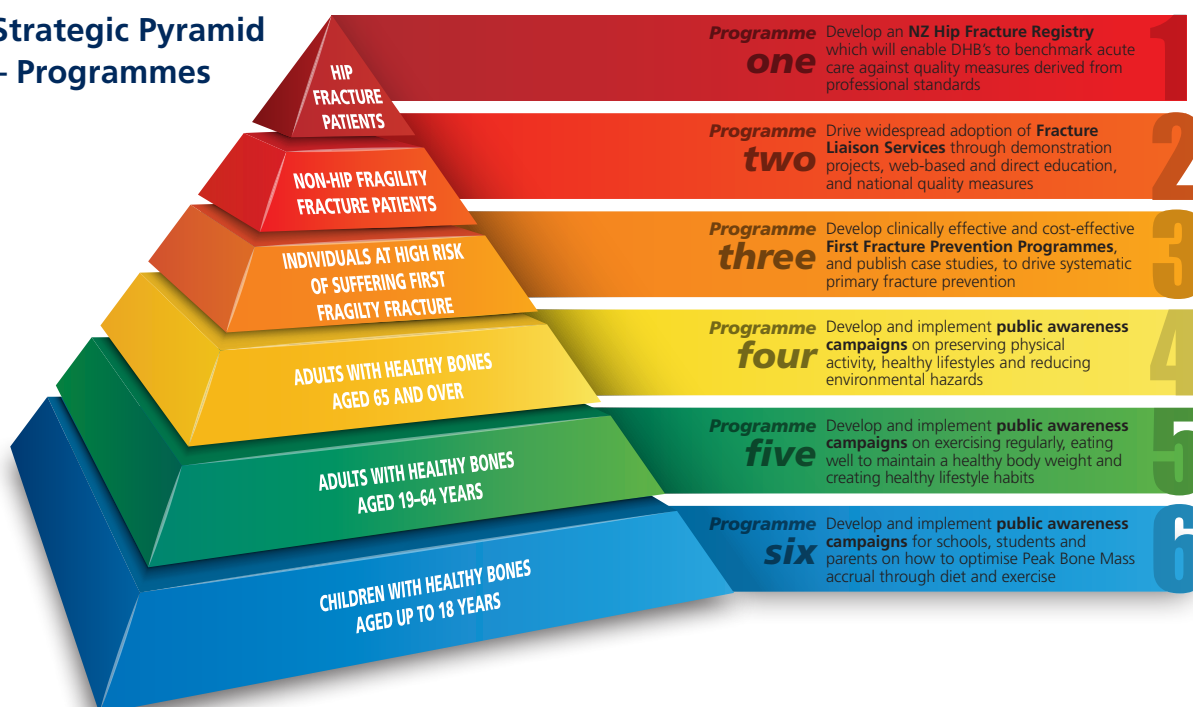
## BoneCare 2020 *(cont.)*

### Strategic Pyramid – Objectives



The programmes we have proposed to achieve each objective can be seen in the pyramid below:

### Strategic Pyramid – Programmes



# Osteoporosis New Zealand: Strategic Goals

To achieve the ONZ's Strategy we have defined some clear, measured strategic goals as follows:

## Strategic Goal #1 A National Audit of Hip Fractures

*By 2016, comprehensive clinical participation in a New Zealand Hip Fracture Registry, which will benchmark prospectively the quality of hip fracture care in all DHBs against trans-Tasman professional guidelines published in 2014.*

The Australian and New Zealand Society for Geriatric Medicine published detailed guidance on best practice for Orthogeriatric Services, which have been shown to dramatically improve post-hip fracture care.

ONZ has been working with ACC, the Ministry of Health, and the New Zealand Hip Fracture Registry Implementation Committee (HFR) to develop and implement a national strategy for a systematic approach to hip fracture care and prevention.

ONZ is a member of the ANZ HFR Steering Group that developed Trans-Tasman Acute Hip Fracture Care guidelines which were published in September 2014 with approval from the Australian National Health and Medical Research Council.

Currently, the Australian Commission for Safety and Quality in Healthcare and the NZ Health Quality and Safety Commission (HQSC) are in the process of finalising a Hip Fracture Care Clinical Care Standard derived from these guidelines. That should be published in mid-2016.

ACC and the NZ Orthopaedic Association, in collaboration with ONZ, HQSC and other professional learned societies have established the NZ Hip Fracture Registry. After a successful pilot in the Northern Region, hospitals across the country are beginning to participate in the Registry.

This will provide an opportunity to benchmark care against professional standards.

## Strategic Goal #2 Improve DHB Services

*By 2016, full implementation by all District Health Boards (DHBs) of Fracture Liaison Services (FLS), the model of care which ensures that all patients presenting with bone fractures caused by osteoporosis receive the osteoporosis assessment and treatment that they need, combined with intervention to reduce falls.*

Response overseas to this issue has been the successful implementation of Fracture Liaison Services (FLS), a coordinated service where patients presenting with a fragility fracture receive osteoporosis assessment and treatment where needed, and interventions to reduce falls risk. The outcome of FLS has been a significant reduction in fracture incidence and associated costs. FLS would ensure equitable access to PHARMAC subsidised treatments for osteoporosis throughout New Zealand.

Secondary fracture prevention – delivered by well organised FLS – is a crucial part of ONZ's strategy for a very simple reason. Half of hip fracture patients break another bone in the months or years before they break their hip. New Zealand has a number of highly effective and inexpensive osteoporosis treatments which have been shown to reduce future fracture risk by 30-70%, dependent on the agent and site of fracture. Accordingly, FLS respond to the first fracture and provide appropriate preventive intervention to stop up to half of individuals who would otherwise go on to fracture their hip. Effective use of evidence-based falls interventions will add benefit above and beyond that delivered by the osteoporosis treatments.

ONZ is working with the MoH, ACC and the Fracture Liaison Network New Zealand to establish an FLS in every DHB throughout New Zealand.

ONZ has advocated with the MoH and ACC for the development of both clinical standards and clinical guidelines for New Zealand.

ONZ is working with clinical experts and learned societies to develop Clinical Standards for FLS and Clinical Guidelines for the Diagnosis and Management of ONZ.

The guidelines will be succinct and practical and be a distillation of the evidence base. They will contain practical recommendations on identification of high risk individuals, diagnostics and treatment for both patients with fragility fractures and those at high risk of suffering their first fragility fracture.

## Strategic Goals *(cont.)*

### Strategic Goal #3 Improve Prevention in Primary Care

*By 2017, development of clinically effective and cost-effective systems, through collaborative processes, for prevention of the first bone fracture caused by osteoporosis – First Fracture Prevention Programmes – for nationwide implementation by 2020.*

ONZ wants to work with key stakeholders - including ANZSGM, RNZCGP, ANZBMS, ACC, HQSC and the Ministry of Health – to develop and implement a world first: a clinically effective and, crucially, cost-effective strategy to identify individuals who are at high risk of suffering a hip fracture as their first fragility fracture (primary fracture prevention). Put another way: to develop an effective strategy to pre-emptively identify the 50% of hip fracture patients who do not give us advance notice of their impending hip fracture risk, courtesy of a 'signal' fracture.

### Strategic Goal #4 Raise Public Awareness

*By 2017 Develop a suite of resources to support health professionals and drive public awareness of osteoporosis, and the bone fractures that it causes.*

The 'problem' of an unnecessarily high incidence of osteoporosis is due to a lack of awareness and insufficient focus/understanding of the simple steps that anyone can take to build and maintain healthy bones.

ONZ needs to raise funds to support development of a disease awareness campaign to raise public awareness of osteoporosis.

The Public Awareness Campaign will aim to increase consumer awareness that fracture begets fracture, the benefits of physical activity, a healthy lifestyle, reducing environmental hazards and that effective, safe treatments are available to prevent fractures.

ONZ also wants to raise the public's awareness that if you are over 50 and have broken a bone as a result of a minor fall or bump, that they are encouraged to ask their doctor or healthcare provider about osteoporosis and a bone health assessment.

### Strategic Goal #5 Improve Outcomes

*By 2020, a demonstrated National reduction of 1000 cases of hip fracture per year (relative to the ageing population trend line of 2012) and a public health cost saving of NZ \$20 Million per year (adjusted annually from 2012 dollars for inflation).*

Approximately 30,000 clinically apparent fractures happen every year in New Zealand, including approx. 4,500 hip fractures.

Hip fractures are the most serious fracture caused by osteoporosis with half of hip fracture sufferers requiring long-term care and a quarter suffering an early death.

ONZ's work in a multisector, multidisciplinary collaboration of government organisations, learned professional societies and the NGO sector aims to prevent up to 1,000 cases of hip fracture and save NZ\$20 million dollars annually. Additional savings will be accrued by prevention of fragility fractures at other skeletal sites.

This strategy will provide an illustration of what can be achieved when all stakeholders in a country work together in the best interests of people who are living with osteoporosis.

### Strategic Goal #6 High Performing Charity

*An ONZ Trust operated effectively and efficiently with lean staffing and outsourced administrative/financial functions that enable ONZ to concentrate its limited financial resources on the task of preventing bone fractures caused by osteoporosis.*

ONZ runs an effective and efficient charity with lean staffing and outsourced financial functions. ONZ has made a major difference to improving care and outcomes for people suffering from the bone-wasting disease known as osteoporosis, however there is considerably more work to be done.

Support would be invaluable and enable ONZ to concentrate on the continued delivery of ONZ's strategy.

## Benefits

Delivery of ONZ's strategy as outlined above will make a major difference to improving the quality and consistency of care and outcomes for people suffering from the bone-wasting disease known as osteoporosis and to prevent bone fractures caused by osteoporosis. The benefits of delivering our strategy include but are not limited to:

### *Reduction in the incidence of hip fractures in New Zealand.*

FLS and Orthogeriatrics Services established by DHBs throughout New Zealand are likely to prevent up to 1,000 cases of hip fracture and save NZ\$20 million dollars annually. Additional savings will be accrued by prevention of fragility fractures at other skeletal sites.

### *Improved quality of care for fragility fracture patients*

Improved quality and consistency of care for all New Zealanders suffering fragility fractures at all skeletal sites.

### *Prevention of fragility fractures*

Awareness of risk factors and early diagnosis are key to the prevention and treatment of osteoporosis.

Both women and men may have certain 'risk factors' that can make them more likely to develop osteoporosis.

Raise consumer awareness that if they break a bone as a result of a minor fall or bump since their 50th birthday they should ask their GP about osteoporosis and undergo a bone health assessment.


Raise consumer awareness and understanding of the simple steps that anyone can take to build and maintain health bones.

# *Better bones, fewer fractures*





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