A multifactorial approach to falls assessment and prevention, which includes physiotherapy, reduces falls in older people. Physiotherapy includes the delivery of evidence-based exercise programmes to optimise an individual’s strength and balance. Physiotherapists work in partnership with community exercise groups to ensure continuity of care and provide the recommended dosage of exercise, enabling sustainable long term benefits.

Evidence-based multifactorial falls assessment and personalised care reduces falls

Multifactorial falls risk assessment reduces falls by 24% and should be offered to all older people who have fallen or are at risk of falls(1-3). Physiotherapists are able to detect early difficulties with movement, strength and balance. This enables them to identify the most appropriate risk factors for individuals, as well as determining an individual’s overall risk of falls. Physiotherapists also assess for other causes of falls, such as behavioural and environmental, to pinpoint contributing factors(3).

Based on assessment findings, a person centred care plan is developed. The care plan may include options which assist individuals to achieve their agreed goals, for example positive risk-taking based on the individual’s strengths (i.e. what they can do). This proactive approach enables people to remain active and live well(4).
Multifactorial interventions may reduce rate of falls

Multifactorial interventions may reduce the rate of falls compared with usual care or attention control\(^5\). These interventions should be considered for people who have fallen, or are at a risk of falls, including older people in settings such as care homes\(^3\).

Physiotherapists advise on managing modifiable risks, such as footwear, and co-ordinate referrals to health and community services\(^3\).

The cost of falls to the NHS in England due to hazards in the home environment is £435 million\(^6\). Home hazard modification is a cost-effective intervention, which includes support, equipment and advice to complete daily living activities, often delivered in partnership with occupational therapists\(^7\).

A long lie on the floor is associated with serious injury, increased mortality and increased risk of secondary complications\(^8\). Physiotherapists teach people how to get up from the floor safely and/or how to minimise time spent on the floor. Specific strength training may enable individuals to get up from the floor independently\(^9\).

Fear of falling affects approximately 50% of people who have fallen and up to 50% who have never fallen, which can reduce confidence and independence, and lead to social isolation\(^10, 11\). Exercise programmes may reduce fear of falling in the short term, without increasing the risk or frequency of falls\(^12\). Cognitive behavioural therapy can be delivered by trained support workers and can reduce both fear of falling and depression\(^11\).

The NHS Long Term Plan has recommended a significant increase in the number of first contact practitioner roles in general practice\(^13\). First contact physiotherapists, alongside community physiotherapists, are ideally placed to provide advice on lifestyle, falls prevention, bone health and reduction of fracture risk using NICE recommended screening tools, such as FRAX and QFracture\(^14\).

Physiotherapists also work as fracture liaison service (FLS) coordinators to systematically identify and assess people at risk of fragility fractures and recommend interventions for bone health and falls prevention\(^1, 15\). Per 300,000 population, an effective FLS will prevent 250 fragility fractures, including 140 hip fractures, over five years\(^15\). The total expected local savings to the NHS and social care is £2.1 million for a service cost of around £640,000 (a net benefit of £1.46 million); however, FLS is not consistently available\(^15, 16\).

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**Fact**

Fear of falling affects approximately 50% of older people who have fallen and up to 50% who have never fallen.

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**The physiotherapy offer:**

**what does good look like?**

<table>
<thead>
<tr>
<th>Providing</th>
<th>Outcome</th>
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</thead>
<tbody>
<tr>
<td>Multifactorial falls risk assessment</td>
<td>Up to 24% reduction in falls(^1)</td>
</tr>
<tr>
<td>Evidence based exercise programmes</td>
<td>Up to 34% reduction in rate of falls(^17)</td>
</tr>
<tr>
<td>Effective secondary fracture prevention</td>
<td>Prevent 46,000 avoidable fragility fractures over five years(^16)</td>
</tr>
<tr>
<td>The same level of care as the top 5 CCGs</td>
<td>29,000 fewer injuries and £59 million saved on emergency admissions</td>
</tr>
</tbody>
</table>
Size of the problem and cost of ill health

In the UK:

• One third of over 65s fall at least once each year, rising to 50% for those over 80\(^2, 3\).

• Falls which result in injury are the leading cause of accident-related mortality in older people. Following a fall, 50% of older people experience serious mobility impairments and there is a 10% probability of dying within a year\(^1, 10\).

• Falls are estimated to cost the NHS more than £2.3 billion per year\(^3\).

• There are an estimated 500,000 fragility fractures each year but less than one third receive bone protecting treatments\(^1\).

Targeted, evidence-based exercise programmes for people with multiple long term conditions, at risk of falls

Well-designed exercise programmes involving strength, balance and functional exercises reduce falls when delivered in both group and home-based settings\(^17, 19\).

Physiotherapists are well placed to support people with complex health problems to engage in an individualised programme that is adapted to the right intensity, includes supervision if required, and is enjoyable\(^20\). The Otago Exercise Programme and Falls Management Exercise (FaME) are well established programmes which are both clinically and cost effective\(^7\).

These exercise programmes must comprise a minimum dosage of 50 hours, delivered for at least two hours per week, for a minimum of six months\(^2, 20, 22\). In many localities, programmes are not commissioned to provide this amount of exercise, which will reduce effectiveness\(^2, 21\).

Integrated pathways and community partnerships which help people transition from health services to community exercise groups are essential to achieve this evidence-based recommendation\(^22\).

Physiotherapists support individuals to overcome barriers and identify motivators to support exercise participation, such as an improved ability to complete daily activities\(^20\). Physiotherapists promote healthy ageing and provide clear messages about the need to continue exercising to sustain improvements made.

Patient Story
John, aged 70

“Following a bereavement I felt very low and going outdoors made me feel anxious. I lost my confidence walking and worried about falling. I began to gain weight and struggled to manage my type 2 diabetes”.

“I was referred for strength and balance exercise classes. Initially I was worried about going out of the house; however, my confidence began to build. Socialising with other people in the group sessions helped because they were in a similar situation to me and knew how I felt. I enjoyed the exercises and felt safe doing them with guidance from the physiotherapy team. I noticed that my balance and fitness improved each week and progressed on to a strength and balance exercise class at my local leisure centre”.

“Now I no longer worry about going outdoors. I’ve lost weight and I’ve had no more falls.”
Guy’s and St Thomas’ NHS Foundation Trust Community Rehabilitation and Falls Service

The team received a Health Service Journal (HSJ) Value in Healthcare Award in 2016 in recognition of an initiative that has enhanced falls prevention in the London boroughs of Southwark and Lambeth. With support from the ‘Southwark and Lambeth Integrated Care’ programme, the outcomes from the initiative led to increased substantive funding from local commissioners. The Trust has increased the capacity of the community falls service and created an innovative referral and telephone triage process delivered by non-qualified staff who are trained and supervised by physiotherapists.

Physiotherapists and postural stability instructors now run 37 evidence-based strength and balance exercise classes in the community, and provide one-to-one treatment in peoples’ homes. The strength and balance programme runs for 30 weeks and aims to reduce falls, fractures, falls related ambulance calls, A&E attendances and hospital admissions.

Patient outcomes from the project have shown that:

• **76% of participants** showed improvements in one or more clinical measures (chair stand test, 180 degree turn and timed up and go)

• **75% of participants** reported improvements in their quality of life, function and confidence, measured using the Falls Efficacy Scale International

• **No injurious falls** reported by participants during the programme.
References


Acknowledgments

Thanks to Kate Bennett (AGILE Chair), Sarah De Biase (AGILE Vice Chair), Dr Katie Robinson (AHP Clinical Academic Lead, Nottingham University Hospitals NHS Trust), Professor Victoria Goodwin MBE (Associate Professor in Ageing and Rehabilitation at the University of Exeter Medical School) and Judith Hall (Clinical Lead and Head of Community Rehab and Falls Service, Guy’s and St Thomas’ NHS Foundation Trust).