FALLS PREVENTION AND
BONE HEALTH STRATEGY
2011 - 2016
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>Why the strategy matters</strong></td>
<td>3</td>
</tr>
<tr>
<td>Facts about falls</td>
<td>3</td>
</tr>
<tr>
<td>About our draft strategy</td>
<td>4</td>
</tr>
<tr>
<td>Our approach</td>
<td>5</td>
</tr>
<tr>
<td>The position in Lothian</td>
<td>5</td>
</tr>
<tr>
<td><strong>The way ahead</strong></td>
<td>6</td>
</tr>
<tr>
<td>Our recommendations</td>
<td>6</td>
</tr>
<tr>
<td>Strategic context and targets</td>
<td>6</td>
</tr>
<tr>
<td>The pathway to better services</td>
<td>7</td>
</tr>
<tr>
<td>Falls co-ordinators/leads</td>
<td>7</td>
</tr>
<tr>
<td>Falls and bone protection assessment</td>
<td>7</td>
</tr>
<tr>
<td>Prevention and intervention</td>
<td>9</td>
</tr>
<tr>
<td>Better bone health</td>
<td>11</td>
</tr>
<tr>
<td>Making the strategy work</td>
<td>12</td>
</tr>
</tbody>
</table>
Introduction

Falls are a major problem for older people, leading to a significant number of fractured bones, hospital admissions and even deaths.

The Scottish Government has asked each health board to develop a strategy to reduce the number of falls, provide the best possible services for patients who have falls, and to encourage better bone health.

In Lothian the strategy will provide a clear approach, based on good evidence for what works best. It will be implemented by staff in hospitals and the community.

The strategy will assure high standards of prevention and care across the three community health partnerships (CHPs) and West Lothian’s community health and care partnership (CHCP) – the organisations which shape and deliver many NHS services in their areas. It will also help us work even more closely with local authorities and the voluntary sector.

Clinical staff from NHS Lothian have worked with the public, and others with an interest in the issue, to create the draft Falls Prevention and Bone Health Strategy. We want as many people as possible to comment on the draft strategy so we can take their views into account before we finally agree what the strategy should be.

This document explains the main points of the draft strategy and is intended to be quicker to read than the full version. However, NHS Lothian would be very happy to provide you with a copy of the complete draft strategy, this can be found in downloadable format on NHS Lothian website, consultation zone.

Why the strategy matters

Facts about falls

Falls cause 85% of accidental home deaths among over 65s, and a million non-fatal accidents a year in the UK.

Fear of falling is the most frequent reason given for going into a care home. Some 6-30% of falls in older people living at home can be prevented through population-wide and individually targeted action.

The greatest benefit comes when this is combined with the diagnosis and treatment of underlying osteoporosis, as this reduces the risk of fracture in those prone to falling.

A fall can have many damaging effects. Beyond physical injuries, there can be a loss of confidence and dignity. This, in turn, is linked to further falls and poorer health. Frequent falls can cause anxiety and depression. They also have consequences for carers, loved ones and on health and social care providers.

The chances of falling increase with age. Falls are the commonest cause of accidental injury in older people. About 6% of falls in those over 65 result in a fracture, with 1% being of the hip.
Falls are the commonest reason for older people to attend A&E and for being admitted to hospital. Injury is more common in frailer people and the nature of the fall affects injury risk and type.

Falls due to syncope (blackouts) are particularly likely to result in injury. In more active and younger people, wrist fractures are common, whereas from 75+ hip fractures are most likely.

The cost to the NHS and local government of managing people who have had falls is considerable. About half is linked to inpatient fracture management and almost as much with long term care provision. Long hospital stays are a big factor.

**Falls and fracture (in particular osteoporotic fracture) are closely linked.** Osteoporosis is a thinning of the structures that make up bones, making them more likely to break. Bones are normally strong enough to withstand a fall from standing height, osteoporotic bones are more fragile and a fall can lead to fragility fractures.

**About our draft strategy**

Each year around 30% of people over 65, and 50% of those over 80, have a fall - nearly 74,000 falls in total in Lothian. Action is needed to cater for, and reduce, present and future need. As we live longer falls are becoming an even bigger issue. Health and social services are often unaware of people at risk.

This means they are frequently unable to offer assessments or interventions to reduce the risks. In Lothian more than 15,400 bed days a year are used to provide care for people over the age of 65 who have been taken to hospital as acute admissions due to falls.

This draft strategy is designed to ensure a high-quality, cost-efficient service that will reduce the number and severity of falls between now and 2014. For example, we believe that targeted, evidence-based interventions can reduce the number of falls and the fracture rate by up to 30%.

Our draft strategy sets out a vision for improved services for those:

- at risk of falling
- at risk of bone fragility fractures
- who have had a fall.

To do this it aims to:

- identify people at risk of falls and fragility fractures
- provide further assessment of those identified at risk
- provide targeted, evidence based interventions.

We are also committed to reducing the number of falls which result in injury by putting more emphasis on prevention.
The draft strategy is largely aimed at people of 50 and above. But it also promotes public health approaches to improving bone health in all ages. Other issues it covers are:

- population-based prevention
- bone health and osteoporosis
- individuals at risk of falling at home, in care homes and in hospitals.

The timing of this draft strategy is good as we are redesigning many relevant NHS Lothian systems and services.

We are also fortunate that there are parts of Lothian which already have excellent falls and bone health services, and their good practice can be spread across the region.

**Hip and thigh injuries lead to some of the longest hospital stays, averaging 28.2 days in Lothian. Hip fracture treatment costs around £12-15,000 per admission. In 2007, 921 patients were treated for hip fracture. The annual cost in Lothian is around £11.2 million.**

**Our approach**

The idea that preventing falls and promoting bone health is the responsibility of all healthcare professionals is at the heart of the draft strategy.

This approach creates many more occasions for patients to have falls risk assessments and to be directed to sources of help and advice.

We are also suggesting the creation of a clear pathway through the system, so patients can be sure of getting appropriate and timely care and support.

Falls prevention and bone health are not issues just for the NHS. So the draft strategy is also about how we work with colleagues in local authorities and in voluntary organisations. Closer working between health and social care organisations is an excellent way to maximise the reduction in the number of falls across Lothian.

The National Falls Working Group has outlined a future direction for falls and bone health services and our strategy is in line with its recommendations.

**The position in Lothian**

Many NHS Lothian falls services are very good. However, there is variation and they are not joined up by a single approach that ensures the best for all patients. Providers include CHPs (community health partnerships) and CH(C)P (community health and care partnership) and inpatient services. Their services are managed and accountable in different ways.

A comprehensive strategy and financial plan for falls prevention and bone health will mean that our services become better developed. The draft strategy also seeks to
ensure that we can routinely identify the number of older people presenting to A&E with an injury caused by a fall and that we gather the data to show what support and help works best.

Most importantly, it puts the patient at the centre of everything we do.

The draft strategy has been developed through the NHS Lothian Falls Steering Group, which made use of personal and professional expertise across the organisation. It included staff who specialise in medicine of the elderly, plus allied health professionals, acute and primary care professionals, public health, planning and pharmacy.

In April 2009 NHS Lothian held a patient/public focus group event to find out more about what members of the public want their services to be like. The results showed that older people welcome:

- home safety visits
- using existing community projects to offer basic guidance
- more home safety rails
- community alarms.

Following a fall, older people felt that it was important that the cause was investigated and that help and support should be provided to limit the chances of further falls. The key messages from this event have been built into this draft strategy.

**The way ahead**

**Our recommendations**

This section gives the 27 recommendations for the Falls Prevention and Bone Health Strategy and explains some of the reasons they are being made. For further details see the full draft strategy document.

**Strategic context and targets**

Falls and fracture prevention work takes place in a wider context of service modernisation and improvements in NHS Lothian. These include meeting targets, for example the one which guarantees that no patient will wait more than 18 weeks from referral to treatment from 31 December 2011.

We are committed to reducing A&E attendances and the number of emergency bed days needed by patients over 65. There is an emphasis on reducing the number of older people admitted to hospital two or more times in one year as emergencies. We are also working to improve care provision so more older people with complex needs can stay in their own homes. At the same time we want to raise patient and carer satisfaction levels.

**Recommendation 1:** NHS Lothian Falls Prevention and Bone Health Strategy will be aligned in its implementation to whole systems work programmes and under the ethos of Shifting the Balance of Care.
The pathway to better services

NHS Lothian is committed to creating an evidence-based falls prevention and management pathway for all service users. This means that all health professionals, and colleagues from partner organisations, are responsible for falls prevention and bone health.

Having a clear pathway, and wide responsibility, allows patients to be identified quickly, assessed and directed to the services they need. Many services will be in the community and they will be provided on a tiered basis to suit individual needs.

The emphasis is on enabling people to live safely and independently, and encouraging them to take part in health improvement and health promotion activities.

We also want people to have good access to services which maintain health and wellbeing while promoting a safe home and community environment. This will allow specialist staff to concentrate more of their time on the fairly small number of complex cases needing most attention. Our pathway aims for:

- self-management
- early identification of those at high risk of falls and fragility fractures
- a fast response when someone falls and needs help
- co-ordinated management of people needing specialist assessment.

Falls co-ordinators/leads

In order to deliver the best possible services we are introducing specialist falls co-ordinators in the CHPs and CHCP. They will develop and deliver a co-ordinated, integrated falls service for their area. They will create links within primary and secondary care, social work, community alarm services, housing, the emergency services, and the voluntary and private sectors.

The falls co-ordinators/leads will ensure that all interested parties across Lothian are aware of the falls pathway and work with social, community care and the third sector on its implementation.

Certain hospital staff, for example in A&E, combined assessment and acute receiving units, should be given responsibility for linking up with falls co-ordinators.

An important aim of this draft strategy is to ensure that hospitals have quick access to community-based services for falls prevention and management.

Falls and bone protection assessment

We want health and social care professionals to go through falls checklist with older patients as a matter of routine. Where appropriate there can be screening for osteoporosis and more detailed falls assessments as part of our tiered approach.
We would like to develop a computer database with comprehensive information about falls in Lothian. A modest amount of administrative support would be needed to run the database but it will let us see how well the strategy works, and help us decide on future actions and directions.

It will also be valuable in helping us develop programmes to suit people facing different sorts of risks. This is not always straightforward and can involve multidisciplinary teams with high levels of expertise. So we need the best possible data in order to develop the best possible approaches.

There are different reasons why people fall or are at risk of falls. One is syncope (blackouts) and can be linked to cardiac or neurological symptoms but can occur without either. Patients who have fallen do not always remember a blackout. Recognition and assessment of syncope is a skilled medical task and frequently requires specialist investigation and treatment. The database will help us develop the best approaches.

Recommendation 2: CHPs and CHCP to implement an evidence-based pathway for the prevention and management of falls and osteoporotic fragility fractures in collaboration with local authority and third sector partners which is suitable for their locality.

Recommendation 3: A directory of services across health, social authorities and the voluntary sector for older people and carers.

NHS Lothian, and partner organisations, make good use of modern technology in falls prevention and to manage people at risk. Telecare alarms are in widespread use and we intend to make greater use of telehealth monitoring which can alert people that they are at immediate risk of a fall.

A number of factors often come together to cause a fall. Posture, unsteadiness, frailty, changing sensory functions like poor eyesight, illness, medication and even footwear can contribute. We aim to provide systematic multidisciplinary assessments to detect these issues, followed by effective programmes to limit the risks. These can include anything from changes in the home to strength and balance training.

Recommendation 4: The appointment of a NHS Lothian falls co-ordinator/lead for the plus administrative support to support implementation of strategy.

Recommendation 5: NHS Lothian and its partners to develop good communication links with falls co-ordinators to identify older people at risk of falls or fragility fractures.
**Recommendation 6:** Falls co-ordinators to agree appropriate evidence-based tools for falls screening.

**Recommendation 7:** A single NHS Lothian core data set for falls.

**Recommendation 8:** A collection system to gather core data and to show how well each part of the pathway is working.

**Recommendation 9:** CHPs and CHCP to work with key stakeholders to ensure that people who have fallen and are injured receive appropriate assistance. Also to provide a single point of access to help for those who have fallen but were uninjured.

**Recommendation 10:** Care pathways to ensure that people who are screened are directed to appropriate services to minimise future risk of falling.

**Recommendation 11:** Patient pathways to maximise the potential of day hospital and out-patient facilities to undertake specialised falls and bone health assessments.

**Recommendation 12:** Tailored intervention programmes that are logged and maintained by named key workers for high risk people.

**Prevention and intervention**

Much can be done in the community to reduce the risk of falls and this draft strategy recommends that a range of tailored interventions should be available to suit individual needs. In line with the latest best-practice advice this should include options like:

- home adaptations or modifications
- withdrawal or minimisation of psychoactive medicines
- assessment and treatment of postural hypotension
- cardiac pacing for certain people with cardioinhibitory carotid sinus hypersensitivity
- vitamin D supplements
- exercise, particularly balance, strength and gait training.

Exercise programmes can reduce falls by increasing muscle strength and improving reaction times. Programmes need to be targeted and tailored to people’s particular needs, demography and risk factors. Exercise works best as part of a broader programme and needs to be regular and sustained – once or twice a week for three to six months.

Repeated falls and instability often lead to care home admission. Many care home residents, with mainly physical or mental health problems, are at high risk. The approach to reducing falls in care homes often needs to be different from in the community.

Up to 35% of falls in care homes result in serious injury and up to 8% in fractures. There are between 1.5 and three falls a year in a typical care home and 10% need medical attention. Between 25%-30% of hip fractures are in long-term care home situations. Care home falls can lead to increased death rates as well as physical and psychological damage and loss of independence.
Evidence is emerging that a holistic approach involving residents, staff and institutional factors can be successful. Targeted use of hip protectors may be worthwhile.

Prevention strategies and interventions need to recognise that falls can have a number of causes such as frailty, confusion and the effect of certain prescribed drugs, requiring a variety of interventions. Research has come to different conclusions about the best approach in care homes, but the Cochrane review in 2005 suggests options like:

- muscle strengthening and balance retraining
- Tai Chi
- hazard assessment and modifications for those with a history of falling
- withdrawal of psychotropic medicines
- multidisciplinary, multi-method and holistic, health/environmental risk factor screening/intervention programmes.
- NHS Lothian, the local authorities, and others, need to provide education for care home staff to help them understand and reduce risks.

Falls are common among hospital inpatients – from 2.9-13 per 1,000 bed days. Injury rates are higher than for community falls, up to 30%, and can result in distress, anxiety, depression, impaired rehabilitation, longer hospital stays, death or higher rates of discharge to long-term institutional care, plus complaints and litigation. The risk factors and how to identify them are well documented.

Evidence is emerging to support the effectiveness of a holistic approach that includes patient, staff and institutional factors.

NHS Lothian has initiatives in place to reduce inpatient falls. These include:

- increasing awareness of falls and prevention at ward level
- ratification of the Policy and Protocol for the Assessment and Management of Adult Hospital Patients with Falls.
- Quality improvement programmes across all clinical areas
- Implement a patient safety falls bundle

**NHS Lothian has a sophisticated system for recording hospital falls. Quarterly reports show that falls remain the top repeated incident across audit sites in Lothian. A detailed incident form for falls has been introduced in University Hospitals Division (UHD) medicine of elderly wards.**

**Recommendation 13:** An evidence-based exercise pathway should be established for patients at high risk of falls or fragility fractures.

**Recommendation 14:** Health and social care should make the best use of facilities such as leisure centres, community centres and GP practices to provide exercise programmes.
**Recommendation 15:** All tailored exercise programmes should be assessed for their effectiveness.

**Recommendation 16:** Falls co-ordinators should work with local authorities and private care providers to identify training needs.

**Recommendation 17:** Care home residents should have an assessment to determine falls and bone health risk plus documented individual intervention care plans to help minimise risk of fracture.

**Recommendation 18:** The Fallen Uninjured Policy needs to be implemented and monitored throughout all NHS Lothian Hospitals.

**Recommendation 19:** NHS Lothian implements falls care bundles across inpatient areas to reduce harm from hospital falls.

**Recommendation 20:** Falls data (e.g. DATIX) is actively used by the quality improvement teams to ensure a culture of continuous improvement and that we learn from falls.

**Recommendation 21:** Hospital falls leads need to work with fracture liaison nurses and community falls co-ordinators, or leads, on single system falls pathway development.

**Better bone health**

It is important to involve all relevant healthcare professionals in identifying older patients in need of help with bone health. By directing patients to the appropriate services we can diagnose and treat conditions such as osteoporosis.

NHS Lothian provides advanced diagnostic tests and clinical care for patients who have suffered a fragility fracture, and has an open access bone densitometry service for primary care practitioners.

These services reduce the number of fractures in the community by diagnosing and ensuring appropriate treatment for patients with osteoporosis. Those in institutional care, or who are housebound, and at high risk of calcium and vitamin D deficiency can be prescribed calcium and vitamin D supplements to reduce the risk of fracture.

Patients are able to help themselves. Effective measures include giving up smoking, limiting alcohol intake to recommended levels and eating a diet rich in calcium and vitamin D to reduce bone loss. Regular weight-bearing exercise, including gentle walking, has a positive effect on the skeleton and is also likely to reduce the risk of falling by strengthening muscles.

**Recommendation 22:** All patients at high risk of falls should be assessed for bone health.

**Recommendation 23:** All divisions in NHS Lothian should work together to define, implement and monitor an evidenced-based bone health pathway.
Recommendation 24: NHS Lothian should risk assess capacity and demand of existing DXA services and impact of SIGN 71, Nice 87 and the Scottish Hip Fracture Audit and changing demography.

Recommendation 25: Raise awareness and knowledge of all relevant healthcare practitioners of bone health and osteoporosis pathways and treatment guidelines.

Making the strategy work

The success of the strategy depends on creating a whole system approach which operates throughout NHS Lothian and makes falls prevention and bone health the responsibility of all staff. CHPs and the CHCP need to work with local authorities and the third sector (e.g. charities and voluntary organisations). Good staff training and effective communications are necessary to maximise awareness of the strategy among staff.

A performance management framework is needed to monitor the impact of this strategy and a framework for the osteoporosis and bone health recommendations needs to be developed. To measure the success of the strategy we need:

- patient experience assessments
- quality of life indicators
- activity analysis
- cost benefit analysis of interventions
- equity of access
- waiting times monitoring across pathway
- falls incidence and outcome data
- data on fracture outcomes and incidence of osteoporosis.

This draft strategy is not expected to create many extra financial demands on NHS Lothian. Around £50,000 will be needed to employ a falls lead and £22,000 for administrative support. Furthermore the prevention of falls and improvement in bone health will in the future prevent many people from unnecessary harm across Lothian.
This document is a short guide to the full strategy consultation document. Please take time to read and consider the document when responding to this consultation. The full strategy can be found on the NHS Lothian website at: http://www.nhslothian.scot.nhs.uk/OurOrganisation/Consultations

There are some questions available at the above web link to help you to reply to the consultation. Please feel free to answer any or all of them and to add any other comments.

You do not have to use the online survey. We also welcome your comments in the following ways:

**By e-mailing your comments to:** marion.tague@nhslothian.scot.nhs.uk

**By writing to:** Falls Prevention Consultation, Director of Allied Health Professionals, NHS Lothian, Waverley Gate, 2-4 Waterloo Place, Edinburgh EH1 3EG

**By telephoning:** 0131 465 5693    **By faxing:** 0131 465 5403

**The consultation will close on 1 August 2011.**

At the end of the consultation period we will be preparing a summary report of all the consultation responses. In this report we will list who has responded to the consultation. If you would like your response to be anonymous, please let us know.

The final strategy will go to the Lothian NHS Board in the autumn 2011. If you would like to receive a copy of the final version please let us have your contact details.