

ISLINGTON JSNA: FOCUS ON

FRAILITY AND FALLS

APRIL 2019

Frailty is related to the ageing process, that is, simply getting older. It describes how as people grow older, they gradually lose their in-built reserves, leaving them vulnerable to dramatic, sudden changes in health triggered by seemingly small events such as a minor infection or a change in medication or environment. Frailty therefore defines the group of older people who are at highest risk of adverse outcomes such as falls, disability, admission to hospital, or the need for long-term care ⁽¹⁾.

Falls are associated with frailty due to loss of muscle mass (sarcopenia), as well as associations with long-term conditions and certain medicines, cognitive deficit and delirium ⁽²⁾. However, there are also environmental associations with falls, including physical hazards in the home and outside, ⁽³⁾ and adverse weather conditions such as snow and ice ⁽⁴⁾.

Facts and figures

- Around 9% of people aged 65 and over in Islington are severely frail, and another 15% are moderately frail. ^{(2018) (5)}
- There are an estimated 7,200 falls in Islington each year, although many go unreported. ^{(2018) (6,7)}
- There are around 1,750 ambulance callouts for falls each year in Islington, with around 1,000 taken to A&E. ^{(2015/16 to 2017/18) (8)}
- There were 495 emergency admissions due to falls in Islington, including 110 hip fractures. ^{(2017/18) (9,10)}

Population groups

- White women are more likely to experience a fragility fracture compared to Black women and all men. ⁽¹¹⁾
- Fragility factors appear to be associated with social deprivation in men but not in women. ⁽¹¹⁾
- The risk of falling increases with age: one in three people aged 65 and over and one in two people aged 80 and over fall each year. ⁽⁶⁾

Measures for reducing inequalities

Evidence-based interventions which help to tackle inequalities include:

- Prevention – regular exercise, good nutrition, and regular eye tests all reduce the risk of falls
- Medication reviews to identify multiple medications which increase the risk of falling in people with multiple conditions
- Improving environmental factors in the home, including increasing lighting and making safe trip hazards such as loose carpets or lack of handrails

National & local strategies

- Department of Health. Falls and fractures: Effective interventions in health and social care (2009)
- NICE Clinical Guideline CG161 Falls in Older People: Assessing risk and prevention, 2013, and Quality Standard 86 Falls in Older People: Prevention, 2017
- NICE Clinical Guidance NG56: Multi morbidity: clinical assessment and management, 2016
- North Central London Sustainability and Transformation Plan, 2016

SETTING THE SCENE: THE ISLINGTON PICTURE

Frailty and falls and their impact

Estimated falls in older people (65+), Islington 2018

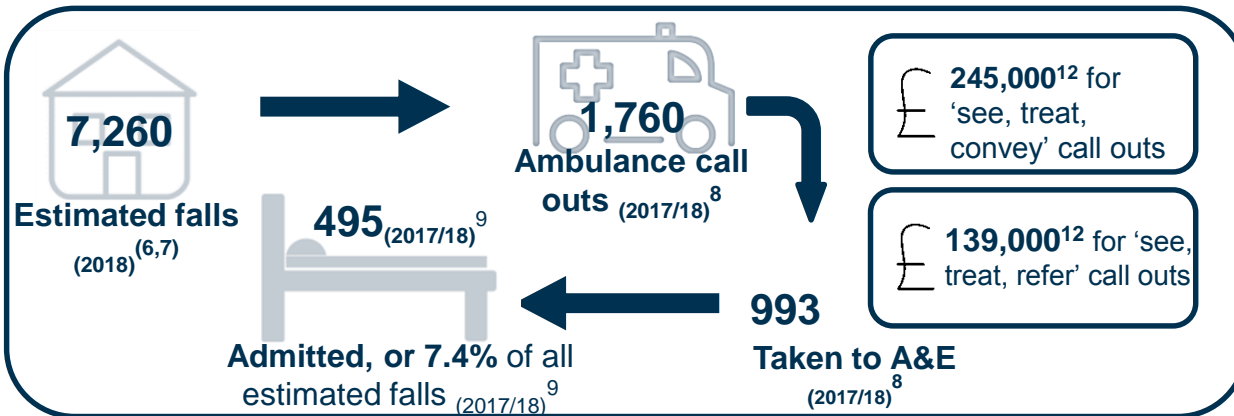
21,800 people aged 65+



5,500 people aged 80+



An estimated **one in three** people aged 65+ fall each year, including **one in two** people aged 80 or over – around 7,260 falls per year in Islington (2018).^(6,7)



Rates of injuries due to falls 2017/18

- Islington has a high rate of injuries from falls in people aged 65 and over (**2,455** per 100,000) compared to England (**2,170/100,000**) and to London (**2,319/100,000**).⁹
- At **555/100,000**, the rate of hip fractures in people aged 65 and over in Islington was similar to London (515/100,000) and to England (578/100,000).⁹

Wider determinants

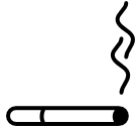


Social isolation is a major adverse outcome following a fall. Of all Islington residents living alone, 25% are aged 65 and over. This is lower than London (30%) and England (41%)⁽¹⁴⁾.

Associated health risks

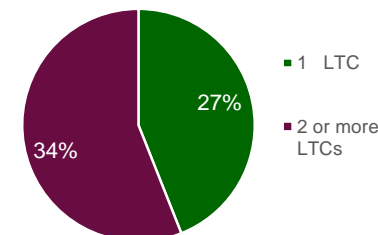
Ill health and life style -related conditions in older people have an impact on the severity of their frailty.

Smoking: Local GP data shows that **28%**⁵ of people 65+ are ex-smokers, and 12% still smoking in Islington (2018)⁵



Alcohol: Islington men aged 65 and over have a higher rate of alcohol specific admissions to hospital compared with London and England, while women have similar rate.^{15 (2016/17)}

Obesity: **59%**⁵ of GP-registered older people 65+ in Islington are overweight or obese (12,000 people). This rate is higher than the working age population (33%) (2018)⁵



Co morbidities: 50%⁵ of GP-registered older people 65+ in Islington were living with one or two or more long term conditions (LTCs) (2015)⁵

Frailty: Who is at risk?

Frailty index by gender and age 65+, Islington 2018⁵

Both men and women (65+) are **similarly likely** to have **mild frailty** (both 27%). **Women (65+)** are more likely to have **moderate frailty** (16%) than older men (14%), and to have a **severe frailty** then older men (10% vs 7%).

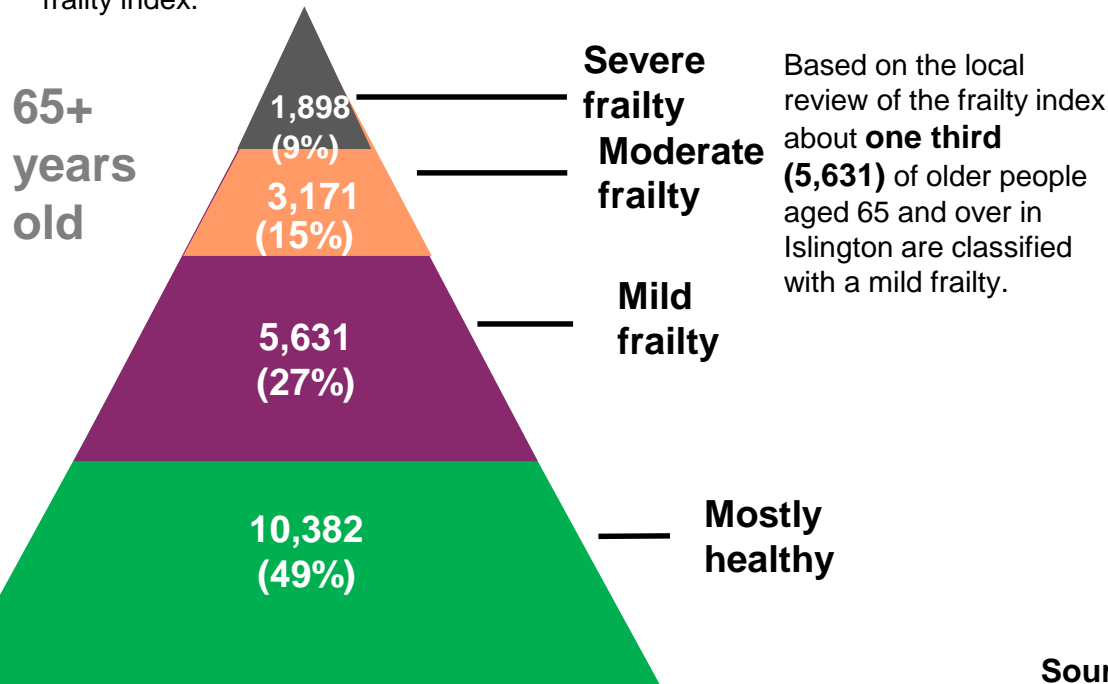
Frailty index by ethnicity in people aged 65, Islington, 2018⁵



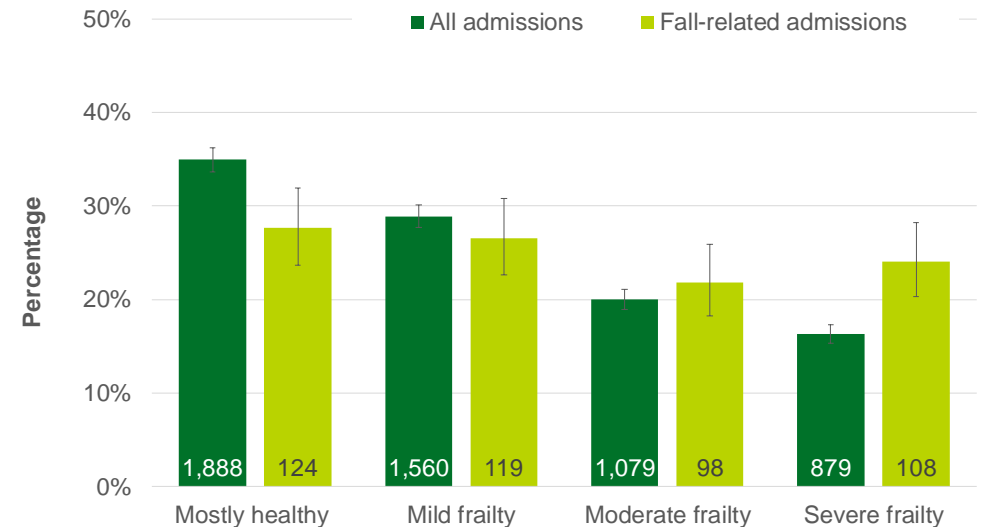
Women from Other/Mixed ethnic groups (35%) and men from Other /Mixed and Black ethnic groups (41% and 40% respectively) are more likely to have a **mild frailty** compared to the Islington average (27%). **White women and Asian men** are more likely to have a **severe frailty (24% and 31% respectively)** than the Islington average (9%).

Frailty index, age 65+, Islington 2018⁵

The population (65+) has been segmented to identify elderly people living health lives, and those with severe, moderate and mild frailty based on the frailty index.



Frailty index: overall and fall-related admissions, age 65+, Islington 2017/18⁵



In Islington, local data shows that older people (65+) with severe frailty have a significantly higher proportion of admissions related to falls than overall admissions (24% vs 16%).

Source: GP PH linked dataset (2018), hospital admission data (2017/18)³

FUTURE NEED

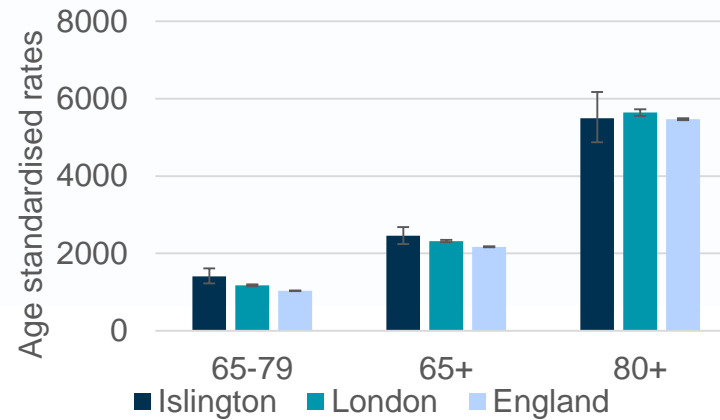
Hip fractures and their impact on older people¹⁶

Falls are the main cause of hip fractures, a particularly devastating injury for the older people



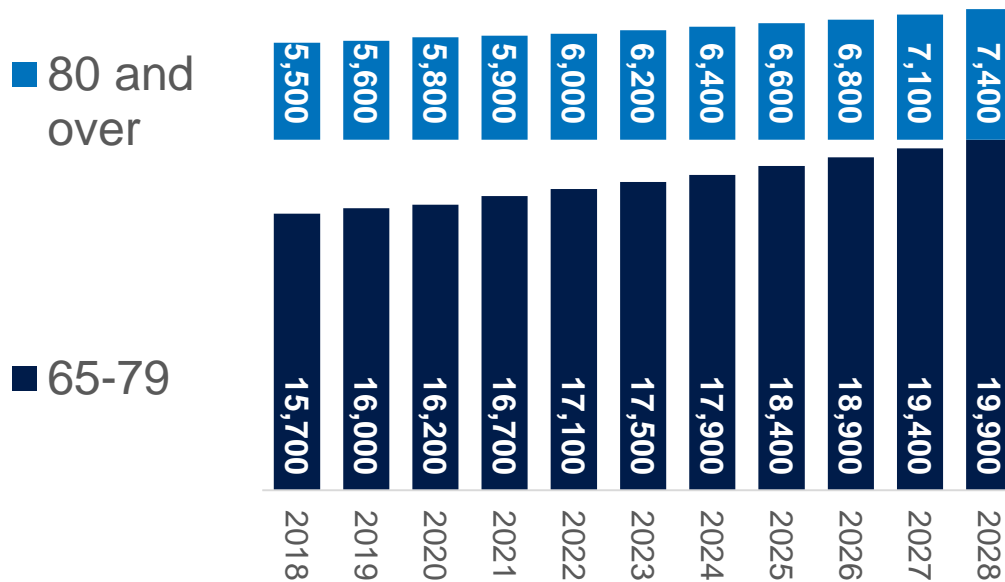
95% of hip fractures occur as a result of a falls. There were **110** hip fractures in 2017/18, a rate of 555 per 100,000 – similar to London (515) and England (578). The rate has been stable for the past five years, but an aging population means that the number is likely to increase.

Age standardised rate of A&E related to injuries due to falls^{9,13,17}



In Islington, emergency hospital admissions for injuries due to falls increase with age. The rate increases from **1,406 per 100,000** population in the 65-79 years old to **5,496 per 100,000** in the over 80s. The Islington rate for people aged 65 and over was the 10th highest in London.

GLA population projections, Islington, 2018 to 2028²



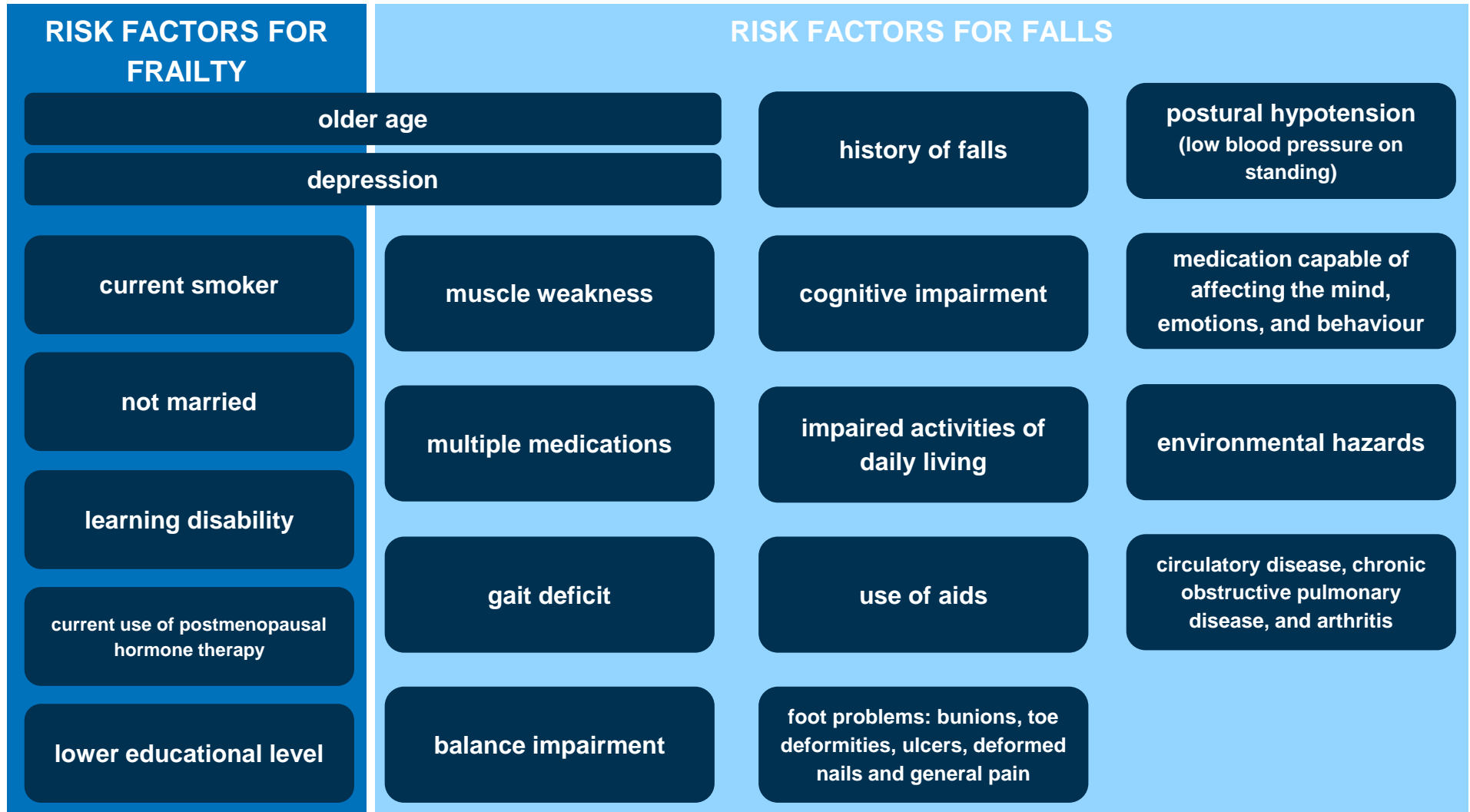
Based on population projections, in 2028 there are likely to be:

+1,900
People aged 80 and over
+26%

+4,200
People aged 65-79
+21%

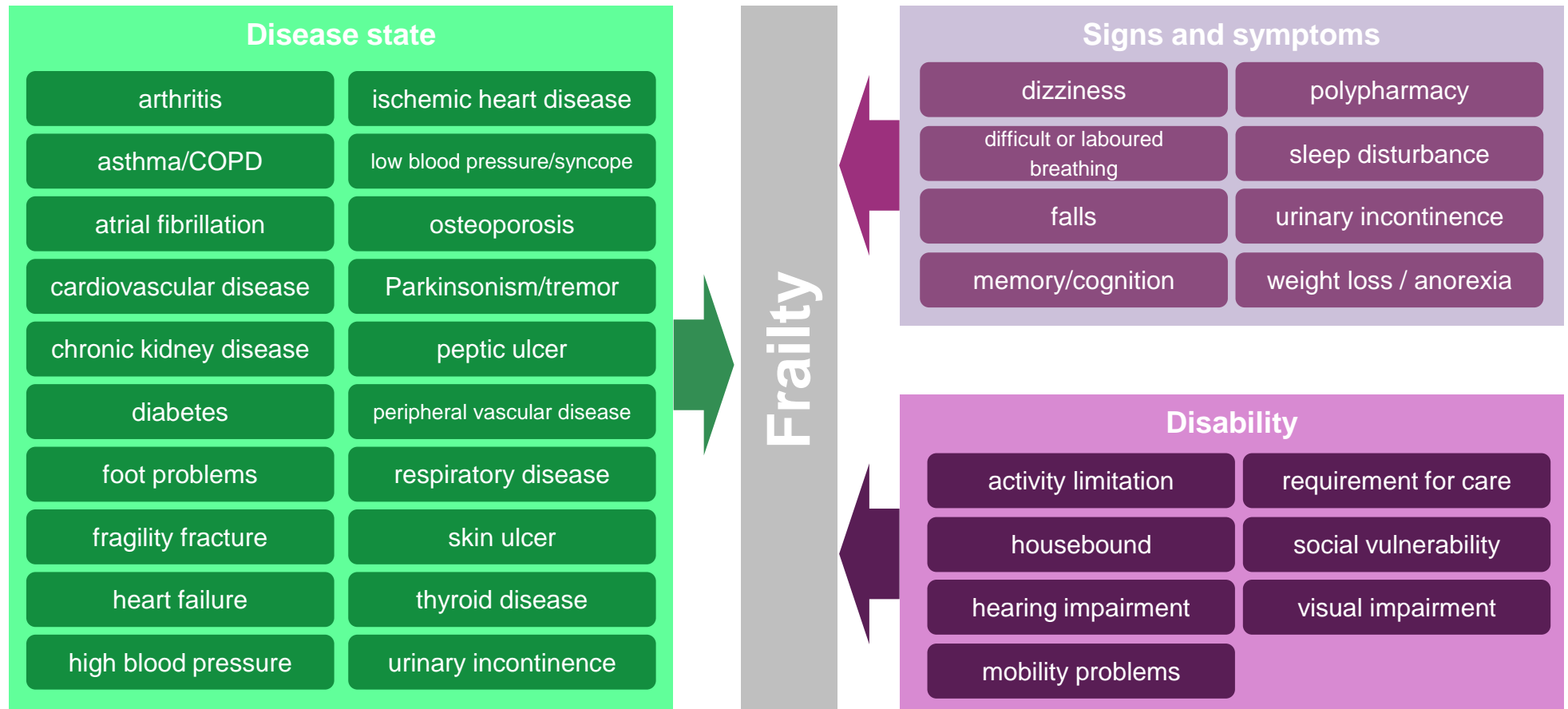
- at least **1,130** more residents with moderate to severe frailty,
- an additional **1,830** falls,
- 400** additional ambulance callouts for falls,
- 220** more A&E attendances, and
- 120** more admissions for injuries due to falls each year by 2027.

- Frailty develops as a consequence of age-related decline which makes a person vulnerable to minor events such as infections or falls. People with frailty have a much greater risk of falls, disability, and death, and an increased likelihood of requiring long-term care.
- While the causes of falls are complex, frail older people are particularly vulnerable because of conditions such as delirium, heart problems, poor eyesight, and strength and mobility problems.



WHAT WORKS?

- The Frailty Index has been developed using the cumulative deficit model of frailty, whereby frailty is defined on the basis of the accumulation of a range of health deficits.
- The Frailty Index can be utilised to proactively identify and target multifactorial assessment and prevention measures for older people with frailty, by considering individual frailty and vulnerability rather than by chronological age alone.
- Comprehensive geriatric assessment (CGA) is defined as a multidisciplinary diagnostic and treatment process that identifies medical, psychosocial, and functional limitations of a frail older person in order to develop a coordinated plan to maximize overall health with aging. Home geriatric assessment and acute geriatric care units have been shown to be consistently beneficial for several health outcomes.⁽¹⁸⁾



WHAT WORKS?

MULTIFACTORIAL FALLS INTERVENTIONS

*Good quality evidence suggests efficacy in reducing rate and risk of falls
A Cochrane review found that multifactorial intervention reduced the rate of falls by 24%.¹⁹*

Should:

- Be personalised
- Address modifiable risk factors
- Promote independence
- Improve physical & psychological function

NICE recommends annual falls risk assessments for all people aged 65+. Multifactorial falls risk assessments should be offered to all people at high risk of falls, and then, if appropriate, a multifactorial intervention should be delivered.¹

HOME BASED EXERCISE PROGRAMMES

Good evidence suggests efficacy in reducing rate and risk of falls.

PHE Guidelines:⁶

- Progressive strength training and highly challenging balance exercises for the majority of older people at low to moderate risk of falls
- Programmes should be 50 hours or more, delivered for at least two hours per week
- At the end of the programme, older people should be assessed and offered follow-up classes

HOME HAZARD ASSESSMENT

Evidence suggests efficacy in reducing rate and risk of falls when used with other interventions, of greater benefit to people at higher risk of falls

PHE Guidelines:⁶

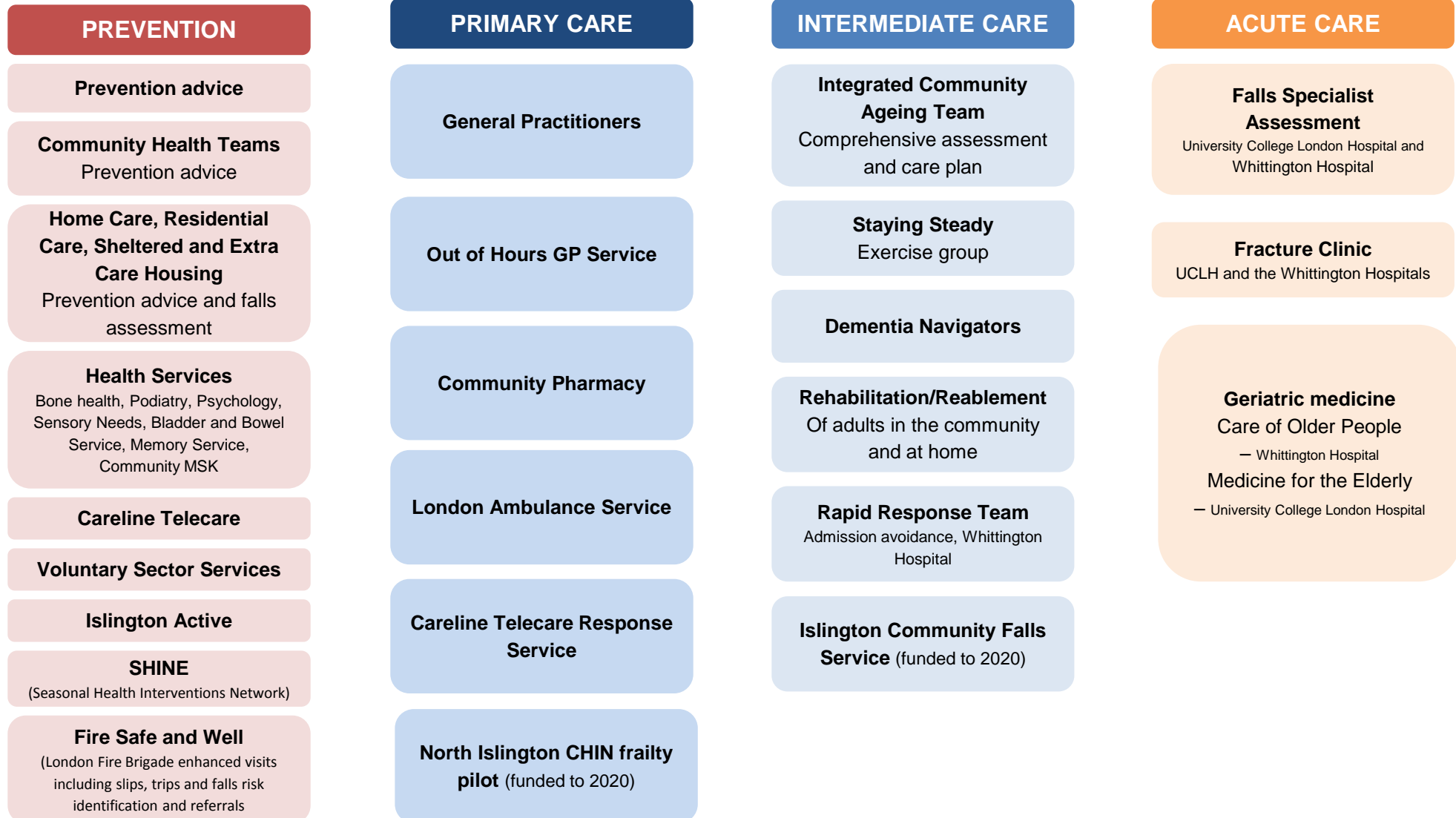
- Can be carried out by housing practitioners or occupational therapists
- Home adaptations can mitigate falls-related environmental hazards, for example by installing handrails on unsafe stairs
- NICE recommends this intervention for older people who have received treatment in hospital following a fall

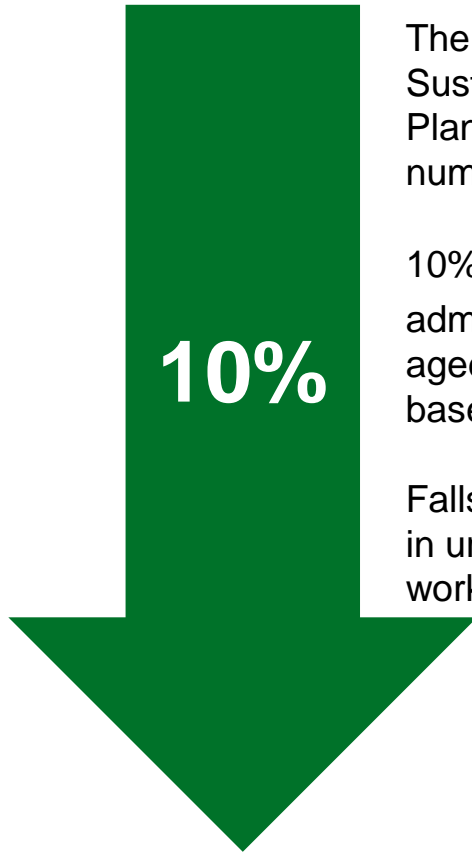
OTHER FALLS INTERVENTIONS

- NICE recommends that **medication review** be carried out at least annually in older people at risk of falls, with greater attention paid to polypharmacy.
- Vision **assessment and referral** has been a component of successful multifactorial falls prevention programmes, but there is no evidence for it as an effective intervention in isolation.
- Wider aspects of falls prevention also warrant attention, for example in **town planning and architecture**.
- Fracture **liaison services** can be offered to all people over 50 suffering a first fracture in hospital.

ASSETS & SERVICES

- Assets and services contributing to falls prevention and response are found in both the statutory and voluntary sectors, and in non-health and social care sectors such as housing and leisure, reflecting that falls management is multifactorial:





The North Central London* Sustainability and Transformation Plan⁸ has a target to reduce the number of injuries due to falls by

10% - **57** fewer emergency admissions due to falls on people aged 65 and over in Islington based on 2014/15.

Falls prevention is also a priority in urgent and emergency care work streams

Nice Quality Standards for falls²⁰

- NICE quality standards are a set of specific, concise statements and associated measures. They set out aspirational, but achievable, markers of high-quality, cost-effective patient care, covering the treatment and prevention of different diseases and conditions. There are nine quality standards for falls:

1	Older people are asked about falls when they have routine assessments and reviews with health and social care practitioners, and if they present at hospital.
2	Older people at risk of falling are offered a multifactorial falls risk assessment.
3	Older people assessed as being at increased risk of falling have an individualised multifactorial intervention.
4	Older people who fall during a hospital stay are checked for signs or symptoms of fracture and potential for spinal injury before they are moved.
5	Older people who fall during a hospital stay and have signs or symptoms of fracture or potential for spinal injury are moved using safe manual handling methods.
6	Older people who fall during a hospital stay have a medical examination.
7	Older people who present for medical attention because of a fall have a multifactorial falls risk assessment.
8	Older people living in the community who have a known history of recurrent falls are referred for strength and balance training.
9	Older people who are admitted to hospital after having a fall are offered a home hazard assessment and safety interventions.



Key area	Gap	Planned action
Identifying frailty	<ul style="list-style-type: none"> Identification of the most vulnerable patients and intervening early 	<ul style="list-style-type: none"> The electronic Frailty Index has been developed which will enable GPs to search their clinical systems for records of health deficits and calculate the Frailty Index for their most vulnerable patients. The North Islington Care Closer to Home Integrated Network (CHIN) is piloting multi-agency community based comprehensive geriatric assessment in north Islington for patients with moderate frailty. GPs assess patients flagged by the electronic frailty index, the CHIN team undertaking further screening assessment prior to CGA where indicated.
Falls prevention	<ul style="list-style-type: none"> An ageing population suggests that the number of falls and injuries due to falls will increase 	<ul style="list-style-type: none"> Identify opportunities to enable residents to remain active and healthy, and encourage resilience in the community. Promotion of physical activity opportunities to improve strength and balance. Work with other prevention services across both the statutory and voluntary sectors, particularly through the Haringey and Islington Wellbeing Partnership, to reduce the risks of falling, including reducing hazards in the home and reducing alcohol intake.
	<ul style="list-style-type: none"> The majority of falls that occur in the community are minor and don't come to the attention of services, meaning that preventative services are not offered 	<ul style="list-style-type: none"> Scope current service provision across the community and health care settings to inform the development of a defined single falls pathway in partnership with commissioners and providers in primary and secondary care, social care, housing, the voluntary sector, and the independent sector (for example, care homes). Explore the opportunities for maximising data sharing across organisations to inform targeted prevention initiatives.
Falls response	<ul style="list-style-type: none"> Falls prevention and response is multifactorial involving statutory and voluntary services, and there is a need to ensure that all residents are able to access services equitably 	<ul style="list-style-type: none"> Develop a single evidence based multifactorial falls pathway in partnership with providers ensuring that prevention and treatment services are equitable and adhere to NICE guidelines and quality standards for falls.

- Further information on this topic, and previous outputs and reports used to inform this fact sheet can be found at the following locations:
 - NICE Clinical guideline CG161: Falls in older people: assessing risk and prevention (2013)
 - <https://www.nice.org.uk/guidance/cg161>
 - NICE Quality Standard 86: Falls in older people (2017)
 - <https://www.nice.org.uk/guidance/qs86>
 - Public Health England Falls and fracture consensus statement Resource pack (2017)
 - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/628732/Falls_and_fracture_consensus_statement_resource_pack.pdf
 - Department of Health. Falls and fractures: Effective interventions in health and social care (2009)
 - http://www.laterlifetraining.co.uk/wp-content/uploads/2011/12/FF_Effective-Interventions-in-health-and-social-care.pdf
 - NHS England: Safe, compassionate care for frail older people using an integrated care pathway (2014)
 - <https://www.england.nhs.uk/wp-content/uploads/2014/02/safe-comp-care.pdf>
 - Age UK Stop Falling: Start Saving Lives and Money.
 - http://www.ageuk.org.uk/documents/en-gb/campaigns/stop_falling_report_web.pdf?dtrk=true

▪ **References**

- 1) NHS England Frailty – what it means and how to keep well over the winter months. Online at <https://www.england.nhs.uk/blog/frailty/>
- 2) Morley JE, Vellas B, van Kan GA, Anker SD, Bauer JM, Bernabei R, et al. Frailty consensus: a call to action. J Am Med Dir Assoc. 2013;14(6):392-7.
- 3) NHS. Falls – overview. Online at <https://www.nhs.uk/conditions/falls/>
- 4) Benyon C et al. The cost of emergency hospital admissions for falls on snow and ice in England during winter 2009/10: a cross sectional analysis. Environ Health. 2011; 10: 60.
- 5) Islington GP PH linked dataset (2018)
- 6) NICE Clinical Guideline CG161: Falls in older people; assessing risk and prevention, 2013.
- 7) GLA Population projections (Jul 2017) - 2016-based population projections using a central trend-based projection. <https://data.london.gov.uk/dataset/gla-population-projections-custom-age-tables>
- 8) London Ambulance Service via GLA Safestats (restricted access) – average of LAS callouts for falls 2015/16 to 2017/18, aged 65+.
- 9) Public Health England. Public Health Outcomes Framework, indicator 2.24i: Injuries due to falls in people aged 65 and over (Persons).

Key facts	Setting the scene	Future need	What influences?	What works?	Assets & services	Targets & outcomes	The Voice	Gaps	Further info
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▪ **References (continued)**

- 10) Public Health England. Public Health Outcomes Framework, indicator 4.14i: Hip fractures in people aged 65+.
- 11) Curtis, M. et al. Epidemiology of fractures in the United Kingdom 1988-2012: Variation with age, sex, geography, ethnicity and socioeconomic status. Bone 2016;87:19-26
- 12) NHS Improvement Reference Costs 2016-17. Available at <https://improvement.nhs.uk/resources/reference-costs/>
- 13) Public Health England. Public Health Outcomes Framework, 4.14ii - Hip fractures in people aged 65 and over - aged 65-79
- 14) Office of National Statistics Census 2011. DC1107EW - Marital and civil partnership status by sex by age
- 15) Public Health Intelligence Profile. Alcohol-specific hospital admissions in Islington. October 2017.
- 16) NHS. Hip fractures - overview. Available at <https://www.nhs.uk/conditions/hip-fracture/>
- 17) Public Health England. Public Health Outcomes Framework, 4.14iii - Hip fractures in people aged 65 and over - aged 80+
- 18) Ward KT. And Reuben DM. Comprehensive geriatric assessment. Available at <https://www.uptodate.com/contents/comprehensive-geriatric-assessment#H24>
- 19) Gillespie LD. Interventions for preventing falls in older people living in the community. Cochrane Database of Systematic Reviews 2012;9: 1465-1858
- 20) NICE Quality Standard QS86: Falls in Older People

About Islington’s JSNA

[Islington’s Evidence Hub](#) brings together information held across the organisations into one accessible place. It provides access to evidence, intelligence and data on the current and anticipated needs of Islington’s population and is designed to be used by a broad range of audiences including practitioners, researchers, commissioners, policy makers, Councillors, students and the general public.

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