Pathways for the prevention and management of falls and fragility fractures

Quick reference guide 2009
Up and About presents the various aspects of fall and fragility fracture prevention and management in the context of a journey of care. This quick reference guide provides a summary of the main points in Up and About. It is underpinned by evidence drawn from recognised guidelines, tacit and organisational knowledge, and the experiences of older people and their carers. This resource can be applied practically to identify and promote best practice, to assist in identifying gaps in service provision, and to assist service planning.

The journey of care has been divided into four stages, which are colour coded. A descriptor of each stage is outlined in the key to pathway diagram. The pathway diagram provides an overview or map of the pathways and identifies the links between the different stages of the journey of care across community, primary and secondary care settings. Further information is presented in the full version of Up and About.

### Key to pathway diagram

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| At this stage:  
- An individual is living in the community with support as required  
- The emphasis is on self care, supported self management, health education and promotion to enable active ageing and minimise the risk of falls and fragility fractures  
- Support for carers may be essential to achieve the outcomes  
- There are opportunities for early intervention if circumstances change, therefore this stage has strong links with anticipatory care  
- Long term condition management, including self management, plays a vital role, and  
- Cultural values and traditions as well as an individual’s values, attitudes and beliefs may influence engagement at this stage. | At this stage:  
- An individual at high risk of falls and fragility fractures is identified and this triggers referral for appropriate intervention  
- Individuals are identified either when they present with a fall or an injury due to a fall or opportunistically by health and social care practitioners  
- Opportunistic case identification links with both anticipatory care and the Single Shared Assessment process  
- Falls risk and fracture risk are considered in combination  
- An initial falls risk screen aims to identify individuals at high risk of falling; it is not intended to determine all contributory factors or specific interventions, and  
- Scottish Patients At Risk of Re-admission and Admission (SPARRA) may identify some high risk fallers. | At this stage:  
- An individual has fallen and has requested assistance  
- The individual may have sustained an injury and/or be unwell or is asymptomatic, appears uninjured but is unable to get up from the floor/ground independently, and  
- Appropriate onward referral and intervention at this stage may prevent further falls and unwanted consequences of falls. | At this stage:  
- An individual has been identified as being at high risk of falling and/or sustaining a fracture  
- Falls risk and fracture risk management are considered in combination, with services for falls and osteoporosis operationally linked or dovetailed  
- Intervention aims to identify then minimise an individual’s risk factors for falling and sustaining a fracture  
- A case/care management approach may be initiated, and  
- Timely, appropriate and co-ordinated management may lead to reduced A&E attendances and hospital admissions including admission with a fragility fracture. |
### Community provision

**SELF MANAGEMENT POPULATION**

**Target outcome**

1. Supporting health improvement and self management to reduce the risk of falls and fragility fractures*

   - Opportunities to:
     - engage in health promotion and lifelong learning around active ageing generally, and falls and fracture prevention specifically
     - access appropriate services and organisations, which aim to support:
       - the maintenance of health and wellbeing
       - a safe home environment
       - a safe community environment

2. Identifying individuals at high risk of falls and/or fragility fractures

   Includes primary and community care services

* Includes care homes and sheltered housing

**LOCALITY-BASED REHABILITATION (+ MAINTENANCE) SERVICES**

Includes disease/lifestyle management and case management

1. Fall: requiring assistance

2. Telecare including community alarm services

3. Responding to an individual who has just fallen and requires immediate assistance

   - Co-ordinated management including specialist assessment
     - Multidisciplinary, multi-agency rehabilitation services including those with specialist falls knowledge, some of which may be within secondary care
     - Multifactorial risk assessment and fracture risk screening
     - Tailored intervention for minimising risk of falls and fractures

4. Further intervention

**REHABILITATION TEAMS**

Utilising case management

1. Ambulance service; NHS 24; Services responding to uninjured fallers

2. Osteoporosis services including:
   - DXA scanning
   - Fracture liaison
   - Clinics
   - Physiotherapy
   - Exercise

3. A&E or minor injury unit

4. Inpatients including:
   - Orthopaedic
   - Medical
   - Assessment unit
   - Elderly care
   - Rehabilitation

### Acute provision

**PATHWAY DIAGRAM**

[Diagram showing the pathway from self-management to acute care with various stages and interventions marked.

Adapted from Future model for rehabilitation. In: Co-ordinated, integrated and fit for purpose. A delivery framework for adult rehabilitation in Scotland, Scottish Executive; 2007]
Stage 1: Supporting health improvement and self management to reduce the risk of falls and fragility fractures (maintenance phase)

Older people and their carers:
- have opportunities to engage in health promotion and lifelong learning around health improvement and minimising falls and fracture risk, and
- have opportunities to access appropriate services and organisations, which aim to support the maintenance of health and wellbeing, a safe home environment and a safer community environment.

Includes:
- Local exercise opportunities designed (or modified) for older people
- Proactive health services such as medication reviews, osteoporosis checks, long term condition management
- Services to support safety at home, including Telecare, and
- Support for carers.

Stage 2: Identifying individuals at high risk of falls and/or fragility fractures

Older people:
- who present for medical attention because of a fall, or with recurrent falls (two or more falls in the past year), are offered multifactorial assessment to identify contributory risk factors for falls and risk of osteoporosis and fractures
- who present with a fragility fracture receive an assessment to identify osteoporosis (including DXA where appropriate), which will determine their need for treatment to prevent future fractures, and
- reporting a single, non-injurious fall are offered an initial falls risk screen and an initial assessment to identify clinical risk factors for fracture.

Opportunistic case identification
- Older people are asked routinely (at least once a year) whether they have fallen, and are observed for gait and balance deficits. Examples of opportunities are when the older person attends a routine health check, or presents with another health or social issue
- Older people who are diagnosed with osteoporosis receive an initial falls risk screen, and
- Men aged 50 years or more and postmenopausal women receive an initial assessment to identify clinical risk factors for fracture.

Stage 3: Responding to an individual who has just fallen and requires immediate assistance

Older people:
- who have just fallen and require immediate assistance have access to services that provide an effective, safe and timely response
- who have fallen, but are not conveyed to hospital following the fall, are considered for further assessment of falls and fracture risk and offered this where indicated, and
- who have received treatment for any injury due to a fall, or treatment for any acute medical condition related to a fall, are offered further assessment of falls and fracture risk.
Assessment

- Older people identified as having a high risk of falling are offered a multifactorial assessment to identify contributory risk factors.

  Includes:

  > For example, a comprehensive falls history, medication review, fracture risk assessment and assessment of gait and balance, assessment of the home environment, postural hypotension, vision, cognition and feet/footwear, and

  > An assessor or a co-ordinator/case manager providing and/or arranging the interventions indicated from the assessment.

- People identified as at risk of osteoporosis and fracture are offered further investigation where indicated (including DXA), and

- Older people with suspected or confirmed blackouts and those with unexplained falls, vertigo and dizziness are offered focused medical assessment.

Treatment

- Following assessment, an older person is considered for an individualised, multifactorial intervention programme aimed at minimising the identified risks for falling and/or sustaining a fracture, promoting independence, and improving physical and psychological function.

  May include interventions such as:

  > Pharmacological management of osteoporosis, strength and balance exercises, medication modification/withdrawal, interventions to mitigate identified home hazards and promote the safe performance of daily activities, management of postural hypotension and heart rate or rhythm abnormalities, management of foot problems, vision correction and self management training.

  > Older people are encouraged to participate in the programme with positive messages of potential benefits.

Guiding principles for the development of a comprehensive, co-ordinated and person-centred approach

- A whole system approach is applied to the planning, implementation and delivery of services for the prevention and management of falls and fragility fractures

- Services for older people who fall and osteoporosis services are operationally linked or dovetailed

- Older people identified with a high risk of falling and/or sustaining a fragility fracture have equitable and timely access to services with appropriate skills and expertise

- Healthcare providers target individuals for whom there is evidence that effective intervention will reduce the risk of future falls and fractures

- Services are provided locally where possible

- Interventions are explained, discussed and agreed with the individual and his or her carers and a decision to decline intervention is respected

- The importance of working with carers is recognised

- Older people and carers are involved in local improvement work

- At every stage, accurate and relevant data are collected to support direct care and provide information for service and resource evaluation, planning and improvement
For further information please refer to the full version of Up and About which is accessible via the NHS Quality Improvement Scotland website: [www.fallspathway.nhshealthquality.org](http://www.fallspathway.nhshealthquality.org)
or the online Falls Community: [www.fallscommunity.scot.nhs.uk](http://www.fallscommunity.scot.nhs.uk)

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