

Falls in older people 2015 : JSNA Factsheet

Tower Hamlets Joint Strategic Needs Assessment

UPDATED: 2015/6

revised: Annually

Executive Summary

For ease of reading and unless otherwise stated, the term “older people” is used here for people aged 65 and over.

- Falls and fall-related injuries are one of the major causes of loss of independence, disability or death in older people.
- Thirty percent of older people and 50% of people older than 80 suffer a fall at least once a year.
- According to national estimates around 4,320 older people are expected to have a fall in Tower Hamlets in 2015 (2,578 women and 1742 men).
- About 5% of falls in older people who live in the community result in a fracture or hospitalization. Between 10% and 25% of falls in nursing homes and hospitals result in a fracture.
- In 2013-14 there were 405 emergency admissions for injuries due to falls (264 women and 141 men) for older people in Tower Hamlets. This represents a standardised admission rate of 2,414 per 100,000 population which is significantly higher than rates in London (2,197) and England (2,064).
- Fracture of the hip is a serious outcome of a fall in older people with devastating impact on their quality of life. It has major implications for morbidity, mortality, hospital and social care utilisation. The incidence of hip fractures in the UK is 86,000 per year, and 95% of these are the result of a fall. The cost to the NHS is £1.7 billion a year.
- In 2013-14 there were 108 emergency admissions (77 women and 31 men) for fracture of the hip in older people in Tower Hamlets. This represents a standardised admission rate of 630 per 100,000 people which is not significantly different to rates in London (530) and in England (580). Sixty three percent (68) of the 108 admissions were for people aged 80 and over.
- Most falls in older people are the result of a complex interaction of risk factors and the risk of falling increases exponentially as the number of risk factors affecting an individual increases. Falls prevention is usually based on assessing multiple risk factors.

There is a wide range of research, policy, guidelines and quality standards providing evidence base interventions to improve primary and secondary prevention of falls and the quality of care of those suffering a hip fracture. In particular, NICE guidelines (CG161) recommend how best to approach falls including a focus on strength and balance training; multifactorial risk assessment and individualized, multifactorial intervention. NICE (QS 16) defines clinical best practice for the care of hip fractures.

A number of different services in Tower Hamlets are involved in the prevention and treatment of and rehabilitation from falls. These include, GPs, community health teams, hospital specialist physiotherapy services, specialist falls clinic, social services and voluntary organisations as LinkAge Plus. Co-ordination of these services is of a paramount importance to ensure effectiveness and avoid duplication of work.

Recommendations

Recommendations: as part of the JSNA process, we have reviewed the evidence and consulted stakeholders and the recommendations are presented in Table 16 at the end of this report.

1. What are falls? What are their implications?

1.1. Falls: the WHO defines falls as “inadvertently coming to rest on the ground, floor or other lower level, excluding intentional change in position to rest in furniture, wall or other objects.” Falls are coded as E880-E888 in the International Classification of Disease-9 (ICD-9), and as W00-W19 in ICD-10, which covers a wider range of falls including those on the same level, upper level, and other unspecified falls¹.

- Studies show that most falls do not result in serious injury, but annually approximately 5% of older people living in the community who fall experience a fracture or need hospitalisation².
- Fall-related injuries are a serious problem for older people particularly those who have underlying conditions.
- Even minor falls can have major psychological impact leading to lower levels of confidence, independence and increased isolation and depression delaying the recovery³
- Falls are a significant cause of emergency hospital admissions. The consequences can be long hospital stays, disability, substantial loss of independence, long term nursing or residential care, costly social care packages and premature death. Falling has an impact on quality of life, health and healthcare costs⁴.
- Older people have the highest risk of falling with 1 in 3 people older than 65 and 1 in 2 people older than 80 falling at least once a year⁵.
- Causes of falls in older people are complex and multi-factorial.
- Falls are the most common patient safety incidents reported in hospital trusts in England. A significant minority of these falls result in death or in severe or moderate injury⁶.
- Between 10% and 25 % of falls in nursing homes and hospitals result in a fracture⁷.
- Most fractures in older people occur in the context of increased bone fragility, osteopenia or osteoporosis⁸.

1.2. Risk Factors for Falls: falls and resulting injuries in older people occur as a result of a complex interaction of risk factors and the risk of falling increases exponentially as the number of risk factors affecting an individual increases⁹.

NICE¹⁰ identified the most predictive risk factors for falls in older people who live in the community and in those cared for in extended care settings reported (table). These risks should be considered by clinicians responsible for assessing individuals at risk of falling:

<i>Community-dwelling older people</i>	<i>People cared for in extended care settings</i>
<i>Falls history</i>	<i>Falls history</i>
<i>Fear of falling</i>	<i>Gait and/or Balance deficit</i>
<i>Gait and/or balance deficit</i>	<i>Visual impairment</i>
<i>Mobility impairment</i>	<i>Cognitive impairment</i>
<i>Visual impairment</i>	
<i>Cognitive impairment- Dementia</i>	
<i>Urinary incontinence</i>	
<i>Home hazards</i>	

- ***Falls history and fear of falling:*** individuals who have had a fall are three times more likely to suffer another fall. Recurrent falls in an individual are usually due to the same underlying intrinsic factor. However, they may be an indication of the deterioration of a current disease (eg: Dementia, Parkinson) or of the development of a new problem (eg: infection, dehydration)¹¹. Besides, people who have fallen in the past often have increased fear of falling and decreased mobility and balance due to the associated lack of physical activity. Individuals who have suffered a fall have a 66% chance of having a subsequent fall in the

following year compared to those who have not had a fall¹²

- **Gait deficit, balance deficit and mobility impairment:** gait and balance disorders are common affecting around 20% to 50% of older people¹³. Decline in strength, endurance and muscle power and any lower extremity disability increases the risk of falls. Muscle weakness and mobility impairment is very common among older people and it is mostly due to underlying disease (eg: arthritis, stroke, Parkinson disease) or inactivity¹⁴.
- **Visual impairment:** increases the risk of falling around 2.5 times¹⁵. Vision is fundamental to co-ordinating our movement – balance and postural stability are directly affected by vision. In addition, vision is fundamental to adapting gait to enable safe travel through the environment, avoiding obstacles and negotiating steps and stairs¹⁶. Refractive error, cataract, glaucoma, macular degeneration, visual field loss and the eye complications due to diabetes all contribute to the risk of falls¹⁷.
- **Dementia and Depression** are both independently associated with a twofold increase in the risk of falls¹⁸.

Other intrinsic risk factors:

- **Age:** the incidence of falls exponentially increases with age due to the age-related biological changes. People aged 65 and older have the highest risk of falling, with 30% of people older than 65 and 50% of people older than 80 falling at least once a year¹⁹.
- **Gender:** Incidence rates of falls are 2.3 times higher in women than in men. Women are also more likely to suffer osteoporosis-related fractures as a consequence of a fall due to hormonal factors. However, fall-related mortality disproportionately affects men²⁰.
- **Ethnicity:** there is not robust evidence to suggest that there are differences in risks of falls in different ethnic groups²¹.
- Use of multiple medication (three to four medications)
- Use of Anti-arrhythmic and Psychotropic medications
- Medical conditions: orthostatic hypotension (postural hypotension or head rush or dizzy spell), syncope or sudden loss of consciousness, depression, stroke and arthritis²².
- Foot problems: is one of the major cause of walking difficulties in older people. Bunions, toe deformities, ulcers, deformed nails and general painful feet increase balance difficulties and functional ability and therefore, increase the risk of trips and falls²³.
- Vitamin D deficiency is common in older people in residential care and may lead to abnormal gait, muscle weakness, osteomalacia and osteoporosis. However, it is not clear if Vitamin D deficiency increases the risk of a fall²⁴.

Extrinsic risk factors: The Kings Fund identified that more than one in five homes poses risks to the people living in them, in particular of falls²⁵

- Home hazards: poor lighting, tripping hazards such as clutter, loose rugs and mats, carpet folds.²⁶
- Inappropriate walking aids or assistive devices.
- Street hazards: sloping, slippery, obstructed or uneven pathways, steps, landings, verandas, patios or entrances slippery when wet²⁷.

1.3. Costs of Falls:

- Falls account for 10 – 25% of ambulance call-outs for older people, costing £115 per call-out²⁸.
- Among older people, falls and fractures account for 4 million hospital bed days each year in England, at a cost of £2 billion²⁹.
- Falls in hospitals are the most common patient safety incidents reported in hospital Trusts in England and their treatment alone has been estimated to cost the NHS £15 million per year³⁰.
- A patient-level linked data study in Torbay showed that over the 12 months that followed admission for falls, hospital, community and social care costs were 70% higher than in the 12 months before the fall. The greatest increase was in community care costs (160%) compared to a 37% increase in social care and

35% in acute hospital care costs³¹.

- The cost of falls to the NHS in Tower Hamlets in 2010-11 was estimated to be £1,943,000 per year. Forty one percent of the cost were thought to be paid by social services.

1.4. Osteoporosis and Fragility Fractures: osteoporosis is the commonest bone disease and is characterised by low bone mass and deterioration of bone tissue which if untreated, it leads to an increase in bone fragility and susceptibility to fragility fractures³².

Fragility fracture is a fracture sustained as the result of a force equivalent to a fall from a standing height or less. Fragility fractures occur most commonly in the spine (vertebrae), hip (proximal femur) and wrist (distal radius). They may also occur in the arm (humerus), pelvis, ribs and other bones.

Fragility fractures are all associated with substantial disability, pain and reduced quality of life but hip fractures have more severe consequences³³.

Osteoporosis is usually an age-related disease. It can affect both sexes, but women, in particular older white women, are at greater risk because the decrease in oestrogen production after the menopause accelerates bone loss to a variable degree. After the menopause, the prevalence of osteoporosis increases markedly with age, from approximately 2% at 50 years rising to more than 25% at 80 years. As the longevity of the population increases, so will the incidence of osteoporosis and fragility fracture³⁴.

Osteoporosis is often asymptomatic until the first fracture occurs and often remains undiagnosed. Patients who suffer one fragility fracture are at a very high risk of sustaining another fracture³⁵

Although bone density is a major factor for fragility fracture, there are other clinical factors that may affect the risk of fragility fracture (box1)³⁶ :

Box1. Clinical factors that may affect the risk of fragility fracture

Age Sex Low body mass index ($\leq 19\text{kg/m}^2$) Previous fragility fracture, particularly of the hip, wrist and spine including morphometric vertebral fracture Parental history of hip fracture Current glucocorticoid treatment (any dose, by mouth for 3 months or more) Current smoking Alcohol intake of 3 or more units daily Falls	<u>Secondary causes of osteoporosis include:</u> <ul style="list-style-type: none">• Rheumatoid arthritis• Untreated hypogonadism in men and women• Prolonged immobility• Organ transplantation• Type I diabetes• Hyperthyroidism• Gastrointestinal disease• Chronic liver disease• Chronic obstructive pulmonary disease
--	---

Care home residents are at high risk of fragility fracture probably due to increased age, frailty and multiple comorbidities, which increase fracture risk. There is also evidence that care home residents have lower body mineral density, with 70% assessed as having osteoporosis using densitometry criteria alone³⁷.

The WHO diagnostic criteria for osteoporosis is based on the measure of bone mineral density (BMD) at the lumbar spine and proximal femur using DXA scan and it is expressed as a T-score of < -2.5 SD or below³⁸.

The FRAX and QFracture, tools are used in the UK to predict the probability of a fracture over a period of time. The T-score is one of the risk factors used in the Fracture Risk Assessment Tool (FRAX) to identify people at high, 10 year risk of fracture and who are likely to benefit from pharmacological treatment³⁹.

There are a variety of NICE approved treatments for the prevention^{40 41} of fragility fractures in people who are at

risk, or to prevent further fractures in those who have already had one or more fragility fractures. However, identifying who will benefit from preventative treatment is imprecise. Between 20% and 70% reductions of the risk of re-fracture have been identified depending on fracture site. However, most patients who should be on treatment are not offered it because they are not identified, investigated and monitored⁴².

1.5. Fracture of the Hip: hip fracture is a serious outcome of a fall in people over 65 years with devastating impact on their quality of life due to loss of function and independence. It has major implications for morbidity, mortality, hospital and social care utilisation.

Hip fracture risk is multifactorial. Many factors, in addition to low bone mineral density, contribute independently to the risk of fracture, including age, history of maternal hip fracture, low body weight, height, poor health, previous hyperthyroidism, poor depth perception, tachycardia, previous fracture, and benzodiazepine use⁴³.

The existence of impaired balance can predict about 40% of all hip fractures⁴⁴ whereas osteoporosis predicts just around 27%⁴⁵.

People living in residential and nursing homes are at three times the risk of those in the general population and around a quarter of patients with hip fracture are admitted to institutional care⁴⁶.

- The incidence of hip fractures in the UK is 86,000 per year, and 95% of these are the result of a fall. The cost to the NHS is £1.7 billion a year⁴⁷. Current projections suggest that, in the UK, hip fracture incidence will rise.
- Only 1 in 3 sufferers of a hip fracture return to their former levels of independence and 1 in 3 ends up moving to long-term care (resulting in social care costs). Hip fractures are almost as common and costly as strokes and the incidence is rising⁴⁸.
- About 10% of people with a hip fracture die within 1 month of admission and about a third within 12 months. Most of the deaths are due to associated conditions and not to the fracture itself, reflecting the high prevalence of comorbidity⁴⁹.
- Around 25% of people with hip fracture are admitted from institutions and around 10 to 20% of those admitted from home will move to institutional care⁵⁰.
- People living in the most deprived areas are more likely to have a hip fracture and a worse outcome than those in the least deprived areas⁵¹.

2. What is the policy context?

There are a number of public policy documents already in place which advocate comprehensive falls and fracture prevention services. They are as follows:

International:

WHO Regional Committee for Europe, Strategy and action plan for healthy ageing in Europe 2012-2020⁵²: this document proposes strategic action areas and a set of interventions that will be in synergy with Health 2020, the new European policy framework supporting action across government and society for health and well-being. Falls prevention is identified as a key priority in this strategy.

WHO Global Report on Falls Prevention in Older Age⁵³: the report describes the magnitude of falls, a framework for prevention and the challenges faced to tackle this problem from an international and regional perspective. It also includes examples of effective interventions. It is the product of the conclusions reached and recommendations made based on a series of background papers that were prepared by worldwide recognised experts.

National:

NICE quality standard [QS86], 2015. Falls in older people: assessment after a fall and preventing further falls⁵⁴

Active for Life: Guidelines - Promoting physical activity with older people; Health Education Authority, 2014⁵⁵ : this guide aims to assist a range of people at a local level to promote physical activity among older people.

NICE clinical Guidelines 161: Falls- Assessment and prevention of falls in older people (2013)⁵⁶: this guideline updates and replaces NICE clinical guideline 21. It provides recommendations for the assessment and prevention of falls in older people and the key priorities for implementation. It is an extension to the remit of NICE clinical guideline 21 (2004) to include assessing and preventing falls in older people during a hospital stay (inpatients).

The Kings Fund Improving the Public's Health- A resource for Local authorities, 2013⁵⁷: The "Warmer and Safer homes" chapter states that more than one in five homes poses risks to the people living in them, in particular of falls. The report provides a number of recommendations to local authorities on how to reduce the risk of falls amongst older people.

NICE Quality Standard for Hip Fracture (QS16)⁵⁸: defines clinical best practice for the care of hip fractures. It covers the management and secondary prevention of fragility fracture of the hip or fracture of the hip due to osteoporosis or osteopenia hip fracture in adults (18 years and older).

Age UK Report to the Minister of State for Care Services, Breaking Through: Building Better Falls and Fracture Services in England, 2012⁵⁹: this report summarises the views of stakeholders who took part in a national falls and fractures summit in London on 4 October 2011. It highlights the cause of unacceptable variations in the quality of falls and fracture services in England and provides recommendations to improve the services.

Start Active - A report on physical activity for health from the four home countries' Chief Medical Officers, 2011⁶⁰: these guidelines were issued by the four Chief Medical Officers (CMOs) of England, Scotland, Wales and Northern Ireland. They provide evidence on how regular physical activity can reduce the risk of many chronic conditions including musculoskeletal conditions and can improve quality of life. The report emphasises for the first time the importance of physical activity for people of all ages and provides physical activity guidelines for older adults.

Department of Health- The prevention package for older people, 2009⁶¹: this was designed to support the NHS and Local Authorities (social care services) in prioritising and effectively commissioning services that support the

health, well-being and independence of older people. The report “*Falls and Fractures. Effective interventions in Health and social care*”⁶² was one of those included in this package and provides recommendations on the setting up of the Fracture Liaison Service.

National Service Framework for Older People, 2001⁶³ : this document presents the rationale for the setting up of eight standards for health and social care to help older people to stay as healthy, active and independent as possible. Standard 6 aims to reduce the number of falls which result in serious injury and to ensure effective treatment and rehabilitation for those who have fallen. It recommends that:

- The NHS works in partnership with the local authority to take action to prevent falls and reduce resultant fractures or other injuries in older people.
- Older people who have fallen receive effective treatment and rehabilitation and (with their carers) receive advice on prevention through a specialised falls service.

The following three Outcomes Frameworks documents are not guidelines or evidence. They specify the outcomes the three different Agencies want to achieve and the indicators that will help to measure the success of our strategies locally, and enable us to compare ourselves with other areas.

Public Health Outcomes Framework (PHOF)⁶⁴: provides indicators on hospital admissions due to fall injuries and admissions for hip fractures in the over 65s'. These indicators are measures that reflect the success of services in preventing falls and will give an indication of how the NHS, public health and social care are working together to tackle these issues locally.

NHS Outcomes Framework⁶⁵: Domain 3 indicators 3.5 and 3.56 refer to the importance of improving recovery from fragility fracture and helping older people to recover their independence after illness or injury respectively.

Adult Social Care Outcomes Framework (ASCOF)⁶⁶: although there are no specific outcomes indicators for falls or fractures, the incidence of falls in the local population will have major implications for Domain 2 “delaying and reducing the need for care and support” given that falls in those aged 65 and above is a major risk for increased need of continuing social care at home and admission to care homes. Also, indicators 2B (1) “Older people at home 91 days after leaving hospital into reablement “ and 2B(2) “Older people receiving reablement services after leaving hospital” measure how successful are the reablement services that people receive until they can look after themselves

3. What are the effective interventions?

Most accidental falls are associated with more than one risk factor which can potentially be modified. Evidence shows that falls prevention through multi-factorial interventions can increase older people’s ability to continue to live safely and independently providing personal and social benefits for the individual and community⁶⁷. These interventions have been identified as cost-effective for the NHS and Local Authority due to a reduction in hospital and nursing home admissions and better physical function⁶⁸.

What follows are evidence based interventions for addressing falls in older people from key national guidelines. They are divided in three groups:

- 3.1 Interventions to improve physical health in the general older population
- 3.2 Interventions to prevent falls
- 3.3 Interventions following a fall to prevent a second one.

3.1 Interventions to improve physical health in older people: Being active can play an important part in both positive ageing and reducing frailty, helping to reduce the risk of falls. It can help older people maintain their

health, well-being, independence and social participation.

The Department of Health⁶⁹ has given recommendations on the amount and intensity of the daily physical activity for older people in order to maintain or improve their health and prevent falls. These recommendations can be applied to disabled older adults emphasising that they need to be adjusted for each individual based on that person's exercise capacity and any special health or risk.

The Academy of Medical Royal Colleagues⁷⁰ reports on different studies which show that exercise programmes are highly effective in older adults:

- Physical activity programmes for older adults that emphasise balance training, coordination and muscle strengthening safely significantly reduce the risk of falls by 30-50%.
- Exercise also maintains muscle strength and increases bone mineral density so fractures are far less likely even after a fall.
- Being physically active reduces the risk of later hip fracture by 35-68%.

Age UK⁷¹ report on the evidence for primary and secondary prevention of fall programmes, identified Taichi, dancing and gardening as activities which reduce the risk of falls. They are appropriate for younger-older adults who have not experienced a fall (primary prevention).

3.2. Interventions to prevent falls:

3.2.1 The 2001 National Service Framework (NSF) for Older People⁷²: the NSF for older people provided key recommendations for falls prevention, care and treatment and rehabilitation following a fall. The Department of Health Implementation Framework stated the **five components of an integrated Falls Service⁷³**:

- To extend council, PCT and voluntary sector initiatives to improve exercise, balance, medicines management, environment and footwear for older people to reduce the risk of falling.
- To improve emergency response to falls, with assessment of people who have fallen before their transfer to an emergency department and good intermediate care services where hospital assessment is not required.
- Falls assessment for everyone with recurrent falls or one fall with serious consequences.
- To increase capacity in osteoporosis services in DXA scanning for bone density as a guide to treatment.
- To improve rehabilitation services for people who have lost functional ability or confidence after a fall.

These recommendations remain applicable and since April 2013 are the responsibility of CCGs.

3.2.2 Kings Fund recommendations to local authorities on how to reduce the risk of falls among older people⁷⁴:

- To develop specific strategies and programmes to reduce falls, working with the local NHS, housing and social care.
- To undertake risk assessment and work with home improvement agencies to provide support for older people, people with disabilities and those on low incomes.
- To develop handy person schemes to support vulnerable people to improve the safety of their homes and link this with hospital discharge schemes to help prevent further accidents.

3.2.3 NICE CG161⁷⁵ provides evidence and recommendations on how to prevent falls in older people in the community and during hospital stay. It also provides a Falls Care Pathway (Appendix 1).

Preventing falls in older people:

a) Risk **identification** by:

- Routine questioning by healthcare professionals about whether an older person has fallen in the past year including frequency, context and characteristics of the fall.
- Observation for balance and gait deficits and referral as appropriate for strength and balance interventions for older people reporting a fall or demonstrate abnormalities of gait and/or

balance.

- b) **Multi-factorial risk assessment** for those presenting for medical attention because of a fall, recurrent falls in the past year or demonstrate abnormalities of gait and/or balance. The assessment has to be carried out by health care professionals with appropriate skills and experience in the setting of a specialist falls service. The multifactorial assessment may include: falls history, assessment of gait, balance, mobility and muscle weakness, assessment of osteoporosis risk, fear of falling, visual impairment, cognitive impairment and neurological examination, urinary incontinence, home hazards, and cardiovascular examination and medication review.
- c) Multifactorial **intervention**: Older people with recurrent falls or assessed as being at increased risk of falling should be considered for an individualised multifactorial intervention to include:
- Strength and balance training individually prescribed and monitored by appropriately trained professional.
 - Home hazard assessment as part of discharge planning, to include follow-up and intervention.
 - Vision assessment and referral.
 - Medication review with modification or withdrawal, in particular, psychotropic medications.
 - Cardiac pacing should be considered for older people with cardio inhibitory carotid sinus hypersensitivity, who have experienced unexplained falls.
 - Promote the participation of older people in flexible falls prevention programmes (addressing any potential barriers).
 - Provision of accessible (orally and in writing) information on falls and falls prevention to older people at risk of falling and their carers.
 - Maintenance of basic competence in falls assessment and prevention for all healthcare professionals.
- d) **Following treatment for an injurious fall**, patients should be offered a multidisciplinary assessment to identify and address future risks.

Interventions not recommended by NICE because there is insufficient or conflicting evidence supporting them:

- Brisk walking.
- Low intensity exercise combined with incontinence programmes.
- Untargeted group exercise. Although exercise in groups should not be discouraged as a means of health promotion, there is little evidence that exercise interventions that are not individually prescribed for older people living in the community are effective in falls prevention.
- Cognitive/behavioural interventions.
- Referral for correction of visual impairment: there is lack of evidence that referral for correction of vision as a single intervention for older people living in the community is effective in reducing the number of people falling. However, vision assessment and referral is a component of successful multifactorial falls prevention programmes.
- Vitamin D: vitamin D deficiency and insufficiency are common among older people and have a negative impact in muscle strength and possibly neuromuscular function. The use of combined calcium and vitamin D3 supplementation has been found to reduce fracture rates in older people in residential/nursing homes and sheltered accommodation. Although there is emerging evidence that correction of vitamin D deficiency or insufficiency may reduce the propensity for falling, there is uncertainty about the relative contribution to fracture reduction via this mechanism (as opposed to bone mass) and about the dose and route of administration required. No firm recommendation can therefore currently be made on its use for this indication.
- Hip protectors: no evidence for the effectiveness of hip protectors to prevent fractures when offered to older people living in extended care settings or in their own homes.

Preventing falls in older people during hospital stay:

- Fall risk prediction tools to predict inpatients' risk of falling in hospital are not recommended
- All patients aged 65 years or older and patients aged 50 to 64 years (if judged by a clinician to be at risk of falling) should be regarded as being at risk of falling in hospital and their care should ensure: identification of environmental risk factors; multifactorial assessment and multifactorial intervention if appropriate; provision of information and information sharing across services (NICE guideline 138).

3.3 Interventions following a fall to prevent further falls (secondary prevention).

3.3.1 NICE QS 86⁷⁶ covers assessment **after a fall and preventing further falls** in older people living in the community and during a hospital stay. It specifies the six standards which should be considered when planning and delivering care services and the quality measures (structure, process and outcome) required to provide evidence of meeting the standards. The six standards are:

1. Older people who present for medical attention (in a variety of settings and to different health professionals) because of a fall have a multifactorial falls risk assessment by a health care professional with appropriate skills and experience
2. Older people living in the community who have a known history of recurrent falls are referred for a strength and balance training programme individually prescribed and monitored by an appropriate trained professional
3. Older people who are admitted to hospital after having a fall are offered a home hazard assessment and safety interventions.
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.

3.3.2 Assessment of Osteoporosis : NICE⁷⁷ provides guidance on the selection and use of risk assessment tools in the care of people who may be at risk of fragility fractures

They recommend targeting risk assessment of fracture risk in:

- all women aged 65 years and over and all men aged 75 years and over
- women aged under 65 years and men aged under 75 years in the presence of risk factors, for example:
 - previous fragility fracture
 - current use or frequent recent use of oral or systemic glucocorticoids
 - history of falls
 - family history of hip fracture
 - other causes of secondary osteoporosis
 - low body mass index (BMI) (less than 18.5 kg/m²)
 - smoking
 - alcohol intake of more than 14 units per week for women and more than 21 units per week for men.

It also provided recommendations on therapies and interventions for the primary prevention of osteoporotic fragility fractures in postmenopausal women⁷⁸

3.3.3 Recommendations on Best Practice in Hip Fracture Care: the British Orthopaedic Association Blue Book on Fragility Fractures⁷⁹ summarises best practice in the care and secondary prevention of hip fractures. It identifies the key elements in good hip fracture care and six standards for hip fracture care. Compliance with these standards is monitored through participation in the National Hip Fracture Database (NHFD)⁸⁰. It is important to note standard 5 and 6 regarding secondary prevention. These include assessment of the need for bone protection treatment and the offer of multidisciplinary assessment and intervention to prevent further falls.

They also recommend that an orthogeriatrician – a care of the elderly physician with an interest in fracture care – is fully integrated in the fracture service to provide specialist medical care and early rehabilitation. This can minimise delays to surgery caused by medical problems and can reduce adverse events.

3.3.4 Responding to a first fracture and preventing the second: The Department of Health guide on “Falls and Fractures”⁸¹ recommended the implementation of Fracture Liaison Services (FLSs) in all units to ensure that identification, assessment and treatment of fracture risk are consistently delivered to all patients with fragility fractures.

The FLS model is usually delivered by a nurse specialist supported by a lead clinician. The aim is to identify patients with new fragility fracture who are either admitted to the orthopedic inpatient ward or who are managed as outpatients through the fracture clinic⁸².

Estimates show that in England, national FLS coverage should prevent 31,000 fractures including 13,000 hip fractures over 5 years in people aged over 50 years. This leads to a 5-year saving of at least £156.2 million in NHS acute care costs, not including social care or community costs or benefits to patients, their families and carers.

3.3.5 Responding to a first fracture and preventing the second: The Department of Health guide on “Falls and Fractures”⁸³ recommended the implementation of Fracture Liaison Services (FLSs) in all units to ensure that identification, investigation, initiation of treatment and monitoring are consistently delivered to all patients with fragility fractures.

The FLS model is usually delivered by a nurse specialist supported by a lead clinician in osteoporosis. Patients identified by the nurse with new fragility fracture who are either admitted to the orthopedic inpatient ward or who are managed as outpatients through the fracture clinic⁸⁴.

Estimates show that in England, national FLS coverage should prevent 31,000 fractures including 13,000 hip fractures over 5 years in people aged over 50 years. This leads to a 5-year saving of at least £156.2 million in NHS acute care costs, not including social care or community costs or benefits to patients, their families and carers. However, in 2010 only 37% of health settings in England, Wales and Northern Ireland had an FLS, while Scotland had almost universal access. Besides, there is great variability in terms of capacity and scope of the FLSs⁸⁵.

4. What is the local picture?

4.1 Older People in Tower Hamlets by age and gender groups: In 2015, there were 16,400 older people (5.80%) in Tower Hamlets (Table 1). Older people make up a relatively small proportion of the Tower Hamlets overall population in comparison to London (11.51%) and England (17.83%).

Population projections to 2020 show that although the number of older people will increase to 18,100, the proportion they represent will decrease slightly to 5.81%. However, by 2030, these figures will increase to 24,200 older people representing 6.84% of the TH population. Therefore, by 2030, Tower Hamlets older people will still represent a small proportion of the total population when compared to London (13.95%) and England (22.04%) (Table 1).

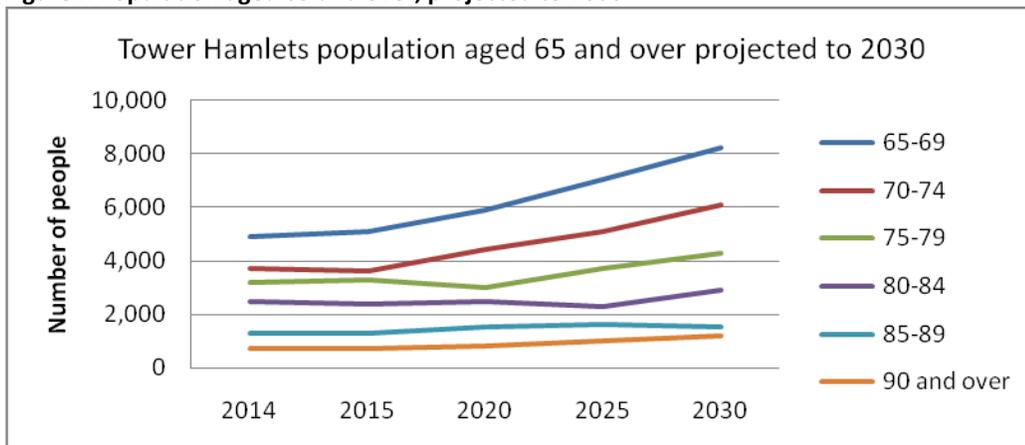
Figure 1 shows the estimated Tower Hamlets population aged 65 and over projected to 2030 by age groups.

Table 1. Tower Hamlets (TH) total population, population aged 65 and over and population aged 85 and over as a number and percentage of the total population, projected to 2030

Region/Local Authority	2014	2015	2020	2025	2030
TH Total population	276,400	282,700	311,500	334,100	353,600
TH Population aged 65 and over	16,300	16,400	18,100	20,700	24,200
TH Population aged 85 and over	1,900	2,000	2,300	2,600	2,800
TH population aged 85 and over as a proportion of the total population	0.69%	0.71%	0.74%	0.78%	0.79%
TH population aged 65 and over as a proportion of the total population	5.90%	5.80%	5.81%	6.20%	6.84%
London population aged 65 and over as a proportion of the total population	11.44%	11.51%	11.86%	12.69%	13.95%
England population aged 65 and over as a proportion of the total population	17.58%	17.83%	18.86%	20.21%	22.04%

Source: <http://www.poppi.org.uk/index.php?pageNo=315&arealD=8648&loc=8648> accessed 28 July 2014

Figure1. Population aged 65 and over, projected to 2030



Source: <http://www.poppi.org.uk/index.php?pageNo=314&arealD=8362&loc=8362> accessed 28 July 2014

Table 2 shows the estimated Tower Hamlets population aged 65 and over by age group and gender as a percentage of the total 65 and over population projected to 2030. In 2015, 54.3% of older people in Tower Hamlets were women, slightly lower than England (54.7%) and London (55.5%). From 2020 onwards, the percentage of women aged 65 and over is estimated to decrease slightly in Tower Hamlets (52.5% in 2030) when compared to men (48.3%). Similar decreasing pattern is estimated for England.

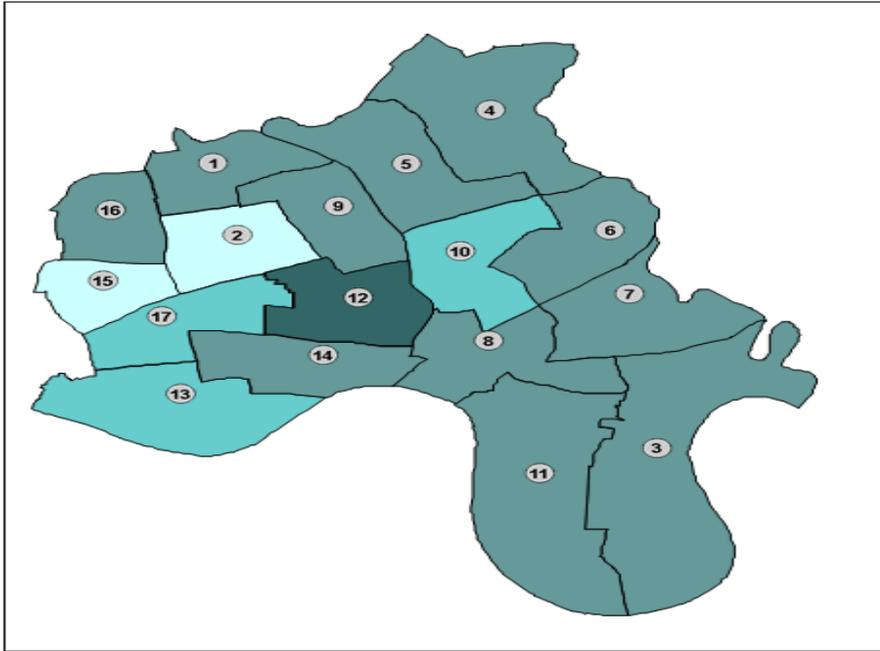
Table 2 -Tower Hamlets, London and England populations aged 65 and over by age group and gender as a percentage of the total 65 and over population projected to 2030. Numbers are percentages.

Age group and sex	2014	2015	2020	2025	2030
TH males 65-74	25.15	25.00	26.52	28.02	29.75
TH males 75-84	16.56	15.85	13.26	12.56	13.22
TH males 85 and over	4.91	4.88	5.52	5.80	5.37
TH males 65 and over	46.63	45.73	45.30	46.38	48.35
London males aged 65 and over	44.38	44.48	44.87	45.33	45.60
England males aged 65 and over	45.17	45.31	45.84	46.20	46.40
TH females aged 65-74	27.61	28.66	30.94	30.34	29.34
TH females aged 75-84	19.02	18.29	16.57	16.43	16.94
TH females aged 85 and over	7.36	7.32	7.18	6.76	6.20
TH females 65 and over	53.99	54.27	54.70	53.62	52.48
London females aged 65 and over	55.61	55.52	55.31	54.67	54.40
England females aged 65 and over	54.83	54.69	54.16	53.80	53.60

Source: <http://www.poppi.org.uk/index.php?pageNo=315&areaID=8648&loc=8648> accessed 28 July 2014

Figure 2 show the geographical distribution of the Tower Hamlets older population by electoral ward. The area with the highest concentration of older people is Bow East with 1,144 older people and the area with the lowest concentration is Spitalfields and Banglatown with only 627 older people. Figure 2 also shows the geographical distribution of Linkage Plus services commissioned by the Local Authority from the voluntary sector, whose remit includes falls prevention.

Figure 2. Geographical distribution of the Tower Hamlets population aged 65 and over by electoral ward.



Ward	Area population range		High Occurrences
	Low (\geq)	($<$)	
1	627	800	(2)
2	800	1,000	(3)
3	1,000	1,200	(11)
4	1,200	1,402	(1)

Source: GLA 2013 Round of Demographic Projections - Trend-based ward projections for 2014 published 6 March 2014 and TH Public Health Intelligence Team.

1 Bethnal Green North, 2 Bethnal Green South, 3 Blackwall and Cubitt Town, 4 Bow East, 5 Bow West, 6 Bromley-by-Bow, 7 East India and Lansbury, 8 Limehouse, 9 Mile End and Globe Town, 10 Mile End East, 11 Millwall, 12 St. Dunstan's and Stepney Green, 13 St. Katharine's and Wapping, 14 Shadwell, 15 Spitalfields and Banglatown, 16 Weavers, 17 Whitechapel.

4.2 Tower Hamlets population aged 65 and over and physical inactivity: older adults have very low levels of physical activity with only 7% achieving the recommended minimum frequency of five times a week⁸⁶.

There is no data on the number of older people in Tower Hamlets who do some kind of physical activity. Sport England Local Sport Profile⁸⁷ for Tower Hamlets does not provide any figures on the number of people 55 years old and older who participate in sport (at least once a week) due to the small sample size.

4.3 Visual impairment: Ageing increases the likelihood of developing a number of different conditions which cause visual impairment: age related macular degeneration, glaucoma, diabetic retinopathy, cataracts, cancer (eye, nasal, sinus, nasopharynx and brain tumours), neurological conditions, hypertension and stroke. The number of older people registered in Tower Hamlets as blind or partially blind is 325⁸⁸. However, not everyone with a visual impairment is registered as sight impaired. The estimated number of older people in Tower Hamlets with a moderate or severe visual impairment for 2015 is 1,442. This figure is estimated to increase to 1,544 in 2020 and to 2,029 by 2030⁸⁹.

The major causes of preventable sight loss and the most common eye conditions experience by people that are visually impaired in Tower Hamlets are early stages aged-related macular degeneration (AMD) followed by diabetic retinopathy, glaucoma and cataracts Table 6 shows the estimates of the number of people who live in the Tower Hamlets with different visual impairment conditions as presented in the Tower Hamlets Vision Plan⁹⁰. Although the figures include all ages, these eye conditions appear predominantly in older people

Table 6- Estimates of the number of people in Tower Hamlets with sight impairing eye conditions

Condition	Number of people
Age Related Macular Degeneration (AMD) late stagewet/dry	1652
Cataracts	897
Diabetic Retinopathy (background)	2950
Glaucoma	1779

4.4 Cognitive impairment/Dementia: Older people with cognitive impairment or dementia are at increased risk of falls. Moreover, people with dementia are at increased risk of fractures⁹¹. In January 2015, 827 GP registered patients in Tower Hamlets had a diagnosis of dementia. However, 1,158 people are estimated to suffer from the condition. The estimated national prevalence of dementia is 0.41% compared to 0.39 % in Tower Hamlets⁹².

4.5 People in Tower Hamlets expected to fall: According to the Health Survey for England (2005) the national incidence of falls varies across age groups and gender. The percentage of people expected to have a fall increases with age, and more women than men are expected to have a fall, except in the population aged 85 and over, of whom the same percentage (43%) of both men and women are expected to have a fall (Table 7).

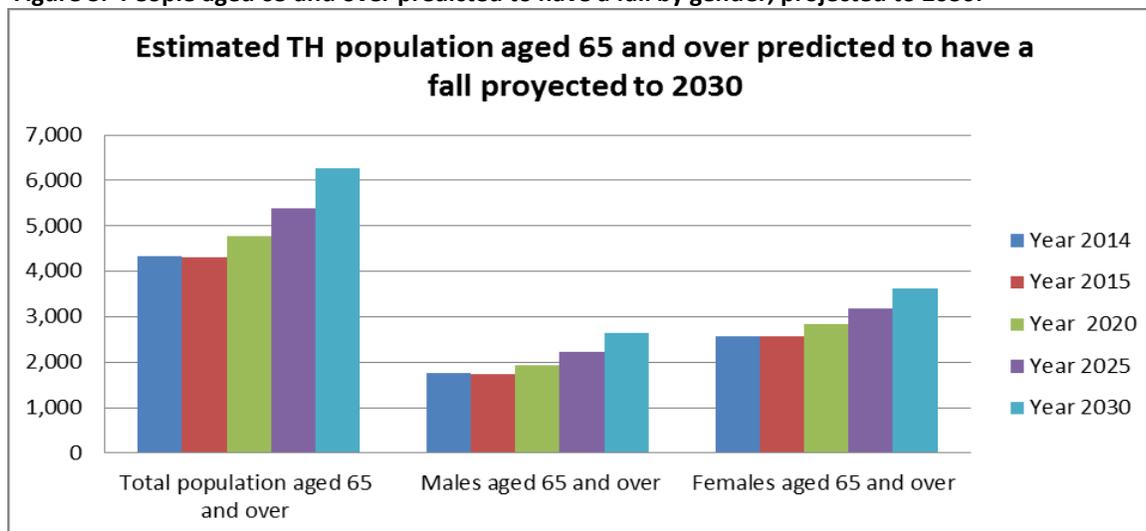
Table 7. Percentage of males and females expected to have fallen in the last 12 months in England

Age range	% males	% females
65-69	18	23
70-74	20	27
75-79	19	27
80-84	31	34
85+	43	43

Source: <http://www.poppi.org.uk/index.php?pageNo=338&areaID=8648&loc=8648> accessed 7 July 2014

According to national estimates⁹³, around 4,320 (26%) older people were expected to have a fall at least once in Tower Hamlets in 2015. Of these 60% are women (2,578) (Figure 3). The number of older people expected to have a fall in Tower Hamlets is predicted to increase by around 446 over the next five years to 4,766 (26%) in 2020. By 2030 it is estimated that the total figure will increase to 6,264 (26%). These increases are due to the estimated increase on the TH population. The gender differential is partly due to higher national prevalence rates in women aged 65 to 84 years and also partly due to higher numbers of older women than men in the borough.

Figure 3. People aged 65 and over predicted to have a fall by gender, projected to 2030.



4.6 Hospital admissions due to falls: Falls are the largest cause of emergency hospital admissions for older people and a major precipitant of people moving from their own home to long-term nursing or residential care. In 2013-14, there were 405 emergency admissions for injuries due to falls in older people living in Tower Hamlets. Sixty five per cent (264) of those falls were in females and 141 (35%) were in males. This represents an overall age-sex standardised rate of 2,414 per 100,000 population, which was significantly worse than the rate for London (2,197) and England (2,064) (Table 9 and Figure 3). One hundred and fifty four (38%) out of the 405 admissions were for those aged 65-79 and 251 (62%) were for those aged 80 and over. Although the rate of admission for the 80 and over years old in Tower Hamlets appears to be higher than for London and England, that difference is not statistically significant, that is, it is due to chance.

Table 9. Age-sex standardised rates (numbers) of emergency admissions for injuries due to falls per 100,000 population, 2013-14

Age group and gender	TH (numbers)	London	England	Significant difference
Total population aged 65 and over	2414 (405)	2197	2064	yes
All males 65 and over	1,993 (141)	1,829	1,661	yes
All females 65 and over	2,835 (264)	2,565	2,467	yes
People aged 65-79	1,263 (154)	1,098	989	yes
Males aged 65-79	1,150 (67)	964	799	yes
Females aged 65-79	1,376 (87)	1,231	1,180	no
People aged 80 and over	5,753 (251)	5,385	5,182	no
Males aged 80 and over	4,440 (74)	4,337	4,162	no
Females aged 80 and over	7,066 (177)	6,432	6,201	no

Source; <http://www.phoutcomes.info/public-health-outcomes-framework#gid/1000042/pat/6/ati/102/page/0/par/E12000007/are/E09000030/iid/22401/age/27/sex/4>. Accessed 7 May 2015

Figure 4. Age-sex standardised rates of admissions in people aged 65 and over per 100,000 population. Tower Hamlets, London and England 2013-14

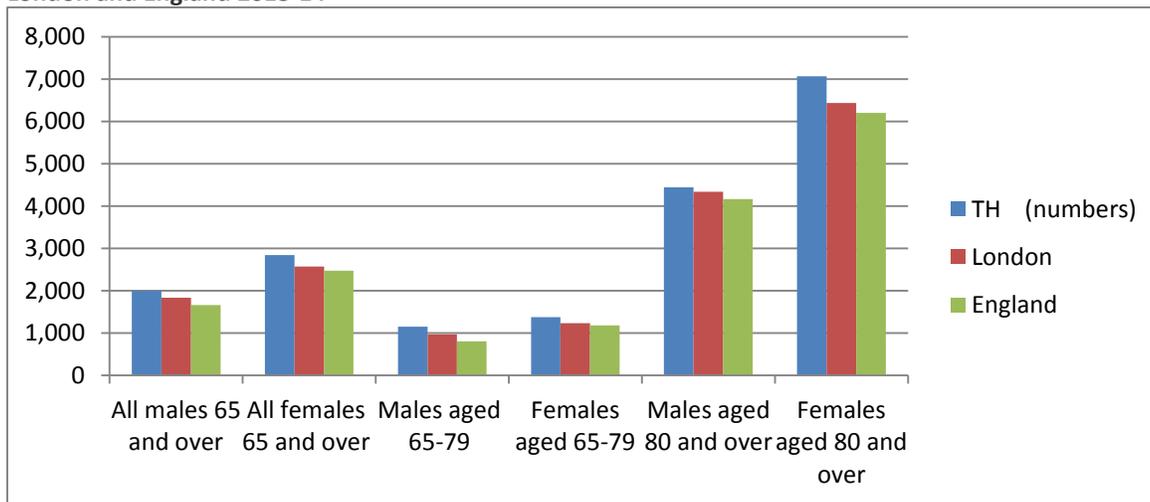


Figure based on data from <http://www.phoutcomes.info/public-health-outcomes-framework#gid/1000042/pat/6/ati/102/page/4/par/E12000007/are/E09000030/iid/22401/age/27/sex/4>. Accessed 7 May 2015

It should be noted however, that these hospital admissions are a proxy for the prevalence of falls injuries; these

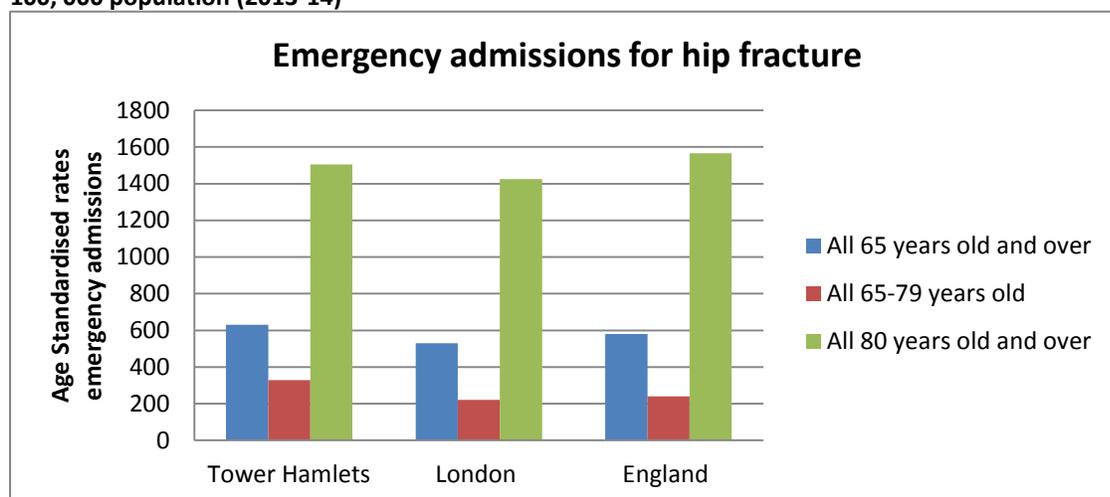
are only the tip of the iceberg in relation to the health and well-being burden of falls. Inpatient hospital admissions are a proportion of falls incidents, more may present to A&E and GPs, not all of which will lead to hospital admission.

It is not possible at this stage, to obtain information on type of injuries suffered as a consequence of a fall in Tower Hamlets. However, England data⁹⁴ shows that for all ages, the top three primary diagnoses for admissions for falls in 201 were 'fracture of femur' 14.9%, 'fracture of forearm' 9.1% and 'open wound of head' 8.5%.

4.7 Osteoporotic fractures: Based on the 2014-15 Quality and Outcomes Framework (QOF) indicators for Osteoporosis⁹⁵, 114 patients out of the 43,923 estimated 50 years old and over registered with a TH GP, were recorded as having suffered an osteoporotic fracture. This represents an osteoporotic fracture prevalence of 0.26%.

4.8 Hip fracture: In 2013-14 there were 108 emergency admissions for hip fracture in those aged 65+ registered in Tower Hamlets. Sixty eight (62%) of these admissions were for people aged 80 years old and over and 40 (37%) were for people aged 65 to 79 years old. Figure 5 shows the age-sex standardised rates of emergency admissions for hip fracture for people 65 and older registered in Tower Hamlets (630), London (530) and England (580). Although the rate is higher in Tower Hamlets it does not significantly differ from those for London and England for any of the age groups.

Figure 5. Age standardised rates of emergency admissions for hip fracture, Tower Hamlets, London and England per 100, 000 population (2013-14)



Data Source: <http://www.phoutcomes.info/public-health-outcomes-framework#gid/1000044/pat/6/ati/102/page/1/par/E12000007/are/E09000030/iid/40101/age/2/sex/4> accessed 7 May 2015.

5. What is being done locally to address the issues?

The implementation of the Health and Social Care Act in April 2013 brought about a major reorganisation of agencies and services with transfer of some responsibilities to different organisations, and major changes in staff and service provision. As a consequence, a review of the current provision of falls prevention and management services in Tower Hamlets was carried out in April 2014⁹⁶ based on recommendations made in the Tower Hamlets Falls JSNA published in 2011⁹⁷. This section presents the current range of Falls Services provision in Tower Hamlets based on that review, shown by different types of provider – primary health care, community health care, NHS acute Trust, local authority and commissioned voluntary organisations.

The following services are responsible for providing the 3 levels of falls prevention:

- Primary prevention – focusing on the general population and those at high risk of falls and providing initiatives to prevent falls occurring.
- Secondary prevention – focusing on the population who have suffered a fall and providing initiatives to maintain their health and to prevent further falls or complications
- Tertiary prevention – focusing on the population who had suffered a fall and are experiencing complications and on initiatives to maintain optimum health.

5.1 LinkAge Plus: is a network of five community organisations working as a consortium to provide one stop services for people 50 years old and over. It covers the whole borough and it is jointly funded by the London Borough of Tower Hamlets and Tower Hamlets Clinical Commissioning Group.

The service offers a range of activities, services and information which contributes to falls prevention including:

- A healthy lives programme, including: healthy eating advice (including the importance of calcium), promotion of physical activity and dementia awareness
- Physical activities: walks, dancing and chair based fitness.
- Tai Chi and Yoga classes .
- Screening new clients for risk of falls and arranging referrals to the Community Health Teams for assessment when required (see screening form in appendix 2)
- Social and leisure activities: Coffee mornings which include guest speakers, trips, men's groups
- Learning, advice and volunteering: art, computers, etc.
- Health activities: awareness talks and therapies
- Advice on housing, pensions, benefits and legal
- Outreach visits to vulnerable and housebound older people to identify risk factors and reduce physical hazards in an individual's home.

Services are provided from five community centres located across the borough. It also includes an outreach service with trained outreach workers who can provide people with one to one support and information and put them in touch with a wide range of community and council services.

In the financial year 2013-14, a total of 1,156 new clients used the services of LinkAge Plus and 1,039 (89%) were screened for falls risk. Besides, 1067 people attended general physical activity (walks & chair based fitness) sessions, 217 attended Tai Chi and Yoga sessions. Social and recreational activities were attended by 1190 people and 782 people were given advice and/or attended learning sessions⁹⁸.

5.2 PRIMARY CARE

5.2.1 GPs: see patients who are potentially at increased risk of falling or who have had a fall that did not require emergency intervention, and are expected to routinely monitor and modify risk factors for falls in patients aged 65 and over.

The Tower Hamlets Falls JSNA (2011)⁹⁹ recommended the development and use of a general practice, "Falls

Check List”, for older people, to routinely identify and monitor the risk of falls. However, stakeholder’s feedback suggests that GPs do not routinely use any specific “Falls Check List” to assess risks of falls.

Implementation of the *Integrated Care NIS*¹⁰⁰ however, is expected to improve identification and management of people at risk of unplanned hospital admission, including from falls and injuries derived from them. Patients in the Integrated Care Programme are assessed by GPs for a number of conditions which can lead to a fall and should be referred to appropriate services. These include:

- Number of falls in the last year and if there has been any referral for falls assessment
- Mobility: walking pace and use of wheelchair, referral to Physiotherapist/ community health services, musculoskeletal services and/or occupational therapy.
- Referral to podiatry
- Ability to manage bathing, dressing, toileting, incontinence, feeding.
- Checking sight and hearing and referral if needed
- Review of medication at least once a year (eg: benzodiazepines, antihypertensives, etc.)
- Blood pressure (to exclude postural hypotension), pulse rate, weight and HbA1c.
- Presence of urinary/faecal incontinence
- Alcohol consumption
- Dementia assessment and family history of dementia
- Referral to geriatrician if appropriate

However, there is no requirement to assess and collect data on bone health (calcium & vitamin D) or on discussion about the importance of avoiding dehydration (important when GPs visit care homes). Nevertheless, diagnosis and treatment of Osteoporosis is one of the 2014-15 Quality and Outcomes Framework (QOF)¹⁰¹.

GPs are encouraged to refer older patients to community based service (Link Age Plus- see below) when appropriate in particular, to attend falls prevention exercise classes like Tai-Chi. Anecdotal evidence suggests that referral to this service is low.

GPs refer older patients at risk of falling to the local Community Health Team “Single Point of Access” (SPA - see this service below) for assessment of balance and gait deficits and multifactorial risk assessment and multifactorial intervention if appropriate, to avoid inappropriate referrals to the specialist Falls Clinic (see below). However, feedback from GPs suggests that they do not get enough information about their patients’ follow-up once they have been referred to the SPA.

Older people who present for medical attention because a fall or recurrent falls should undergo a risk assessment by the specialist falls team as recommended by NICE¹⁰². When appropriate, GPs can make direct referrals to the consultant lead at the Falls Clinic for further assessment to identify more specialised reasons for falling. In these cases, it is essential that patients are assessed first by the GP for suitability for referral.

When modifiable risks are in the home environment, primary care staff can refer to the community health team SPA to trigger action to solve it. They can also refer to social services or to the Age UK Handyperson Service.

No data on referral to these different services is available at the time of writing. However, anecdotal evidence from the CHT teams suggests that a high number of potential fallers are not been identified and referred as appropriate.

5.2.2 Medicines Use Reviews (MURs) undertaken by pharmacists: they are also important tools in identifying older people who may be at increased risk of falling due to the type or number of medications they are taking. The General Pharmaceutical Services in England - 2003-04 to 2012-13 ¹⁰³ shows that 47 (97.9%) community pharmacies in Tower Hamlets provided MURs which compares with 89.9% in London and 92% in England. The

information provided does not allow identifying how many of those MURs are due to review of treatments for patients at risk of falls.

5.3 COMMUNITY HEALTH SERVICES

Community health services in Tower Hamlets provide a falls prevention function consisting of:

- Primary prevention: to prevent a first fall in the older population through education to promote well-being, awareness of risk factors and how to reduce them.
- Secondary prevention: to people already identified as vulnerable and those who may have previously fallen to prevent further falls.
- Tertiary prevention from falls related injury providing post-fall rehabilitation, exercise and advice.

The prevention function is provided through the Multidisciplinary Community Health Team (CHT).

5.3.1 Multidisciplinary Community Health Team (CHT): This Tower Hamlets team is split geographically into 4 locality teams (North East, North West, South East and South West). The CHT is comprised of Community Nurses, Care Navigators and Therapists. Each locality is expected to have 5 qualified therapists based alongside the nursing teams. All staff within CHT are expected to be able to complete a basic falls assessment.

The falls prevention remit of this team teams is to perform home based multidisciplinary assessment to all those at risk of falling and referral, depending on need. Once patients are assessed, they are provided with an individualised home based multidisciplinary rehabilitation programme and advice and support to make their environment safer. Clients can be provided with equipment, walking aids and adaptations within the home to minimise the risk of falling. Clients will also be referred to the Safe and Steady Group (see below) and to Telecare (see below) if appropriate. The occupational therapy team can arrange for any minor adaptations required to be carried out in the house. Referrals to the CHT is through the Single Point of Access (SPA).

The CHTs also provide input to the Falls Clinic one afternoon a week. Patients attending the falls clinic undergo a multidisciplinary assessment by a physiotherapist to determine if they require a home assessment and further intervention to prevent further falls.

Over 2014-15, the CHT has developed a number of falls assessment documentation and two Falls Pathways. These are:

- **Tower Hamlets Falls Pathway** (Appendix 3): this is a general pathway to be followed by any health or social care staff who is first in contact with a person in the community who has had a fall.
- **Community Health Team Therapy Falls Pathway** (Appendix 4): this is the pathway to be followed when a referral is received by the single point of access (SPA).
- **General Falls Assessment** (Appendix 5): this general form can be completed by any discipline within CHT – it includes prompts on who to refer onto for further input including looking at medication reviews and requesting GP input as needed. This form could also be used by GPs, voluntary organisations and social care staff. It is already used by LinkAge Plus to screen for falls risk (see below) to their clients.
- **Adult Community Health Team Initial Assessment** (Appendix 6): – if a person reports falling then this should automatically instigate an inter-team referral to the therapists if appropriate.
- **Specialist Therapy Falls Assessment** (Appendix 7): tends to be completed only by therapists as it involves a more clinical in-depth assessment. This would be completed alongside the standard physio assessment.

All falls assessments are multifactorial assessment tools and are used to help identify factors which can contribute to falls. The interventions offered after such assessments are all tailored to the individual and designed to work on balance and strengthening.

Currently, data from this service cannot be obtained due to administrative issues.

5.3.2 Admission Avoidance Team at Accidents and Emergencies department: this service managed by the Central Community Health Team, started in Oct 2013 as a pilot (and has been financed through the “Winter Pressure” grant and is still functional. It is based at the A&E department of the Royal London Hospital and it is staffed with therapists and nurses from the community. They liaise with A&E staff to identify and assess patients who have attended the A&E department and are in need of support to avoid unnecessary admissions. The team also carries out home assessments if urgently required. If the case is non-urgent, the team will refer the case to the corresponding locality CHT for follow-up. If the patient requires an urgent social care package, the input of a designated social worker from the Local Authority Hospital Social Work Team will be sought.

From April 2014 to March 2015, the Admission Avoidance Team assessed 149 patients who had fallen and were then discharged home from A & E. Currently it is not possible to provide these data by age group as this is not a current requirement. However, anecdotal evidence suggests that the majority of the patients would be 65 years old and over.

5.3.3 The centralised “Safe and Steady” group is based at the Royal London hospital. A series of twelve-week programmes of progressive, evidence-based balance and strength exercises, with assessment, advice and education are run for groups of between 5 and 15 participants by a Senior Physiotherapist, Therapist Assistant and additional disciplines as needed (Box). Referrals to the Safe and Steady Group are made via the Community Health Teams therapists. GPs, Linkage Plus, social services and voluntary sectors can refer to CHT and request patients to be considered for a place on the Safe and Steady Group. Patients who agree to attend the centralised Safe and Steady Group are offered hospital transport to attend the sessions.

Outline of 12- week programme of two hour sessions

- Wk 1 - Introduction and baseline measures & benefits of exercise
- Wk 2 - Medical reasons for falls
- Wk 3 - Managing the emotional impact of falling
- Wk 4 - Bone health and reducing risks of fragility fractures
- Wk 5 - Environmental Hazards
- Wk 6 - Foot health and shoes
- Wk 7 - Healthy Eating
- Wk 8 - What to do if you have a fall and getting up off the floor
- Wk 9 - Continuing exercises after the group – local options
- Wk 10 -Anxiety & Relaxation
- Wk 11 –Tai-Chi ongoing community exercises
- Wk 12 – Final assessments

Anecdotal evidence from LinkAge Plus staff suggests that older people would prefer the “Safe and Steady” groups to be provided at the community hubs as they used to be. However, some of the equipment required for providing the above sessions is not available at community level.

Currently, data from this service cannot be obtained due to administrative issues.

5.4 SECONDARY CARE

5.4.1 The Falls Clinic: is a once a week outpatient consultant geriatrician led, multi-disciplinary falls assessment clinic.

Patients attending the Falls Clinic undergo a multidisciplinary assessment based on national guidelines, to determine the cause of the fall, provide appropriate intervention and take any preventative measures needed, including DEXA scans, blood tests, reviewing medication and treating medical causes (e.g. postural hypotension). The multidisciplinary assessment is provided by the consultant geriatrician/falls lead, a general nurse and a

physiotherapist.

A referral to the Falls Clinic is indicated if a person has unexplained falls or if they “black out” and fall. Referrals to the clinic are made from GPs, A&E and other consultants. There are local guidance and criteria for referral to the Falls Clinic. However, discussion with the Falls Clinic consultant identified that a number of referral are inadequate as patients are not properly pre-assed before referral. The Falls Clinic at Mile End Hospital is not able to see everyone who falls in Tower Hamlets, and it is important that GPs assess the suitability of a patient before making a referral.

The clinic has developed a variety of patient information leaflets about specific risk factors for falls. There are leaflets for example, on Postural hypotension, Tilt tests, postprandial hypotension. They are written only in English.

In the year 2014-15, 387older people from Tower Hamlets attended the Falls Clinic, 240 women and 147 males.

Table 11 shows the source of referral to the Falls Clinic. The majority of referrals were done by GPs (166 for women and 137 for men).

Table 11. Referrals to the Falls Clinic by Source of referral, 2014-15

Sex	Referral source	Numbers
Female	referral from a GENERAL MEDICAL PRACTITIONER	166
	other - not initiated by the CONSULTANT responsible for the Consultant Out-Patient Episode	28
	following an emergency admission	24
	referral from a CONSULTANT, other than in an Accident And Emergency Department	14
	following an A&E attendance (including Minor Injuries Units and Walk In Centres)	7
	referral from a GENERAL PRACTITIONER with Special Interest	1
Total females		240
Male	referral from a GENERAL MEDICAL PRACTITIONER	137
	following an emergency admission	4
	following an A&E attendance (including Minor Injuries Units and Walk In Centres)	3
	other - not initiated by the CONSULTANT responsible for the Consultant Out-Patient Episode	3
Total males		147
Grand Total		387

Source: Business Intelligence Unit at Bart’s Health NHS Trust

5.4.2 Orthogeriatric Medical Support: As recommended by the BOA¹⁰⁴, an Orthogeriatrician provides medical support to patients presenting with fragility fracture at the Bart’s and London Trust London. However, there is no a Fracture Liaison Service as it is also recommended.

5.4.3 Falls and the Mental Health Services for Older People: In-patient and Community Mental Health Services for older people in Tower Hamlets are provided by the East London NHS Foundation Trust and are based at Mile End hospital. In-patient care is provided from two wards: the Dementia Assessment ward and the Functional Assessment ward (for service users with functional mental illnesses).

The Inpatient and Community Mental Health Care Teams include nurses and occupational therapists and all staff receive falls prevention training at induction and once a year.

Community mental health care is provided by two community teams based at Mile End Hospital: The Community Mental Health Team (Older People) and the Community Dementia Care Team (CDT). Both teams are integrated mental health and social services teams which provide psychiatric and social needs assessment,

intervention and treatment for older people with mental health problems. The service is multi-disciplinary, staffed by community mental health nurses, social workers, an occupational therapist, psychologists, psychiatrists and support workers. Both operate a “single point of entry” for all referrals to mental health services for older people. This team organises activity sessions for patients. For example, groups for gardening, exercises, going out and mobility. The team liaises with the Community Health Care Teams when required.

A consultant in mental health leads and oversees all interventions to prevent falls. She has developed a quality assurance programme for the prevention of falls & serious harm for in-patients which, is in line with the NICE CG161. The following initiatives have been developed and implemented:

- A falls multifactorial assessment tool (appendix 8) to assess every patient admitted to the wards (based on NICE CG 161).
- A falls multi-factorial interventions checklist has been developed to prevent second falls by raising awareness, improving practice and ensuring consistency of practice across the Trust.
- Routine screening for delirium on admission.
- A system with the ward pharmacist to highlighting high risk drugs which has promoted awareness & safer prescribing practice.
- Assessment of patients’ home environments before discharge.
- Patient and carer information leaflets on how to prevent a fall provided within the welcome admissions pack at the Trust.
- Posters on how to act if a fall occurs are displayed on wards.
- Routine audit of all falls which occur on the wards.

5.5 TOWER HAMLETS ADULT SOCIAL CARE SERVICES:

5.5.1. Assessment and Intervention (Social Care) and Community Health Team (Social Care). The Assessment and Intervention team is in the process of developing a new Social Work Team to work with the Community Health Teams on the integrated care pathway. The team is funded via the Better Care Fund. The aim is to work as part of the Integrated Community Health Teams and the focus of work is those adults over 18 years, who have jointly consented and are on the Integrated Care Pathway (ICP). The GPs risk assess service users who might be eligible using a specified matrix. These service users all have a long term condition or are receiving neuro rehabilitation.

Currently, the team receives referrals via clinical leads and others in the CHT bases. These referrals then are screened via Assessment & Intervention or by CHT (Social Work) to ensure they are eligible for social care assessment/support and that the person is on the ICP. If the person is not eligible, the team will provide information and advice or signpost to the most appropriate services. If the person is eligible, they will undergo an assessment. The other referral routes are via the Social Care front door.

The CHT (Social Work) is expected to have a Team Manager, 3 Senior Practitioners (one embedded in Assessment & Intervention) 10 Social Workers and 1 carer’s support worker.

The Service does not currently collate data on referrals made as a result of a fall.

5.5.2 Hospital Social Work Team: the team liaises with the Community Care Services Hospital Admission Avoidance Team in assessing patients who have attended the Royal London Hospital, to avoid unnecessary admissions. They also assess patients before discharge to identify any social care needs.

The services do not routinely collect data about whether a referral to their team has resulted from a fall and so they could not provide data on services activity due to falls.

5.5.3 Reablement service: this provides short term support following a change in circumstances such as a fall, a

stay in hospital or a stroke. Support is provided usually for six weeks but there is flexibility to extend for people whose independence is likely to increase further with a slightly longer service. The support involves working intensively with the individual to reduce any potential long term loss of independence following a fall and avoid any subsequent need for longer term services. Someone who has fallen might be referred to the reablement service if they do not require physical rehabilitation from a physiotherapist or if they have already received support from physiotherapy and would benefit from some additional support in regaining skills and confidence (to go to the shops for example). The service is provided by a multidisciplinary team including occupational therapists, nurse advisor, social workers and front line officers.

In the year 2013-14, the services received 968 referrals from a number of different council teams. The majority of the referrals (442; 45%) were from the First Response Team, 40% (391) from the Hospital First Response Team and the remaining 15 % were from other social care services. This compares with only 148 referrals received in 2009-2010 which demonstrates that more staff is aware of this service. However, information recorded is not breakdown by age or whether the referral is related to falls. Nonetheless, the majority of referrals are for older people.

A users' survey carried out in January 2013, showed that 76% of users were very or quite happy with the service and that the equipment or adaptation they received helped them to stay as safe and independent as possible.

5.5.4 In-house long-term Occupational Therapy Service: This service mainly provides special equipment and adaptations to modify people's environment to support them to be as independent as possible (e.g. access, wet rooms). Referrals are from GPs, CHTs, Hospital Social Work team, and Reablement team.

5.6 Tower Hamlets Sight and Hearing Services- Vision Strategy and Vision Plan¹⁰⁵: the development of the 2013-2016 Vision Strategy and the 2014- 2016 Vision Plan sets out the current level of eye health and visual impairment support provision in Tower Hamlets, identifies service and delivery considerations, and sets out recommendations for current and future service provision. The Plan sets the stage for the development of seamless, cost effective and joined up prevention initiatives and service provision in Tower Hamlets. The services provided by this plan will have a positive influence in falls prevention as visual impairment is a major risk factor for falls.

5.7 Tower Hamlets Residential Homes: All residential and nursing home provision in the Borough is outsourced. There are six care homes in Tower Hamlets, two of which also provide nursing care. Residential homes have responsibility to prevent falls for their residents.

The 2014 review of the Tower Hamlets Falls Services looked into the way that the 5 residential homes in Tower Hamlets were dealing with falls prevention. The overall result identified that there were no Tower Hamlets agreed guidelines on how to address falls prevention which all the homes could implement. For example, three homes reported the use of the falls prevention Excelcare guidelines which include the need to carry out an initial basic assessment of falls risk to each resident and to review monthly or if there are changes in circumstances. Another home also reported carrying out a basic assessment of risk. One of the nursing homes and one residential home reported liaising with the GP for referrals to the fall clinic and Peter Shore Court is actively supported by a GP. Two homes (one of them a nursing home) reported having all the staff trained in falls prevention.

Falls management is carried out by all care homes in accordance with their falls policy and procedures. Information on falls is kept by the home alongside other resident information. In certain circumstances, the homes may need to inform the council and CQC about falls. This is when the falls are as a result of safeguarding, causes serious injuries, leads to hospital admissions or is a Care Quality Commission (CQC) notifiable incident.

The Local Authority monitors falls in two main ways: desktop monitoring and site visits. Each quarter, homes are required to submit information on all falls as follows:

- Number of falls with no injuries
- Number of falls with injuries but no hospital admission
- Number of falls with injuries requiring hospital admission

The sites visits include the review of a sample of falls to assess if it has been managed in line with the home falls policy/procedure, whether sufficient information is available for each incident, appropriate risk assessments are being updated and if relevant referrals to external agencies have been made when needed.

A total of 218 falls were reported in 2014-15. It is not possible to calculate what proportion of the care homes population this figure represents as there are no complete data on the total number of residents for some of the homes.

Since the third quarter of 2014-15 more care homes have provided complete information and new details about each fall have also been recorded. In that period, there were 269 residents in 5 out of the 6 care homes, 69 falls and 8 (11%) hospital admissions due to falls (Table 13).

Table 13. Number of care homes residents, falls, and outcomes (data from 5 out of 6 homes)

Total residents	269
Total falls	69
Falls with no injuries	44
Falls with injuries but no hospital admission	17
Falls with injuries requiring hospital admission	8
Number of residents experiencing one or more falls with major injury (only 4 homes reporting)	4

Source: LBTH Adult Social Care, Contract Management Team

The borough also provides Extra Care Schemes where the residents own their own flats within a purpose built complex. There are carers present 24 hours a day who can provide care, but not to the degree available in a residential home. The schemes are based in Coopers Court; Duncan Court; Donnybrook Court; Sonali Gardens; Shipton House; Sue Starkey House. No data has been collected for these schemes.

5.8 Housing:

5.8.1 Age UK Handyperson Service: The aims of this service are to: improve the home safety of older people; minimise risks of accidents including falls and avoidable hospital admissions; provide home repairs and maintenance and raise awareness of home safety issues and risk factors amongst older people. Services provided include minor adaptations, accident prevention e.g. fixing loose carpets and steps for older and vulnerable people and supporting carers by providing these services for people they care for.

5.8.2 Home Improvement Agency: the Home Improvement Agency (HIA) is an in-house team provided by the Development and Renewal Directorate of London Borough of Tower Hamlets (within the Private Housing Improvement Team). The HIA can provide professional, technical and administrative services for people who have fallen or are at risk of falling by arranging or carrying out work to improve or repair their homes or adaptations to reduce the risk of falling.

A range of grants and advice is available through the HIA for private owners or private sector tenants to enable them to carry out repairs, improvements or adaptations and allow them to remain in their own homes. This includes Home Repair Grants (up to £6,000 within a five year period) for owner occupiers who are either disabled or over 60 years old and on a qualifying benefit, to remove category 1 Hazards under the Housing,

Health and Safety Rating System.

The professional, technical and administrative services provided by the Housing Improvement Team covers all disabled private sector residents and therefore, there is no specific data for work related to falls prevention. However, a great number of the adaptations they provide contribute to the falls prevention agenda.

Major adaptations are funded through the Disabled Facilities Grant (DFG) scheme but small items such as grab-rails, extended warranties for ceiling track hoists, stair, and step and through floor lifts can currently be provided to home owners on a means tested benefit via a small Home Repairs Grant. All DFG adaptations are referred via an Occupational Therapist (either Council or Health); referrals for Home Repairs Grants can come from the OT service, Adult Services or be a self-referral.

The service activity for the year 01/04/14 – 31/03/15 was as follows:

- 275 DFG application packs were sent out, of these 165 were for private sector residents who were 65 years old or over. Of this 275:
- 168 were for wet floor level access showers
- 46 were for some form of lift (stair, step or through-floor)
- 13 were for ceiling track hoists
- The 275 DFG application packs resulted in 209 approved grants and of these 117 were to private sector residents aged 65 or over
- The cost of these adaptations was £564,561.99

5.9 Tower Hamlets Telecare Service and Assistive Technology Team supports people to live more independently and to manage risks at home by providing them with devices that raise alarms in case of incidents such as fire, floods and falls. Alarms are received by the in-house Alarm Response Centre which is open 24/7, throughout the year. A limited range of devices are available on a universal basis through self-referrals to the Assessment and Intervention Team, as well as referrals from internal social care staff and health practitioners. Examples of these devices are:

- (i) Telecare unit and a pendant button which can be worn as a necklace or wrist strap. Service users are assessed for additional sensors including sensors to detect falls. When users press the button or any of the sensor alerts, the response centre is automatically dialled via the user's telephone line. The operators can automatically view the service user's personal details, and will talk to them and agree the most appropriate action. This may involve contacting a family member, neighbour or friend, contacting a doctor or emergency services, or sending a Telecare team member to provide assistance.
- (ii) Automatic night lights to light up poor areas which will aid in prevent falls
- (iii) Bed and chair occupancy sensors some of which are timed so that if the user have not returned to the bed or chair within the set time, it will raise an alert to the control centre indicating that the user may have fallen and is in need of assistance

There are currently around 3,500 service users, which includes around 700 residents in sheltered housing, for whom the Telecare team are responsible out of hours. Telecare is a free service for residents who do not live in sheltered housing.

Telecare receives more than 200 in-coming alarm activation calls daily. Each call can warrant up to 4 or more out-going calls, requesting for Emergency Services, Next of Kin attendance, Scheme Manager attendance, or a Telecare Emergency Visit. This number does not include the general enquiries and referrals received and dealt with by the service.

5.10 Roads, highways & pavements Tower Hamlets Department: This department, among other things, have responsibility for the maintenance of roads including pavements, footways and highways in the borough. There is a page on the London Borough of Tower Hamlets website- "Pavement maintenance" for residents

to report uneven pavements and falls hazards such as ice¹⁰⁶

6. What evidence is there that we are making a difference?

6.1 Public Health Outcomes Framework Indicators (PHOF)¹⁰⁷: Two PHOF indicators measure the impact of services to prevent falls: Emergency admissions due to falls in older people (Domain 2; 2.24i) and hip fractures” (Domain 4; 4.14i).

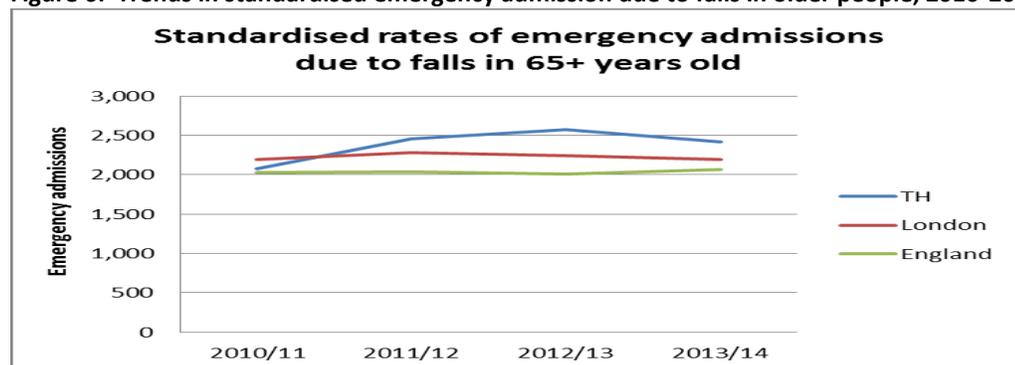
- **Emergency admissions due to falls in older people:** Tower Hamlets standardised emergency admission rate due to falls increased between 2011 and 2013 but slightly decreased over the period 2013-14. Over the same period, London and England rates were lower (statistically significant when compared to England) and remained fairly static (table 14 and figure 6).

Figure 14. Trends in Age-sex standardised rates (ASR) and (numbers) of emergency admissions for injuries due to falls per 100,000population, 2013-14. Tower Hamlets, London and England

Year	TH (number)	DSR	London DSR	England DSR
2010/11	(344)	2,072	2,194	2,030
2011/12	(381)	2,458	2,281	2,035
2012/13	(409)	2,575	2,242	2,011
2013/14	(405)	2,414	2,197	2,064

Source: <http://www.phoutcomes.info/public-health-outcomes-framework#gid/1000042/pat/6/ati/102/page/4/par/E12000007/are/E09000030/iid/22401/age/27/sex/4> . Accessed May 2015

Figure 6. Trends in standardised emergency admission due to falls in older people, 2010-2014



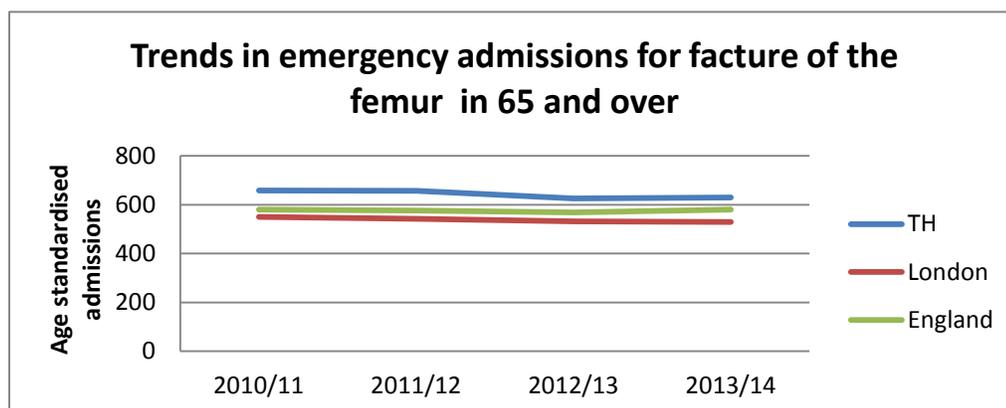
- **Hip Fractures in older people:** The standardised rate of emergency admissions due to hip fracture in older people in Tower Hamlets increased in 2012-13 compared to 2011-12. England rates have also increased and although rates are higher in Tower Hamlets than England, the difference is not significant (table 14).

Table 15. Trends in age standardised rate (ASR) and (numbers) of emergency admissions for fracture of the femur in people over 65 (Numbers). Tower Hamlets, London and England 2011-2014

Period	(Nos.)	TH ASR	London ASR	England ASR
2010/11	(112)	659	550	580
2011/12	(101)	657	543	576
2012/13	(101)	626	532	568
2013/14	(108)	630	530	580

Source: <http://www.phoutcomes.info/public-health-outcomes-framework#gid/1000044/pat/6/ati/102/page/4/par/E12000007/are/E09000030/iid/41401/age/27/sex/4> . Last accessed 28 July 2015

Figure 7. Trends in age standardised emergency admissions for fracture of the femur. Tower Hamlets, London and England



6.2 The Adult Social Care Outcomes Framework (ASCOF)¹⁰⁸ indicators 2B (1) “ Older people at home 91 days after leaving hospital into reablement “ and 2B(2) “Older people receiving reablement services after leaving hospital” measure how successful are the reablement services that people receive until they can look after themselves. In 2013-14 Tower Hamlets ranked 108 out of 151 reablement services for indicator 2B(1) and 60 out of 152 for indicator 2b(2).

6.3 The Quality and Outcomes Framework (QOF)¹⁰⁹ indicators for Osteoporosis (secondary prevention of fragility fractures)

The QOF is a voluntary annual reward and incentive programme for all GP surgeries in England which gives an indication of the overall achievement of a surgery through a points system. Practices aim to deliver high quality care across a range of areas for which they score points. The higher the score, the higher the financial reward for the detailing practice achievement results. The final payment is adjusted to take account of surgery workload, local demographics and the prevalence of chronic conditions in the practice's local area. Its aim is to reward good practice.

Three indicators relating to osteoporosis and fragility fractures have been included since the 2012/13 QOF¹¹⁰:

OST1: Requires GPs to maintain a register of patients:

- Aged 50 or over and who have not attained the age of 75 with a record of a fragility fracture on or after 1 April 2014 and a diagnosis of osteoporosis confirmed on DXA scan,
- Aged 75 or over with a record of a fragility fracture on or after 1 April 2014.

OST2: Requires GPs to record the percentage of patients aged 50 and over and who have not attained the age of 75 with a fragility fracture in whom osteoporosis has been confirmed on a DXA scan, who are currently treated with an appropriate bone-sparing agent.

OST3: Requires GPs to record the percentage of patients aged 75 or over with a diagnosis of osteoporosis, with a fragility fracture on or after 1 April 2014, who are currently treated with an appropriate bone-sparing agent.

Data from the Health and Social Care Information Centre for the 36 Tower Hamlets practices shows the following results for the Osteoporosis QOFs - 2013/14¹¹¹:

OST1: All practices in Tower Hamlets achieved the maximum score (3) for this indicator. In total, 114 patients out of the 43,923 estimated 50 years old and over registered with a TH GP, were recorded as having suffered an osteoporotic fracture. This represents an osteoporotic fracture prevalence (or fracture recording prevalence) of 0.26%. This compares with 0.17% for the year 2012-13.

OST2: 17 practices out of 36 had attained the maximum score (3) for recording the percentage of patients aged 50 and over and who have not attained the age of 75 with a fragility fracture in whom osteoporosis has been confirmed on a DXA scan, who are currently treated with an appropriate bone-sparing agent.

OST3: 32 practices out of 36 had attained the maximum score (3) for recording the percentage of patients aged 75 or over with a fragility fracture on or after 1 April 2012, who are currently treated with an appropriate bone-sparing agent, as per NICE 2011.

However, it should be noted that a practice which has no patients who have a particular QOF-measured condition, cannot score any QOF points for that clinical area, and could wrongly be perceived as being a lower performer in any rank of points scored. This is particularly pertinent for specialist centres and those with specific demographics, e.g. a university practice whose patients are primarily students.

6.4 Link Age Plus: in the financial year 2013-14, LinkAge Plus screened 1,039 older people for falls risk. Besides, 1067 attended general physical activity (walks & chair based fitness) sessions and 217 attended Tai Chi and Yoga sessions. The service has contributed to falls prevention in several other ways through: outreach visits to vulnerable and housebound older people to identify risk factors and reduce physical hazards in an individual's home; referrals to a handyperson service to contribute to the reduction of hazards in an individual's home; referrals to the current Community Health Teams for assessments and provision of group general exercise classes held at Link Age Plus hubs¹¹².

6.5 Telecare: is currently unable to provide outcome figures for the period 2013-14 and 2014-15 due to changes in IT systems.

7. What is the perspective of the public?

We are not aware of any surveys of local residents views on Tower Hamlets falls prevention services. Previous anecdotal evidence from some members of the older people in the Older Peoples Reference Group (OPRG) in Tower Hamlets identified that a number of people raised the issue of poorly kept pavements, kerbs and poor bus driving (ie. drivers not pulling up close enough to kerbs) as the main problem in actual or potential falls. They felt at risk of having falls due to tripping over uneven pavements, kerbs and trying to get on busses. They mentioned that they regularly had to spend their time looking at where they were walking in order to avoid tripping or falling. This, at times, made them worried about going out, especially to places they did not know as they were unfamiliar with the state of pavements. People with mobility problems (using walking aids or wheelchairs) felt particularly vulnerable and worried about going outside; they provided an example of a wheelchair tipping over due to uneven kerb drop.

A Stakeholder consultation with the OPRG was carried out on 7 September 2015 to ascertain the views of the local residents regarding their experiences with falls and Tower Hamlets falls prevention services. Previous to this meeting, a summary of the draft of this document, was circulated to all the members of the group for their feedback.

The meeting was attended by 23 members (3 males and 20 females) from different borough wards. They all were given the opportunity to provide their views and discuss their own experiences. Twelve of the 23 people reported their own experiences.

The following is a summary of the main issues raised. These confirm similar issues as above:

- A number of people raised the issue of poorly kept pavements, kerbs and poor bus driving (ie. drivers not pulling up close enough to kerbs) as the main problem in actual or potential falls. They felt they were at risk of having falls due to tripping over uneven pavements, kerbs and trying to get on busses.
- People with mobility problems (using walking aids or wheelchairs) felt particularly vulnerable. One person provided an example of suffering a fall because there were wet leaves on the pavement which made here crutches to slip. Others commented on wheelchairs tipping over due to uneven kerb drop.
- Some people experiencing falls which did not result into major injury, even when they are frequent, did not contact their GP for advice.
- All agreed that the fact that after suffering a fall they became worried about going out.
- Some people discharged from hospital expect their GP to make the first contact. If this does not happen, they are reluctant to contact the surgery as they expect the GP to contact them. Therefore, they can spend days without any kind of support.
- Lack of awareness due to lack of communication about the services they could access
- Difficulty in contact social services as there are no direct referrals
- Those who had been able to attend exercise/rehabilitation classes find them very useful but they would like them to be provided locally.

Regarding older people's views and experiences of participating in falls programmes, NICE¹¹³ a number of barriers and provided facilitators (see also appendix 9). For example:

Barriers to participation of older people in falls prevention programmes

- People may be reluctant to participate in falls prevention programmes if:
 - they have not previously exercised
 - do not perceive a risk of falling
 - have perceived poor functional ability
 - have not been adequately consulted about what changes they are willing to make
 - Lack of transport to venues
 - No support from family.
- Information provision on falls prevention programmes may alienate rather than encourage participation by

stereotyping older people, not being available in languages other than English, not emphasizing that many falls may be preventable and not promoting the social value of falls prevention programmes.

Recommendations to promote participation of older people in falls prevention

- Health care professionals involved in the assessment and prevention of falls should discuss what changes a person is willing to make to prevent falls.
- Falls prevention programmes should be flexible enough to accommodate participants' different needs and preferences, promoting the social value of such programmes. They should also address potential barriers such as low self-efficacy and fear of falling, and encourage activity change negotiated with the participant
- Information should be relevant and available in languages other than English.

8. What more do we need to know?

As part of the JSNA process and the previous review of the Tower Hamlets Falls Services, we have identified three main areas which need to be addressed:

8.1 Data gathering, monitoring and sharing: Since the transfer of Public Health to the local authority, access to some databases has not been possible (e.g. HES). Moreover, data is recorded in different ways by different services and access to data on service use and outcomes is difficult or not available. Improving data collection and monitoring would allow tracking performance, outcomes and equity along the falls pathway. Therefore, there is a need to agree if the following data should be collected routinely and who should monitor the information:

- Falls data from all the services mentioned in the Falls JSNA in particular, community intelligence which is currently lacking robustness.
- Outcomes of falls (to be able to assess how well the path way is implemented).
- Data on falls in the 6 extra care sheltered facilities.
- Data on falls from the ambulance service.
- Data on costs of falls.

8.2 Services provision/Communications:

- We need to agree and implement a TH Falls Pathway which includes not only what to do after a fall (as the one developed by the CHT) but how to routinely identify older people at risk of falls.
- We need to be able to know how well Health and Social Care teams share information to avoid duplication of service provision.
- We need to be able to know if all professionals (GPs, practice nurse, social care, voluntary sector, and housing staff) in contact with older people always ask about falls history and refer accordingly for further investigation if needed.
- We need to be able to know that the newly developed TH falls pathway will be followed in TH residential homes
- We need to identify resident's views about their own experience of the falls care pathway.

8.3 Training:

- We need to have a way of recording and monitoring falls training received by primary care, social care, care homes and voluntary organisations staff in contact with older people.

9. What are the priorities for improvement?

As part of the JSNA process we have reviewed the evidence and consulted stakeholders. The recommendations identified are presented in table 16 below

10. Contacts / Stakeholder Involvement

Contacts:

	NAME	CONTACT DETAILS
UPDATED BY	Dr Mar Soler-Lopez	Mar.Soler-Lopez@towerhamlets.gov.uk
SIGNED OFF BY	Abi Knight	Abi.Knight@towerhamlets.gov.uk

Stakeholders:

Dave Barnard; Head of Community Services; Link Age Plus, LBTH
Dr Zaza.Darwiche; Consultant in Mental Health- Older people, East London NHS Foundation Trust
Fiona Davies; Lead Nurse In-Reach Community Health Teams; Bart's Health NHS Trust
Barbara Disney; Strategic commissioning Manager, Commissioning and Health, LBTH
Dr Claire Dow, Community Geriatrician, Bart's Health Trust
Julie Dublin; Programme Manager (Integrated Care), NHS Tower Hamlets Clinical Commissioning Group.
Diane Hackney; User Involvement Coordinator, Tower Hamlets Older People's Reference Group.
Florence Hing, Highly Specialist Physiotherapist (Falls Lead); Community Health Team (South West Locality); Barts Health NHS.,
Cristine Oates; Service Manager Reablement and Resources, LBTH
Dr Macherla Radhamanohar; Consultant Geriatrician, Falls Lead, Bart's Health Trust.
Dr Dhanupriya Sivapathasuntharam; Consultant Orthogeriatrician, The Royal London; Bart's Health NHS Trust
Dr Susannah Solaiman- GP, Lead for Urgent care
Brian Turnbull: Service Manager First Response Services (Social Care); LBTH

Table 16. RECOMMENDATIONS AND ACTIONS FOR ADDRESSING FALLS PREVENTION IN TOWER HAMLETS

RECOMENDATION	RATIONAL	Likely Impact
UNIVERSAL FALLS PREVENTION		
<p>1. Promote the participation of older people in physical activity programmes and in falls prevention programmes (in particular Tai-chi, gardening and dancing).</p>	<ul style="list-style-type: none"> • The Department of Health has given recommendations on the amount and intensity of the daily physical activity for older people in order to maintain or improve their health and prevent falls. • The Academy of Medical Royal Colleges reports that: <ul style="list-style-type: none"> ○ Exercise maintains muscle strength and increases bone mineral density so fractures are far less likely even after a fall ○ Physical activity programmes that emphasise balance training, co-ordination and muscle strengthening significantly reduce the risk of falls by 30-50% ○ Being physically active reduces the risk of later hip fracture by 35-68% • Age UK and NICE CG 161, identified Tai-chi, dancing and gardening as activities which reduce the risk of falls in younger-older adults who have not experienced a fall (primary prevention). 	<ul style="list-style-type: none"> • Reduction of the number of admissions for first falls and fractures • Fewer people with two of the most the predictive risk factors for falls: “Falls history and “Fear of falling”.
<p>2. Risk factors identification by routine questioning by health and social care professionals and community staff (e.g.: Link Age Plus) about whether an older person has fallen in the past year including frequency, context and characteristics of the fall (as per NICE CG 161).</p>	<ul style="list-style-type: none"> • NICE key priority for implementation (NICE CG161) • Routine questioning enables: <ul style="list-style-type: none"> (i) identification of the most predictive risk factors (falls history, fear of falling, gait and/or balance deficit; mobility impairment, visual impairment, cognitive impairment, urinary incontinence and home hazards) (ii) referral of individuals to appropriate service for further assessment and intervention. 	<p>Studies show that asking “do you have impaired balance? Can predict about 40% of all hip fractures.</p>
<p>3. GPs and community pharmacists to regularly review the number and types of medication taken by older people</p>	<p>As recommended in NICE CG161. Studies show that patients taking more than 3 to 4 medications, anti-arrhythmic drugs, or psychotropic medications are at increased risk of falls or more recurrent falls than those who do not take them.</p>	<p>Studies have shown some potential costs savings in reviewing medications ((Coleman & Fox 2002 in NICE CG161)</p>

INTERVENTIONS FOR PEOPLE AT RISK OF FALLING OR REPORTING A FALL		
<p>4. Older people are encouraged and supported to participate in falls prevention activities by: addressing potential barriers to attend, providing information in languages other than English, providing flexible programmes to accommodate participant’s needs and involving carers and family</p>	<ul style="list-style-type: none"> • Lack of non- English speaking information, lack of transport to venues, no support form family, social stigma attached to programmes for “older people” were identified as a barrier to participating in prevention programmes (NICE CG161). • The Tower Hamlets OPRG also identified transport as an issue in attending activities. 	<p>Increased awareness of the risks and of the measures older people can take to prevent falls.</p> <p>Increased numbers of older people participating in exercise and rehabilitation sessions, better adherence to prevention programmes and less drop-out/losses to follow-up</p>
<p>5. Education & Information: All health professionals dealing with patients at risk of falling or who have had a fall, should develop and maintain basic professional competence in falls prevention and assessment. This includes: GPs, other health and social care professional, LinkAge Plus staff and care home staff.</p> <p>Training on falls prevention should be done by the Community Health Teams as they are the experts.</p>	<p>Professional need to inform orally and in writing and educate older people regarding:</p> <ul style="list-style-type: none"> • the preventable nature of some falls • where to seek further advice and assistance • how to cope if they have a fall • how to stay motivated if referred to falls prevention programmes. <p>Professional need to be skilled to carry out falls assessments using different tools and prescribe appropriate interventions.</p>	<p>Increased awareness of the risks and of the measures older people can take to prevent falls and on how to cope if falls occur.</p>
<p>6. Older people in the community and other settings) reporting a fall or considered at risk of fall should be observed for balance and gait deficits and assessed for their ability to benefit from interventions to improve strength and balance.</p>	<p>Mobility impairment, gait disorders and balance deficits have frequently been identified as significant predictors of falls. Intervention trials focusing on gait and balance have shown a reduction in falls (NICE CG 161).</p>	<p>Those most likely to benefit are older community-dwelling people with balance and/or gait deficit or a history of recurrent falls.</p> <p>Exercise programmes bring other health benefits.</p>
<p>7. Older people who presents for medical attention (in a variety of settings and to different health professionals) because of a fall, or recurrent falls in the past year or with gait and/or balance abnormalities should be offered a multifactorial falls risk assessment by a health care professional with appropriate skills and experience as</p>	<p>The multifactorial risk assessment aims to identify a person’s individual risk factors for falling. This enables practitioners to refer for effective interventions targeted at specific risk factors and reduce subsequent falls. It is a NICE key priority for implementation (NICE CG161) and a NICE quality standard (NICE QS 86).</p>	<p>Fewer older people at risk of falling</p>

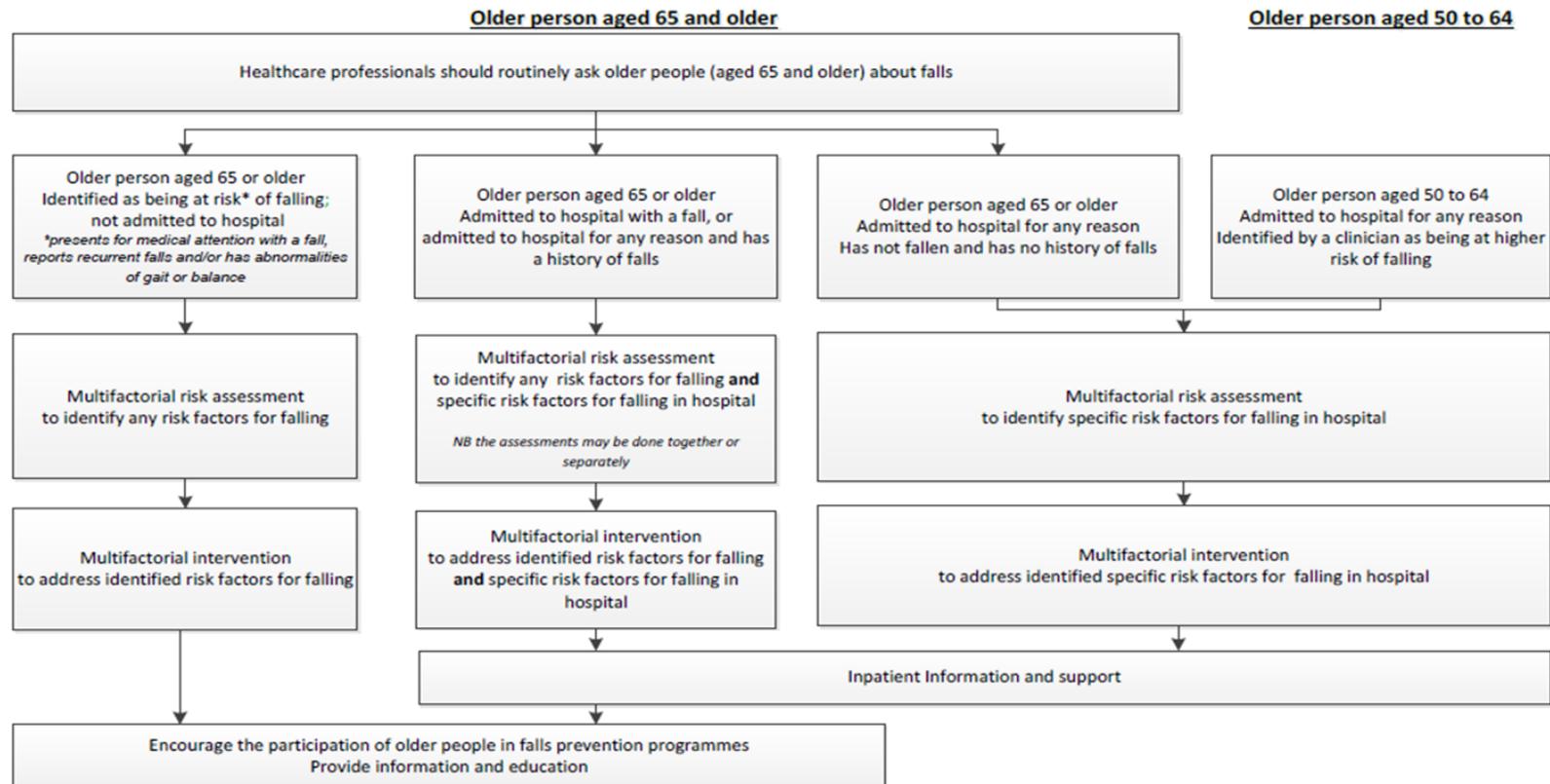
described in NICE CG161 . This assessment should be part of an individualised multifactorial intervention (see below)		
8. Older people in the community who have a history of recurrent falls or assessed as being at increased risk of falls should be considered for an individualised multifactorial intervention including: individually tailored strength and balance training, home hazards assessment and intervention; vision assessment and referral and medication review with modification. Note: Recurrent falls = falling twice or more within 1 year.	<ul style="list-style-type: none"> • The evidence suggests that multifactorial interventions targeted to risk factors are effective in reducing falls. • Evidence shows that individually tailored interventions delivered by health professionals are more effective than standards or group delivered programmes. • Strength and balance training has been identified not only as a component in successful multifactorial intervention programmes but as an effective single intervention to reduce subsequent falls (NICE CG 161 and NICE QS 86 standard 5). 	<p>Fewer falls and fewer admissions to hospitals due to falls.</p> <p>Improve older people independence.</p> <p>Fewer referrals to care homes.</p> <p>NICE CG 161 reported that exercise programmes are likely to be cost effective but less cost effective than the multifactorial intervention.</p>
9. Ensure there is a referral protocol for referrals to the secondary care Falls Clinic and that GPs are aware of its existence.	<ul style="list-style-type: none"> • A referral to the Falls Clinic is indicated if a person has recurrent or unexplained falls or if they “black out” and fall. Referrals to the clinic are made from GPs, A&E and other consultants. • Anecdotal evidence from the Falls Clinic consultant identified a number of GPs referrals which have not been appropriately pre-assessed by GPs. 	More availability of appointments at the Falls Clinic for those who really need specialised treatment
INTERVENTION FOLLOWING AN INJURIOUS FALL (resulting in fracture or soft tissue damaged)		
10. Older people who are admitted to hospital after having a fall are offered a home hazard assessment and safety interventions	This leads to increases in people’s independence and improvements in physical and psychological function (NICE QS86, standard 6)	Facilitate hospital discharge and freeing up of hospitals beds
11. Following treatment of an injurious fall, older people should be offered a multi-disciplinary assessment to identify and address future risk and individualised intervention.	Evidence suggests that multifactorial, multidisciplinary rehabilitation programmes are effective in reducing the incidence of new falls in those who have suffered an injurious fall. (NICE CG 161 and in NICE QS86 standard 6)	<p>Promote independence and improving physical and psychological function.</p> <p>Decrease in the number of hospital admissions due to repeated falls.</p>
12. Older people admitted to hospital with fractures as a result of falling have access to a specialist orthogeriatrician, in line with best practice	<ul style="list-style-type: none"> • Recommended by the British Orthopaedics Association. It minimises delays to surgery caused by medical problems. • There is already a consultant orthogeriatrician at Bart’s providing this service. 	<p>Improved quality of care.</p> <p>Shorter hospital stays.</p>

<p>13. The development of a Fracture Liaison Service</p>	<p>This has been shown to be effective in providing cost-effective osteoporosis care for patients presenting to hospital with fragility fractures. It is recommended by the British Orthopaedics Association</p>	<p>Falls cost savings</p>
<p>14. People who are discharged from hospital following a fall are referred or signposted to appropriate falls prevention community services. This is particularly important for those who have had osteoporotic fractures of any type.</p>	<ul style="list-style-type: none"> • Improve co-ordination of care between the acute and community services by promoting awareness of relevant falls prevention services in the community to hospital discharge teams. This will improve follow-up after discharge of older people who have had a fracture. • Factsheet for professionals to include all relevant contact details, distributed via hospital discharge teams 	<p>Improved patient experience and reduced unplanned admissions through more integrated care</p>
<p>15. For prevention of and action after a fall during hospital stay, it is recommended to follow NICE CG 161 “preventing falls in older people during hospital stay” and to meet the NICE quality standards 86 as detailed in pages 14 and 15 in this JSNA.</p>	<p>To be assessed by secondary care</p>	
<p>OVERALL ISSUES</p>		
<p>16. Agree on the overall falls care pathway for Tower Hamlets based on the pathway developed by the CHT (appendix) and on the NICE CG 161 pathway.</p> <p>This pathway should be implemented by all the TH residential homes</p> <p>Ensure that all professionals in contact with older people at risk of falls (or who have fall) are aware of the falls pathway, the different services available and how to refer appropriately.</p>	<p>Consultation with stakeholders has identified that not all health and social care professionals in contact with older people at risk of falls (or who have had a fall) are aware of how the different services work and interrelate and of what makes an appropriate referral to those services.</p>	<p>Avoidance of work duplication and improved effectiveness in the use of overstretched services.</p>

<p>17. Agree on how much data on service usage due to falls and on the outcomes of a fall episode should be routinely recorded, monitored and shared - and who should be responsible for this.</p>	<ul style="list-style-type: none"> • It will enable monitoring of performance and appropriate actions to be taken at all points in the care pathway. • Current data on admissions due to falls and hip fractures is only available annually in the PHOF • The ASCOF indicator 2B(1) and 2B(2) , also published annually, measures the success of reablement services in achieving self- care for service users. 	<p>Routine monitoring of the different services involved in falls prevention would allow evaluating the complete falls pathway and to develop evidence based commissioning.</p>
<p>18. Develop and agree an Action Plan on how to take these recommendations forward</p>	<p>There is a need to define responsibilities for the different services and how to implement the falls care pathway.</p>	<p>Ownership of the pathway</p>

Appendix 1

2 Care pathway



Appendix 2



Tower Hamlets
Community Health Services

Linkage plus and the Tower Hamlets Falls Prevention Team are working together to identify who is at risk of falling or breaking a bone and getting them the intervention they need to reduce those risks.

FALLS RISK

Everyone over the age of 50 needs to be assessed for their risk of falling:

Ask the 5 questions below, the more the person scores 'YES' then the higher their risk of falling is.

	ASSESSMENT	Yes	No
1	Has the person fallen in the previous year?		
2	Are they on 4 or more medications a day?		
3	Does the person have Parkinson's Disease or a Stroke?		
4	Does the person report any problems with balance?		
5	Can the person stand up from a chair without using their arms?		
	Total number of 'YES' responses:		

ACTION

Total number of 'YES' responses:

2 or less (lower risk) – Give 'Falls and Bone Health advice leaflet'

3 or more (higher risk of falls) – Refer person to the Tower Hamlets Falls Prevention Team

FRACTURE RISK

Everyone over the age of 50 will be assessed for their risk of breaking a bone if they do fall. Ask the questions below, the more the person scores 'YES' then the higher their risk of a 'fragility fracture' is.

	ASSESSMENT	Yes	No (or don't know)
1	Is the person aged 65 or over?		
2	70 or over?		
4	80 or over?		
5	85 or over?		
6	Is the person female?		
	Has the person broken any bones after the age of 50?		
7	Did their mother break her hip after the age of 50?		

8	Does the person weigh 8st 9lbs (56Kg) or less?		
9	Does the person smoke?		
10.	Does the person need to use their arms to get up from a chair?		
	Total number of 'YES' responses		

ACTION

Total number of 'YES' responses:

3 or less (lower risk) – Give 'Falls and Bone Health advice leaflet'

4 or more (higher risk of fracture) – Refer to GP to consider further tests or treatment for weaker bones

Falls risk based on FRAT (Falls Risk Assessment Tool) by QMC, London. Osteoporosis risk based on Fracture index by Black D.M et al 2001

Please complete the Falls and Bone health screening for all new outreach contacts. The scoring will direct you to which of the 3 actions below to be most useful to the person in helping to prevent falls and fragility fractures – Thank you!

1. Provide a copy of 'The Falls and Bone health leaflet' with useful information and contact details
These will be available at each of the LinkAge hubs
2. Make referrals to the **Tower Hamlets Single Point of Access** for further assessment and interventions to reduce the person's risks of falling.
Referrals are made using the one page referral form which is available from LinkAge co-ordinators – Please include a copy of this completed screening form with this referral.
3. Make referrals to the GP to further investigate or treat the person's risk of getting a fragility fracture.
Referrals can be made by giving a copy of this screening tool to the person to take to their GP (or sending it to the person's GP with their consent, highlighting the fracture risk of 4 or more).

(if any difficulties obtaining copies of the 'Falls and Bone Health Information Leaflet, the falls team referral form or this screening tool then contact Zeki Du'Ale at Linkage plus on: zeki.duale@toynbeehall.org.uk or 0207 392 9233 Or Florence Hing at community falls prevention team florence.hing@bartshealth.nhs.uk or Tel: 0207 377 7151 or Fax: 0203 594 0942

LinkAge Hubs

Sundial Centre (LAP 1)

11 Shipton Street
London E2 7RU

Telephone 020 7021 4137

Email: sundial@peabody.org.uk

Toynbee Hall (LAP 1&2)

28 Commercial Street
London E1 6LS

Telephone 020 7392 2914/5

Email: zeki.du'ale@toynbeehall.org.uk

Sonali Gardens (LAP 3&4)

70 Tarling Street
London E1 0AT

Telephone: 020 7265 9292

Email: linkage@sthildas.org.uk

Age UK East London (LAP 5&6)

Appian Court
87 Parnell Road
London E3 2RS

Telephone: 020 8981 7124

Email: info@acth.org.uk

Neighbours in Poplar (LAP 7&8)

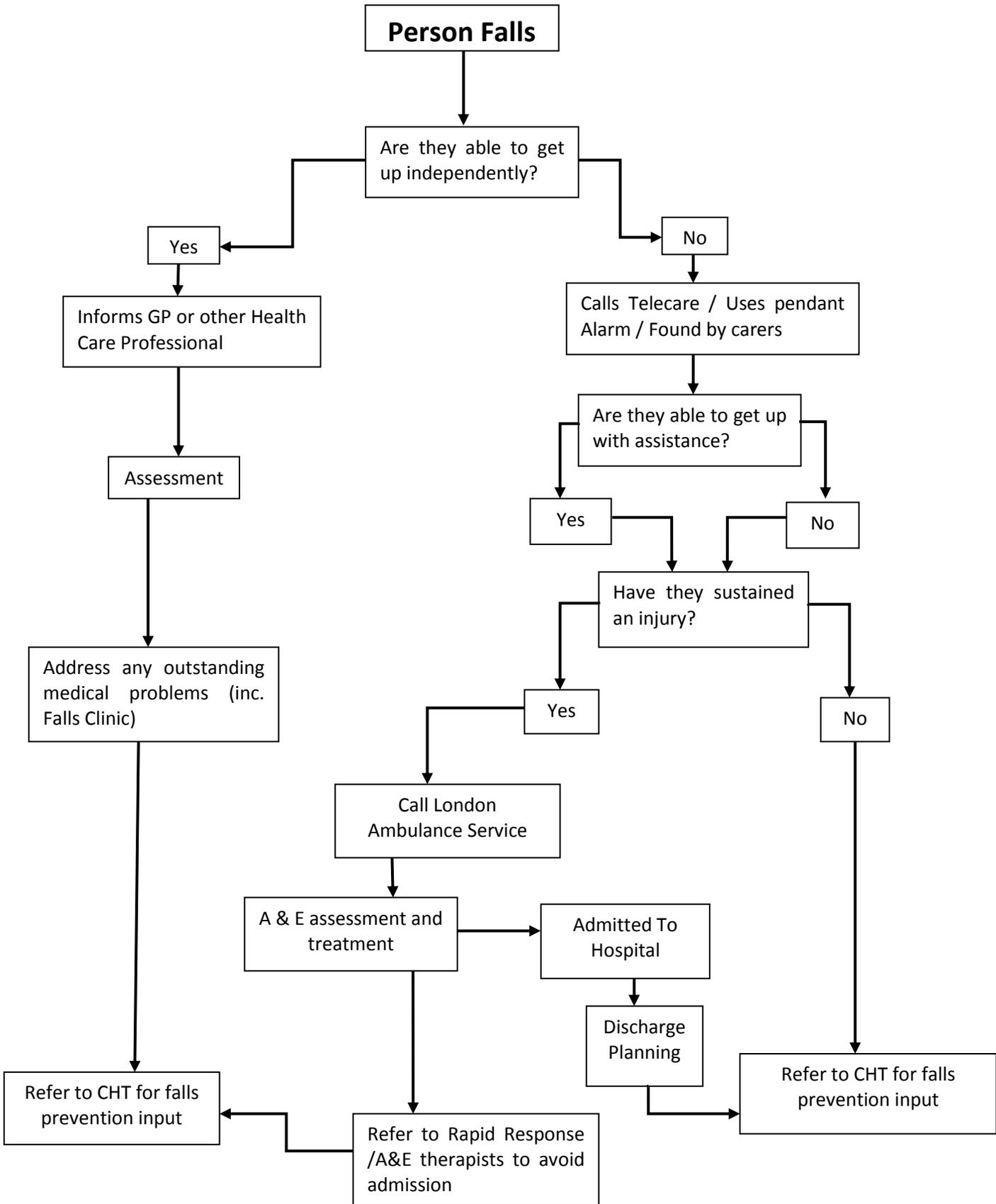
St. Matthias Community Centre
113 Poplar High Street
London E14 0AE

Telephone: 020 7987 0459/07813478891

Email: nip65@msn.com

COMPLETED BY: (at the hub ticked above)

Falls Pathway in Tower Hamlets



Adult Community Health Team (CHT) Initial Assessment - APPENDIX 6

To be carried out by first professional doing the initial visit. Most responses are linked with EMIS read codes (tick boxes)
The primary aim of this assessment is to explore whether there are urgent / unmet needs requiring urgent action / a referral to other disciplines within CHT. *(Optional) indicates not required in a Rapid Response assessment.

Client Name:	Client Date of Birth	Client NHS Number:
Client Address:	Client Contact Number: Next of Kin Details	
Assessor Name:	Locality/Team: NW	Date of Assessment:
GP Details:	<input type="checkbox"/> Tick if Rapid Response Time Referred: _____ Time Received by CHT _____ Time Patient/seen/contacted: _____	
Data Protection Act (1998) Inform the client that CHT routinely shares information about clients with social services, GP's and relevant professionals in order to plan and deliver appropriate care. Does the client consent to CHT processing & sharing their personal information? <input type="checkbox"/> Yes <input type="checkbox"/> No Note any objections or concerns:		
Referral Details (fill prior to visit)		
Reason for referral**?		Date Referred: ___ / ___ / ___
Are there any known risks to visiting alone? <input type="checkbox"/> No <input type="checkbox"/> Yes (specify) Needs interpreter**? <input type="checkbox"/> No <input type="checkbox"/> Yes (State language)..... Family member interpreter present? <input type="checkbox"/> No <input type="checkbox"/> Yes Ethnicity needs confirming? <input type="checkbox"/> No <input type="checkbox"/> Yes		
Access Issues: Able to Open door? <input type="checkbox"/> Yes <input type="checkbox"/> No If No, how can access be arranged?		

GENERAL SOCIAL INFORMATION	Tick if problem identified
Accommodation/ housing: <i>(Aim – to identify any housing problems or re-housing applications in process)</i> <input type="checkbox"/> Inadequate housing <input type="checkbox"/> Housing adequate If inadequate housing, then state reason, details <input type="checkbox"/> Lack of space in house <input type="checkbox"/> Lack of heat in house <input type="checkbox"/> Inadequate sanitation <input type="checkbox"/> Damp in house <input type="checkbox"/> Stairs in house <input type="checkbox"/> Overcrowded in house <input type="checkbox"/> Multiple occupancy <input type="checkbox"/> No indoor toilet <input type="checkbox"/> House in poor repair	
Living situation: <i>(Aim – to identify who lives with the client or discuss recent or planned changes in living situation)</i> <input type="checkbox"/> Lives alone – help available <input type="checkbox"/> lives alone – no help available <input type="checkbox"/> Warden attended <input type="checkbox"/> Nursing/other home <input type="checkbox"/> Residential institution <input type="checkbox"/> Housing dependency scale <input type="checkbox"/> Lives with relatives <input type="checkbox"/> Lives in temporary housing <input type="checkbox"/> Has no fixed abode	
Family or Social support network: <i>(Aim - to identify important friends, carers, partners & any changes in the degree of support to the client)</i>	

Problems with medication management?	<input type="checkbox"/> Able to take medication <input type="checkbox"/> Uses dosset box <input type="checkbox"/> Forgets to take medication <input type="checkbox"/> Unhappy about medications <input type="checkbox"/> Polypharmacy	
Problems with weight	<input type="checkbox"/> Weight steady <input type="checkbox"/> Weight increasing <input type="checkbox"/> Weight decreasing	
Problems with appetite	<input type="checkbox"/> Normal appetite <input type="checkbox"/> Reduced appetite <input type="checkbox"/> Increased appetite	
New or increased problems with swallowing?	<input type="checkbox"/> Coughing when eating <input type="checkbox"/> Coughing when drinking <input type="checkbox"/> Effortful swallowing <input type="checkbox"/> Sensation of food sticking in throat <input type="checkbox"/> Difficulty with tablets only Frequency of above problems: <input type="checkbox"/> every meal <input type="checkbox"/> daily <input type="checkbox"/> weekly <input type="checkbox"/> occasional Saliva management: <input type="checkbox"/> Drooling at rest <input type="checkbox"/> coughing on saliva <input type="checkbox"/> saliva pooling in mouth Other (please specify): <p style="text-align: right;">Tick if referral to Speech and Language Therapy needed <input type="checkbox"/></p>	
Any known allergies	<input type="checkbox"/> No known allergies <input type="checkbox"/> Drug allergy (specify below) <input type="checkbox"/> Latex allergy <input type="checkbox"/> Food allergy <input type="checkbox"/> Allergy to animals <input type="checkbox"/> Allergy, unspecified Specify:	
Any pain or difficulties managing pain	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Any problems with hearing	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Eyesight	<input type="checkbox"/> Yes patient concerned about eyesight <input type="checkbox"/> Normal vision	
Any breathing difficulties:	<input type="checkbox"/> Breath Normal <input type="checkbox"/> Wheezing <input type="checkbox"/> Breathless – at rest <input type="checkbox"/> Cough <input type="checkbox"/> Short of breath on exertion <input type="checkbox"/> No cough <input type="checkbox"/> Paroxysmal nocturnal dyspnoea	
Smoking Status:	<input type="checkbox"/> Never Smoked <input type="checkbox"/> Ex Smoker <input type="checkbox"/> Current Smoker <input type="checkbox"/> Passive smoker	
If current smoker, Offer referral to smoking cessation	<input type="checkbox"/> Smoking cessation referral declined <input type="checkbox"/> Referral to smoking service agreed	
Problems with diarrhoea:	<input type="checkbox"/> Yes <input type="checkbox"/> Diarrhoea not present	
Problems with Constipation:	<input type="checkbox"/> Yes <input type="checkbox"/> No Not constipated	
Foot Health Issues:	<input type="checkbox"/> Yes <input type="checkbox"/> No Issues	
Presence of pressure	<input type="checkbox"/> No skin ulcer <input type="checkbox"/> Pressure sore <input type="checkbox"/> Dry skin	

Client Name:

Date of Birth:

GHT Initial Assessment (Ver 1)

ulcer/skin problem:	<input type="checkbox"/> At risk of developing pressure sores <input type="checkbox"/> Rash present <input type="checkbox"/> Leg ulcer <input type="checkbox"/> Other open wounds NOS	
Bowels Assessment:	<input type="checkbox"/> Bowels: incontinent <input type="checkbox"/> Bowels: occasional accident <input type="checkbox"/> Bowels: fully continent <input type="checkbox"/> Stoma	
Bladder Assessment:	<input type="checkbox"/> Bladder: incontinent <input type="checkbox"/> Bladder: occasional accident <input type="checkbox"/> Bladder: fully continent <input type="checkbox"/> Indwelling urethral catheter	
Observations (fill in as needed)	BP _____ / _____ : PR _____ RR _____ Temp: _____ SpO2: _____	
	Tick if already getting continence products at home <input type="checkbox"/> Tick if needing referral to community nurse <input type="checkbox"/>	

MOBILITY		
Indoor Mobility:	<input type="checkbox"/> Mobile in home <input type="checkbox"/> Confined to bed <input type="checkbox"/> Walking aid use <input type="checkbox"/> Confined to chair <input type="checkbox"/> Independent in wheelchair	
Outdoor Mobility:	<input type="checkbox"/> Fully mobile <input type="checkbox"/> Mobile outside with aid <input type="checkbox"/> Housebound	
Bed/Chair Transfer:	<input type="checkbox"/> Independent: chair/bed transf. <input type="checkbox"/> Minimal help: chair/bed transf. <input type="checkbox"/> Dependent: chair/bed transfer <input type="checkbox"/> Transfers using hoist	
Bathing Transfers:	<input type="checkbox"/> Independent bathing <input type="checkbox"/> Dependent for bathing	
Any issues around movement of limbs, neck or back:	<input type="checkbox"/> No motor symptom <input type="checkbox"/> Limited range of motion <input type="checkbox"/> Weakness present <input type="checkbox"/> Increased muscle tone	
	Tick of referral to physiotherapy needed <input type="checkbox"/>	

FALLS		
Number of falls in the last year _____	(Optional) Tick if has fear of falling <input type="checkbox"/>	
(Optional) Tick if History of Fracture after the age of 50 <input type="checkbox"/>	Tick if needs full falls assessment	<input type="checkbox"/>

ACTIVITIES OF DAILY LIVING		
Using the toilet:	<input type="checkbox"/> Dependent in toilet <input type="checkbox"/> Needs help in toilet <input type="checkbox"/> Independent in toilet	
Personal care ability:	<input type="checkbox"/> Able to perform personal care activity <input type="checkbox"/> Unable to perform personal care activity <input type="checkbox"/> Need for assistance with personal care	
If unable to perform personal care, select appropriate difficulty:	<input type="checkbox"/> Difficulty dressing lower body <input type="checkbox"/> Difficulty dressing upper body <input type="checkbox"/> Difficulty with bathing <input type="checkbox"/> Difficulty shampooing/combing hair <input type="checkbox"/> Difficulty brushing/flossing/mouth care <input type="checkbox"/> Lack of personal care facilities <input type="checkbox"/> Unwilling/unable/forgets to complete personal care activities	

Client Name:

Date of Birth:

CHT Initial Assessment (Ver 1)

	<input type="checkbox"/> Unable to access personal care facilities	
Cooking ability:	<input type="checkbox"/> Independent in cooking <input type="checkbox"/> Needs help with cooking <input type="checkbox"/> Meals on wheels <input type="checkbox"/> Spouse cooks food	
*(Optional) Difficulty with shopping/laundry/housework?	<input type="checkbox"/> Needs help with shopping <input type="checkbox"/> Difficulty laundering clothing <input type="checkbox"/> Needs help with housework	
Problems with current equipment	<input type="checkbox"/> No <input type="checkbox"/> Yes: Specify:	
Tick if referral to Occupational Therapy Needed		<input type="checkbox"/>

ROLES AND ROUTINES	
*(Optional) Do you feel satisfied with your current roles and routines? (e.g work, study, parenting, leisure, social roles)	<input type="checkbox"/> Yes, satisfied with current roles and routines <input type="checkbox"/> No, not satisfied with current roles and routines
*(Optional) Do you need any support with your current interests and activities? (e.g are there any hobbies/interests that you would like to be more involved in, what barriers are there to activity or involvement)	<input type="checkbox"/> Yes, needed support with current interests and activities <input type="checkbox"/> No, does not need any support with current interests/activities

COMMUNICATION	
Have there been any recent changes in your ability to understand what other people say to you?	<input type="checkbox"/> yes <input type="checkbox"/> no Example(s):
Have there been any recent changes in your ability to speak to others and make yourself understood?	<input type="checkbox"/> yes, difficulties producing clear speech sounds <input type="checkbox"/> yes, difficulties finding the right word(s) <input type="checkbox"/> yes, difficulties putting words in the right order in a sentence <input type="checkbox"/> no problems Example(s):
Have there been any recent changes in your ability to read and / or write? ^a <small>^aThis is asking about reading comprehension and spelling rather than eyesight and manual dexterity</small>	<input type="checkbox"/> yes <input type="checkbox"/> no Example(s):
Tick if referral to Speech and Language Therapy needed <input type="checkbox"/>	

MENTAL HEALTH		
Have there been any recent problems in memory or thinking?	<input type="checkbox"/> Yes - <input type="checkbox"/> No -	
*(Optional) Issues around memory and cognition (select all that applies) - explain how they currently cope	<input type="checkbox"/> Often forget important things - events, names, faces, turning off gas <input type="checkbox"/> Easily distracted or have difficulty completing a task <input type="checkbox"/> Difficulty organising self e.g. managing appt and letters	
*(Optional) How is your mood recently?	<input type="checkbox"/> Normal mood <input type="checkbox"/> Depressed mood <input type="checkbox"/> Mood swings <input type="checkbox"/> Suicidal ideation	
*(Optional) Mental Health Issues (you can select more than one) - provide additional explanation as needed	<input type="checkbox"/> Personal history of mental disorder <input type="checkbox"/> Family history of mental and behavioural disorders <input type="checkbox"/> feeling depressed <input type="checkbox"/> "Nerves" – nervousness <input type="checkbox"/> Sleep disturbances <input type="checkbox"/> Bereavement <input type="checkbox"/> Drug abuse <input type="checkbox"/> Alcohol problem drinking	
Tick if mental health issues/need for psychology identified		<input type="checkbox"/>

Carer Needs		
Name of Main Carer/Contact Details		
Nature of Care/Support provided (free text)		
Any Carer Issues	<input type="checkbox"/> Carer able to cope <input type="checkbox"/> Housing and welfare advice <input type="checkbox"/> Benefits advice <input type="checkbox"/> Carer or dependent stress	
Tick if referral for carer support needed		<input type="checkbox"/>

INITIAL CARE PLAN	
Concerns around safeguarding or mental capacity <u>Need further discussion with line manager if identified</u>	<input type="checkbox"/> Adult safeguarding concern <input type="checkbox"/> Child safeguarding concern <input type="checkbox"/> Learning disability <input type="checkbox"/> Advice about assessment of mental capacity needed
SUMMARY OF PROBLEMS IDENTIFIED	
Social	
Health	
Mobility/Falls	
ADL	
Roles and Routine	
Mental Health	
Carer	
INITIAL INTERVENTIONS	
Summary of Initial interventions:	
Onward referrals:	
Care plan options:	<input type="checkbox"/> Care plan agreed with patient <input type="checkbox"/> Care plan completed
<input type="checkbox"/> Rehab Goal Identified	
<input type="checkbox"/> Hospital Admission Avoided ?	
<input type="checkbox"/> Hospital Admission Arranged ?	
Outcome:	
<i>Additional Instructions: Upload this document to EMIS and Use CHT Initial Assessment Template in Consultation</i>	

Client Name:

Date of Birth:

CHT Initial Assessment (Ver 1)

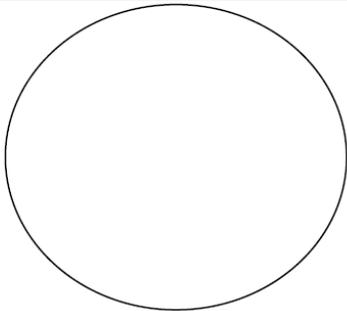
SPECIALIST THERAPY FALLS ASSESSMENT APPENDIX 7

Date of assessment	Name	Date of Birth	
Falls History			
Number of falls in last 12 months:			
Time, location & task of fall(s):			
Cause of fall(s)/mechanism: (Dizziness/Blackouts?)			
Injuries:			
Was the person able to get up from the floor?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Was the person able to summon help following the fall?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Does the person have a pendant alarm?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Fear of falling or restricting any activities they appear capable of doing:		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Details:			
Drug History			
<input type="checkbox"/> On 4 or more prescription only drugs		<input type="checkbox"/> Not Applicable	
On any of the following medication:			
<input type="checkbox"/> Sleeping tablet	<input type="checkbox"/> Water tablet	<input type="checkbox"/> Heart tablet	
<input type="checkbox"/> Anti-depressant	<input type="checkbox"/> Blood pressure tablet	<input type="checkbox"/> Major tranquilisers	
		Refer to doctor for medication review if this has not been done in last 12 months	
Bone Health			
Previous fragility fracture:		<input type="checkbox"/> Hip <input type="checkbox"/> Wrist <input type="checkbox"/> Vertebrae <input type="checkbox"/> Not Applicable	
<input type="checkbox"/> Corticosteroids	<input type="checkbox"/> Rheumatoid arthritis		
<input type="checkbox"/> Alcohol/smoking	<input type="checkbox"/> Parental history osteoporosis/hip fracture		
<input type="checkbox"/> Already on bone health treatment. How long:		Refer to doctor if osteoporosis risk and unmanaged	
Social History			
Gait and Balance Analysis (Including aid used)			
<input type="checkbox"/> Walking aid checked / provided Type:			
Outcome measures			
Timed Unsupported Stand:	180°turn:	Sit to Stand test:	Timed Up and Go:
Normal: over 2 mins	Normal: 4 steps		Normal: <10 sec
Tinetti Balance and Gait Assessment		<input type="checkbox"/> Yes	<input type="checkbox"/> No (See attached)

Name:

NHS No:

Adapted from:SLIPS

Environmental Assessment		
Floors (rugs, cables, etc.)		Action:
Stairs & Steps (rails, carpets, etc.)		Action:
Kitchen (space, location of frequently used items)		Action:
Bathroom (mats, rails, equipment)		Action:
Bedroom (lighting, path,)		Action:
Other:		
Feet and Footwear		
<input type="checkbox"/> Any foot problems i.e. corns, bunions, swelling, overgrown toenails: <input type="checkbox"/> N/A <input type="checkbox"/> Inappropriate, poorly fitting or worn footwear:		If needed: <input type="checkbox"/> Referral to podiatry <input type="checkbox"/> Referral to orthotist <input type="checkbox"/> Advice on footwear Other:
Vision		
Does the pt wear Glasses? <input type="checkbox"/> Yes, when was their last eye test? . <input type="checkbox"/> No		If needed: <input type="checkbox"/> Referral to Optician
Cognition		
Has Pt had a discussion with GP re: memory impairment or concerns? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, has there been any further investigation or diagnosis? Detail:		
Mini-Cog Test		Total: /3 < 2 refer to OT
Recall: Choose 3 non related words, ask pt to remember and repeat <div style="text-align: right;">/3</div>	Clock Drawing: Inside the circle draw the hours of a clock as if a child would draw them. Please the hands of the clock to represent the time "forty five minutes past ten o'clock.	
Risk Factors		
<input type="checkbox"/> Muscle Weakness	<input type="checkbox"/> Decreased ROM	<input type="checkbox"/> Postural Instability
<input type="checkbox"/> Reduced functional ability	<input type="checkbox"/> Environmental Hazards	<input type="checkbox"/> Cognitive Impairment
<input type="checkbox"/> Behaviour/Attitude	<input type="checkbox"/> Visual Impairment	<input type="checkbox"/> Foot health/footwear
<input type="checkbox"/> Vestibular / Dizziness	<input type="checkbox"/> Alcohol	<input type="checkbox"/> Incontinence
<input type="checkbox"/> Loss of Confidence	<input type="checkbox"/> Fear of Falls	<input type="checkbox"/> Unsafe use of equipment
<input type="checkbox"/> Other:		
Treatment Plan		
<input type="checkbox"/> Otago	<input type="checkbox"/> Backward Chaining	<input type="checkbox"/> Outdoor Mobility
<input type="checkbox"/> Stair Practice	<input type="checkbox"/> Public Transport	<input type="checkbox"/> RSW input
<input type="checkbox"/> Environmental Ax	<input type="checkbox"/> Falls Group	<input type="checkbox"/> Advice & Education
<input type="checkbox"/> Telecare	<input type="checkbox"/> LinkAge Plus	<input type="checkbox"/> Discharge
<input type="checkbox"/> Other:		
Name of therapist:	Signed:	Date:

Tower Hamlets Falls JSNA APPENDIX 8 – MFA tool form



MULTI- FACTORIAL FALLS PREVENTION ASSESSMENT

Name _____ DOB _____

Physical Health Risk Factors	Y/N	Enquire	Identified Risk Factors	Individualised care plan
History of Falls 2 or ≥ 6/12		Identify context and place of fall Review incidents, Involve patient /carer Give out falls leaflet		
Fear of falling		Identify why they think falling		
Mobility problems/ aids		Enquire about intrinsic risks *		
Appropriate foot wear		Request suitable foot wear from family within 24.hrs. Offer temporary replacement slippers/socks. If offer declined- choice. Document discussion in plan		
Check feet for ulcers In growing toe nails		Any problems with foot care. Pain & discomfort, refer to podiatry		
Postural hypotension		dizzy, syncope All patients to have daily sitting and standing BP assessment and review by doctor within 2/7		
Cardiovascular Problems Neurological problems		List ECG and discuss in MDT for r/v by GP/Geriatrician/ ward Doctor		
Diabetes, Peripheral neuropathy, retinopathy		Get details Review by DN		
Drugs ≥ 4		Review in MDT. Involve pharmacist		
Culprit drugs		Check when last r/v by GP On Hypotensive? Benzodiazepine/ Hypnotic, Antipsychotic, Antidepressant If yes, arrange for a medication review with doctor within 2/7 of admission Sleep chart/& sleep hygiene GDS- junior Dr/ pharmacy		
Vision		Do they wear glasses –varifocals Check patient can see items end of bed.		
Urine		Check for incontinence or frequency. Urine dip		

Mental Health Risk Factors	Y/N			
Dementia		MMSE/ ACE 111		
Confusion/ Agitation (Delirium?)		Signs of infection , dehydration Confusion Assessment Method, Bloods, with inflammatory markers, urine Dip. Level observation		
Osteoporosis screen		History of low trauma fractures (from standing height or below) Any family history of osteoporosis (maternal hip fractures) Prescribed systemic steroids \geq 3/12 Is patient on medication to improve bone density / need for calcium and Vit D		

Intrinsic risk factors *	Y/N	Individualised care plan
Can patient stand up from chair independently?		
Mobility Aids- get details, ferrules replacement?		
Can patient complete Time Get Up & Go in \leq 10 seconds		
Environment Hazards		
Recent history of weight loss/ poor nutrition		

Name of staff members completing:

Nurse:

OT:

Doctor:

Pharmacist:

Admission:

Update:

Appendix 9 Document References:

- ¹ http://www.who.int/ageing/publications/Falls_prevention7March.pdf?ua=1
- ² NICE quality standard [QS86], March 2015. Falls in older people: assessment after a fall and preventing further falls <http://www.nice.org.uk/guidance/qs86/chapter/introduction> accessed 29 May 2015
- ³ Help the Aged, 2008. Spotlight Report 2008
- ⁴ NICE Clinical Guidelines 161: Falls- Assessment and prevention of falls in older people, 2013. <http://www.nice.org.uk/nicemedia/live/14181/64166/64166.pdf>
- ⁵ ROSPA cited by NICE Clinical Guidelines 161: Falls- Assessment and prevention of falls in older people, 2013. <http://www.nice.org.uk/nicemedia/live/14181/64166/64166.pdf>
- ⁶ NICE quality standard [QS86], March 2015. Falls in older people: assessment after a fall and preventing further falls <http://www.nice.org.uk/guidance/qs86/chapter/introduction> accessed 29 May 2015
- ⁷ Rubenstein LZ , Josephson KR, Robbins AS. Falls in the nursing home. *Annals of Internal Medicine*; 1994; 121:442–51
- ⁸ Royal College of Physicians. Falling standards, broken promises- Report of the national audit of falls and bone health in older people 2010 https://www.rcplondon.ac.uk/sites/default/files/national_report.pdf accessed 4 June 2015
- ⁹ World Health Organization 2007, Global Report on Falls Prevention in Older Age. http://www.who.int/ageing/publications/Falls_prevention7March.pdf?ua=1 accessed 18-11-2014
- ¹⁰ NICE Clinical Guidelines 161: Falls- Assessment and prevention of falls in older people, 2013. <http://www.nice.org.uk/nicemedia/live/14181/64166/64166.pdf>
- ¹¹ Rubenstein, L. Z. & Josephson, K. R. (2006) Falls and their prevention in elderly people: what does the evidence show? *Medical Clinics of North America*, 90, 807-824.
- ¹² Nevitt MC, Cummings SR, Kidd S, Black D. Risk factors for recurrent non-syncopal falls; A prospective study. *JAMA* 1989; 261: 2663-8)
- ¹³ Alexander NB cited in: Rubenstein, L. Z. & Josephson, K. R. (2006) Falls and their prevention in elderly people: what does the evidence show? *Medical Clinics of North America*, 90, 807-824.
- ¹⁴ Rubenstein LZ. Falls in Older People: epidemiology, risk factors and strategies for prevention. *Age and Ageing*, 2006; 35-S2: ii37-ii41
- ¹⁵ Rubenstein, L. Z. & Josephson, K. R. (2006) Falls and their prevention in elderly people: what does the evidence show? *Medical Clinics of North America*, 90, 807-824.
- ¹⁶ Focus on Falls, 2014 http://www.college-optometrists.org/filemanager/root/site_assets/commissioning/falls/focus_on_falls_report_240414.pdf
- ¹⁷ British Geriatrics Society. The importance of vision in preventing falls
A joint policy statement by the British Geriatrics Society and the College of Optometrists, 2010.
http://www.bgs.org.uk/index.php?option=com_content&view=article&id=410:visionpreventingfalls&catid=47:fallsandbones&Itemid=307 Accessed 5 February 2015
- ¹⁸ Rubenstein, L. Z. & Josephson, K. R. (2006) Falls and their prevention in elderly people: what does the evidence show? *Medical Clinics of North America*, 90, 807-824.
- ¹⁹ NICE Clinical Guidelines 161: Falls- Assessment and prevention of falls in older people, 2013. <http://www.nice.org.uk/nicemedia/live/14181/64166/64166.pdf>
- ²⁰ J A Stevens, P S Corso, E A Finkelstein, and T R Miller The costs of fatal and non-fatal falls among older adults. *Inj Prev*. 2006 Oct; 12(5): 290–295.
10.1136/ip.2005.011015; PMID: PMC2563445;
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2563445/> Accessed 18-11-2014
- ²¹ Todd C, Ballinger C, Whitehead S. Reviews of socio-demographic factors related to falls and environmental interventions to prevent falls amongst older people living in the community,
<http://www.who.int/ageing/projects/3.Environmental%20and%20socioeconomic%20risk%20factors%20on%20falls.pdf>
- ²² Rubenstein, L. Z. & Josephson, K. R. (2006) Falls and their prevention in elderly people: what does the evidence show? *Medical Clinics of North America*, 90, 807-824.
- ²³ Department of Health (2009) - Foot Care Services for older people
http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@pg/documents/digitalasset/dh_103153.pdf accessed 4 February 2015

-
- ²⁴ NICE Clinical Guidelines 161: Falls- Assessment and prevention of falls in older people, 2013. <http://www.nice.org.uk/nicemedia/live/14181/64166/64166.pdf>
- ²⁵ The Kings Fund Improving the Public's Health- A resource for Local authorities, 2013:
(http://www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/improving-the-publics-health-kingsfund-dec13.pdf)
- ²⁶ Rubenstein, L. Z. & Josephson, K. R. (2006) Falls and their prevention in elderly people: what does the evidence show? *Medical Clinics of North America*, 90, 807-824.
- ²⁷ SUSAN E. CARTER, ELIZABETH M. CAMPBELL, ROB W. SANSON-FISHER, SEUNA REDMAN, WILLIAM J. GILLESPIE. *Environmental hazards in the homes of older people. Age and Ageing*; 1997; 26: 195-202 <http://ageing.oxfordjournals.org/content/26/3/195.full.pdf>
- ²⁸ Fall prevention: New approaches to integrated falls prevention services. NHS Confederation, Briefing, April 2012 Issue 234
- ²⁹ Royal College of Physicians, 2011. *Falling Standards, Broken Promises: Report of the national audit of falls and bone health in older people 2010*. London: RCP; www.rcplondon.ac.uk/resources/falling-standards-broken-promises accessed on 2 June 2014
- ³⁰ NICE Clinical Guidelines 161: Falls- Assessment and prevention of falls in older people, 2013. <http://www.nice.org.uk/nicemedia/live/14181/64166/64166.pdf>
- ³¹ TY, TJ, BD SL. Exploring the system-wide costs of falls in older people in Torbay. The Kings Fund, 2013.
- ³² British Orthopaedic Association 2007, *The care of patients with fragility fracture (The "Blue Book")* <http://www.fractures.com/pdf/BOA-BGS-Blue-Book.pdf> accessed on 4 Nov 2014
- ³³ NICE (CG146) Osteoporosis: assessing the risk of fragility fracture, 2012 <https://www.nice.org.uk/guidance/cg146/chapter/Introduction> accessed 1 June 2015
- ³⁴ NICE (TA 161) <http://www.nice.org.uk/guidance/ta161/chapter/2-Clinical-need-and-practice>
- ³⁵ Royal Colleague of Physicians. Falls and Fragility Fracture Audit programme (FFFAP) Secondary fracture prevention: first steps to a national audit Fracture Liaison Service Database (FLS-DB) Feasibility study summary report. https://www.rcplondon.ac.uk/sites/default/files/final_fls-db_public_report_-_full_report.pdf accessed 6 July 2015
- ³⁶ NOGG (National Osteoporosis Guideline Group). Guideline for the diagnosis and management of osteoporosis in postmenopausal women and men from the age of 50 years in the UK. http://www.shef.ac.uk/NOGG/NOGG_Pocket_Guide_for_Healthcare_Professionals.pdf. Accessed 1 June 2015
- ³⁷ <http://publications.nice.org.uk/osteoporosis-assessing-the-risk-of-fragility-fracture-cg146/research-recommendations>
- ³⁸ WHO- In NICE, <http://www.nice.org.uk/guidance/ta161/chapter/2-Clinical-need-and-practice>.
- ³⁹ NICE <http://www.shef.ac.uk/FRAX/tool.jsp?locationValue=9>
- ⁴⁰ NICE (TA160) <http://www.nice.org.uk/guidance/ta160> and NICE (TA161) <http://www.nice.org.uk/guidance/ta161/chapter/2-Clinical-need-and-practice> Accessed 1 June 2015
- ⁴¹ NOGG (National Osteoporosis Guideline Group). Guideline for the diagnosis and management of osteoporosis in postmenopausal women and men from the age of 50 years in the UK, 2014; http://www.shef.ac.uk/NOGG/NOGG_Pocket_Guide_for_Healthcare_Professionals.pdf. Accessed 1 June 2015
- ⁴² Royal Colleague of Physicians. Falls and Fragility Fracture Audit programme (FFFAP) Secondary fracture prevention: first steps to a national audit Fracture Liaison Service Database (FLS-DB) Feasibility study summary report. https://www.rcplondon.ac.uk/sites/default/files/final_fls-db_public_report_-_full_report.pdf accessed 6 July 2015
- ⁴³ Aasis Unnanuntana, Brian P. Gladnick, Eve Donnelly, Joseph M. Lane; The Assessment of Fracture Risk; *J Bone Joint Surg Am*. 2010 Mar; 92(3): 743–753. doi: 10.2106/JBJS.I.00919PMCID: PMC2827823 <http://europepmc.org/articles/PMC2827823> accessed 8 June 2015
- ⁴⁴ http://aje.oxfordjournals.org/content/169/2/143?ijkey=f15a4e07c229219a2fa98ed604138a66ffa32dc3&keytype=tf_ipsecsha accessed from here on 29 June 2015
- ⁴⁵ Ensrud KE et al 2014;349:g4120; <http://www.bmj.com/content/349/bmj.g4120> accessed 29 June 2015
- ⁴⁶ British Orthopaedic Association 2007, *The care of patients with fragility fracture (The "Blue Book")*
- ⁴⁷ NICE CKS Falls-Risk Assessment, 2014. <http://cks.nice.org.uk/falls-risk-assessment#!topicsummary>
- ⁴⁸ <http://www.phoutcomes.info/public-health-outcomes-framework#gid/1000044/pat/6/ati/102/page/6/par/E12000007/are/E09000030> accessed 10 October 2014.
- ⁴⁹ Robert and Goldacre, 2003 in: Quality Watch. Focus on hip fracture. Trends in emergency admissions for fractured neck of femur, 2001 to 2011. The health Foundation/Nuffield Trust, October 2013

-
- ⁵⁰ National Clinical Guideline Centre, 2011, in: Quality Watch. Focus on hip fracture. Trends in emergency admissions for fractured neck of femur, 2001 to 2011. The health Foundation/Nuffield Trust, October 2013
- ⁵¹ Quality Watch. Focus on hip fracture. Trends in emergency admissions for fractured neck of femur, 2001- 2011. The Health Foundation/Nuffield Trust, October 2013
- ⁵² WHO Regional Committee for Europe, Strategy and action plan for healthy ageing in Europe 2012-2020.
http://www.euro.who.int/__data/assets/pdf_file/0008/175544/RC62wd10Rev1-Eng.pdf accessed 27-01-2015
- ⁵³ WHO Global Report on Falls Prevention in Older Age:
http://www.who.int/ageing/publications/Falls_prevention7March.pdf?ua=1
- ⁵⁴ <http://www.nice.org.uk/guidance/qs86/resources/guidance-falls-in-older-people-assessment-after-a-fall-and-preventing-further-falls-pdf>
- ⁵⁵ Active for Life: Guidelines - Promoting physical activity with older people; Health Education Authority
http://www.nice.nhs.uk/nicemedia/documents/act4life_older.pdf accessed 4 November 2014
- ⁵⁶ NICE clinical Guidelines 161: Falls- Assessment and prevention of falls in older people (2013). <http://www.nice.org.uk/nicemedia/live/14181/64166/64166.pdf>
- ⁵⁷ The Kings Fund Improving the Public's Health- A resource for Local authorities, 2013:
(http://www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/improving-the-publics-health-kingsfund-dec13.pdf)
- ⁵⁸ NICE Quality standard for hip fracture (QS16), March 2012. <https://www.nice.org.uk/guidance/qs16>
- ⁵⁹ Age UK Report to the Minister of State for Care Services, Breaking Through: Building Better Falls and Fracture Services in England, 2012:
<http://www.nos.org.uk/document.doc?id=987> accessed 3 November 2014
- ⁶⁰ Department of Health. Start Active, Stay Active - A report on physical activity for health from the four home countries' Chief Medical Officers, 2011
- ⁶¹ Department of Health- The prevention package for older people, 2009:
http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/dh_103146
- ⁶² Department of Health (2009). Falls and Fractures. Effective interventions in Health and Social care http://www.laterlifetraining.co.uk/wp-content/uploads/2011/12/FF_Effective-Interventions-in-health-and-social-care.pdf. Accessed February 2015
- ⁶³ Department of Health (2001) National Service Framework for Older People (<https://www.gov.uk/government/publications/quality-standards-for-care-services-for-older-people>).
- ⁶⁴ Public Health Outcomes Framework (PHOF)- Overarching Indicators. <http://www.phoutcomes.info/>
- ⁶⁵ NHS Outcomes framework. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213712/dh_131724.pdf
- ⁶⁶ Adult Social Care Outcomes Framework (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/141627/The-Adult-Social-Care-Outcomes-Framework-2013-14.pdf)
- ⁶⁷ NICE Clinical Guidelines 161: Falls- Assessment and prevention of falls in older people, 2013. <http://www.nice.org.uk/nicemedia/live/14181/64166/64166.pdf>
- ⁶⁸ Beswick AD, Rees K, Dieppe P, Ayis S, Gooberman-Hill R, Horwood J, Ebrahim S (2008). Complex interventions to improve physical function and maintain independent living in elderly people: a systematic review and meta-analysis. Lancet, 371 (9614), 725-735).. <http://www.ncbi.nlm.nih.gov/pubmed/18313501>
- ⁶⁹ Department of Health (2011). Start Active, Stay Active. A report on physical activity for health from the four home countries' Chief Medical Officers.
- ⁷⁰ Academy of Medical Royal Colleges, 2015. Exercise: The miracle cure and the role of the doctor in promoting it; <http://www.aomrc.org.uk/general-news/exercise-the-miracle-cure.html> accessed 2 July 2015
- ⁷¹ Age UK 2011 Falls Prevention Exercise – following the evidence http://www.ageuk.org.uk/Documents/EN-GB/For-professionals/Research/Falls_Prevention_Guide_2013.pdf?dtrk=true. Accessed August 2015
- ⁷² Department of Health. National Service Framework (NSF) for Older People, 2001
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/198033/National_Service_Framework_for_Older_People.pdf
- ⁷³ Department of Health (2006). A New Ambition for Old Age-Next Steps in implementing the National Service Framework for Older people, 2006.
http://library.nhs.gov.uk/mediaAssets/dementiasp/A_new_ambition_for_old_age_12-Nov-07.pdf

-
- ⁷⁴ The Kings Fund Improving the Public's Health- A resource for Local authorities, 2013: (http://www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/improving-the-publics-health-kingsfund-dec13.pdf)
- ⁷⁵ NICE Clinical Guidelines 161: Falls- Assessment and prevention of falls in older people, 2013. <http://www.nice.org.uk/nicemedia/live/14181/64166/64166.pdf>
- ⁷⁶ NICE quality standard [QS86], March 2015. Falls in older people: assessment after a fall and preventing further falls <http://www.nice.org.uk/guidance/qs86/chapter/introduction> accessed 29 May 2015
- ⁷⁷ NICE CG146. Osteoporosis: assessing the risk of fragility fracture; <http://publications.nice.org.uk/osteoporosis-assessing-the-risk-of-fragility-fracture-cg146>. Accessed 1 June 2015
- ⁷⁸ NICE technology appraisal guidance [TA160] October 2008. Alendronate, etidronate, risedronate, raloxifene and strontium ranelate for the primary prevention of osteoporotic fragility fractures in postmenopausal women (amended) <http://www.nice.org.uk/guidance/ta160> Accessed 1 June 2015
- ⁷⁹ British Orthopaedic Association 2007, The care of patients with fragility fracture (The "Blue Book") <http://www.fractures.com/pdf/BOA-BGS-Blue-Book.pdf> accessed on 4 Nov 2014
- ⁸⁰ The National Hip Fracture Database-Part of the Falls and Fragility Fracture Audit Programme <http://www.nhfd.co.uk/20/hipfractureR.nsf/welcome?readform>
- ⁸¹ Department of Health (2009). Falls and Fractures. Effective interventions in Health and Social care. http://www.laterlifetraining.co.uk/wp-content/uploads/2011/12/FF_Effective-Interventions-in-health-and-social-care.pdf. Accessed February 2015
- ⁸² Mitchell PJ; Fracture Liaison Services: the UK experience; Osteoporos Int (2011) 22 (Suppl 3):S487–S494; DOI 10.1007/s00198-011-1702-2 <http://www.prevrefrat.org/Fracture%20Liaison%20Services%20the%20UK%20experience.pdf>. Accessed 6 July 2015
- ⁸³ Department of Health (2009). Falls and Fractures. Effective interventions in Health and Social care. http://www.laterlifetraining.co.uk/wp-content/uploads/2011/12/FF_Effective-Interventions-in-health-and-social-care.pdf. Accessed February 2015
- ⁸⁴ Mitchell PJ; Fracture Liaison Services: the UK experience; Osteoporos Int (2011) 22 (Suppl 3):S487–S494; DOI 10.1007/s00198-011-1702-2 <http://www.prevrefrat.org/Fracture%20Liaison%20Services%20the%20UK%20experience.pdf>. Accessed 6 July 2015
- ⁸⁵ Royal College of Physicians. Secondary fracture prevention: first steps to a national audit. London RCP, 2015 https://www.rcplondon.ac.uk/sites/default/files/final_fls-db_public_report_-_full_report.pdf accessed 6 July 2015
- ⁸⁶ Lee IM and Skerrett PJ (2011) Physical activity and all-cause mortality: what is the dose-response relation? Medicine & Science in sports and exercise 33 (6 Suppl):S459-71 <http://www.ncbi.nlm.nih.gov/pubmed/11427772>
- ⁸⁷ <http://www.sportengland.org/our-work/local-work/local-government/local-sport-profile/>
- ⁸⁸ RNIB Sight Loss Data Tool; <http://www.rnib.org.uk/knowledge-and-research-hub-key-information-and-statistics/sight-loss-data-tool/>; Accessed 8 Sept 2015
- ⁸⁹ POPPI- Projecting Older People Population Information System <http://www.poppi.org.uk/index.php?pageNo=341&arealD=8362&loc=8362>; Accessed 8 September 2015
- ⁹⁰ Vision for Tower Hamlets: A Plan for Eye Care & Inclusion, 2013 – 2016 – latest data taken from RNIB sight loss data tool version2 - July 2015
- ⁹¹ Shaw, F. E., Bond, J., Richardson, D. A., Dawson, P., Steen, I. N., McKeith, I. G., Kenny, R. A. (2003) Multifactorial intervention after a fall in older people with cognitive impairment and dementia presenting to the accident and emergency department: randomised controlled trial. BMJ, 326 (73)
- ⁹² Primary Care web Tool, https://www.primarycare.nhs.uk/private/dpc/dpc_main.aspx accessed 17-02-2015
- ⁹³ <http://www.poppi.org.uk/index.php?pageNo=338&arealD=8362&loc=8362>. Accessed 13 October 2014 .
- ⁹⁴ Provisional Monthly Hospital Episode Statistics for Admitted Patient Care, Outpatients and Accident and Emergency Data - April 2012 to February 2013; <http://www.hscic.gov.uk/catalogue/PUB11051>. Accessed 14 July 2015
- ⁹⁵ Quality and Outcomes framework- GP practice results 2013-2014 <http://qof.hscic.gov.uk/> accessed 8 February 2015
- ⁹⁶ Soler M. Review of Tower Hamlets Falls Services and the implementation of the 2011 Falls JSNA recommendations to addressing falls in Tower Hamlets. Internal report, April 2014
- ⁹⁷ Tower Hamlets Falls JSNA 2011
- ⁹⁸ LinkAge Plus Activity Report 2013-14

-
- ⁹⁹ Tower Hamlets Falls JSNA 2011
- ¹⁰⁰ <http://gp.towerhamletscg.nhs.uk/clinical-services/co-ordinated-care-specification.htm>
- ¹⁰¹ Quality and Outcomes Framework (QOF) 2014-15 <http://www.patient.co.uk/doctor/quality-and-outcomes-framework-qof-2014-2015> accessed 5 February 2015
- ¹⁰² NICE Clinical Guidelines 161: Falls- Assessment and prevention of falls in older people (2013). <http://www.nice.org.uk/nicemedia/live/14181/64166/64166.pdf>
- ¹⁰³ Health and Social Care Information Centre (HSCIC); General Pharmaceutical Services in England - 2003-04 to 2012-13 [NS]16:01 July 03, 2015 - 09:30 November 20, 2013.
<http://www.hscic.gov.uk/searchcatalogue?productid=13373&q=MURs&topics=0%2fPrimary+care+services&infotype=0%2fOfficial+statistics&sort=Most+recent&size=10&page=1#top>
- ¹⁰⁴ British Orthopaedic Association 2007, The care of patients with fragility fracture (The “Blue Book”) <http://www.fractures.com/pdf/BOA-BGS-Blue-Book.pdf>. Accessed on 4 Nov 2014
- ¹⁰⁵ Vision for Tower Hamlets: A Plan for Eye Care & Inclusion, 2013 – 2016
- ¹⁰⁶ http://www.towerhamlets.gov.uk/ignl/transport_and_streets/roads_highways_and_pavements/pavement_maintenance.aspx
- ¹⁰⁷ PHOF: <http://www.phoutcomes.info/public-health-outcomes-framework#gid/1000044/pat/6/ati/102/page/6/par/E12000007/are/E09000030>. Accessed 7 May 2015
- ¹⁰⁸ Adult Social Care Outcomes Indicators: <http://ascof.hscic.gov.uk/Outcome/711/>; accessed 9 September 2015
- ¹⁰⁹ Quality and Outcomes framework- GP practice results 2013-2014 <http://qof.hscic.gov.uk/> accessed 8 February 2015
- ¹¹⁰ Osteoporosis resources for Primary care <http://www.osteoporosis-resources.org.uk/implementation/20-preparation-for-qof-201213>
- ¹¹¹ Health and Social Care Information Centre QOF data on Osteoporosis in TH 2014: <http://www.hscic.gov.uk/terms-and-conditions>
- ¹¹² LinkAge Plus Activity Report 2013-14
- ¹¹³ NICE Clinical Guidelines 161: Falls- Assessment and prevention of falls in older people (2013). <http://www.nice.org.uk/nicemedia/live/14181/64166/64166.pdf>