

Age Well

Physical Activity, Frailty and Falls

Introduction

Frailty describes a person's physical and mental resilience and their ability to recover following a period of illness¹. Nationally it is estimated that 10% of over 65's (amounting to around 2,764 Merton residents) and 25-50% of over 85's live with frailty². Delaying and reducing the severity of frailty can help older people improve their quality of life and stay independent for longer. Frailty is also associated with falls; the number one reason older people are admitted to hospital and a main reason for needing residential care. Reducing frailty within the population can reduce costs to health and social care – hip fractures alone cost the NHS and social care £2.3billion a year³.

The causes of falls involve a number of issues and risk factors include muscle weakness, poor balance, visual impairment, being prescribed a number of medicines, environmental hazards, and medical conditions⁴. The impact of falls is affected by a range of factors including bone health, frailty, and low weight. Physical activity is widely recognised as a key determinant of people staying healthier for longer, reducing the risk of falls^{5,6,7}. During the Covid 19 pandemic concern has been raised of the potential 'de-conditioning' of older people due to lockdowns and a reduction in physical activity⁸.

Emergency hospital admissions due to falls in people aged 65 and over

Falls are the largest cause of emergency hospital admissions for people aged 65 years and over, and substantially impact on long term health outcomes of older adults, often resulting in people moving from their own home to long-term nursing or residential care. In 2020/21, the hospital admission rate due to falls in people aged 65 and over in Merton was 2,126.6 per 100,000, accounting for 575 emergency admissions. This is significantly higher than London's (1871.7 per 100,000), but similar to England's (2,023 per 100,000)⁹.

Falls are the number one reason for hospital admission amongst older people and one of the main reasons for needing residential care. The rate of hospital admissions due to falls amongst older people in Merton increased from 2010/11 to 2017/18 after which rates have declined but are still significantly higher than the London average but similar to the England average (Figure 1)¹⁰. Locally, hospital admissions due to falls significantly increased from 2549.2 per 100,000 in 2010/11 to 3328.8 per 100,000 in 2017/18, after which a decline was observed¹⁰.

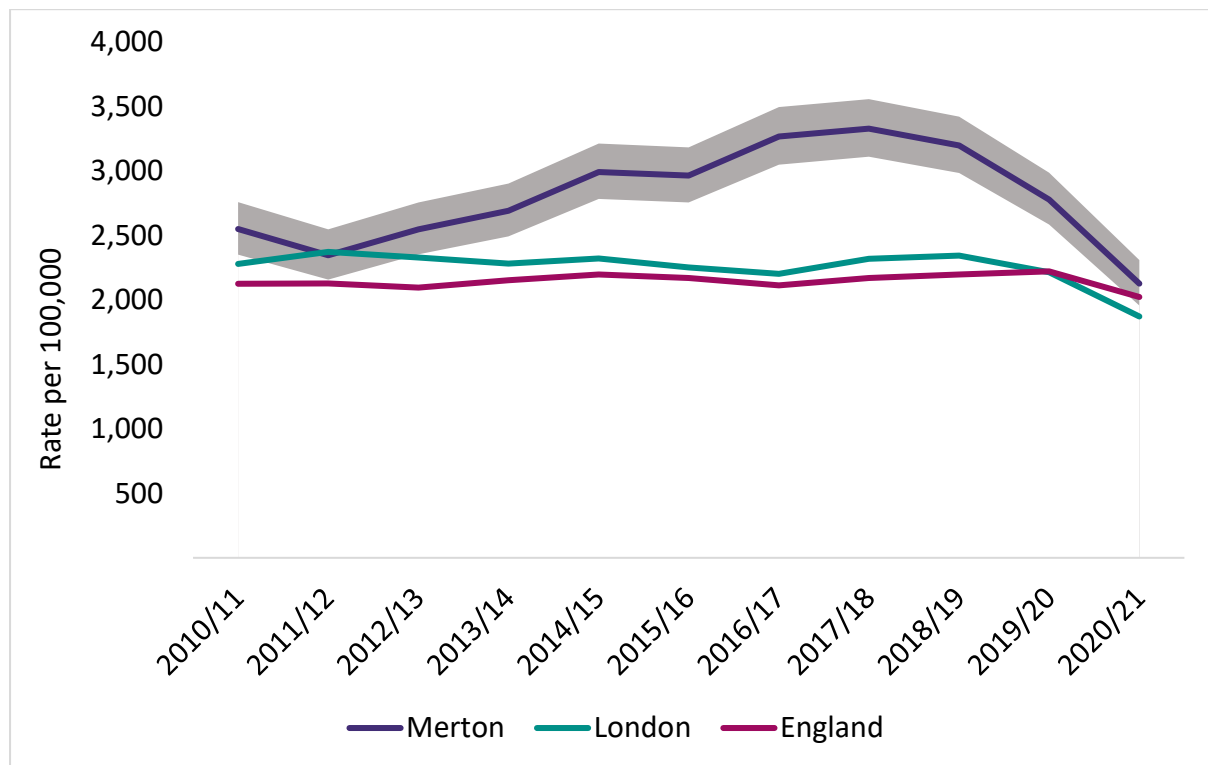
Whilst data shows a recent decrease in hospital admissions of people aged 65+ due to falls, national research highlights the risks of de-conditioning due to the pandemic (lockdowns and reduced physical activity) and subsequent increased risk of falls¹¹. It is important to understand the nuances around this, why risk may have gone up (de-conditioning) but hospital admissions have reduced. We do not yet know why but this may relate to the risk that de-conditioning provides is a future risk e.g., as people leave lockdowns and do more

activity, they increase their risk outside of the home. It may also be due to the fact that 81% of households didn't go out during the first lockdown apart for essential reasons¹².

Finally, it may also be due to people avoiding hospitals in the early stages of the pandemic. During 2020 we know that A and E attendances and hospital admissions went down, this may be partly related to patients not attending due to fear of Covid-19 transmission¹³.

Future analysis and understanding are required.

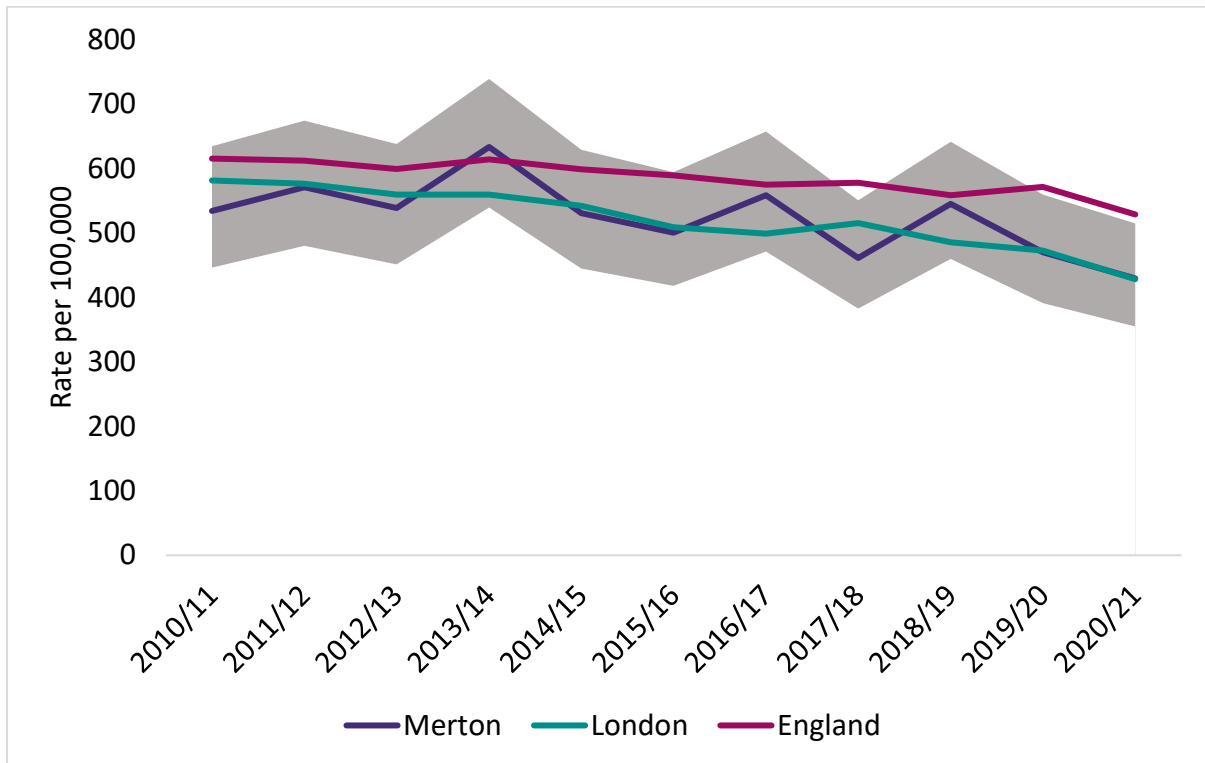
Figure 1: Emergency hospital admissions for fall injuries in persons aged 65 and over, directly age-standardised rate per 100,000 between 2010/11 and 2020/21 in Merton, London, and England. Public Health Profiles, OHID⁹.



Emergency hospital admissions due to hip fractures in people aged 65 and over

In 2020/21, hospital admissions due to hip fractures was 429.4 per 100,000 (accounting for 115 hip fractures), which is significantly lower than England (528.7 per 100,000) and similar to the London average (428.2 per 100,000) (Figure 2)¹⁴. This is also a decrease from 545 per 100,000 in 2018/19.

Figure 2: Emergency hospital admissions for fractured neck of femur in persons aged 65 and over, directly age-standardised rate per 100,000 between 2010/11 and 2020/21 in Merton, London, and England. Public health profiles, OHID¹⁴.



A number of services help prevent falls and frailty. These include group physical activity classes run by the community and voluntary sector, especially those that focus on strength and balance activity. Services that provide reablement and aids/adaptations can also help support independence. Community healthcare services such as the Falls Prevention Service also provide holistic support for those who have fallen or are at risk of falls.

Frailty

Delaying and reducing the severity of frailty can help older people improve their quality of life and stay independent for longer. Despite evidence of older adults becoming deconditioned and local concerns around frailty and increased risk of falls last year (Merton Story 2021), emergency admissions for falls in people over the age of 65 decreased in 2020/21. This may be due to decreased time spent outdoors by older people during the early part of the pandemic and there is a need for monitoring to assess the long-term effect^{9,11}. Rates of frailty increase with age¹⁵. There have been few studies on the prevalence of frailty by ethnic group in the United Kingdom. A pilot study of Londoners using electronic Frailty Index (eFI) data found higher rates of frailty amongst those of South Asian ethnic minority groups (in particular people from a Bangladeshi ethnic minority group) and lower rates in residents from a black ethnic minority group. Further research is needed¹⁶.

Analysis carried out in 2018 estimated that rates of frailty are higher in Morden and East Merton Primary Care Network areas. More information is available in the [Merton Story 2021](#). In future the electronic Frailty Index (eFI), from which a frailty risk estimate has been generated for all Merton residents, can be used to monitor frailty epidemiology.

Service User and Resident Views

Focus group work carried out around active ageing in Merton with older people (2019)¹⁷ highlighted a range of barriers to increased physical activity including: awareness of what is available, transport to activities, cost/money, pain and mobility, 'elderly' perceptions, lack of motivation (linked to depression and loneliness) and caring responsibilities.

Recommendations

Review more recent E Frailty Index data when available.

Further Information:

- Loneliness and isolation
- Dementia

References:

¹ Ageing well and supporting people living with frailty [Internet]. NHS England. [cited 14 June 2022]. Available from: <https://www.england.nhs.uk/ourwork/clinical-policy/older-people/frailty/>

² Understanding frailty [Internet]. Age UK; 2022 [cited 28 September 2022]. Available from: <https://www.ageuk.org.uk/our-impact/policy-research/frailty-in-older-people/understanding-frailty/>

³ Frailty resources [Internet]. NHS England. [cited 28 September 2022]. Available from: <https://www.england.nhs.uk/ourwork/clinical-policy/older-people/frailty/frailty-resources/>

⁴ Office for Health Improvement and Disparities. Falls: applying All Our Health [Internet]. GOV.UK; 2022 [cited 28 September 2022]. Available from: <https://www.gov.uk/government/publications/falls-applying-all-our-health/falls-applying-all-our-health>

⁵ Exercise as you get older [Internet]. NHS. [cited 28 September 2022]. Available from: <https://www.nhs.uk/live-well/exercise/exercise-as-you-get-older/>

⁶ Physical activity [Internet]. World Health Organization. 2020 [cited 28 September 2022]. Available from: <https://www.who.int/news-room/fact-sheets/detail/physical-activity>

⁷ Physical activity [Internet]. World Health Organization. 2020 [cited 28 September 2022]. Available from: <https://www.who.int/news-room/fact-sheets/detail/physical-activity>

⁸ Jaccard A et al,. Wider impacts of COVID-19 on physical activity, deconditioning and falls in older adults. Public Health England; 2021. available at [Wider impacts of COVID-19 on physical activity, deconditioning and falls in older adults \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/98444/wider-impacts-of-covid-19-on-physical-activity-deconditioning-and-falls-in-older-adults.pdf)

⁹ Office for Health Improvement and Disparities. Public health profiles [Internet]. Fingertips. [cited 28 September 2022]. Available from: <https://fingertips.phe.org.uk/search/falls#page/3/gid/1/pat/6/par/E12000007/ati/402/are/E09000024/iid/22401/age/27/sex/4/cat/-1/ctp/-1/yrr/1/cid/4/tbm/1>

¹⁰ Office for Health Improvement and Disparities. Public health profiles [Internet]. Fingertips. [cited 28 September 2022]. Available from: <https://fingertips.phe.org.uk/search/falls#page/3/gid/1/pat/6/par/E12000007/ati/402/are/E09000024/iid/22401/age/27/sex/4/cat/-1/ctp/-1/yrr/1/cid/4/tbm/1>

¹¹ Jaccard A et al,. Wider impacts of COVID-19 on physical activity, deconditioning and falls in older adults. Public Health England; 2021. Available at [Wider impacts of COVID-19 on physical activity, deconditioning and falls in older adults \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/98444/wider-impacts-of-covid-19-on-physical-activity-deconditioning-and-falls-in-older-adults.pdf)

¹² Murphy R et al,. Coronavirus and the social impacts on behaviours during different lockdown periods, Great Britain: up to February 2021. Office for National Statistics; 2021. Available at <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandw>

[ellbeing/articles/coronavirusandthesocialimpactsonbehavioursduringdifferentlockdownperiodsgreatbritain/uptofebruary2021#main-points](https://www.bma.org.uk/media/2841/the-hidden-impact-of-covid-web-pdf.pdf)

¹³ The hidden impact of COVID-19 on patient care in the NHS in England. British Medical Association; 2020. Available at: [https://www.bma.org.uk/media/2841/the-hidden-impact-of-covid_web-pdf.pdf](https://www.bma.org.uk/media/2841/the-hidden-impact-of-covid-web-pdf.pdf)

¹⁴ Office for Health Improvement and Disparities. Public health profiles [Internet]. Fingertips. [cited 28 September 2022]. Available from: <https://fingertips.phe.org.uk/search/hip%20fractures#page/3/gid/1/pat/6/par/E12000007/ati/402/are/E09000024/iid/41401/age/27/sex/4/cat/-1/ctp/-1/yrr/1/cid/4/tbm/1>

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¹⁶ Pradhananga S, Regmi K, Razzaq N, Etefaghian A, Dey A, Hewson D. Ethnic differences in the prevalence of frailty in the United Kingdom assessed using the electronic Frailty Index. *AGING MEDICINE*. 2019;2(3):168-173. Available at: <https://doi.org/10.1002/agm2.12083>

¹⁷ Rob Clarke, "Active Ageing in Merton" (2019), Age UK Merton for London Borough of Merton (internal report).