

Falls and fractures

*Developing a local joint strategic
needs assessment*



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Falls and fractures: developing a local joint strategic needs assessment

This guidance note sets out:

- The case for assessing the level of needs to address risk of falls and incidence of falls in a local population
- The clinical and social impact of a fall on an individual
- The policy context for assessing local needs, the commissioning implications of needs assessed needs
- Annex A provides a template for falls assessment for use by local commissioning communities.

It should be read in conjunction with the DH guide Falls and fractures: effective interventions in health and social care and associated pathways.

Why assess needs of people who fall in local populations?

Falling is a serious and frequent occurrence in people aged 65 and over. The statistics demonstrate the severity of falling;

- Each year, 35%^{1 2} of over 65s experience one or more falls
- About 45% of people over 80 who live in the community fall each year. Between 10 – 25% of such fallers will sustain a serious injury³.
- 7% of those who have fallen attending A&E, 4% resulting in a serious injury, 3% being admitted to an in-patient bed.

Falls have serious consequences for individuals; hip fractures are the most frequent fragility fractures caused by falls and the commonest cause of accident related death.

Falls, and fear of falling, have a significant individual human cost. Fewer than half of older people with a hip fracture return to their usual place of residence and for some it is the event which forces them to leave their homes and move into residential care. Startlingly, 80% [of older women surveyed] would rather be dead than experience the loss of independence and quality of life that results from a bad hip fracture and subsequent admission to a nursing home (Salkeld et al BMJ 2000).

In addition to the individual costs falls have a significant cost to health and care services. Ambulance call-outs to pick up people who have fallen, A&E attendances, in-patient treatments for fractures and other trauma, rehabilitation and long term follow-up care and support.

1 21% of 65 – 69 yr olds and 43% of those 85+ reported having fallen Deaths from accidental falls rise steeply with age In 2005, over 2200 people aged over 65 in England died as a result of falls (from APHO report: Indications of Public Health: Older People 2008)

2 Cryer and Patel 2001: (as reported in British Heart Foundation ppt) One-third of people aged 65+ and 50% of over-80s living in the community will fall. Over 60% of those living in nursing homes will fall repeatedly.

3 BOA/BGS Blue Book

Commissioners across health and care therefore should assess the level of falls in their local population to ensure that sufficient preventive and treatment services are available. Commissioners should ensure that appropriate models of rehabilitation are in place for managing long term care costs by supporting individuals to reach their maximum potential for recovery following a fall.

Local commissioning communities should have reliable estimates of expected levels of falls and fractures based on local demographics and compared to national prevalence.

The policy context for assessing needs: Joint Strategic Needs Assessment and World Class Commissioning

The Care Quality Commission will be looking for clear evidence of needs based planning and commissioning when assessing PCTs and local authorities. A Joint Strategic Needs Assessment is the foundation for such evidence.

Section 116 Local Government and Public Health Act (2007) placed a duty on upper tier authorities and PCTs to undertake a Joint Strategic Needs Assessment (JSNA) jointly produced by the Local Authority Director of Adult Social Services, Director of Children's Services and the PCT Director of Public Health. The duty came into effect in April 2008.

The purpose of a JSNA is to identify the current and future health and well-being needs of the local population. Identified needs should inform strategic planning and commissioning priorities for the local authority and PCT, notably priorities for the 3 year planning cycles of Local Area Agreements and Community Area Agreements.

The DH Guidance on Joint Strategic Needs Assessment⁴ states that a needs assessment is a systematic method for reviewing the health and wellbeing needs of a population, leading to agreed commissioning priorities that will improve health and wellbeing outcomes and reduce inequalities (p7)

An effective JSNA process is underpinned by

- Partnership working – contributions from Local Strategic Partnerships members, including providers from all sectors
- Community engagement
- Evidence of effectiveness

A JSNA describes the big picture of local population needs using high level data. The Guidance for JSNA has a core data set that includes some items relevant to a falls needs assessment:

- Population numbers in five year age bands as estimates of current population and projections for population changes looking at 3-5 year intervals ahead over a period of 15-20 years

4 DH, Guidance on Joint Strategic Needs Assessment, 2007, www.dh.gov.uk/publications

- Trauma, including falls using hospital admissions for fractured neck of femur as a proxy for incidence
- Musculo-skeletal including arthritis using admission for hip and knee replacement

A JSNA will often be an iterative process. Reliable data entry and collection processes might not be in place within local commissioning communities. Commissioners should examine their local data and identify strengths and weaknesses and put remedial programmes in place to develop robust and reliable data. Where data is found to be unreliable, commissioners will want to revisit the data sources more frequently to ensure progress on reliability.

A JSNA then, describes the big picture of the local population needs such as that set out in World Class Commissioning organisational competency 5: Manage Knowledge and Assess Need.

The WCC guidance⁵ states that in managing knowledge and assessing needs a PCT will:

- Demonstrate ownership of contribution to a robust and ongoing JSNA
- Have strategies to further develop and enhance the needs assessment data sets and analysis with its partners
- Routinely acquires knowledge and intelligence of the whole community through well-defined and rigorous methodologies, including data collection with local partners, services providers and other agencies
- Identify and use the relevant core data sets required for effective commissioning analysis and demonstrates this use
- Routinely seek and report on research and best practice evidence, including clinical evidence, that will assist in commissioning and decision making
- Shares data with current and potential providers and with relevant community groups
- Demonstrate that it has sought and used all relevant data to work with communities and clinicians, prioritising strategic commissioning decisions and longer-term workforce planning

5 DH, World Class Commissioning, 2007, http://www.dh.gov.uk/en/Managingyourorganisation/Commissioning/Worldclasscommissioning/DH_083204

Engaging the public and people who use services

An integral element of JSNA development is to hear the voice of the public and people who use services – as the JSNA guidance states:

*“Ensuring the engagement of particularly vulnerable and hard to reach groups, those with complex medical and social care needs and those experiencing exclusion will be one of the significant challenges of JSNA”
(p14)*

This is supported in World Class Commissioning organisational competence 3, Engage with Public and Patients, which states that;

“PCTS are responsible through the commissioning process for investing public funds on behalf of their patients and communities. In order to make commissioning decisions that reflect the needs, priorities and aspirations of the local population, PCTS will have to engage the public in a variety of ways, openly and honestly. They will need to be proactive in seeking out the views and experience of the public, patients, their carers and other stakeholders, especially those least able to act as advocates for themselves.”

Of further interest to PCT commissioners is Section 2a of the NHS Constitution⁶ which states that patients:

“.....have the right to expect your local NHS to assess the health requirements of the local community and to commission and put in place the services to meet those needs as considered necessary.”

⁶ The NHS Constitution <http://www.dh.gov.uk/em/Healthcare/NHSConstitution/index.htm>

Developing a Minimum Data Set for the JSNA

Establishing the level local demand for a comprehensive falls and fracture service depends on data. Reliable data for the number of hip fractures locally is reasonably easy to collect, and reasonably accurate. When trying to assess the number of fragility fractures caused by falls and the actual number of falls taking place in a local population, data can be more difficult to collect and interpret.

However, using a variety of data sources, there is much that can be done to establish basic levels of need and, moreover, identify where there are gaps in the service and in service standards and quality.

Current guidance recognises the importance of falls as a key issue to be addressed in JSNAs. Hospital admissions for Fractured Neck of Femur (FNOF) are recognised within the Core Data Set in the guidance as shown below

[Return to Table 1](#)

Indicator(s)		
55. Hospital admissions for fractured proximal femur (proxy for incidence)		
Domain Burden of ill-health	Sub-domain Trauma	Sub-sub-domain Falls
Sources		
Description	Detail	Available from
Number and indirectly age-standardised rate	LA, latest 2003-04 (update imminent)	From www.nchod.nhs.uk . Look for 'Emergency hospital admissions and timely surgery: fractured proximal femur'. Relevant indicator is <i>rate</i> of admissions (rather than percent receiving timely surgery).
Comments		
<ul style="list-style-type: none"> POPPI (www.popp.org.uk) contains projections of the number of older people attending A&E or admitted to hospital as a result of falls. This is not measuring the same thing, but may be thought relevant. 		

The guidance recognises the limitations of the current minimum data set as FNOF is only a proxy for gathering information on the incidence of falls and underlying bone health. However, this reinforces the case to be made for reviewing falls and fractures within the JSNA because:

- by using the JSNA process, authorities can increase the extent to which intelligence concerning health and social care is joined up.

- it provides a joint data set upon which the PCT and the local authority can plan services together. This means that when gaps in provision are identified agencies can work together to close those gaps.
- the JSNA process has resulted in easy access to a shared core data set which can be built on in future years, alongside other analysis and benchmarking.

Using JSNA findings

There is a clear distinction between individual and population need; population need captured in a JSNA should be translated into services that support individuals who have these needs.

Comparing needs and current services by:

- Quantity of services units against number in need
- Quality of available services (as assessed by users of the service, patient reported outcome measures, and services quality measures) with comparable services elsewhere
- Location of service delivery against geographic base of need (eg large scale supported living facilities)
- Range of services to meet all levels of need
- Choice of services

Outcomes from assessing needs, strategic planning and commissioning should be threefold:

To reduce the number of falls:

- Better health and wellbeing
- Improve an individual's balance by exercise
- Individual assessment of people who fall for underlying medical causes, with treatment plans to reduce the risk
- Provide a safer environment to prevent falls

To reduce the number of fractures

- Better bones for all
- "After the first fracture, act to prevent the second"
- Improve balance and treating the bones

Reduce the consequences

- After a fall – rehabilitate and get active again
- After a hip fracture: ensure high quality care to agreed standards to save lives and money
- Prevent 'long-lie' scenarios by training on how to get up or by alarm technology

JSNA template – Assessing local needs and services

The template provides a framework for local commissioning communities (health and care) to build their evidence of falls prevalence and health and care activity. Completion of all or part of the template is entirely optional.

Annex 1	Issues to be aware of and questions to ask	Data source
Population at risk of falling	Each year 35% over 65s experience a fall Falls estimated to increase by 50% by 2020	Office of national statistics census 2001 population data available at local authority and primary care organisation http://neighbourhood.statistics.gov.uk/dissemination/LeadHome.do;jessionid=ac1f930c30d6f1c9ccd3ff9f41be8578ad0b875fad83?m=0&s=1239792133198&enc=1&najs=true&nsck=true&nssvg=true&nswid=1003
Local population prevalence; 65+		
Males 65+		
Females 65+		
Population 65+ from BME groups		
Population trajectories over 5, 10 and 15 years	Projecting Older People Population – data available at local authority level http://www.poppi.org.uk/	
Factors increasing risk of serious injury from falls		
Osteoporosis	Incidence of osteoporosis increases with age; 15% of men and women over 50 30% men and women over 70 40% men and women over 80 Women have higher risk of osteoporosis; 2% women aged over 50 rising to 25% aged over 80	Health Episode Statistics (HES) – Record level hospital episode data holds data on episodes of care categorised by International Classification of Diseases (ICD 10) Relevant ICD 10 codes are: (M80.) Osteoporosis with pathological fracture (M81.) Osteoporosis without pathological fracture (M81.0) Postmenopausal osteoporosis (M82.) Osteoporosis in diseases classified elsewhere Data is collated locally as well as www.hesonline.nhs.uk More information on osteoporosis at: http://www.nos.org.uk/

Annex 1	Issues to be aware of and questions to ask	Data source
(Rates of Falls in other age groups if available) check stats (ie 65 – 74;75-84; 85+ and perhaps rates of falls in specific groups (eg those who live in Nursing and residential homes)	Between 45-50% people 80+ living in community fall each year. Of which 10-25% sustain serious injury	http://www.hesonline.nhs.uk/ Some high level queries may be run from here: http://www.hesonline.nhs.uk/Ease/servlet/ContentServer?siteID=1937&categoryID=654 Care homes should hold internal falls registers.
Where do people fall? <ul style="list-style-type: none"> ● home ● residential establishment ● POST code (links to deprived areas) ● Ethnicity available? 	60% of people living in residential and nursing homes falls regularly	This can be determined for those patients admitted to hospital using the ICD 10 'W' codes outlined below (Annex B) HES – Will provide ethnicity, usual place of residence and GP postcodes. Sourced locally or at http://www.hesonline.nhs.uk/
Prevalence of falls in local population		
Number of falls – Incidence	Does the number of recorded falls match with predicted prevalence data? If not, investigate the discrepancies.	Accurate figures are difficult to obtain because the injury is likely to be the coded entry on presentation to A&E and secondary care.
Fractured neck of femur (Need to Define ICD codes (ie Proximal Neck of Femur: eg S72 and OPCS4 codes (W series))		Fractured neck of femur – ICD 10 code S72 Annex A shows the other most common diagnoses presenting when a fall occurs in a person over 65. See Annex B for falls specific external cause codes ('W series')
Other fragility fractures (need to define key ones)		See Annex A for ICD 10 codes that can be used for local data searches
Reported incidence in local population		
Number of falls (rates/1000)		
Other fragility fractures		

Annex 1	Issues to be aware of and questions to ask	Data source
Treatment		
Location of intervention		
Number of fallers attending A&E	7% of all fallers attend A&E	See Annex A for ICD 10 codes that can be used for local data searches and http://www.datadictionary.nhs.uk/web_site_content/supporting_information/clinical_coding/accident_and_emergency_diagnosis_tables.asp?shownav=1
Number of fallers using ambulance services	7% people who fall are picked up off the floor by ambulance staff	Local ambulance data (availability from Information Centre planned Spring 2009)
Number of fallers attending GP		GP practice data
Number admitted to in-patient care	3% of people who fall are admitted as in-patients	See Annex A for ICD 10 codes that can be used for local data searches http://www.hesonline.nhs.uk/Ease/servlet/ContentServer?siteID=1937&categoryID=1071
Type of intervention/ treatment		
Number of fractured neck of femur	4% of all falls result in significant injury	DEXA scans are coded as "diagnostic test (imaging)". http://www.datadictionary.nhs.uk/data_dictionary/messages/central_return_data_sets/data_sets/diagnostics_waiting_times_and_activity_data_set_fr.asp?shownav=0
Number of other fragility fracture		
Number of falls risk assessment		
Number of osteoporosis assessment		
● DEXA scans		
● bone-sparing agent		
Number referred to exercise/balance classes – other multi-factorial assessment	Falls prevention can reduce the number of falls by between 15 and 30%	Local data

Annex 1	Issues to be aware of and questions to ask	Data source
Rehab, Long Term Care & Support and Implications of Fall		
No of people with short term housing requirements		Local data
No of People unable to return to their usual place of residence		HES data can be used to determine those who don't return to their usual place of residence although this is only an immediate discharge destination
Other:		
No (%) of People >65 who are overweight/obese		QOF Obesity data is not sub-categorised by age http://www.ic.nhs.uk/webfiles/QOF/2007-08/NewFilesGS/QOF0708_Prac_Obesity.xls
No of People > 65 who are involved in physical activity sessions sponsored by local agencies		Local data

Annex A International Classification of Disease (ICD 10)

Most common diagnoses presenting when a fall occurs in a person over 65

S72	Fracture of femur
R54	Senility
S52	Fracture of forearm
S42	Fracture of shoulder and upper arm
S01	Open wound of head
S82	Fracture of lower leg including ankle
S32	Fracture of lumbar spine and pelvis
S09	Other and unspecified injuries of head
S00	Superficial injury of head
M25	Other joint disorders not elsewhere classified
N39	Other disorders of urinary system
S70	Superficial injury of hip and thigh
S79	Other and specified injuries of hip and thigh
R55	Syncope and collapse
S80	Superficial injury of lower leg
S22	Fracture of rib(s) sternum and thoracic spine
S81	Open wound of lower leg
S06	Intracranial injury
S62	Fracture at wrist and hand level
J18	Pneumonia organism unspecified
M54	Dorsalgia
S43	Dislocation, sprain & strain of joints & ligaments of shoulder girdle
M79	Other soft tissue disorders not elsewhere classified
J22	Unspecified acute lower respiratory infection
I63	Cerebral infarction

R41	Other symptoms & signs involving cognitive function and awareness
S02	Fracture of skull and facial bones
S89	Other and unspecified injuries of lower leg
T84	Complic'ns of internal orthopaedic prosthetic devices, implants & grafts
S30	Superficial injury of abdomen, lower back and pelvis
S92	Fracture of foot except ankle

Annex B Hospital Episode Statistics (HES)

Codes for falls

W00	Fall on same level involving ice and snow
W01	Fall on same level from slipping tripping and stumbling
W02	Fall involving ice-skates skis roller-skates or skateboards
W03	Other fall same level due collision/pushing by another person
W04	Fall while being carried or supported by other persons
W05	Fall involving wheelchair
W06	Fall involving bed
W07	Fall involving chair
W08	Fall involving other furniture
W09	Fall involving playground equipment
W10	Fall on and from stairs and steps
W11	Fall on and from ladder
W12	Fall on and from scaffolding
W13	Fall from out of or through building or structure
W14	Fall from tree
W15	Fall from cliff
W16	Diving/jumping into water causing injury other than drowning or submersion
W17	Other fall from one level to another
W18	Other fall on same level
W19	Unspecified fall



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