

PUBLIC HEALTH REPORT

FALLS AND FRACTURES

Introduction

Falls represent the most frequent and serious type of accident in people aged 65 and over. Every year, more than one in three (almost 4 million) people over 65 in UK suffer a fall that can cause serious injury, and even death. Furthermore, falls are the main cause of disability and the leading cause of death from injury among people aged over 75 in the UK¹.

Falls destroy confidence, increase isolation and reduce independence. A fall can hasten a move into residential care. After a hip fracture, 50 per cent of people can no longer live independently¹.

The after-effects of even the most minor fall can be catastrophic for an older person's physical and mental health. Fear of falling again, among older people and those who care for them, reduces quality of life and well-being, even if a fall does not result in serious consequences¹.

Falls and fractures in older people are a costly and often preventable health issue. There is a mass of evidence showing that exercise programmes designed to improve strength and balance, delivered over several weeks or months by a local service, can lead to a reduction in falls. It is outrageous that over a million falls could be prevented by using the right exercises¹.

PHE guideline on 'Falls: applying All Our Health'² lists the following factors as the causes of having a fall:

- Having a history of falls
- Muscle weakness
- Poor balance
- Visual impairment
- Polypharmacy and the use of certain medicines
- Environmental hazards and a number of specific conditions.

² PHE guideline on 'Falls: applying All Our Health'-July 2019, online available from:

¹ Age UK, Stop Falling: Start Saving Lives and Money, online available from: <u>https://www.ageuk.org.uk/documents/en-gb/campaigns/stop_falling_report_web.pdf?dtrk=true</u> [Last accessed: 31-10-2019]

https://www.gov.uk/government/publications/falls-applying-all-our-health/falls-applying-all-our-health [Last accessed: 31-10-2019]

Falls are events resulting from the presence of risk factors. The likelihood and severity of injury resulting from an event is related to bone health. People with low bone mineral density are more likely to experience a fracture following a fall. One of the main reasons why people have low bone mineral density is osteoporosis².

Over 3 million people in the UK have osteoporosis and they are at much greater risk of fragility fractures. Hip fractures alone account for 1.8 million hospital bed days and £1.9 billion in hospital costs every year, excluding the high cost of social care².

The most cost efficient strategies are to start preventive treatment in people who have had a fracture after a low force such as falling. These include wrist and vertebral fractures. Likewise, all people who are having falls should be questioned and examined to see if some simple solution can be found. As well as being painful and requiring major surgery, hip fractures can be devastating as one third of people who fall and fracture their hip die within a year and a high proportion (41%) never return to their own home³.

Appendix A includes the PHE guidance of focusing on falls in professional practice and core principles for health and care professionals².

A comprehensive list of selected resources that can be used to inform falls and fractures prevention is available here: <u>https://fingertips.phe.org.uk/profile/healthy-ageing/supporting-information/falls</u>

Local Context

In Harrow In 2017/18 there has been 996 Emergency Hospital Admissions (EHAs) due to falls in people aged 65 years old and over (2,392 per 100,000), significantly higher than England (2,170/100,000). In Harrow the EHAs rate for females was almost twice as males.

From 2013/14 to 2017/18 there was 900 hip fractures related EHAs for Harrow. Harrow's indirectly standard rate of admissions at 78.5 (compared to 100 admissions for England) was the 2nd lowest compared to Nearest Neighbours, also it was significantly lower than London and England. Of the 203 hip fractures in people aged 65 and over in Harrow (2017/18) 142 were for females and 61 for males.

In 2012 the estimated number of people aged 45+ in Harrow with osteoarthritis was over 2,700 (2.9%), it was similar to London and England rates of 2.9% and 3% accordingly.

According to the QOF, prevalence of osteoporosis for Harrow GP registered patients aged 50 year and above in 2017/18 was 0.59% (N=473 persons). Harrow had the 3rd highest rate between all NNs, significantly higher than London average rate (0.4%) but similar to England rate (0.62%).

The estimated number of people aged 65+ in Harrow with Age related Macular Degeneration (AMD) in 2017/18 was 41 (107 per 100,000 populations), similar to London and England average. In

³ Hagino T. J Orthop Traumatol. 2011 'Prognostic prediction in patients with hip fracture: risk factors predicting difficulties with discharge to own home', online available from: <u>https://link.springer.com/article/10.1007/s10195-011-0138-y</u> [Last accessed: 31-10-2019]

2017/18 the number of people aged 40+ in Harrow with glaucoma were 16 (14/100,000), also similar to the London and England average rate.

The number of people in Harrow (all ages) in 2017/18 with a Certifications of Visual Impairment (CVI) was 105, (42 per 100,000 populations). Harrow's rate was significantly higher than London average of 31 but similar to the England average of 41 per 100,000

The number of people aged 65-74 registered blind or partially sighted with Adult Social Care as at the 31st March 2017 in Harrow was 135 (684 per 100,000 populations). It is significantly higher than England average rate of 555 per 100,000. The number of people aged 74+ registered blind or partially sighted with Adult Social Care as at the 31st March 2017 in Harrow was 725 (4,045 per 100,000 populations). It is not significantly different from the London average rate of 4387/100,000 and England average rate of 3,961 per 100,000.

Emergency hospital admissions due to Falls

Compared to Nearest Neighbours (NNs)

In 2017/18 the rate of Emergency Hospital Admissions (EHAs) due to falls in people aged 65+ for Harrow (2,392 per 100,000, N=996) was similar to London (2,319 / 100,000), but significantly higher than England (2,170 / 100,000). Fig 1 illustrates the EHAs rate due to falls in people 65+ in Harrow, NNs, London and England in 2017/18.

Fig 1 Emergency hospital admissions rate due to falls in people aged 65+, Harrow, NNs, London and England, 2017/18



Source: PHE, Public Health Outcome Framework

EHAs due to Falls by Sex: Of the 996 EHAs due to falls in Harrow (2017/18) the admissions rate for females was almost twice as males, 638 (66%) for females compared to 328 (34%) for males (Fig 2).

Fig 2 Emergency hospital admissions rate (per 100,000 populations) due to falls in people aged 65

and over by Sex, Harrow 2017/18



Source: PHE, Public Health Outcome Framework

By Age group: In 2017/18 Emergency hospital admissions due to falls in people aged 65-79 for Harrow was similar to London but significantly higher than England. For 80+ age group there was no significant difference between Harrow, London and England (Fig 3).

Fig 3 Emergency hospital admissions due to falls in people aged 65-79 and 80+, Harrow, London and England 2017/18



Source: PHE, Public Health Outcome Framework

Emergency hospital admissions for Hip Fractures

Compared to NNs: From 2013/14 to 2017/18 there has been 900 hip fractures related EHAs for Harrow. Harrow's indirectly standard rate of admissions at 78.5 (compared to 100 admissions for

England) was the 2nd lowest compared to NNs, also it was significantly lower than London and England (Fig 4).



Fig 4 Emergency hospital admissions (ISR) for hip fracture in persons 65+, Harrow, NNs, London and England, 2013/14-17/18

Source: PHE, Public Health Outcome Framework

Hip Fractures by Sex: Of the 203 hip fractures in people aged 65 and over in Harrow (2017/18) 142 were for females and 61 for males, accounts for 614 and 353 per 100,000 of populations respectively (Fig 5). The graph shows the hip fractures rate in Harrow for both male and female was lower but not significantly different from England.





Source: PHE, Public Health Outcome Framework

Hip Fractures by Age group: In 2017/18 there was 58 incidences of hip fractures for people aged 65-79 and 145 for those aged 80+ for Harrow. Fig 6 shows hip fractures rate (per 100,000 of

populations) in Harrow, London and England. Graph shows hip fracture rate for both age groups in Harrow compared to London and England was lower but not significantly different.



Fig 6 Hip fractures in people aged 65-79 and 80+, Harrow, London and England 2017/18

Source: PHE, Public Health Outcome Framework

While fractures have long been attributed to the brittle bone disease, osteoporosis, increasingly scientists are considering the role that osteoarthritis may play in the risk of falling and/or the type and severity of resulting injuries⁴.

Osteoarthritis: According to the Musculoskeletal (MSK) Calculator produced by Imperial College London for Arthritis Research UK based on data from the English Longitudinal Study of Ageing (ELSA), the estimated number of people aged 45+ in Harrow with osteoarthritis was over 2,700 (2.94%), it was similar to London and England rates of 2.9% and 3% accordingly (Fig 7).

⁴ Arthritis Foundation, Osteoarthritis and Falls. Online, available from: <u>https://www.arthritis.org/living-with-arthritis/pain-management/joint-protection/osteoarthritis-and-falls.php</u> [Last accessed: 04/11/2019]

Fig 7 Prevalence (%) of severe hip osteoarthritis in people aged 45 and over, Harrow, NNs, London and England, 2012



Source: PHE, Public Health Outcome Framework

Osteoporosis: According to the QOF, prevalence of osteoporosis for Harrow GP registered patients aged 50 year and above in 2017/18 was 0.59% (N=473 persons). Fig 8 shows Harrow had the 3rd highest rate between all NNs, significantly higher than London average rate (0.4%) but similar to England rate (0.62%).

Fig 8 Osteoporosis: QOF prevalence (%), Person, 50+, Harrow, NNs, London and England, 2017/18



Source: PHE, Public Health Outcome Framework

Poor vision and falls

While the risk factors for falls in older people are multi-factorial, poor vision is considered to be an important contributing factor. Research by the Royal National Institute for Blind People (RNIB) suggests that 50% of cases of blindness and serious sight loss could be prevented1,2 if detected and treated in time.

The estimated number of people aged 65+ in Harrow with Age related Macular Degeneration (AMD) in 2017/18 was 41, it accounts for 107 per 100,000 populations, higher than the London average of 86 (not significantly) and similar to England average (Fig 9).



Fig 9 Preventable sight loss - AMD, Persons, 65+, Harrow, NNs, London and England, 2017/18

Source: PHE, Public Health Outcome Framework

Glaucoma is a condition that causes damage to the eye's optic nerve and gets worse over time. It's often linked to a build-up of pressure inside eye. Glaucoma tends to be inherited and may not show up until later in life. In 2017/18 the number of people aged 40+ in Harrow with glaucoma were 16 (14/100,000), similar to London and England average rate (Fig 10).

Fig 10 Preventable sight loss - glaucoma, Persons, 40+, Harrow, NNs, London and England, 2017/18



Source: PHE, Public Health Outcome Framework

Certifications of Visual Impairment (CVI): The indicator relates to completions of CVI (all causes - preventable and non-preventable) by a consultant ophthalmologist, this initiates the process of registration with a local authority and leads to access to services. The number of people in Harrow (all ages) in 2017/18 with a CVI was 105, it accounts for 42 per 100,000 populations. Harrow's rate was significantly higher than London average of 31 but similar to the England average of 41 per 100,000 (Fig 11).



Fig 11 Preventable sight loss - sight loss certifications, Persons, All ages, Harrow, NNs, London and England,2017/18

Source: PHE, Public Health Outcome Framework

The number of people aged 65-74 registered blind or partially sighted with Adult Social Care as at the 31st March 2017 in Harrow was 135 which accounts for 684 per 100,000 populations. It is lower than London average of 777/100,000 (not significantly) but significantly higher than England average rate of 555 per 100,000 (Fig 12).





Source: PHE, Public Health Outcome Framework

The number of people aged 74+ registered blind or partially sighted with Adult Social Care as at the 31st March 2017 in Harrow was 725 which accounts for 4,045 per 100,000 population. It is lower than London average of 4387/100,000 (not significantly) but slightly (not significantly) higher than England average rate of 3,961 per 100,000 (Fig 13).

Fig 13 People aged 74+ registered blind or partially sighted, Persons, Harrow, NNs, London and England, 2016/17



Falls Inequalities by IMD

Inequalities in Emergency hospital admissions (EHA) due to falls in people aged 65 and over by IMD-2015 in England are presented in Fig 14. The difference between the rate of EHA in 'most deprived decile' (2410 people per 100,000) and the '3rd least deprived decile' (1953 people per 100,000) is 457 admissions per 100,000 per year which accounts for 23% extra admissions.

Fig 14 Emergency hospital admissions due to falls in people aged 65 and over by IMD-2015, persons, England 2017/18



Appendix A: Core principles for health and care professionals⁵

Health and care professionals should:

- Know the needs of individuals, communities and population and the services available
- Think about the resources available in health and wellbeing systems
- Understand specific activities which can prevent, protect, and promote

Taking action

The National Falls Prevention Coordination Group's Falls and fracture consensus statement advocates a whole system approach to prevention, which includes:

- Risk factor reduction across the life-course
- Case finding and risk assessment
- Strength and balance exercise programmes
- Healthy homes
- High-risk care environments
- Fracture liaison services
- Collaborative care for severe injury.

Interventions can take place at population, community and individual levels.

⁵ PHE guideline on 'Falls: applying All Our Health'-July 2019, online available from: <u>https://www.gov.uk/government/publications/falls-applying-all-our-health/falls-applying-all-our-health</u> [Last accessed: 31-10-2019]

If you're a front-line health and care professional:

Health and care professionals can have an impact on an individual level by:

- Routinely asking older people about falls
- Observing for deficits in gait and balance
- Knowing how to recognise the signs of potential risk
- Assessing potential risks, including medical conditions which might predispose to fall
- Understanding the referral pathway to local services, that reduce fall risks
- Reassuring individuals and their carers or families, that help is available to reduce the risk of falling
- Supporting healthy ageing, including reducing exposure to risk factors such as inactivity and visual impairment, making every contact count and signposting eligible patients to NHS health checks
- Providing up-to-date patient information on falls, such as Get up and go: a guide to staying steady from the CSP

If you're a team leader or manager:

Community health and care professionals, and providers of specialist services can have an impact by:

- Considering their role in primary falls prevention and the messages given out about healthy lifestyles
- Ensuring that inpatient care is in line with falls and fracture clinical guidelines and quality standards
- Encouraging people to stay active, get their eyes and ears checked regularly, eat enough calories and protein, avoid high alcohol use, get connected and eat well, to reduce the risk of falling and improve outcomes if a fall happens
- Developing links with local community providers
- Displaying information in workplaces promoting physical activity benefits for adults and older adults

If you're a senior or strategic leader:

Health and care professionals should be aware of the interventions at the population level, which can include:

- Understanding the local population consider the proportion of older people, frailty prevalence, and the number of falls in the population
- Review the capacity and makeup of falls prevention services
- Influence relevant parties to increase service provision if falls prevention is a local health priority, using tools from the Chartered Society of Physiotherapy (CSP)
- Consider the training needs of the workforce, and what action is needed to give all health and care professionals the knowledge and skills to identify the risk of falls for older people
- Ensure the promotion of physical activity is prominent within commissioned services

Falls Service Overview in Harrow

Central London Community Healthcare (CLCH) has been commissioned to provide an enhanced Falls Pathway to provide more effective prevention and management of falls for people living in their own home and for Care Home residents. The delivery approach is focused on preventing hospital admissions and managing earlier and more effective discharge following a hospital admission.

The pathway will strengthen the current CLCH specification for falls prevention and the Rapid Response service, to support people at home following a fall rather than default to hospital admission. It ensures that future services are more closely aligned with the emerging new models of care. The service caters for patients 65 and over. Once referred to the service patients will receive

- Onward referral to the consultant for medical assessment
- Falls prevention action plans to increase confidence with walking and daily activities, increase confidence and reduce fear of falling.
- Individually tailored home exercise programmes to improve balance, muscle strength and physical well-being.
- Group exercise and education classes within the community.
- Home environment assessments and recommendations and/or equipment to increase safety and reduce the risk of falls in and around the home
- Teach people how to cope in the event of a fall (including how to get up off the floor or seek help if unable).
- Assess people's bone health and provide advice/education about keeping their bones as strong as possible.

The proposed approach for falls prevention and management will provide a sustainable, evidenced based delivery model aligned to the wider development of whole system integrated care within Harrow.

Gaps identified within the falls pathway:

The Enhanced Falls Service is commissioned for patients 65 and over. Evidence suggests that Falls in older people are a common occurrence and represent the most frequent type of serious injury in that cohort and the most common reason for a hospital attendance.

Patients under 65 at risk of falls or has had a fall will be referred to the CLCH Integrated Therapy Service and would be seen by a physio and OT. However, they would not have access to the medical assessment and the group exercise programme run by the enhanced falls service.

Next Steps

- Early identification CCG to work with Integrated Care Programme and Primary Care Network to review ways of identifying and referring target group sooner to reduce likelihood of falls (Promote the use of the WISC dashboard at practice visits)
- Link into the Integrated Care Programme Care Home Workstream
- Dovetail work done by the Local Authority and Everyone Active into the wider falls pathway