

# CAMDEN JSNA: FOCUS ON

## FRAILITY AND FALLS

APRIL 2017

The risk of falls and associated complications rise steadily with age and can be a marker of increasing frailty. Falling and fear of falling increases the risk of falls through a reduction in social participation and loss of personal contact, which in turn increase isolation and depression.

In human terms, falls can result in reduced independence, pain, injury loss of confidence and mortality. The risk of falling is particularly related to lower limb arthritis lower and/or weakness, history of falls, gait/balance issues, visual impairment, postural hypertension, polypharmacy (four or more drugs), cognitive impairment, incontinence and aged 65+. Responding to falls poses a substantial financial burden on the health and social care system.

Evidence based multifactorial falls prevention and risk assessments reduce the rate and risk of falls and the associated distress, pain, injury, loss of confidence, loss of independence and mortality.

### Facts and figures

- One in three people aged 65 to 79 fall each year, rising to one in two people aged 80 or over – around 10,100 falls per year in Camden (2017)<sup>1</sup>
- There are approximately 2,400 ambulance callouts for falls each year with around 1,500 people taken to A&E each year (2014-2016)<sup>2</sup>
- 655 people are admitted to hospital for hip fractures due to falls, including 125 hip fractures (PHOF 2014/15)<sup>3, 4</sup>

### Measures for reducing inequalities

National evidence based interventions which help to tackle inequalities include:

- Medication reviews can help to identify poly-pharmacy which increases 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 and clutter can reduce falls for people living in poorer quality housing

### Population groups

- Women aged 80 and over are more likely than men to experience a falls injury locally and nationally. In Camden, men aged between 65 and 79 are more likely to experience a falls injury than men nationally.<sup>4</sup>
- White women are more likely to experience a fragility fracture compared to Black women and all men.<sup>5</sup>
- Fragility factors appear to be associated with social deprivation in men but not in women.<sup>5</sup>

### National & local strategies

- Department of Health Falls and Fractures: Effective Interventions in Health and Social Care (2009)<sup>6</sup>
- NICE Clinical Guideline CG161 Falls in Older People: Assessing Risk and Prevention (2013)<sup>1</sup> and Quality Standard 86 Falls in Older People: Prevention (2017)<sup>7</sup>
- North Central London Sustainability and Transformation Plan (2016)<sup>8</sup>
- Camden Local Care Strategy (2017)<sup>9</sup>

# SETTING THE SCENE: THE CAMDEN PICTURE

## Frailty and falls and their impact

Estimated falls in older people (65+), Camden 2016

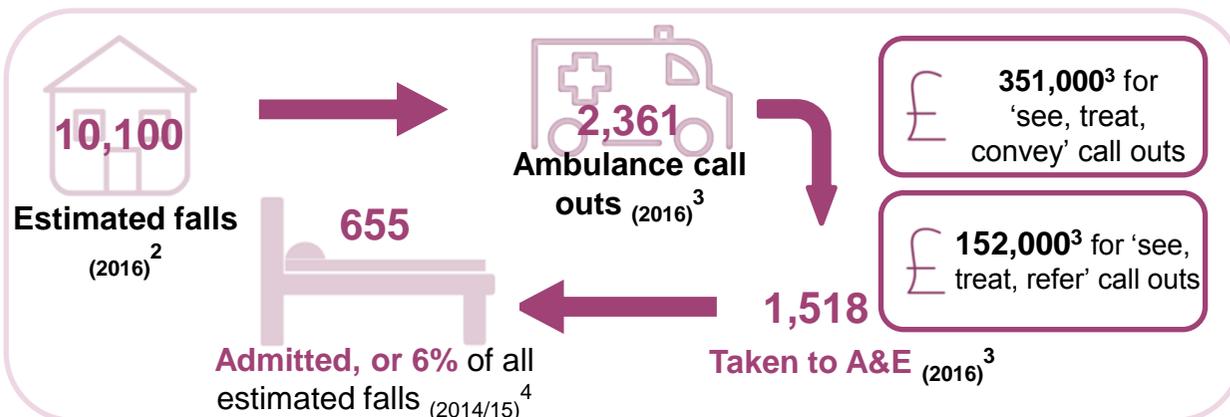
21,100 people aged 65-79



7,600 people aged 80+



An estimated **one in three** people aged 65 to 79 fall each year, rising to **one in two** people aged 80 or over – around 10,100 falls per year in Camden (2016).<sup>1,2</sup>



### Rates of injuries due to falls 2014/15<sup>4</sup>

- Camden has a high rate of injuries from falls in people aged 65 and over (**2,340** per 100,000) compared to England (**2,125/100,000**) but similar to London (**2,253/100,000**)
- At **1,415** per 100,000, the rate of injuries due to falls among Camden men aged 65 to 79 was higher than that for men of the same age in London (**1026/100,000**) and England (**825/100,000**).
- At **6,670** per 100,000, Camden women aged 80 and over were nearly 50% more likely to experience an injury from a fall compared to Camden men of the same age (**4,538/100,000**). There was a similar pattern in London and England.

## Wider determinants



**Social isolation** is a major adverse outcome following a fall. **42%**<sup>10</sup> of older people 65+ are living alone. This rate is higher than London (34%) and (England (31%) (2011).

## Associated health risks

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

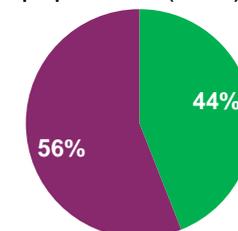
**Smoking:** Local GP data shows that **28%**<sup>11</sup> of people 65+ are ex-smokers, and 15% still smoking in Camden (2015).



**Alcohol:** Camden men aged 65 and over have a higher rate of alcohol-specific admissions to hospital compared with London and England (2014/15)<sup>12</sup>



**Obesity:** **54%**<sup>11</sup> of GP-registered older people 65+ in Camden are overweight or obese (11,800 people). This rate is higher than the working age population (31%) (2015).



■ 1 LTC  
■ 2 or more LTCs

**Co morbidities:** **44%**<sup>11</sup> of GP-registered older people 65+ in Camden were living with two or more long term conditions (LTCs) (2015).

# SETTING THE SCENE: THE CAMDEN PICTURE

## Frailty: Who is at risk?

### Frailty index by gender and age 65+, Camden 2015<sup>11</sup>



Women (65+) are more likely to have **mild frailty** (32%) than older men (31%), and almost **twice as likely** to have a **severe frailty** then older men (8% vs 5%).

### Frailty index by Ethnicity in people aged 65 and over, Camden 2015<sup>11</sup>

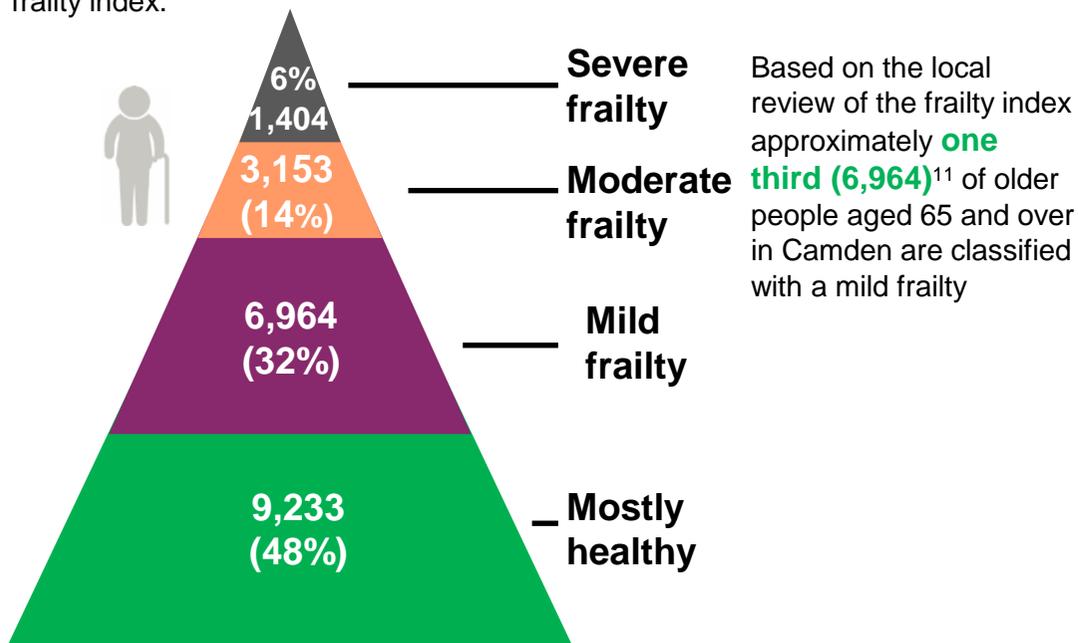


Asian women (26%) and men (31%) are more likely to have a **moderate/severe frailty** compared to the Camden average (20%).

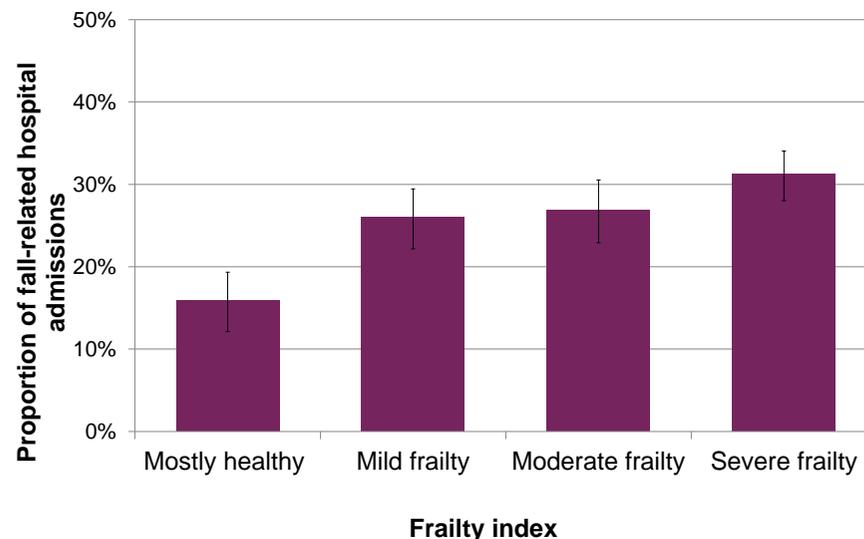
The Frailty Index (eFi), a validated tool, which can be used by GPs to identify patients most at risk of frailty, enabling preventative measures to be put in place. It is defined on the basis of the accumulation of a range of 35 deficits (see page 6), which are clinical signs, symptoms, conditions, and disabilities.

### Frailty index, age 65+, Camden 2015<sup>11</sup>

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 by fall-related admissions, age 65+, Camden 2015<sup>11</sup>



In Camden, local data shows that prevalence of falls increase with the severity of frailty in older people (65+). **About a third (32%)** of older people (65+) with a severe frailty had one or more fall-related hospital admissions in 2015.

# FUTURE NEED

## Hip fractures and their impact on older people<sup>16</sup>

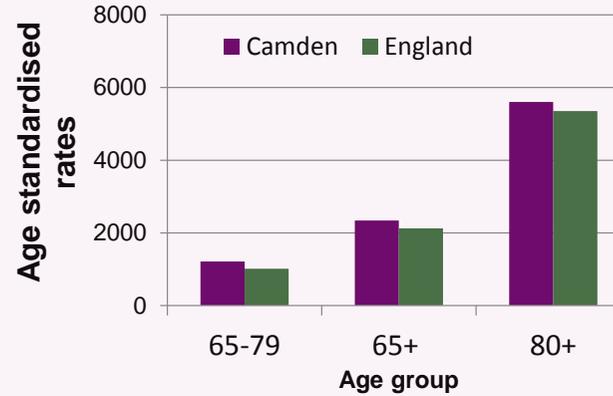
Falls are the main cause of hip fractures, a particularly devastating injury for the older people



**95%** of hip fractures occur as a result of a falls.

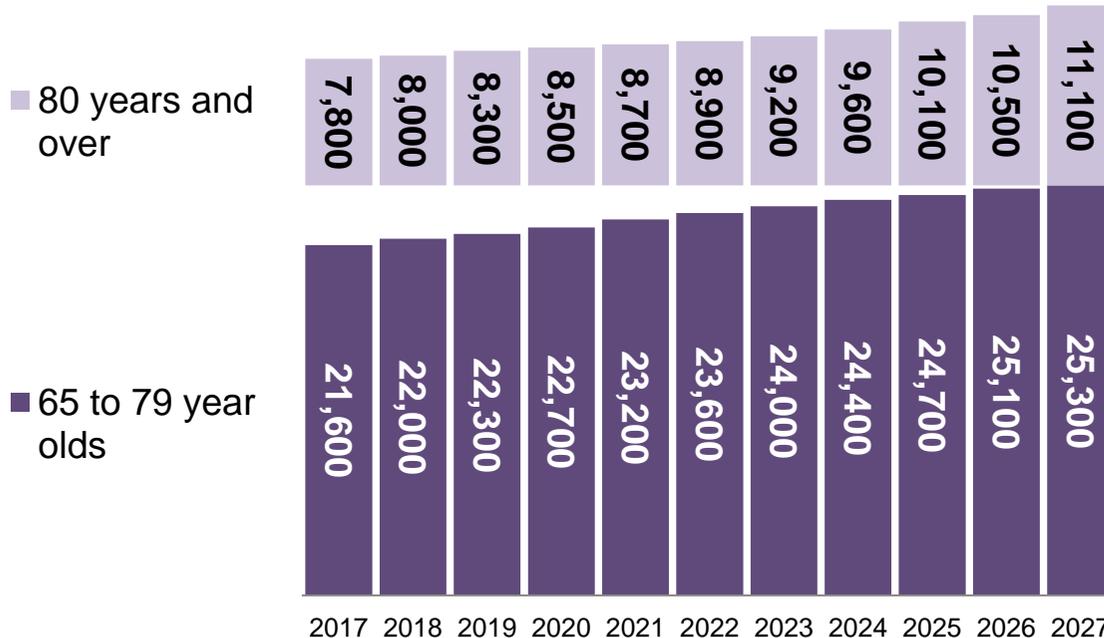
There were **125** hip fractures in 2014/15, a rate of 441 per 100,000 – similar to London (517) but significantly lower than England (571). The rate has been stable for the past five years, but an aging population means that the number is likely to increase

## Age standardised rate of A&E related to injuries due to falls<sup>4</sup>



In Camden, emergency hospital admissions for injuries due to falls increase with age. The rate increases from **1,214 per 100,000** population in the 65-79 years old to **5,604 per 100,000** in the over 80s.

## GLA population projections, Camden, 2017 to 2027<sup>2</sup>



Based on population projections in 2027 there are likely to be:

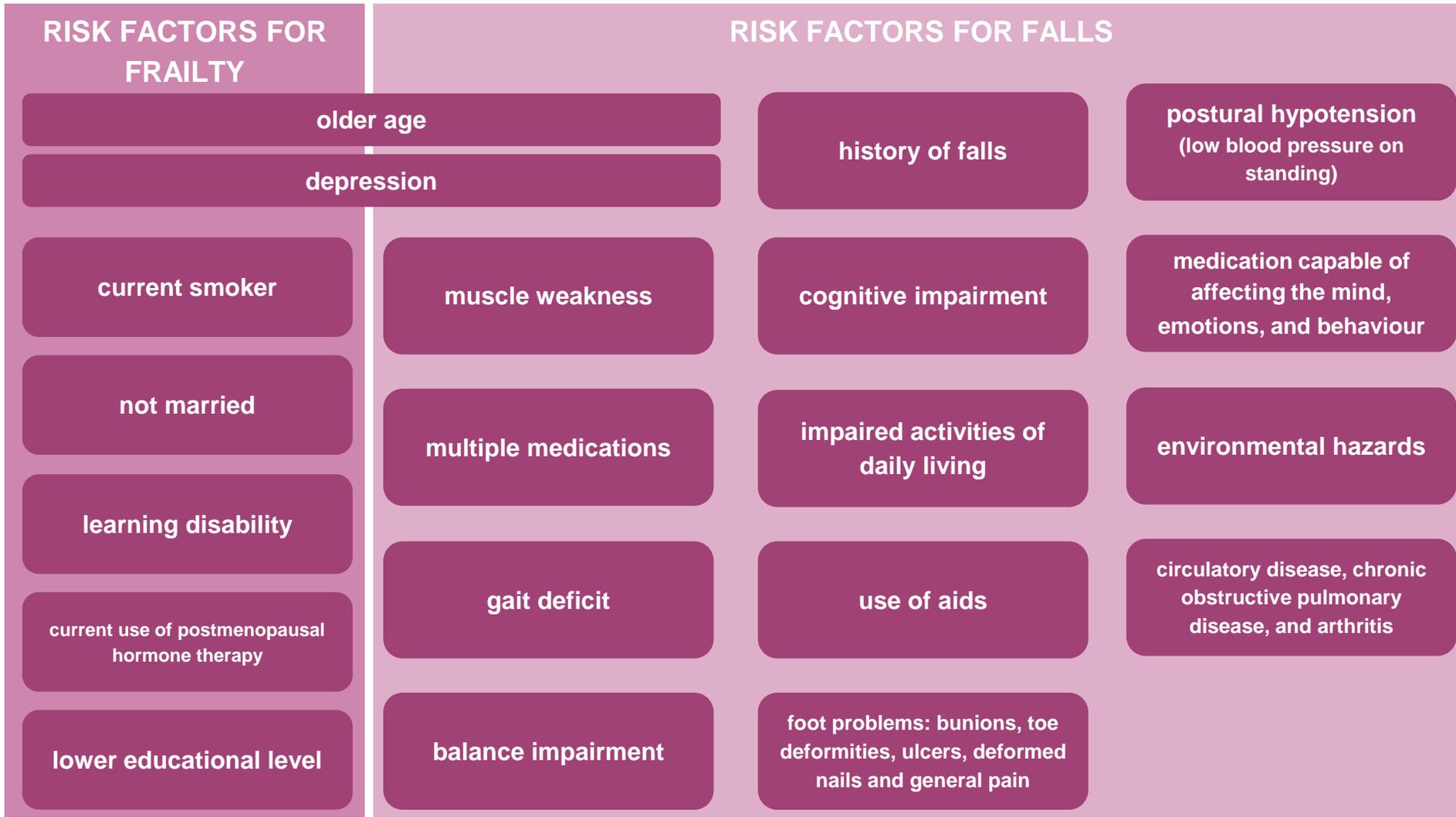
**+3300**  
People aged 65-79  
**+42%**

**+3700**  
People aged 80 and over  
**+17%**

- at least **1,400** residents with moderate to severe frailty,
- an additional **2,900** falls,
- 700** ambulance callouts for falls,
- 435** A&E attendances, and
- 175** admissions for injuries due to falls each year by 2027.

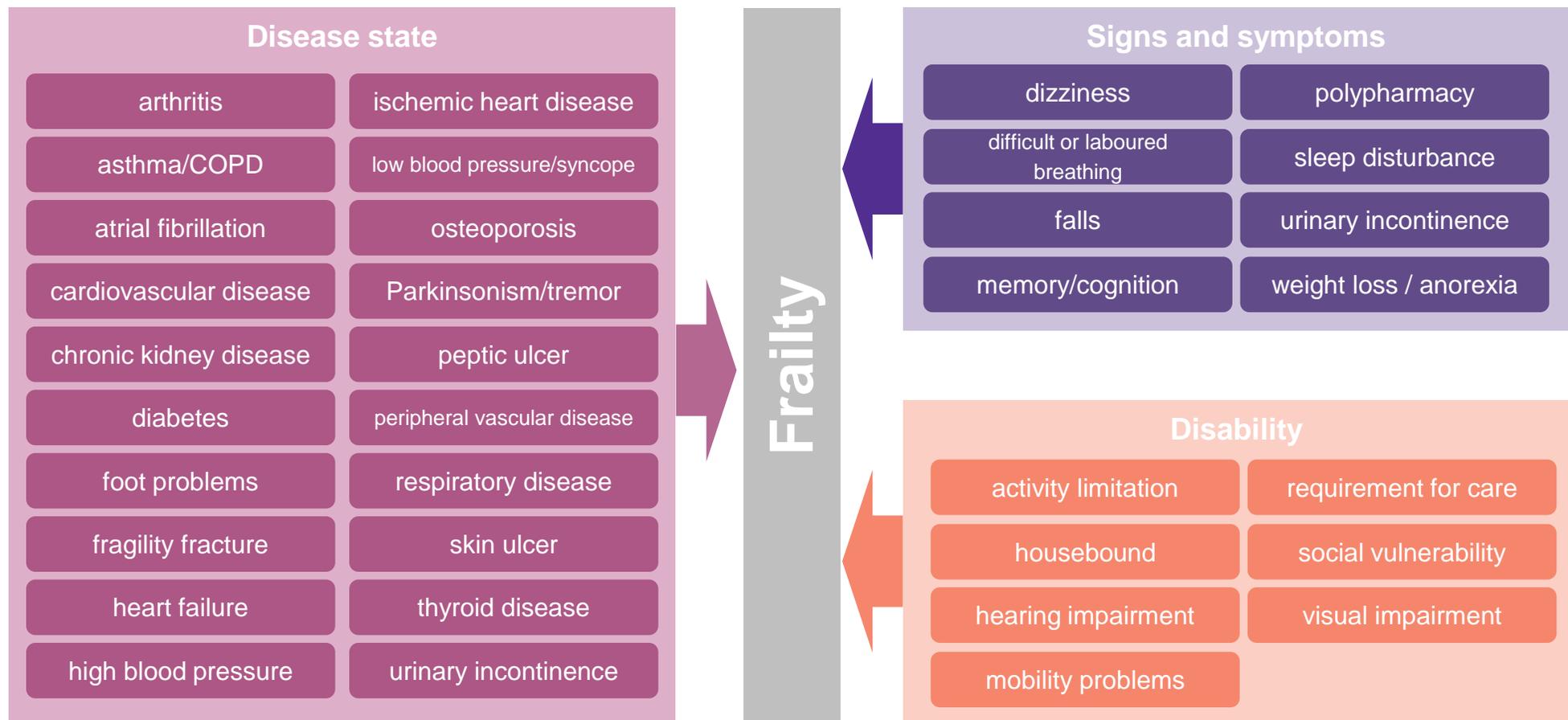
## WHAT INFLUENCES THIS TOPIC?

- 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 INFLUENCES THIS TOPIC?

- 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.



# 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%.<sup>13</sup>*

### 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.<sup>1</sup>

## HOME BASED EXERCISE PROGRAMMES

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

### PHE Guidelines:<sup>6</sup>

- 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:<sup>6</sup>

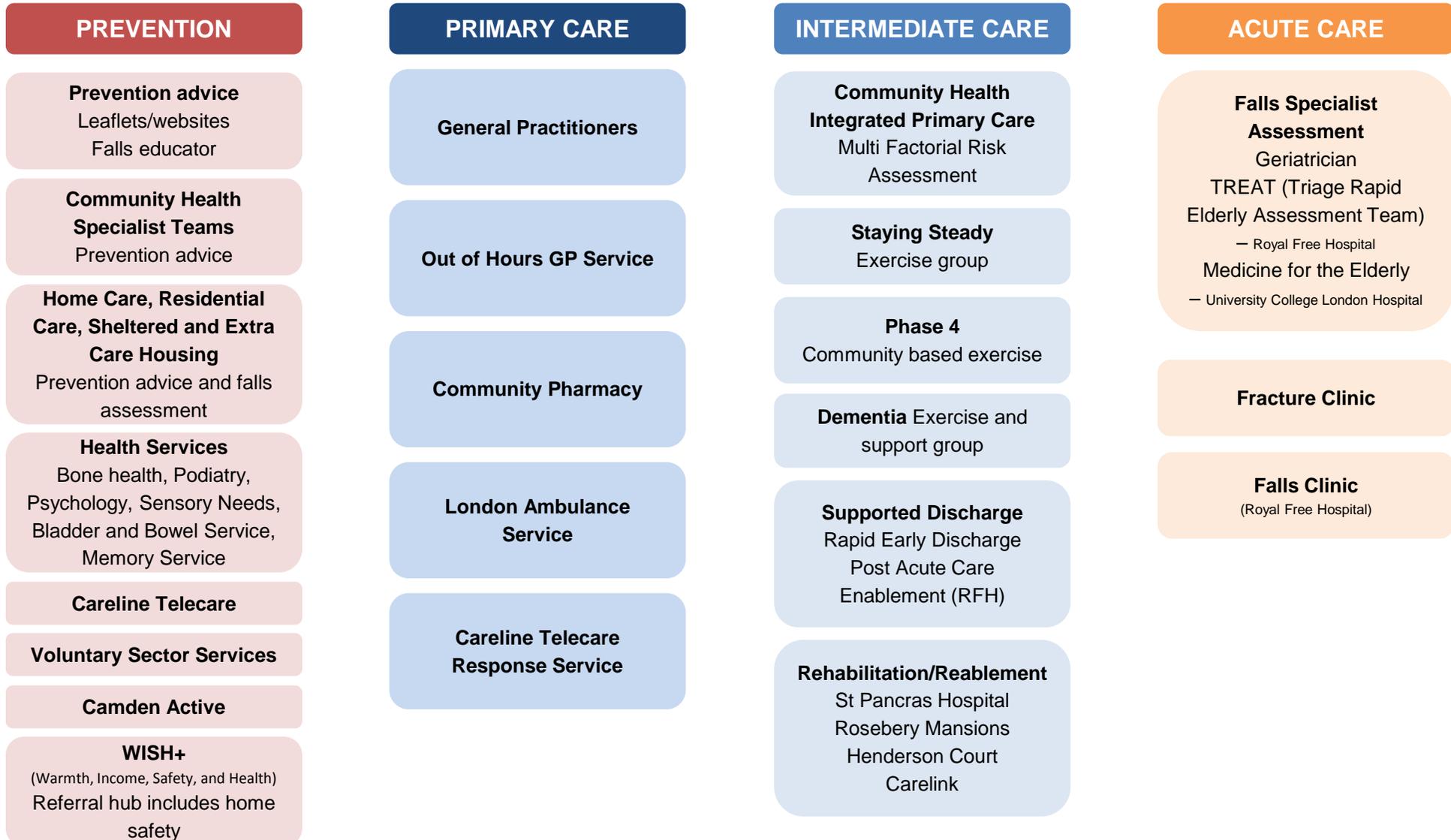
- Can be carried out by housing practitioners or occupational therapists
- Home adaptations can mitigate falls-related environmental hazards, for example by installing handrails on unsafe stairs
- NICE recommends this intervention for older people who have received treatment in hospital following a fall

## OTHER FALLS INTERVENTIONS

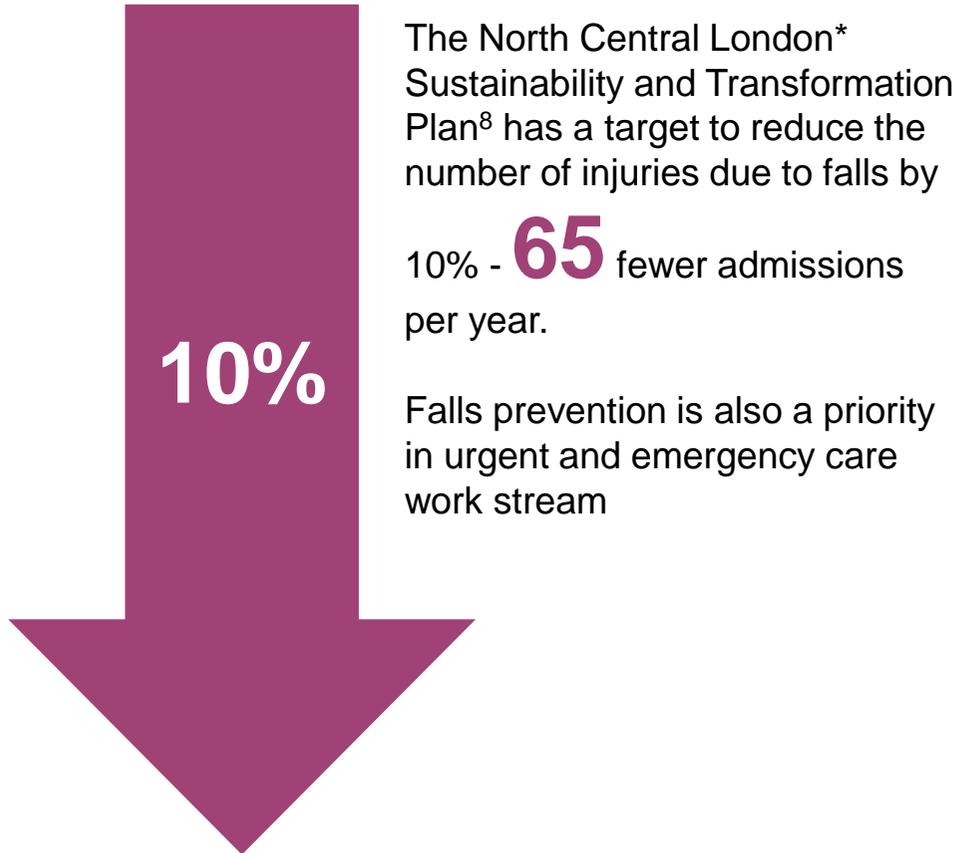
- NICE recommends that **medication review** be carried out at least annually in older people at risk of falls, with greater attention paid to polypharmacy.
- Vision **assessment and referral** has been a component of successful multifactorial falls prevention programmes, but there is no evidence for 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 AND 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:



# TARGETS & OUTCOMES



\*North Central London includes Camden, Barnet, Enfield, Haringey, and Islington

| Nice Quality Standards for falls <sup>7</sup>  |  |
|--|--|
| <ul style="list-style-type: none"> <li>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:</li> </ul> |  |
| 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.                                     |

# THE VOICE: WHAT DO LOCAL PEOPLE THINK ABOUT THIS ISSUE?

## How falling affected me<sup>13</sup>

My fall was frightening more than anything else. I didn't want to move around too much in case I fell again.

I have terrible aches and pains and falling made everything much worse.

I fell several times, but couldn't work out the cause.

My biggest worry was how to summon help if I fell out in the street.

I couldn't sleep afterwards. Most movements I found difficult and painful.

Oh, it was dreadful.

I was restricted because of escalators and had to plan my route differently.

It is incredibly embarrassing.

## The Staying Steady exercise group<sup>13</sup>

Standing straight without pain and walking with a straight back. My posture has improved.

The exercises have really improved my walking and balance. I feel my muscles have improved a lot.

I have progressed over eight weeks under the guidance of the instructors and all those who came as support. I am more than happy to recommend it to anyone who suffers from a fall. I am much more relaxed with myself.

Benefitted from watching others. Not frightened any more. Increased confidence.

It's easier getting up from the chair without holding on, my muscles are getting stronger.

I am mentally alert. Not quite so grumpy. A great feeling of appreciation, both of the instructors and of the lovely members of the group.

## Some thoughts on reablement<sup>14</sup>

All sorts of people came to see me on the day of discharge, it was confusing.

Reablement is a brilliant idea. I had no option as I wanted to return home, rather than go for rehab at St Pancras. The joy of not being in St Pancras!

My friends felt happier about me, I felt I was in good hands.

I am delighted at being at home, I wouldn't want to be in a care home with people I don't know.

The fact that it exists meant I was able to come home rather than stay in hospital. I was desperate to get home as I felt I would become worse in an institution.

This table shows gaps identified from the JSNA, and will be updated as falls prevention and response work develops.

| Key area                   | Gap  | Planned action  |
|----------------------------|--|---|
| <b>Identifying frailty</b> | <ul style="list-style-type: none"> <li>Identification of the most vulnerable patients and intervening early</li> </ul>   | <ul style="list-style-type: none"> <li>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.</li> </ul>   |
| <b>Falls prevention</b>    | <ul style="list-style-type: none"> <li>An ageing population suggests that the number of falls and injuries due to falls will increase</li> </ul>   | <ul style="list-style-type: none"> <li>Identify opportunities to enable residents to remain active and healthy, and encourage resilience in the community.</li> <li>Work with other prevention services across both the statutory and voluntary sectors to reduce the risks of falling, including reducing hazards in the home and reducing alcohol intake.</li> </ul>  |
|                            | <ul style="list-style-type: none"> <li>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</li> </ul>                        | <ul style="list-style-type: none"> <li>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).</li> <li>Explore the opportunities for maximising data sharing across organisations to inform targeted prevention initiatives.</li> </ul> |
| <b>Falls response</b>      | <ul style="list-style-type: none"> <li>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</li> </ul> | <ul style="list-style-type: none"> <li>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.</li> </ul>   |

## FURTHER INFORMATION

- 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>
- 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](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](http://www.ageuk.org.uk/documents/en-gb/campaigns/stop_falling_report_web.pdf?dtrk=true)

- References**

1. NICE CG 161 Falls in older people: assessing risk and prevention (2013)
2. GLA Population projections (Jan 2017) - ONS 2015 Mid year population estimates: <https://data.london.gov.uk/dataset/gla-population-projections-custom-age-tables/resource/4c7f998b-ae3a-4558-8ae1-b976a2b16382>
3. LAS data, GLA <https://lass.london.gov.uk/lass/> (restricted access)
4. Public Health Outcomes Framework <http://www.phoutcomes.info/>
5. Curtis M. et al. Epidemiology of Fractures in the United Kingdom 1988-2012: Variation with age, sex, geography, ethnicity and socioeconomic status. Bone. 2016 June ; 87: 19–26. doi:10.1016/j.bone.2016.03.006
6. Department of Health. Falls and fractures: Effective interventions in health and social care (2009)
7. NICE Quality Standard 86: Falls in older people (2017)

## REFERENCES

### References (continued)

8. North Central London Sustainability and Transformation Plan <https://www.camden.gov.uk/ccm/content/social-care-and-health/health-in-camden/nhs-health-plan-2016.en>
9. Camden Local Care Strategy <http://www.camdenccg.nhs.uk/ourwork/local-care.htm>
10. Census Data (2011)
11. Camden GP PH linked dataset (2015)
12. PHE Fingertips <http://fingertips.phe.org.uk/search/alcohol>
13. Gillespie LD, Robertson MC, Gillespie WJ et al. Interventions for preventing falls in older people living in the community. 2012 (9), Cochrane Database of Systematic Reviews, p. CD007146
14. Feedback from participants at the Camden Staying Group, 2011-2015
15. Feedback from people who received a reablement service from Camden, 2011-2016
16. Todd C, Skelton D. What are the main risk of falls among older people and what are the most effective interventions to prevent these falls? Copenhagen: WHO for Europe, 2004

## About Camden's JSNA

Camden Data brings together information held across different organisations into one accessible place. It provides access to evidence, intelligence and data on the current and anticipated needs of Camden'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.

This factsheet was produced by Ian Sandford, Public Health Strategist, and Ester Romeri, Intelligence and Information Analyst, and approved for publication by Sarah Addiman, Assistant Director of Public Health in April 2017

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