NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Health and social care directorate

Quality standards and indicators

Briefing paper

Quality standard topic: Falls

Output: Prioritised quality improvement areas for development.

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Contents

1 Introduction

This briefing paper presents a structured overview of potential quality improvement areas for falls. It provides the Committee with a basis for discussing and prioritising quality improvement areas for development into draft quality statements and measures for public consultation.

1.1 Structure

This briefing paper includes a brief description of the topic, a summary of each of the suggested quality improvement areas and supporting information.

If relevant, recommendations selected from the key development source below are included to help the Committee in considering potential statements and measures.

1.2 Development source

The key development sources referenced in this briefing paper are:

Occupational therapy in the prevention and management of falls in adults (draft version). College of Occupational Therapists Practice Guideline (publication expected January 2015).

Falls - risk assessment. NICE clinical knowledge summary (2014).

Falls: assessment and prevention of falls in older people. NICE clinical guideline 161 (2013).

This guideline updates and replaces Falls (NICE clinical guideline 21). A review decision was made to update NICE clinical guideline 21 (2004) to extend the remit of the guidance to include assessing and preventing falls in older people during a hospital stay (inpatients). The new recommendations for older people in hospital (2013) sit alongside the original recommendations from the 2004 guideline. The recommendations are labelled according to when they were originally published. It is important to emphasise that all of the 2004 recommendations are just as relevant and important now as they were when they were originally published.

Essential care after an inpatient fall. National Patient Safety Agency (2011).

2 Overview[1]

2.1 Focus of quality standard

This quality standard will cover the assessment and prevention of falls in older people. Older people are those aged 65 years and over. The quality standard will cover the assessment and prevention of falls for older people living in the community and during a hospital stay. For the assessment and prevention of falls during a hospital stay, people aged 50 to 64 years who are admitted to hospital and are judged by a clinician to be at higher risk of falling because of an underlying condition are also covered by the quality standard.

2.2 Definition

The WHO Global Report on Falls Prevention in Older Age (2007) defines a fall as an event which results in a person coming to rest inadvertently on the ground or floor or other lower level. A fall can occur with or without loss of consciousness.

2.3 Incidence and prevalence

Falls and fall-related injuries are a common and serious problem for older people particularly among those who have underlying pathologies or conditions. Falls are a major cause of disability and the leading cause of mortality resulting from injury in people aged 75 and older in the UK.

People aged 65 and older have the highest risk of falling. Around 30% of adults who are over 65 and living at home will experience at least 1 fall a year (approximately 2.5 million people in England). This rises to 50% of adults over 80 who are either at home or in residential care.

Most falls result in no serious injury, but annually approximately 5% of older people living in the community who fall experience a fracture or need hospitalisation. The Royal College of Physicians (2011) report Falling Standards, broken promises highlights that falls and fractures in people aged 65 and over account for over 4 million hospital bed days each year in England alone.

Falls in hospitals are the most common patient safety incidents reported in hospital trusts in England. The National Patient Safety Agency (2011) report Essential care after an inpatient fall states that each year around 282,000 patient falls are reported to the NHS England's Patient Safety division from hospitals and mental health units. A significant minority of these falls result in death or in severe or moderate injury (including around 840 hip fractures, 550 other types of fracture and 30 intracranial injuries). Treating inpatient falls alone costs the NHS more than £15 million per year.

[1] Unless referenced in the body of the text sections 2.1 to 2.4 are taken from NICE clinical guideline 161 or NICE clinical guideline 161: full guidance.

The human cost of falling includes distress, pain, injury, loss of confidence, loss of independence and mortality. Falling also affects the family members and carers of people who fall. Falls are estimated to cost the NHS more than £2.3 billion per year. Therefore falling has an impact on quality of life, health and healthcare costs.

2.4 Management

The major risk factors for falling are diverse, and many of them – such as balance impairment, muscle weakness, polypharmacy and environmental hazards – are potentially modifiable. Since the risk of falling appears to increase with the number of risk factors, multifactorial interventions have been suggested as the most effective strategy to reduce decline in function and independence and also to prevent the associated costs of complications.

Preventive programmes based on risk factors for falling include strength and balance training, medication review, home hazard intervention and follow-up and cardiac pacing where indicated. Interventions need to target extrinsic factors such as hazards within the home environment, aspects of the inpatient environment such as flooring and lighting for older people in hospital, and intrinsic risk factors, such as mobility, strength, gait, medicine use and sensory impairment

A person who has fallen will present either with injuries or as a result of direct questioning. Many older people do not volunteer that they are falling. It is therefore important that healthcare professionals routinely ask older people if they have fallen in the past year. They should also ask about the frequency, context and characteristics of the fall or falls.

Older people who present for medical attention because of a fall, or report recurrent falls in the past year, or demonstrate abnormalities of gait and/or balance should be offered a multifactorial falls risk assessment. This assessment should be part of an individualised, multifactorial intervention.

Undertaking multifactorial assessments and multifactorial interventions for people at risk of falls could result in a reduction of the incidence of falls, saving the NHS and the wider public sector the resources needed to care for people following a fall.

When a person falls during a hospital stay it is important that they are cared for appropriately during the time immediately after the fall. The National Patient Safety Agency (2011) report Essential care after an inpatient fall states that when a serious injury occurs as a result of an inpatient fall, safe manual handling and prompt assessment and treatment is critical to the patient's chances of making a full recovery. It is therefore important that NHS organisations that have inpatient beds have local protocols and systems in place to ensure that staff can consistently achieve this.

See appendix 1for the associated care pathway from the NICE full clinical guideline 161.

2.5 National Outcome Frameworks

Tables 1–3 show the outcomes, overarching indicators and improvement areas from the frameworks that the quality standard could contribute to achieving.

Table 1 The Adult Social Care Outcomes Framework 2014–15

Domain	Overarching and outcome measures
1 Enhancing quality of life for people with care and support needs	***Overarching measure*** 1A Social care-related quality of life* ***Outcome measures*** **Carers can balance their caring roles and maintain their desired quality of life.** 1D Carer-reported quality of life
2 Delaying and reducing the need for care and support	***Overarching measure*** 2A Permanent admissions to residential and nursing care homes, per 100,000 population ***Outcome measures*** **Everybody has the opportunity to have the best health and wellbeing throughout their life, and can access support and information to help them manage their care needs.** **Earlier diagnosis, intervention and reablement means that people and their carers are less dependent on intensive services.** 2B Proportion of older people (65 and over) who were still at home 91 days after discharge from hospital into reablement/rehabilitation services* (NHSOF 3.6 i-ii) **When people develop care needs, the support they receive takes place in the most appropriate setting, and enables them to regain their independence** 2C Delayed transfers of care from hospital, and those which are attributable to adult social care

3 Ensuring that people have a positive experience of care and support	***Overarching measure*** **People who use social care and their carers are satisfied with their experience of care and support services.** 3A Overall satisfaction of people who use services with their care and support 3B Overall satisfaction of carers with social services New measure for 2014/15: 3E Improving people's experience of integrated care** (NHSOF 4.9) ***Outcome measures*** **Carers feel that they are respected as equal partners throughout the care process.** 3C The proportion of carers who report that they have been included or consulted in discussions about the person they care for **People know what choices are available to them locally, what they are entitled to, and who to contact when they need help.** 3D The proportion of people who use services and carers who find it easy to find information about support **People, including those involved in making decisions on social care, respect the dignity of the individual and ensure support is sensitive to the circumstances of each individual.** This information can be taken from the Adult Social Care Survey and used for analysis at the local level
4 Safeguarding adults whose circumstances make them vulnerable and protecting from avoidable harm	***Overarching measure*** 4A The proportion of people who use services who feel safe* ***Outcome measures*** Everyone enjoys physical safety and feels secure. People are protected as far as possible from avoidable harm, disease and injuries.
Aligning across the health and care system * Indicator complementary ** Indicator shared	

Table 2 NHS Outcomes Framework 2014–15

Domain	Overarching indicators and improvement areas
1 Preventing people from dying prematurely	***Overarching indicator*** 1a Potential Years of Life Lost (PYLL) from causes considered amenable to healthcare i Adults 1b Life expectancy at 75 i Males ii Females ***Improvement areas*** **Reducing premature death in people with serious mental illness** 1.5 Excess under 75 mortality rate in adults with serious mental illness (PHOF 4.9*)
2 Enhancing quality of life for people with long-term conditions	***Overarching indicator*** 2 Health-related quality of life for people with long-term conditions** ***Improvement areas*** **Ensuring people feel supported to manage their condition** 2.1 Proportion of people feeling supported to manage their condition** **Reducing time spent in hospital by people with long-term conditions**
3 Helping people to recover from episodes of ill health or following injury	***Overarching indicator*** 3b Emergency readmissions within 30 days of discharge from hospital (PHOF 4.11*) ***Improvement areas*** **Improving recovery from injuries and trauma** 3.3 Survival from major trauma **Improving recovery from fragility fractures** 3.5 Proportion of patients recovering to their previous levels of mobility/walking ability at i 30 and ii 120 days (ASCOF 2B[1]*) ii Proportion offered rehabilitation following discharge from acute or community hospital (ASCOF 2B[2]*)
4 Ensuring that people have a positive experience of care	***Overarching indicator*** 4b Patient experience of hospital care ***Improvement areas*** **Improving people's experience of accident and emergency services** 4.3 Patient experience of A&E services **Improving people's experience of integrated care** 4.9 People's experience of integrated care (ASCOF 3E**)

5 Treating and caring for people in a safe environment and protecting them from avoidable harm	***Overarching indicators*** 5a Patient safety incidents reported 5b Safety incidents involving severe harm or death 5c Hospital deaths attributable to problems in care
Alignment across the health and social care system * Indicator shared with Public Health Outcomes Framework (PHOF) ** Indicator complementary with Adult Social Care Outcomes Framework (ASCOF)	

Table 3 Public health outcomes framework for England, 2013–2016

Domain	Objectives and indicators
1 Improving the wider determinants of health	***Objective*** Improvements against wider factors which affect health and wellbeing and health inequalities ***Indicators*** 1.6 Adults with a learning disability / in contact with secondary mental health services who live in stable and appropriate accommodation† (ASCOF 1G and 1H)
2 Health improvement	***Objective*** People are helped to live healthy lifestyles, make healthy choices and reduce health inequalities 2.24 Injuries due to falls in people aged 65 and over
4 Healthcare public health and preventing premature mortality	***Objective*** Reduced numbers of people living with preventable ill health and people dying prematurely, while reducing the gap between communities ***Indicators*** 4.3 Mortality rate from causes considered preventable** (NHSOF 1a) 4.9 Excess under 75 mortality rate in adults with serious mental illness* (NHSOF 1.5) 4.11 Emergency readmissions within 30 days of discharge from hospital* (NHSOF 3b) 4.13 Health-related quality of life for older people 4.14 Hip fractures in people aged 65 and over 4.15 Excess winter deaths

3 Summary of suggestions

3.1 Responses

In total 18 stakeholders responded to the 2-week engagement exercise 08/07/14-22/07/14.

Stakeholders were asked to suggest up to 5 areas for quality improvement. Specialist committee members were also invited to provide suggestions. The responses have been merged and summarised in table 4 for further consideration by the Committee.

Full details on the suggestions provided are given in appendix 3 for information.

Table 4 Summary of suggested quality improvement areas

Suggested area for improvement	Stakeholders
Prevention • Identification of people at risk • Encouraging the participation of older people in falls prevention programmes	AGILE, BGS, COT, RCP, SCM
Emergency care • Assessment and emergency care following a fall in hospital	COT, RCP
Assessment • Multifactorial falls risk assessment • Medication review • Visual assessment • Assessment and management of bone health	AGILE, CLCHT, COT, CO & OC, LWCCG, NOS, NLH, RCO, RCP, SCM
Intervention • Multifactorial interventions • Individualised care planning • Exercise/strength and balance training • Home hazard and safety intervention • Vitamin D	AGILE, BGS, CLCHT, COT, HQTD, NLH, NHNT, RCN, RCP, SCM, WCCG
Education and information • Competence of healthcare professionals in falls assessment and prevention • Information giving	COT, NLH, SCM

AGILE
BGS – British Geriatrics Society
CLCHT – Central London Community Healthcare Trust
COT – College of Occupational Therapists
CO & OC – The College of Optometrists and the Optical Confederation
HQTD – HQT Diagnostics
LWCCG – NHS Leeds West Clinical Commissioning Group
NHSE – NHS England
NOS – National Osteoporosis Society
NLH – North London Hospice
NHNT – Nottinghamshire Healthcare NHS Trust
RCN – Royal College of Nursing
RCO – Royal College of Ophthalmologists
RCP, Royal College of Physicians
TEWVFT - Tees Esk and Wear Valleys NHS Foundation Trust
SCM, Specialist Committee Member
Vifor – Vifor Pharma UK Ltd
WCCG - Wandsworth Clinical Commissioning Group

4 Suggested improvement areas

4.1 Prevention

4.1.1 Summary of suggestions

Identification of people at risk

Stakeholders highlighted the importance of identifying people at risk of falling and those that have already fallen. This includes people in a variety of settings including primary care, care homes, inpatients, A&E and social care settings.

Encouraging the participation of older people in falls prevention programmes

Stakeholders suggested that encouraging the participation of older people in falls prevention programmes is a key area for quality improvement.

4.1.2 Selected recommendations from development source

Table 5 below highlights recommendations that have been provisionally selected from the development source(s) that may support potential statement development. These are presented in full after table 5 to help inform the Committee's discussion.

Table 5 Specific areas for quality improvement

Suggested quality improvement area	Suggested source guidance recommendations
Identification of people at risk	**Case/risk identification** NICE CG161 Recommendation 1.1.1.1 (KPI)
Encouraging the participation of older people in falls prevention programmes	**Encouraging the participation of older people in falls prevention programmes** NICE CG161 Recommendations 1.1.9.1 and 1.1.9.2.

Identification of people at risk

NICE CG161 – Recommendation 1.1.1.1 (key priority for implementation)

Older people in contact with healthcare professionals should be asked routinely whether they have fallen in the past year and asked about the frequency, context and characteristics of the fall/s. [2004]

Encouraging the participation of older people in falls prevention programmes

NICE CG161 – Recommendation 1.1.9.1

To promote the participation of older people in falls prevention programmes the following should be considered.

- Healthcare professionals involved in the assessment and prevention of falls should discuss what changes a person is willing to make to prevent falls.
- Information should be relevant and available in languages other than English.
- Falls prevention programmes should also address potential barriers such as low self-efficacy and fear of falling, and encourage activity change as negotiated with the participant. [2004]

NICE CG161 – Recommendation 1.1.9.2

Practitioners who are involved in developing falls prevention programmes should ensure that such programmes are flexible enough to accommodate participants' different needs and preferences and should promote the social value of such programmes. [2004]

4.1.3 Current UK practice

Identification of people at risk

The National Falls and Bone Health Audit is coordinated by the Royal College of Physicians (RCP). The main aim of the inpatient falls pilot audit undertaken in 2011 was to assess the feasibility of a full National Audit of Falls in Hospital. The pilot audit examined the organisation of services for inpatients vulnerable to falling in acute hospitals, community hospitals and mental health units. Participating hospitals ranged from a community hospital with eight beds to an acute hospital with more than 1000 beds. In total 46 trusts took part in the pilot audit: 23 acute hospitals, 15 community trusts and 8 from the mental health sector.

The hospitals participated as a result of either random selection or volunteering and cannot, therefore, be assumed to be representative of their care sector, or the NHS as a whole. Caution has to be taken in interpreting data that was collected from only a minority of hospitals, but it was felt that the challenges the participating hospitals are experiencing with delivering basic and in depth falls prevention are unlikely to be unique.

As part of the audit a sample of patients who were aged 65 years and over had their notes checked to see if they had been asked about their history of falls. Results showed that 69% of the notes checked stated that the patient had been asked about

their history of falls, 20% said they had not been asked but included a qualifying statement explaining why and 11% said they had not been asked.

The national audit of falls and bone health in older people 2010 examines the organisation and commissioning of services provided to older people for falls prevention and bone health, and the clinical care delivered to people that have fallen and fractured a bone. For the organisational audit, 100% of acute trusts, 80% of primary care commissioners, 85% of primary care provider organisations, 93% of combined healthcare organisations, 93% of mental health care trusts, 2 specialist hospital trusts and a sample of 79 care homes submitted information about falls and fracture services.

Falling Standards, broken promises reported that 52% (127/246) of providers with an A&E department or Minor Injuries Unit (MIU) routinely screen older people attending with falls for risk of future falls.

Encouraging the participation of older people in falls prevention programmes

Dickinson et al[2] (2011) undertook a qualitative study interviewing older people who had taken part in or declined to participate in fall prevention interventions. Conclusions from the study were that healthcare professionals have a major role to play in the proactive screening and case finding, promoting falls prevention and facilitating older people's access to falls prevention programmes. It also concluded that there is a need for better dissemination of information about falls prevention and relevant services to both healthcare professionals and the general public.

[2] Dickinson A, Horton K, Machen I et al. (2011) The role of health professionals in promoting the uptake of fall prevention interventions: A qualitative study of older people's views. Age and Ageing 40 (6): 724-730.

4.2 Emergency care

4.2.1 Summary of suggestions

Assessment and emergency care following a fall in hospital

Stakeholders suggested that emergency care for a person who has fallen is a key area for quality improvement. Stakeholders highlighted the need for high quality assessment and care following a fall in hospital as this can reduce the risk of secondary injury and further falls.

4.2.2 Selected recommendations from development source

Table 6 below highlights recommendations that have been provisionally selected from the development source(s) that may support potential statement development. These are presented in full after table 6 to help inform the Committee's discussion.

Table 6 Specific areas for quality improvement

Suggested quality improvement area	Selected source guidance recommendations
Assessment and emergency care following a fall in hospital	NPSA Essential care after an inpatient fall Recommendations 1 to 5.

Assessment and emergency care following a fall in hospital

NPSA Essential care after an inpatient fall Recommendations 1 to 5.

NHS organisations with inpatient beds should ensure that:

1. They have a post-fall protocol that includes:

    a) checks by nursing staff for signs or symptoms of fracture or potential for spinal injury before the patient is moved;

    b) safe manual handling methods for patients with signs or symptoms of fracture or potential for spinal injury;

    c) frequency and duration of neurological observations for all patients where head injury has occurred or cannot be excluded (e.g. unwitnessed falls) based on National Institute for Health and Clinical Excellence (NICE) Clinical Guideline 56: Head Injury;

    d) timescales for medical examination following a fall (including fast track assessment for patients with signs of serious injury, or high vulnerability to injury, or who have been immobilised).

2. Their post-fall protocol is easily accessible (e.g. laminated versions at nursing stations).

3. Their staff have access to clear guidance and formats for recording neurological observations using a 15 point version of the Glasgow Coma Scale (GCS) and that changes in the GCS that should trigger urgent medical review are highlighted.

4. Their staff have access at all times to special equipment (e.g. hard collars, flat-lifting equipment, scoops) and colleagues with the expertise to use it, for patients with suspected fracture or potential for spinal injury.

5. Systems are in place allowing inpatients injured in a fall access to investigation and specialist treatment that is equal in speed and quality to that provided in emergency departments and conforms to NICE Clinical Guideline 56: Head Injury.

4.2.3 Current UK practice

The RCP (2012) inpatient falls pilot audit found that 93% of participating trusts have a policy or protocol which covers actions after an inpatient fall and 78% have provided a copy of the policy or protocol to all wards and units in an easy reference format. Table 7 shows the percentage of trusts that met the standards described in the NPSA Rapid Response Report: Essential Care following an inpatient fall.

Table 7

Does the policy or protocol include:	**Total percentage of trusts that ticked yes:**
Basic checks for fracture or spinal injury before moving the patient	91%
Safe manual handling methods for patients with signs or symptoms of fracture or potential for spinal injury	85%
A requirement to take neurological observations not only when head injury occurs, but when it cannot be excluded	85%
Frequency of neurological observations	76%
Duration of neurological observations	72%
Timescales for urgent and routine medical review	70%

The results shown in table 7 suggest considerable progress had been made since a survey in 2009 which found only 52% of acute trusts in England provided advice on clinical checks after a fall[3]. The NPSA required these actions to be in place by July

[3] Healey FM and Treml J. (2013) Changes in falls prevention policies in hospital in England and Wales. Age and Ageing 42 (1): 106-109.

2011. It should be noted that although all but 32 trusts of all types in England had declared compliance with the Rapid Response Report by the time of the pilot audit, only 70% of the hospitals participating in the pilot audit appeared to have built all the required actions into their local protocols.

The audit results also showed that of the participating trusts:

- 39% have a neurological observation chart that includes a 15 point GCS but does not incorporate guidance on how to assess it.
- 52% have a neurological observation chart that includes a 15 point GCS and does incorporate guidance on how to assess it.
- 83% of acute trusts have hard collars available to immobilise the head and neck
- 83% of acute trusts have flat-lifting equipment
- 9% of acute trusts have neither hard collars or flat-lifting equipment

Based on a sample of 388 sets of case notes belonging to patients who had fallen in hospital only 231 (60%) contained a record of checks made for injury before moving the patient.

The audit asked the question: is there a record indicating that safe methods were used to retrieve the patient from the floor? Based on a review of a sample of 375 case notes the following was found:

- In 45% of case notes there was no record of how patient was retrieved
- In 38% of cases it was recorded that an appropriate method of retrieval was used
- In 2% of cases it was recorded that an inappropriate method of retrieval was used (e.g. sling hoist despite suspected fracture)

The findings of the audit highlight the issue that post-fall review is important not only to detect any injury but because a fall is often a ‘red flag’ for an underlying change in the patient’s medical condition. It is therefore concerning to see that the findings of the audit show a high proportion of patients where basic observations that might detect this were not taken, and where there was no timely medical review.

For patients who either had a head/face/scalp injury following a fall or where a head injury was possible 78% of participating trusts answered yes to the question: were neurological observations including a GCS recorded at least once after the fall?

However, only 49% answered yes when asked if a GCS was recorded as often as specified by NICE guidance.

When asked about making changes 24% of trusts said they planned to introduce or revise their post-fall protocol within the next 6 months and 9% said they planned to purchase flat-lifting equipment.

4.3 Assessment

4.3.1 Summary of suggestions

Multifactorial falls risk assessment

Stakeholders highlighted the importance of undertaking a multifactorial falls risk assessment for older people in a variety of settings including during a hospital stay. Stakeholders highlighted that this should be targeted at those considered at risk.

Medication review

Stakeholders highlighted the importance of undertaking a medication review. This should help to ensure that medicines would then be optimised to minimise falls risk and that any errors in medicine administration or taking that may increase falls risks are identified and removed.

Visual assessment

Stakeholders suggested that primary and secondary prevention of falls by promotion of uptake of NHS optometrist sight tests in at risk populations or those who have fallen as an improvement area. Stakeholders also suggested that emerging evidence shows that standard falls rehabilitation strategies may not be effective for people where vision was a factor. They feel that that vision should be a consideration in all aspects of a patient pathway through falls services including prevention and rehabilitation programmes.

Assessment and management of bone health

Stakeholders highlighted the importance of improved assessment and management of bone health and associated lifestyle change to enable primary and secondary fragility fracture prevention secondary to osteoporosis.

4.3.2 Selected recommendations from development source

Table 8 below highlights recommendations that have been provisionally selected from the development source(s) that may support potential statement development. These are presented in full after table 8 to help inform the Committee’s discussion.

Table 8 Specific areas for quality improvement

Suggested quality improvement area	Selected source guidance recommendations
Multifactorial falls risk assessment	**Multifactorial falls risk assessment** NICE CG161 Recommendations 1.1.2.1 (KPI) and 1.1.2.2.
Medication review	**Multifactorial falls risk assessment** NICE CG161 Recommendation 1.1.2.2 **Multifactorial intervention** NICE CG161 Recommendation 1.1.3.1 **Psychotropic medications** NICE CG161 Recommendation 1.1.7.1
Visual assessment	**Multifactorial falls risk assessment** NICE CG161 Recommendation 1.1.2.2 **Multifactorial intervention** NICE CG161 Recommendation 1.1.3.1
Assessment and management of bone health	**Multifactorial falls risk assessment** NICE CG161 Recommendation 1.1.2.2

Multifactorial falls risk assessment

NICE CG161 Recommendation 1.1.2.1

Older people who present for medical attention because of a fall, or report recurrent falls in the past year, or demonstrate abnormalities of gait and/or balance should be offered a multifactorial falls risk assessment. This assessment should be performed by a healthcare professional with appropriate skills and experience, normally in the setting of a specialist falls service. This assessment should be part of an individualised, multifactorial intervention. [2004]

NICE CG161 Recommendation 1.1.2.2

Multifactorial assessment may include the following:

- identification of falls history
- assessment of gait, balance and mobility, and muscle weakness
- assessment of osteoporosis risk
- assessment of the older person's perceived functional ability and fear relating to falling
- assessment of visual impairment
- assessment of cognitive impairment and neurological examination

- assessment of urinary incontinence
- assessment of home hazards
- cardiovascular examination and medication review. [2004]

Medication review

NICE CG161 Recommendation 1.1.2.2

Multifactorial assessment may include the following:

- cardiovascular examination and medication review. [2004]

NICE CG161 Recommendation 1.1.3.1

All older people with recurrent falls or assessed as being at increased risk of falling should be considered for an individualised multifactorial intervention. [2004]

In successful multifactorial intervention programmes the following specific components are common (against a background of the general diagnosis and management of causes and recognised risk factors):

- medication review with modification/withdrawal. [2004]

NICE CG161 Recommendation 1.1.7.1

Older people on psychotropic medications should have their medication reviewed, with specialist input if appropriate, and discontinued if possible to reduce their risk of falling. [2004]

Visual assessment

NICE CG161 Recommendation 1.1.2.2

Multifactorial assessment may include the following:

- assessment of visual impairment [2004]

NICE CG161 Recommendation 1.1.3.1

All older people with recurrent falls or assessed as being at increased risk of falling should be considered for an individualised multifactorial intervention. [2004]

In successful multifactorial intervention programmes the following specific components are common (against a background of the general diagnosis and management of causes and recognised risk factors):

- vision assessment and referral [2004]

Assessment and management of bone health

NICE CG161 Recommendation 1.1.2.2

Multifactorial assessment may include the following:

- assessment of osteoporosis risk

4.3.3 Current UK practice

Multifactorial falls risk assessment

The RCP (2012) inpatient falls pilot audit report states that admission formats which prompt staff to consider a history of falls, impaired mobility or cognitive impairment are essential basics, and although most hospitals included these prompts in their documentation, a small proportion did not. Fear or anxiety about falling was less commonly included, with around half the hospitals including this question in their standard documentation.

The findings of the audit showed that 80% of participating trusts stated that their falls prevention care plan/care pathway/care bundle/in-depth assessment includes a continence assessment and 57% stated that it includes a formal assessment of cognition. When asked about making changes 54% of trusts said they planned to revise their falls care plan/pathway/care bundle/in depth assessment within the next 6 months.

The audit asked the question: was the patient formally assessed and/or treated for impaired cognition? Based on a review of a sample of case notes the following was found:

- 18% of patients could have been assessed but were not
- 24% of patients were assessed and no problem was found
- 44% of patients were assessed, a problem was found and a treatment/plan of care was put in place

The audit asked the question: was the patient formally assessed and/or treated for continence/frequency/urgency? Based on a review of a sample of case notes the following was found:

- 18% of patients could have been assessed but were not
- 31% of patients were assessed and no problem was found

- 40% of patients were assessed, a problem was found and a treatment/plan of care was put in place

The audit asked the question: was the patient formally assessed and/or treated for for cardiovascular assessment and intervention (including ECG)? Based on a review of a sample of case notes the following was found:

- 18% of patients could have been assessed but were not
- 43% of patients were assessed and no problem was found
- 30% of patients were assessed, a problem was found and a treatment/plan of care was put in place

Medication review

The RCP (2012) inpatient falls pilot audit found that 91% of participating trusts stated that their falls prevention care plan/care pathway/care bundle/in-depth assessment includes review of all medication for medications that increase falls risk.

The audit asked the question: was the patient formally assessed and/or treated for medication that could increase the risk of falls? Based on a review of a sample of case notes the following was found:

- 23% of patients could have been assessed but were not
- 33% of patients were assessed and no problem was found
- 36% of patients were assessed, a problem was found and a treatment/plan of care was put in place

Safety of medicines in the care home[4] (2013) was a formal improvement project involving the National Care Forum and a number of other national organisations. These organisations work together to find practical solutions to reduce the risk of harm associated with medications in care homes. As part of the project the group also took time to collect concerns and feedback from care home staff. Comments and feedback about medication safety were collected from care home staff as part of the project. Some of the issues that were highlighted included:

- a lack of medication review and no clear guidance about how long a person should be on a drug before it is reviewed;
- care homes would like to see a system of regular reviews throughout the year.

[4] National Care Forum (2013) Safety of medicines in the care home. Final project report - phase two March 2013.

The British Geriatrics Society (2011) report Quest for Quality highlighted the issue that the 2010 Pulse survey of GPs found that 67% did not carry out a medication review on each resident every six months.

Visual assessment

The RCP (2012) inpatient falls pilot audit found that 78% of participating trusts stated that their falls prevention care plan/care pathway/care bundle/in-depth assessment includes an evaluation of vision.

The audit asked the question: was the patient formally assessed and/or treated for impaired vision? Based on a review of a sample of case notes the following was found:

- 41% of patients could have been assessed but were not
- 30% of patients were assessed and no problem was found
- 15% of patients were assessed, a problem was found and a treatment/plan of care was put in place

Assessment and management of bone health

The RCP (2012) inpatient falls pilot audit found that 50% of participating trusts stated that their falls prevention care plan/care pathway/care bundle/in-depth assessment included an assessment of osteoporosis risk.

The audit asked the question: was the patient formally assessed and/or treated for bone health/osteoporosis/fracture risk? Based on a review of a sample of case notes the following was found:

- 47% of patients could have been assessed but were not
- 15% of patients were assessed and no problem was found
- 28% of patients were assessed, a problem was found and a treatment/plan of care was put in place

4.4 Intervention

4.4.1 Summary of suggestions

Multifactorial interventions

Stakeholders highlighted the importance of individualised multifactorial interventions for older people at risk of falling in all settings including in hospital.

Individualised care planning

Stakeholders highlighted the importance of the identification of optimal models of care to promote individualised care planning for those who experience recurrent falls i.e. avoid crisis and prevent unplanned admissions/emergency service usage. Stakeholders also specifically highlighted the issue of systematic, individualised falls prevention in hospital using a care bundle or similar.

Exercise/strength and balance training

Stakeholders suggested that exercise programmes and targeted strength and balance training are important for the prevention and management of falls for people in care homes/extended care settings. Stakeholders highlighted the importance of incorporating this intervention into daily activities and of considering how these interventions might be improved on by using technology in the form of home based computer games such as the Wii and by using Apps to monitor and increase exercise.

Home hazard and safety intervention

Stakeholders highlighted the importance of home hazard reduction, as part of a multi-factorial falls assessment and intervention, in reducing falls and subsequent loss of independence.

Vitamin D

Stakeholders suggested using a simple self-test to establish if people are vitamin D deficient and increasing vitamin D to75 nmol/L for everyone over the age of 50.

4.4.2 Selected recommendations from development source

Table 9 below highlights recommendations that have been provisionally selected from the development source(s) that may support potential statement development. These are presented in full after table 9 to help inform the Committee's discussion.

Table 9 Specific areas for quality improvement

Suggested quality improvement area	Selected source guidance recommendations
Multifactorial interventions	**Multifactorial interventions** NICE CG161 Recommendations 1.1.3.1 and 1.1.3.2.
Individualised care planning	**Multifactorial interventions** NICE CG161 Recommendation 1.1.3.2, 1.2.2.3 and 1.2.2.4. College of Occupational Therapists: Occupational therapy in the prevention and management of falls in adults Recommendations 10 and 11.
Exercise/strength and balance training	**Exercise in extended care settings** NICE CG161 Recommendation 1.1.5.1 College of Occupational Therapists: Occupational therapy in the prevention and management of falls in adults Recommendation 15.
Home hazard and safety intervention	**Home hazard and safety intervention** NICE CG161 Recommendations 1.1.6.1 and 1.1.6.2. College of Occupational Therapists: Occupational therapy in the prevention and management of falls in adults Recommendations 1 to 4.
Vitamin D	Not directly covered in the identified development sources and no recommendations are presented.

Multifactorial interventions

NICE CG161 Recommendation 1.1.3.1

All older people with recurrent falls or assessed as being at increased risk of falling should be considered for an individualised multifactorial intervention. [2004]

In successful multifactorial intervention programmes the following specific components are common (against a background of the general diagnosis and management of causes and recognised risk factors):

- strength and balance training
- home hazard assessment and intervention
- vision assessment and referral
- medication review with modification/withdrawal. [2004]

NICE CG161 Recommendation 1.1.3.2

Following treatment for an injurious fall, older people should be offered a multidisciplinary assessment to identify and address future risk and individualised intervention aimed at promoting independence and improving physical and psychological function. [2004]

Individualised care planning

NICE CG161 Recommendation 1.1.3.2

Following treatment for an injurious fall, older people should be offered a multidisciplinary assessment to identify and address future risk and individualised intervention aimed at promoting independence and improving physical and psychological function. [2004]

NICE CG161 Recommendation 1.2.2.3

Ensure that any multifactorial assessment identifies the patient's individual risk factors for falling in hospital that can be treated, improved or managed during their expected stay. These may include:

- cognitive impairment
- continence problems
- falls history, including causes and consequences (such as injury and fear of falling)
- footwear that is unsuitable or missing
- health problems that may increase their risk of falling
- medication
- postural instability, mobility problems and/or balance problems
- syncope syndrome
- visual impairment. [2013]

NICE CG161 Recommendation 1.2.2.4

Ensure that any multifactorial intervention:

- promptly addresses the patient's identified individual risk factors for falling in hospital and
- takes into account whether the risk factors can be treated, improved or managed during the patient's expected stay. [2013]

College of Occupational Therapists: Occupational therapy in the prevention and management of falls in adults Recommendations 10 and 11

10. Occupational therapists should take into account the service user's perceptions and beliefs regarding their ability, and personal motivation, which may influence participation in falls intervention.

11. Occupational therapists should maximise the extent to which the service user feels in control of the falls intervention.

Exercise/strength and balance training

NICE CG161 Recommendation 1.1.5.1

Multifactorial interventions with an exercise component are recommended for older people in extended care settings who are at risk of falling. [2004]

College of Occupational Therapists: Occupational therapy in the prevention and management of falls in adults Recommendation 15

15. Activities to improve strength and balance should be incorporated into daily activities and occupations that are meaningful to the individual, to improve and encourage longer term participation in falls prevention interventions.

Home hazard and safety intervention

NICE CG161 Recommendation 1.1.6.1

Older people who have received treatment in hospital following a fall should be offered a home hazard assessment and safety intervention/modifications by a suitably trained healthcare professional. Normally this should be part of discharge planning and be carried out within a timescale agreed by the patient or carer, and appropriate members of the health care team. [2004]

NICE CG161 Recommendation 1.1.6.2

Home hazard assessment is shown to be effective only in conjunction with follow-up and intervention, not in isolation. [2004]

College of Occupational Therapists: Occupational therapy in the prevention and management of falls in adults Recommendations 1 to 4.

1. Service users who have fallen, or are at risk of falls, should be offered an occupational therapist led home hazard assessment, including intervention and follow-up, to optimise functional activity and safety.

2. Occupational therapists should offer home safety assessment and modification for older people with a visual impairment.

3. Occupational therapists should consider carrying out a pre- or post-discharge home assessment to reduce the risk of falls following discharge from an inpatient rehabilitation facility, taking into account the service user's falls risk, functional ability and diagnosis.

4. Occupational therapists should offer service users who are living in the community, advice, instruction and information on assistive devices as part of a home hazard assessment.

Vitamin D

This area is not recommended in the identified development sources and no recommendations are presented relating to the suggested quality improvement area. NICE CG161 lists vitamin D as an intervention that cannot be recommended because of insufficient evidence.

4.4.3 Current UK practice

Multifactorial interventions

The RCP (2012) inpatient falls pilot audit found that with regards to their falls prevention care plan/care pathway/care bundle/in-depth assessment of the participating trusts:

- 78% stated that it includes an evaluation of vision
- 46% stated that it includes suggested actions if problems with vision are identified
- 91% stated that it includes review of all medication for medications that increase falls risk.

Individualised care planning

No current practice information was found that made specific reference to whether individualised care planning is being utilised for those who experience recurrent falls or whether systematic, individualised falls prevention is undertaken in hospitals.

Exercise/strength and balance training

The National Falls and Bone Health Audit asked the question: was the patient formally assessed and/or treated for mobility, strength and balance (physiotherapy)? Based on a review of a sample of case notes the following was found:

- 9% of patients could have been assessed but were not
- 12% of patients were assessed and no problem was found

- 67% of patients were assessed, a problem was found and a treatment/plan of care was put in place.

A report by the RCP[5] (2012) presents the findings from a postal questionnaire which surveyed older people's experiences of therapeutic exercise as part of a falls prevention service. The results are based on 1768 completed patient questionnaires returned to the RCP. The questionnaire was sent to patients who had recently attended an NHS run exercise programme to reduce falls. A second questionnaire was sent to staff involved in the delivery of exercise to reduce falls where these patients had attended. One-hundred sites participated.

Responses from the patient and staff questionnaires indicated that many NHS providers are not delivering completely evidence-based interventions for reducing falls.

For example:

- only 29% of patients returning questionnaires used ankle weights for targeted resistance training to reduce falls.
- only 52% of patients felt their exercise programme had been progressed.
- 81% of patients attending a class indicated that this had lasted 12 weeks or less.
- 73% of patients supervised at home indicated that their programme lasted for 3 months or less.

It is important to note that the FaME (Falls Management Exercise) group programme was delivered to women aged 65 years and over living in the community who had sustained more than three falls in the last year. The Otago home based programme was initially delivered to women aged 80 years and over living in the community and not undergoing rehabilitation i.e. had not been referred into the NHS.

However, participants in this current survey had either fallen or had balance problems and had been referred into healthcare and an exercise programme. Responses from the questionnaires suggest that those referred into NHS exercise programmes may be frailer than those participating in the studies above.

Findings also showed that patients need to be aware of the benefits of therapeutic exercise in falls prevention. Responses from the staff questionnaire showed that the two most common reasons perceived by staff for patients declining an exercise programme were they 'don't feel exercise will help/is necessary' and they 'feel too old to exercise.'

[5] Royal College of Physicians (2012) Older people's experiences of therapeutic exercise as part of a falls prevention service.

This shows the importance of staff understanding the benefits of exercise interventions for older people in reducing falls and being able to communicate this effectively to patients, including the fact that the research trials show that exercises are effective in those aged 80 years and over. It also highlights the importance of motivation training for both patients and staff referring onto and delivering exercise programmes.

The report also concluded that funding priorities can be a barrier to delivering exercise programmes. Lack of funding and resources were given by staff as a reason for not offering an exercise intervention to a patient, in terms of the cost of staff, transport and venues.

Staff responses show a wide variation in waiting lists to start a class, from 1–14 weeks for a home based programme and between 1 week and 6 months for a class. Patients also commented on waiting lists.

Home hazard and safety intervention

The national audit of falls and bone health in older people 2010 Falling Standards, broken promises asked the question: does an occupational therapist routinely assess for potential hazards within the patient's home (of those 274 sites using a falls assessment tool or proforma)? The report showed that 70% (193/274) of providers answered yes to this question. For non-hip fracture patients 10% of these assessments were undertaken in the patient's own environment. For hip fracture patients the figure rose to 38%.

Vitamin D

No specific current practice information was found relating to the use of self-tests to establish if people are vitamin D deficient and increasing vitamin D for particular populations.

4.5 Education and information

4.5.1 Summary of suggestions

Competence of healthcare professionals in falls assessment and prevention

Stakeholders highlighted that the evidence recommends that those healthcare professionals working with at risk patients should develop and maintain a basic level of professional competence in falls assessment and prevention.

Information giving

Stakeholders suggested that education and information giving is important to reduce falls and that there needs to be consistency and quality around the types of information given.

4.5.2 Selected recommendations from development source

Table 10 below highlights recommendations that have been provisionally selected from the development source(s) that may support potential statement development. These are presented in full after table 10 to help inform the Committee's discussion.

Table 10 Specific areas for quality improvement

Suggested quality improvement area	Selected source guidance recommendations
Competence of healthcare professionals in falls assessment and prevention	**Education and information giving** NICE CG161 Recommendation 1.1.10.1
Information giving	**Education and information giving** NICE CG161 Recommendations 1.1.10.2 and 1.2.3.1 College of Occupational Therapists: Occupational therapy in the prevention and management of falls in adults Recommendations 9 and 13.

Competence of healthcare professionals in falls assessment and prevention

NICE CG161 Recommendation 1.1.10.1

All healthcare professionals dealing with patients known to be at risk of falling should develop and maintain basic professional competence in falls assessment and prevention. [2004]

Information giving

NICE CG161 Recommendation 1.1.10.2

Individuals at risk of falling, and their carers, should be offered information orally and in writing about:

- what measures they can take to prevent further falls
- how to stay motivated if referred for falls prevention strategies that include exercise or strength and balancing components
- the preventable nature of some falls
- the physical and psychological benefits of modifying falls risk
- where they can seek further advice and assistance
- how to cope if they have a fall, including how to summon help and how to avoid a long lie. [2004]

NICE CG161 Recommendation 1.2.3.1

Provide relevant oral and written information and support for patients, and their family members and carers if the patient agrees. Take into account the patient's ability to understand and retain information. Information should include:

- explaining about the patient's individual risk factors for falling in hospital
- showing the patient how to use the nurse call system and encouraging them to use it when they need help
- informing family members and carers about when and how to raise and lower bed rails
- providing consistent messages about when a patient should ask for help before getting up or moving about
- helping the patient to engage in any multifactorial intervention aimed at addressing their individual risk factors. [new 2013]

College of Occupational Therapists: Occupational therapy in the prevention and management of falls in adults Recommendations 9 and 13

9. Occupational therapists should share knowledge and understanding of falls prevention and management strategies with the service user. This should provide personally relevant information and take account of the service user’s individual fall risk factors, their lifestyle and preferences.

13. Falls prevention and management information should be available in different formats, and languages, to empower and engage all populations (for example, web-based support, written information leaflets).

4.5.3 Current UK practice

Competence of healthcare professionals in falls assessment and prevention

The RCP (2012) inpatient falls pilot audit found that 46% of participating trusts routinely provide training to staff on falls prevention at least annually. It is important to note that of some of the trusts that answered no to this question stated that their training included updates provided every three years, ad hoc ‘awareness raising’, and some trusts had training programmes under development.

Trusts were also asked what percentage of different staff groups had received training in falls prevention during the last 12 months. Providing this information proved problematic for many hospitals. Examples of reasons for this were that there were no central records of training at all, or that training information was available only for certain staff groups but not others. From the limited information that hospitals submitted, it appears that where education on falls prevention is being provided, it is usually directed at nurses and therapists, but overall due to the lack of local information, it was felt that responses may not be accurate. When staff members were asked directly about whether they have received any training or education in falls prevention in the last year results showed that the groups answered yes as follows:

- 65% of registered nurses
- 59% of health care assistants
- 59% of student nurses
- 72% of physiotherapists
- 65% of occupational therapists

The percentage of staff saying they had received training was generally greater than the proportion of staff the hospital stated they had provided training to which may relate to the issues mentioned previously regarding problems providing information.

A total of 80% of participating trusts stated that they planned to make improvements to training in falls prevention within the next 6 months.

Information giving

The findings of the RCP (2012) inpatient falls pilot audit showed that of participating trusts:

- 46% stated that their falls prevention care plan/care pathway/care bundle/in-depth assessment includes providing information for family or informal carers
- 80% stated that they routinely provide information leaflets for patients (and/or their family or carers) vulnerable to falling (it should be noted that technical issues during the audit mean this particular figure may not be entirely accurate)

4.6 Additional areas

4.6.1 Summary of suggestions

The improvement areas below were suggested as part of the stakeholder engagement exercise however they were felt to be outside the remit of quality standards or are addressed by other NICE quality standard topics.

There will be an opportunity for the QSAC to discuss these areas at the end of the session.

Anaemia recognition and management

Stakeholders highlighted the importance of recognising and appropriately managing anaemia as it was suggested that it has been shown to be an independent risk factor for falls in older people.

Care pathway

Stakeholders suggested that having a falls care pathway in the care home setting is a key area for quality improvement.

Cost effectiveness and QALY related to falls prevention programmes

Stakeholders suggested cost effectiveness and QALY adjusted life years related to falls prevention programmes broken down relative to level of acuity/complexity of falls risk and also recurrent falls/hip fracture requiring institutional care as a key area for quality improvement.

Define best practice and most cost effective service models

Stakeholders suggested that it is important to define best practice and the most cost effective service models to allow long term falls prevention programmes to be accessible to older adults to meet the 50 hours recommended exercise for sustained falls prevention.

Identification of pain as a risk factor

Stakeholder suggested that pain should be recognised as a risk factor for falls.

Integration of care across the whole pathway for hip fracture patients

Stakeholders highlighted the importance of integrating care across the whole pathway for hip fracture patients so that when they are discharged from hospital they continue their rehabilitation in the most suitable environment.

Intensive rehabilitation following post-operative hip fracture

Stakeholders highlighted the importance of intensive rehabilitation following hip fracture as it has been shown to improve outcomes and there is current variation in practice.

Interventions for populations not identified as at risk

Stakeholders highlighted that there is evidence that general older populations (not identified at risk) can benefit from interventions in relation to falls prevention. Stakeholders suggested that promoting health lifestyles, for example, by raising awareness of the importance of physical activity and nutrition, is a key activity to reduce the likelihood of falls and fractures in later life.

Management of falls risks in people with dementia

Stakeholders highlighted the issue that individuals with dementia are at higher risk of falls and that it is possible to reduce and manage this risk which can lead to positive patient outcomes.

Follow up rehabilitation in the community

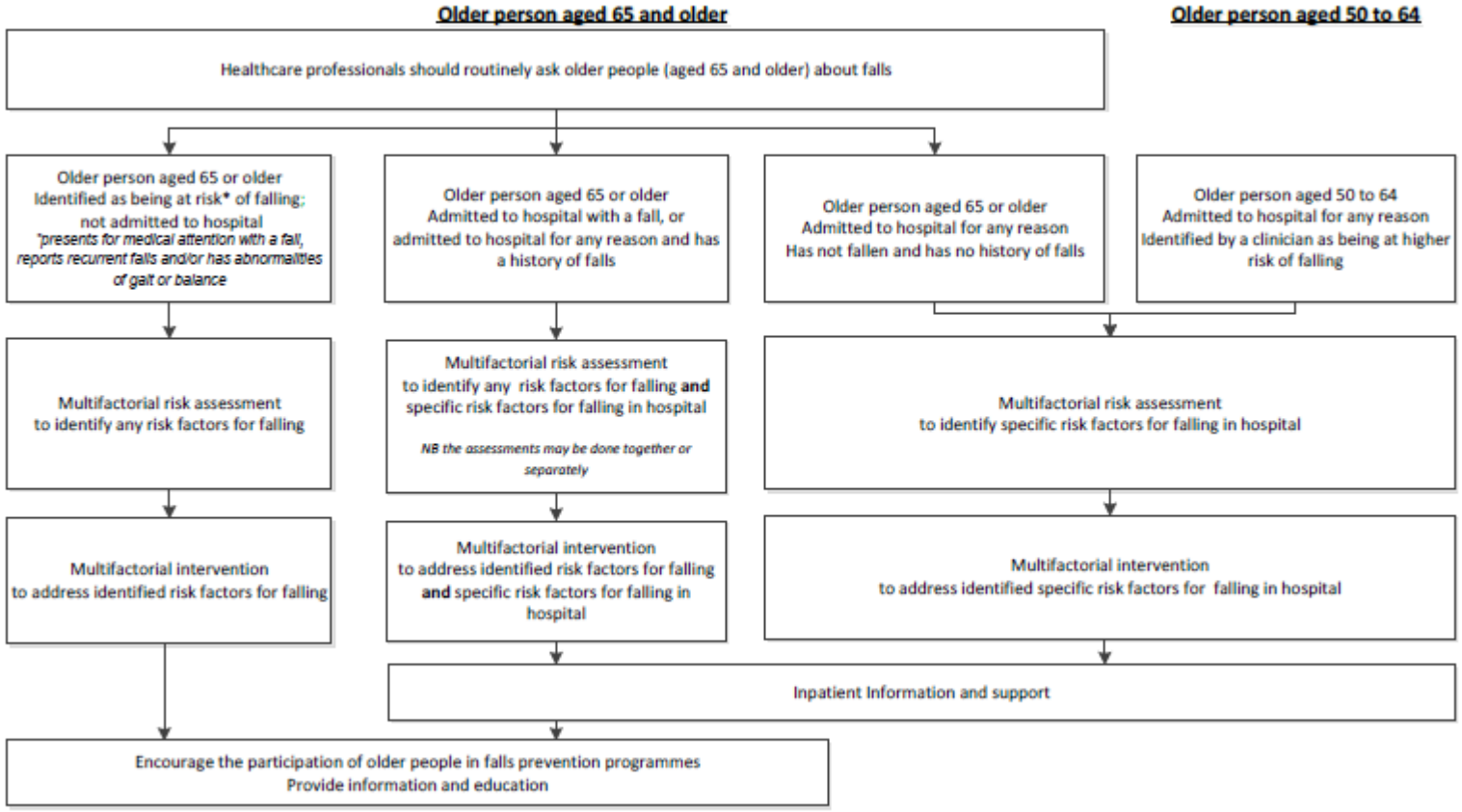
Stakeholders raised the issue that frail and elderly people, who have been hospitalised from falls and resulting fractures, require ongoing, consistent and regular rehabilitation, (that continues when they leave hospital without a break) in order to return to their pre fracture capabilities and prevent recurrent falls.

Vestibular rehabilitation

Stakeholders suggested that vestibular rehabilitation is important as vestibular dysfunction is under diagnosed but highly prevalent amongst older people who fall. Vestibular dysfunction is common in older adult fallers and better recognition of these problems will lead to better management.

Appendix 1: Additional information

Care pathway



Appendix 2: Key priorities for implementation (CG161)

Recommendations that are key priorities for implementation in the source guideline and that have been referred to in the main body of this report are highlighted in grey.

Preventing falls in older people

Case/risk identification

Older people in contact with healthcare professionals should be asked routinely whether they have fallen in the past year and asked about the frequency, context and characteristics of the fall/s. [2004] [recommendation 1.1.1.1]

Multifactorial falls risk assessment

Older people who present for medical attention because of a fall, or report recurrent falls in the past year, or demonstrate abnormalities of gait and/or balance should be offered a multifactorial falls risk assessment. This assessment should be performed by a healthcare professional with appropriate skills and experience, normally in the setting of a specialist falls service. This assessment should be part of an individualised, multifactorial intervention. [2004] [recommendation 1.1.2.1]

Preventing falls in older people during a hospital stay

Predicting patients' risk of falling in hospital

Regard the following groups of inpatients as being at risk of falling in hospital and manage their care according to recommendations 1.2.2.1 to 1.2.3.2:

- all patients aged 65 years or older
- patients aged 50 to 64 years who are judged by a clinician to be at higher risk of falling because of an underlying condition. [new 2013] [recommendation 1.2.1.2]

For patients at risk of falling in hospital (see recommendation 1.2.1.2), consider a multifactorial assessment and a multifactorial intervention. [new 2013] [recommendation 1.2.2.2]

Assessment and interventions

Ensure that any multifactorial assessment identifies the patient's individual risk factors for falling in hospital that can be treated, improved or managed during their expected stay. These may include:

- cognitive impairment

- continence problems
- falls history, including causes and consequences (such as injury and fear of falling)
- footwear that is unsuitable or missing
- health problems that may increase their risk of falling
- medication
- postural instability, mobility problems and/or balance problems
- syncope syndrome
- visual impairment. [new 2013] [recommendation 1.2.2.3]

Appendix 3: Suggestions from stakeholder engagement exercise

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?	Supporting information
009	AGILE	Identification of those at risk of falling and those that have fallen**.**	This will need to include primary care, care homes, inpatients, A&E and social care settings. There is evidence that identifying those at risk and targeting interventions is effective.	Many individuals are at high risk but not identified as such and so miss out on potential interventions not just to prevent further falls but also improve quality of life and independence. A great deal of primary prevention could be undertaken with exercise interventions in primary care but GPs are less than inclined to identify and refer on except when people are already falling (and often not then either) It needs to be clear as to how those at risk in inpatient settings will be identified as being at risk, other than age and by a clinician as this appears vague to be able to set a standard.	RCP Falls audit; Lamb et al 2007

010	College of Occupational Therapists	Key area for quality improvement 1 **Case/risk identification – there is a clear community pathway /procedures for case/risk identification**	Evidence suggests that good case/risk identification reduces number and frequency of falls in older people. There are a variety of community settings where an older person may come into contact with a health or social care professional e.g. GP surgery, Community Occupational Therapist, Community Rehabilitation Team, Social Worker, District Nursing, Podiatry Speech and Language Therapist, Optometrist, Care Worker/Key Worker/Sheltered Housing Warden..	Case/risk identification may be completed by a variety of people in different settings. Implication for the older person is that they may be asked about falls too many times or that they may never be asked as everyone assumes someone else has asked. Falls are everyone's business but for health and social care workers they may not perceive it as their remit. There are key times when older people are at higher risk of falls for example during acute illness, on admission/discharge from hospital, on admission/respite to care home, following a fall. Other services have a role to play in this case identification, for example: Community alarms, care and repair. A clear pathway and procedures is required. This should include the recording of falls.	NICE Falls Guidelines 2013 College of Occupational Therapists: *Occupational therapy in the prevention and management of falls in adults** Focus on Falls College of Optometrists http://www.college-optometrists.org/en/EyesAndTheNHS/focus-on-falls.cfm http://www.scotland.gov.uk/Resource/0039/00393638.pdf http://www.healthcareimprovementscotland.org/our_work/patient_safety/programme_resources/falls_prevention.aspx

011	Royal College of Physicians (RCP)	Key area for quality improvement 1 **Identification of older people that have fallen**	Prevention of falls first requires the identification of older people who have fallen (secondary prevention) or at risk of falling (primary prevention). NICE CG161 recommends that older people in contact with healthcare professionals should be asked routinely whether they have fallen in the past year.	A large primary care-based study found that less than 1% of older people had evidence of falls screening recorded in GP records. The National Audit of Falls and Bone Health in Older People has repeatedly shown insufficient identification and referral of fallers to falls services, even after fracture, most recently in 2011. Falling standards, broken promises (RCP, 2011) showed that the assessment and prevention of further falls was not always undertaken for older people who attended A&E following a fall and fracture (excluding hip and head) and who were then discharged home or to their normal place of residence. We believe that the quality standard should ensure individuals who cross care boundaries in this way are flagged-up so that a multi-disciplinary assessment and appropriate interventions can occur. An assessment should also be prompted for individuals who have fallen two or more times when they attend A&E.	Hippisley-Cox J, Bayly J, Potter J, Fenty J, Parker C. Evaluation of standards of care for osteoporosis and falls in primary care. 2007 http://www.hscic.gov.uk/article/2021/Website-Search?productid=780&q=osteoporosis&sort=Relevance&size=10&page=2&area=both#top Falling standards, broken promises (RCP, 2011)

014	British Geriatrics Society	Key area for quality improvement 1 **Identification of those at risk of falling and those that have fallen.**	This will need to include primary care, care homes, inpatients, A&E and social care settings. There is evidence that identifying those at risk and targeting interventions is effective.	Many individuals are at high risk but not identified as such and so miss out on potential interventions not just to prevent further falls but also improve quality of life and independence. A great deal of primary prevention could be undertaken with exercise interventions in primary care but GPs are less than inclined to identify and refer on except when people are already falling (and often not then either) It needs to be clear as to how those at risk in inpatient settings will be identified as being at risk, other than age and by a clinician as this appears vague to be able to set a standard.	RCP Falls audit; Lamb et al 2007
014	British Geriatrics Society	Key area for quality improvement 2 **Assessment of those at risk**	Multifactorial assessment of those deemed at risk	It is unclear as to who would benefit from a multifactorial assessment from the evidence – everyone or just certain groups. To undertake this with all older people would be very resource intensive and not practical for everyone and there is evidence to support that non-tailored interventions are beneficial	RCP Falls audit;

015	SCM	Key area for quality improvement 2 **Older people should be asked routinely whether they have fallen in the past year and asked about the frequency, context and characteristics of the fall(s)**	People who have fallen may be reluctant to discuss the problem with anyone, especially if they have not been injured. People may be reluctant because they think falling is just part of getting older. And they do not want others to think they are helpless and now must move from their home into a more supervised environment such as a nursing home. People who have fallen once are more likely to fall again. To identify the cause of the fall, professionals should ask about history of falls and the circumstances of the falls.	Falls are not an inevitable consequence of old age; rather they are nearly always due to one or more underlying risk factors. Recognising the risk factors is crucial in preventing falls and injuries.	AGS/BGS Clinical Practice Guideline: Prevention of Falls in Older Persons http://www.medcats.com/FALLS/frameset.htm Age UK/ NOS – Breaking Through http://www.nos.org.uk/document.doc?id=987

010	College of Occupational Therapists	Key area for quality improvement 7 **Encouraging the participation of older people in falls prevention programmes -**	Fear of falling can be as significant as the physical consequences of a fall. Participation in falls prevention programmes has been shown to reduce fear of falling and therefore reduce falls risk. There needs to be various opportunities for people to participate in falls prevention programmes as one size does not fit all. This needs to be considered at each stage in a pathway as per example of pulmonary rehabilitation.	If older people recognise the benefit of falls prevention programmes then they are more likely to participate in self-management.	NICE Falls Guidelines 2013 College of Occupational Therapists: *Occupational therapy in the prevention and management of falls in adults**

010	College of Occupational Therapists	Key area for quality improvement 8 Emergency Care for a person who has fallen. Comment: Urgent care and Emergency areas are not specifically covered in the consultation or in the quality standard	Emergency Department (ED) patients are high risk fallers and do not come under inpatients and often pre community care options. Often they are sent home with temporary services until formal community input can be arranged. In reach/outreach or rapid response care (phone carer support) varies widely and is funding dependant. There is good quality evidence of their efficacy regarding patient outcomes, admission prevention or early discharge and cost savings required. Emergency care is focused on avoiding admission into hospital and an ED therapist is essential to complete an assessment of the the full extent of falls risks and prevention areas.	1) Specify the best practice basic level of questions and medical tests in an emergency department assessment 2) Specify the best practice medical tests required to exclude collapse versus fall 3) best practice approaches to establishing falls history with those with dementia 4) best practice approach to managing falls and fractures with those with dementia 5) simple universal checklist to identify high risk fallers in ED, CDU (ED observation units) - the silver book highlights an ISAR checklist 6) Analgesia best practices for acute fractures for older people 7) analgesia management in patients with dementia and falls 8) footwear considerations when in ED/Observation wards or inpatient wards crucial for safe mobility assessment in absence of patients own well fitting shoes/slippers. Pillow puff/foam temporary slippers been found to contribute to slips, trips and falls. Dual non slip socks being used instead with positive results - http://www.patientsafetyfirst.nhs.uk/ashx/Asset.ashx?path=/Intervention-support/FALLSHow-to%20Guide%20v4.pdf - the how to guide - Reducing harm from falls 2009	http://secure.collemergencymed.ac.uk/code/document.asp?ID=6221 And http://secure.collemergencymed.ac.uk/code/document.asp?ID=6738 And http://secure.collemergencymed.ac.uk/code/document.asp?ID=6440= "Silver Book" http://www.bgs.org.uk/campaigns/silverb/silver_book_complete.pdf

011	Royal College of Physicians (RCP)	Key area for quality improvement 5 **Assessment and care following a fall in hospital**	Older people who fall in hospitals are at risk of serious harm, including fracture, head injury and death. They are also at greater risk of further falls. High quality assessment and care following a fall can reduce the risk of secondary injury (e.g. by providing cervical spine protection or by early identification of intracranial bleeding) as well as further falls. This was recommended by NPSA.	The pilot audit of inpatient falls found a number of potentially dangerous deficiencies in falls aftercare. For example, 22% of patients had no evidence of head injury observations where trauma to the head had occurred or could not be excluded. Most other patients had head injury observations performed with inadequate frequency.	Essential care after an inpatient fall. National Patient Safety Agency (2011). Report of the 2011 inpatient falls pilot audit. RCP (2012).

003	North London Hospice	Key area for quality improvement 1 Multifactorial falls risk assessment for older people including during a hospital stay	Evidence recommends that all people presenting for medical attention due to falling, or report falling in the previous year have a multifactorial falls risk assessment.	Whilst the evidence from NICE is clear regarding the factors which should form the assessment, there is limited guidance on the time scales recommended for completing assessments and reassessment. Similarly, there are significant variations in the actual assessments used by health professionals including the format and whether a numerical rating scale is used. An audit found many hospitals are still using numerical risk prediction tools, therefore, not heeding to advice to avoid these. Additionally, factors which may be treatable, for example, bone health; are not always being identified due to variations in the quality of assessments. More specific guidance in this area would be beneficial in improving the quality of falls risk assessments, therefore, in falls prevention. Additionally it may improve equality of falls prevention and enhance audit.	Help the Hospices (2010) Falls toolkit for prevention and management of falls. http://www.helpthehospices.org.uk/our-services/excellence-in-care/quality-assurance-and-risk-management/falls National Institute for Health and Care Excellence (2013) Falls: assessment and prevention of falls in older people Patient Safety First (2009) The 'How to' guide for reducing harm from falls. http://www.patientsafetyfirst.nhs.uk/ashx/Asset.ashx?path=/Intervention-support/FALLSHow-to%20Guide%20v4.pdf Royal College of Physicians (2012) Report of the 2011 inpatient falls pilot audit. https://www.rcplondon.ac.uk/sites/default/files/documents/inpatient-falls-final-report-0.pdf Royal College of Physicians (2012) Why FallSafe? Care bundles to reduce inpatient falls. https://www.rcplondon.ac.uk/sites/default/files/documents/why-fallsafe.pdf Von Renteln-Kruse, W and Krause, T. Falls events in geriatric inhospital patients. Results of incident recording over three years. Zeitschrift für Gerontologie und Geriatrie, 37: 9-12

010	College of Occupational Therapists	Key area for quality improvement 2 **Multifactorial falls risk assessment – there is an evidence based multi factorial risk assessment completed and appropriate action plan in place**	Multifactorial Risk assessment has been recommended to reduce the number and frequency of falls in older people. This can be completed in a variety of settings and by various members of the multi disciplinary team. Following a multifactorial risk assessment there should be an action plan and actions taken to reduce falls however this may be variable depending on the setting.	Multifactorial Risk Assessment and subsequent actions are the key to a robust multifactorial risk assessment. The competency of staff delivering multifactorial risk assessment should be reviewed and there shroud be a competency framework in place. For example vision testing (College of Optometrists, 2014) Gait assessment Blood pressure monitoring Home Hazards Medication Review There should be relevant training opportunities and staff should be working within their professional guidelines and within their scope of practice. There should also be an audit trail of interventions in order to ensure the quality of care/equality.	NICE Falls Guidelines 2013 Up and About in Care Homes – The management of falls and fractures in care homes for older people improvement project – lianne.mcinally1@nhs.net http://www.sqa.org.uk/files_ccc/PreventionAndManagementOfFallsAndFractures-LearningOutcomes.pdf College of Occupational Therapists: *Occupational therapy in the prevention and management of falls in adults** Focus on Falls College of Optometrists http://www.college-optometrists.org/en/EyesAndTheNHS/focus-on-falls.cfm

015	SCM	Key area for quality improvement 4 **For patients at risk of falling in hospital consider a multifactorial assessment and a multifactorial intervention**	All inpatients aged 65 years or older should be considered at risk of falling as well as patients aged 50 to 64 years who are judged by a clinician to be at higher risk of falling. These patients should have their falls risk factors assessed and interventions should be implemented in accordance with to the patient's individual risk factors.	Research has shown that falls can be reduced by 20-30% through multifactorial assessment and interventions. The aim of these assessments and interventions is to identify and treat the underlying reasons for falls, such as muscle weakness, cardiovascular problems, dementia, delirium and medication. However, audits have found low levels of implementation of these assessments and interventions in UK hospitals.	Royal College of Physicians https://www.rcplondon.ac.uk/resources/falls-prevention-resources National Patient Safety Agency http://www.nrls.npsa.nhs.uk/resources/collections/10-for-2010/reducing-harm-from-falls/?entryid45=59821 National Patient Safety Agency and Patient Safety First http://www.patientsafetyfirst.nhs.uk/Content.aspx?path=/Campaign-news/current/Howtoguidefalls/

011	Royal College of Physicians (RCP)	Key area for quality improvement 5 **Assessment and care following a fall in hospital**	Older people who fall in hospitals are at risk of serious harm, including fracture, head injury and death. They are also at greater risk of further falls. High quality assessment and care following a fall can reduce the risk of secondary injury (e.g. by providing cervical spine protection or by early identification of intracranial bleeding) as well as further falls. This was recommended by NPSA.	The pilot audit of inpatient falls found a number of potentially dangerous deficiencies in falls aftercare. For example, 22% of patients had no evidence of head injury observations where trauma to the head had occurred or could not be excluded. Most other patients had head injury observations performed with inadequate frequency.	Essential care after an inpatient fall. National Patient Safety Agency (2011). Report of the 2011 inpatient falls pilot audit. RCP (2012).

002	NHS Leeds West Clinical Commissioning Group	Full level 3 medication review by a suitably qualified health care professional, ideally a pharmacist with special interest in the elderly, falls or psychotropic medicines	A full level 3 medication review with the patient captures all the clinical notes available, ensures all medication monitoring has been carried out and acted upon and includes information sought from the patient about what medication is actually taken (or not taken) to assess what influence this has on the risk of falls. A level 3 is needed as a level 1 or 2 review purely focuses on what is prescribed – not what happens to medicines in practice. Through a concordant consultation the patients' medicines would then be optimised to minimise falls risk. It also ensures that any errors in medicine administration or taking that may increase falls risks are identified and removed	The aim of a level 3 review in relation to falls is to: • reduce inappropriate medicines that increase risk of falls • optimise medications to manage and control comorbidities that could increase falls risk and thus minimise falls risk e.g. diabetes treatments to prevent low blood sugars • maximise the amount of prescribed medication that is taken to get value for money from the prescribed medicines and reduce risk of falls and minimise falls related harm For example: • Reduce doses or stop drugs that are contributing to excessive low blood pressures, especially when no longer clinically required (excess dose of antihypertensives, drugs with anticholinergic effects and side effects such as antidepressants, drugs for incontinence, painkillers, antipsychotics) • Reduce or stop medicines that cause drowsiness and increase falls risk e.g. hypnotics • Review of medicines that reduce pulse rate and increase falls risk such as dementia treatments, beta blockers • Optimise treatment of postural hypotension medicines once started	Care Home' use of medicines study (CHUMS): Prevalence, causes and potential harm of medication errors in care homes for older people http://www.birmingham.ac.uk/Documents/college-mds/haps/projects/cfhep/psrp/finalreports/PS025CHUMS-FinalReportwithappendices.pdf Accessed 19 12 13 And also published as Barber ND, Alldred DP, Dickenson R et al. Care homes' use of medicines (CHUMS) study: prevalence, causes and potential harm of medication errors in care homes for older people. Quality and Safety in Healthcare 2009; 18:341–346 Safety of Medicines in Care Homes. National Care Forum (2013) http://patientsafety.health.org.uk/sites/default/files/resources/safety_of_medicines_in_the_care_home_0.pdf Accessed 19 12 13 Managing medicines in care homes (2013). NICE Good Practice Guidance. NICE. London http://www.nice.org.uk/guidance/sc/SC 1.jsp Accessed 4 4 14 NHS Scotland. Polypharmacy Guidance. October 2012. http://www.gihub.scot.nhs.uk/media/459059/polypharmacy%20full%20guidance.pdf Accessed 20 6 14 Polypharmacy and Medicines Optimisation – Making it safe and sound (2013). The Kings Fund. London. Authors M Duerden, T Avery and R Payne. http://www.kingsfund.org.uk/sites/files/kf/field/

006	Royal College of Ophthalmologists	Primary prevention of falls by promotion of uptake of NHS optometrist sight tests in at risk populations or individuals	It is well documented in the literature that worse vision correlates with risk of falls in elderly patients. (eg Visual acuity, self-reported vision and falls in the EPIC-Norfolk Eye study. Yip JL et al Br J Ophthalmology. 2014 Mar;98(3):377-82.) The main way that remediable or preventable causes of sight loss present to eye care services in the UK is via optometrists, and the NHS already makes provision for free sight tests every two years after the age of 60, and annually after the age of 70, but we know that the uptake of these tests is variable (Conway, C. and McLaughlan, B. (2007) Older People and Eye Tests, Royal National Institute of Blind People, London, UK. pp.11-20).	There is not currently any mandate for primary care providers to encourage the uptake of sight tests amongst the elderly population. Inclusion of questions about uptake of optometrist sight tests by General Practitioners when seeing people routinely at age 70+ might pick up those who are not utilising the services provided and therefore who are exposing themselves to undue risk of reduced vision and consequent increased risk of falls.	Visual acuity, self-reported vision and falls in the EPIC-Norfolk Eye study. Yip JL et al Br J Ophthalmology. 2014 Mar;98(3):377-82. Conway, C. and McLaughlan, B. (2007) Older People and Eye Tests, Royal National Institute of Blind People, London, UK. pp.11-20). Central and peripheral visual impairment and the risk of falls and falls with injury. Patino CM et al. Ophthalmology. 2010 Feb;117(2):199-206 Vision and falls: a multidisciplinary review of the contributions of visual impairment to falls among older adults. Maturitas. 2013 May;75(1):22-8. Reed-Jones RJ et al

006	Royal College of Ophthalmologists	Secondary prevention of falls by promotion of uptake of NHS optometrist sight tests amongst those who have fallen	For the same reasons as detailed above.	Where any evaluation is made of patients who have had a fall, be that more or less serious in terms of harm done at the index event, questioning about uptake of the NHS sight tests should be included in the list of points covered by way of secondary prevention.	As above

018	The College of Optometrists and the Optical Confederation.	Visual assessment	The chances of having reduced vision greatly increases with age and older people with reduced vision are more likely to fall. Vision is fundamental to coordinating our movement – balance and postural stability are directly affected by vision. In addition, vision is fundamental to adapt gait to enable safe travel though the environment, avoiding obstacles and negotiating steps and stairs.	We are pleased that the NICE Guideline 161 asserts that vision should be a part of any falls multi-factorial assessment and a core part of falls interventions. However, emerging evidence shows that standard falls rehabilitation strategies may not be effective for people where vision was a factor. We feel that that vision should be a consideration in all aspects of a patient pathway through falls services - including prevention and rehabilitation programmes.	Please also see the Thomas Pocklington Trust report *Falls in older people with sight loss: a review of emerging research and key action points* published June 2013, for further evidence. The College of Optometrists recently published the *Focus On Falls* report which looks specifically at the relationship between falls and vision, making several practical recommendations for falls services and the optometric sector. We feel that these reports would be welcome additions to the “Key Policy Documents” section of NICE 161. **References** College of Optometrists and The British Geriatric Society. *The importance of vision in preventing falls, a*vailable from http://tinyurl.com/vision-falls. Accessed 18.7.2014. Abdelhafiz, A.H. and Austin, C.A Visual factors should be assessed in older people presenting with falls or hip fracture *Age and Ageing* 2003 32(1), 26-30 Ivers RQ, Cumming RG, Mitchell P et al. Visual impairment and falls in older adults: the Blue Mountains Eye Study. *J. Amer Ger. Soc*. 1998 46(1): 58-64 Cummings SR. Treatable and untreatable risk factors for hip fracture. *Bone* 1996 18(3 suppl): 165S-167S Jack DI, Smith T, Neoh C et al. Prevalence of low vision in elderly patients admitted to an acute geriatric unit in Liverpool: elderly people who fall are more likely to have low vision *Gerontology* 1995 41(5), 280-5 Patino CM, McKean-Cowdin R, Azen SP et al Central and peripheral visual impairment and the risk of falls and falls with injury *Ophthalmology* 2010 117(2) 199-206

008	Central London Community Healthcare Trust	Improved assessment and management of bone health and associated lifestyle change to enable primary and secondary fragility fracture prevention secondary to osteoporosis	Targeting of bone health in terms of bone protection and bone loading has the potential to offer more primary prevention of fractures associated with osteoporosis, falls shifting the focus away from secondary prevention	Treatment options for reduce osteoporotic fracture risk is lacking in the guidance	RCP, 2012; FFFAP, 2013; NOS, 2012,
009	AGILE	Improved assessment and management of bone health for primary and secondary fragility fracture prevention	Targeting of bone health in terms of bone protection and bone loading has the potential to offer more primary prevention of fractures associated with osteoporosis, falls shifting the focus away from secondary prevention	Treatment options for reduce osteoporotic fracture risk is lacking in the guidance	RCP, 2012; FFFAP, 2013; NOS, 2012,

012	National Osteoporosis Society	**Bone Health Assessment in people who have fallen**	The majority of fractures in older people occur as a result of a fall from standing height. These are low trauma fragility fractures commonly affecting the pelvis, wrist, upper arm or hip. A local authority area with a population of 300,000 may currently include 45,000 people aged over 65, of which 1,100 will sustain a fracture, 360 to the hip each year. Many older people who fall may have osteoporosis. This is a common condition which weakens bone strength and particularly affects post-menopausal women. The incidence in both sexes rises rapidly as the population ages. Its onset is asymptomatic and it is often only recognised after an older person falls and sustains a fragility fracture. Osteoporosis can be diagnosed and treated using specialist bone density or DXA scans	The National Audit of falls and bone health in older people 2010, found that "injurious falls, including 70,000 hip fractures annually, are the leading cause of accident-related mortality in older people" (RCP 2011, p.5). Historically, falls and bone health have not been addressed holistically, with services developing independently to deal with falls or bone health. More recently, there has been an increasing importance placed on ensuring that both elements are dealt with in this high risk population to maximise the benefits to patients. Subsequently, we have seen an increase in policy and guidance ensuring that both falls and fractures are considered. Some examples of these are included under 'supporting information'. We would encourage NICE to include consideration of bone health within the Quality Standards on falls.	The strategy of ensuring that both falls and bone health are considered synonymously is well established and features in: Department of Health prevention package for older people: falls and fractures (http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@pg/documents/digitalasset/dh_109122.pdf) The NICE Quality Standard for Hip Fracture (QS16), Quality Statements (11 and 12) on Falls and Bone Health assessment. Best Practice Tariff for hip fractures. Falls and Fragility Fractures Audit Programme funded by HQIP. Royal College of Physicians, 2011. *Falling standards, broken promises: Report of the national audit of falls and bone health in older people 2010*.

003	North London Hospice	Key area for quality improvement 2 Multifactorial interventions for older people at risk of falling in hospital	Current NICE evidence recommends that older people at risk of falling in hospital be considered for a multifactorial intervention.	The guidance recommends that patients be 'considered' for multifactorial interventions which 'promptly' identify individual risk factors. It is unclear whether there is an expectation for these interventions to be started whilst the patient is staying in hospital. This may lead to interventions being delayed until the patient is discharged. Interventions which are started immediately upon assessment of risk may begin to address key factors, for example, balance problems, fear of falling; in order to proactively prevent falls. Additionally, the guidance recommends ensuring that any intervention takes into account whether any risk factors can be treated, improved or managed. There is an essential link between this factor and the quality of falls assessments (see key area for quality improvement 1 above) which could be highlighted to ensure that health professionals understand the correlation between assessment of risk and its management.	Cameron et al, (2012) Interventions for preventing falls in older people in care facilities and hospitals (Review). The Cochrane Collaboration. Haines et al, (2004) Effectiveness of targeted falls prevention programmes in subacute setting. British Medical Journal, 328: 676-679 Help the Hospices (2010) Falls toolkit for prevention and management of falls. http://www.helpthehospices.org.uk/our-services/excellence-in-care/quality-assurance-and-risk-management/falls Royal College of Physicians (2012) Report of the 2011 inpatient falls pilot audit. https://www.rcplondon.ac.uk/sites/default/files/documents/inpatient-falls-final-report-0.pdf National Institute for Health and Care Excellence (2013) Falls: assessment and prevention of falls in older people

	College of Occupational Therapists	Key area for quality improvement 3 **Multifactorial interventions**	Multi factorial interventions will vary depending on setting and availability of services. There needs to be a consistency in delivery and clear pathway and processes in place.		NICE Falls Guidelines 2013 College of Occupational Therapists: *Occupational therapy in the prevention and management of falls in adults** Focus on Falls College of Optometrists http://www.college-optometrists.org/en/EyesAndTheNHS/focus-on-falls.cfm

011	Royal College of Physicians (RCP)	Key area for quality improvement 3 **Individualised, multifactorial intervention (e.g. falls clinics), including fall-specific medication review**	Most older people who fall do so because of multiple risk factors for falling, rather than a single diagnosis or impairment. Falls prevention therefore requires the systematic identification and management of an individual's falls risk factors, as recommended within NICE CG161.	The National Audit of Falls and Bone Health in Older People found that only 32% of non-hip fragility fracture patients received a multifactorial falls intervention of any kind and only 12% of patients attended a falls clinic. There was evidence that those that attended a falls clinic received more intervention and that there was significant variation between health economies. For a quality standard, it would be inappropriate to require that patients attend a falls clinic, as some localities provide a virtual or home-based service, rather than a physical clinic. One potential way to simplify this as an auditable standard would to look for evidence of fall-specific medication review, which is included in most multifactorial intervention studies. However, documented evidence of any kind of medication review only occurred in 33% of non-hip fragility fracture patients, most of whom were inpatients. Rates of fall-specific medication review in primary care are much lower still.	Falling standards, broken promises (RCP, 2011).

015	SCM	Key area for quality improvement 4 **For patients at risk of falling in hospital consider a multifactorial assessment and a multifactorial intervention**	All inpatients aged 65 years or older should be considered at risk of falling as well as patients aged 50 to 64 years who are judged by a clinician to be at higher risk of falling. These patients should have their falls risk factors assessed and interventions should be implemented in accordance with to the patient's individual risk factors.	Research has shown that falls can be reduced by 20-30% through multifactorial assessment and interventions. The aim of these assessments and interventions is to identify and treat the underlying reasons for falls, such as muscle weakness, cardiovascular problems, dementia, delirium and medication. However, audits have found low levels of implementation of these assessments and interventions in UK hospitals.	Royal College of Physicians https://www.rcplondon.ac.uk/resources/falls-prevention-resources National Patient Safety Agency http://www.nrls.npsa.nhs.uk/resources/collections/10-for-2010/reducing-harm-from-falls/?entryid45=59821 National Patient Safety Agency and Patient Safety First http://www.patientsafetyfirst.nhs.uk/Content.aspx?path=/Campaign-news/current/Howtoguidefalls/

009	AGILE	Identify most effective care models to promote individualised care planning and prevent crisis in those experiencing recurrent falls i.e. avoid crisis and prevent unplanned admissions/emergency service usage	Frequent fallers are high users of emergency care services and often have unplanned admissions – improvements in the way care is provided for this cohort of fallers ie shift from reactive to proactive care and case management/effective resource allocation and care planning is essential if we are to reduce unplanned admissions and the consequences of acute care amongst those most at risk of recurrent falls/falls	NHS England Outcomes Framework: managing LTCs, care in a safe environment, improve patient experience and to ensure viability of the NHS for future	Safe compassionate care for frail older people, NHS England 2013; Age UK;

008	Central London Community Healthcare Trust	Identification of optimal models of care to promote individualised care planning for those who experience recurrent falls i.e. avoid crisis and prevent unplanned admissions/emergency service usage	Frequent fallers are high users of emergency care services and often have unplanned admissions – improvements in the way care is provided for this cohort of fallers ie shift from reactive to proactive care and case management/effective resource allocation and care planning is essential if we are to reduce unplanned admissions and the consequences of acute care amongst those most at risk of recurrent falls/falls	NHS England Outcomes Framework: managing LTCs, care in a safe environment, improve patient experience and to ensure viability of the NHS for future	Safe compassionate care for frail older people, NHS England 2013; Age UK;

011	Royal College of Physicians (RCP)	Key area for quality improvement 4 **Systematic, individualised falls prevention in hospital using a care bundle, or similar.**	Older people are at increased risk of falling when admitted to hospital and there is evidence that a systematic individualised approach to falls risk reduction, such as with a falls prevention care bundle, can reduce the rate of inpatient falls. This approach is recommended by NICE CG161.	The FallSafe quality improvement project examined introduction of a falls prevention care bundle, championed by a nurse at ward-level. The care bundle contained most elements of care subsequently recommended by NICE CG161 and evaluation demonstrated a 25% reduction in falls rates. However, such structured and robust falls prevention is not routinely embedded in all hospitals. Two pilot audits of inpatient falls have been performed with different methodologies, both showing significant deficiencies and variation in all aspects of falls prevention. For example, in both audits, only around half of inpatients had lying and standing blood pressure measurements (of patients in whom this would have been possible).	Falls prevention in hospitals and mental health units: an extended evaluation of the FallSafe quality improvement project. Healey F, et al. Age and Ageing 2014; 43: 484–491. Report of the 2011 inpatient falls pilot audit (RCP, 2012) FFFAP: report into the feasibility of a national audit of falls prevention in acute hospitals (RCP, 2014) – currently embargoed pending review by HQIP. Permission for NICE to use data can be requested, if required.

014	British Geriatrics Society	Key area for quality improvement 3 **Interventions**	There is also evidence that general older populations (not identified at risk) can also benefit from interventions as well as tailored interventions to those at high risk. In addition there is a need for more public health interventions that target populations. Different standards will be required for inpatients as this differs to that for community dwelling populations	Although the provision of interventions (multi factorial and single interventions) is reported by organisations as part of the RCP Audit programme, in practice many people are not offered or able to access services. Many exercise services do not meet the recommended level in terms of content or dose (frequency and duration). The evidence base for exercise interventions generally includes support strategies to promote uptake and adherence by older people but these are often neglected when implemented into practice and as such potential benefits are lost. Most people in care homes will be at risk but there is limited evidence of effective interventions. It will need to be clear as to whether standards will apply to this population	RCP Falls audits; CSP/BOA – the state of orthopaedic services (due for publication Aug 2014); don't mention the F word.

015	SCM	Key area for quality improvement 1 Evidence based strength and balance exercises for community dwelling older people at risk of falling	Evidence based strength and balance exercises for older people not only reduce falls in older people but also prevent injury resulting from falls in older community dwelling people. NICE CG161 recommends strength and balance training for older people living in the community with a history of recurrent falls and/or balance and gait deficit.	Strength and balance exercise has been proven to be extremely effective in reducing falls. It plays an important role in the falls care pathway, both in terms of primary and secondary prevention, and can significantly contribute to reducing the financial burden on the NHS and social care by preventing fractures and avoidable hospital admissions. Audits of falls and bone health services have consistently shown, however, that provision of falls prevention exercise is patchy, at best, and often does not follow the guidelines for evidence-based practice.	Please see: Systematic review and meta-analysis of randomised controlled trials: BMJ 2013;347:f6234 doi: 10.1136/bmj.f6234 (Published 29 October 2013) DOH Prevention package for older people: http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Publicationsandstatistics/Publications/dh_103146 AgeUK (Expert series): http://www.ageuk.org.uk/Documents/EN-GB/For-professionals/Research/Falls_Prevention_Guide_2013.pdf?dtrk=true & http://www.ageuk.org.uk/Documents/EN-GB/Falls/Stop_falling_report_web.pdf?dtrk=true Royal College of Physicians survey https://www.rcplondon.ac.uk/sites/default/files/documents/patient_and_public_involvement_report__2011_final.pdf

005	Wandsworth CCG	Key area for quality improvement 1 Implementation of models for Falls exercise for at risk populations across the full spectrum of ability.	Falls patients come from a full spectrum of physical/functional ability groups from the very low level sedentary/immobile population to the high level independently mobile. Exercise should be considered and delivered appropriately across all stages of the physical spectrum not just the population who replicate some of the research groups. Those who are sedentary or with very limited mobility, cannot be assessed using NICE recommended tools such as the TUAG and 180 degree turn as they cannot physically complete the tests. In line with the evidence this group with significant deconditioning would benefit the most from appropriate exercise interventions but they also need support to initiate an activity and then exercise programme (Eves and Plotnikoff, 2006) Current evidence	There are 2 factors to consider around access and equity 1.Although there is evidence that multifactorial assessments for falls are completed, the processes for identifying the population who access the service varies widely across the country 2.The subsequent availability and quality of exercise models across the full physical/functional spectrum of people who have fallen/at risk of falls also differs which further filters the population starting an exercise intervention. Largely falls exercise provisions are delivered to the "middle band" of physical ability patients driven largely by the current NICE guidelines CG161 which identify key clinical measures like TUAG and 180 degree tune. The use of this tool rules out the low level immobile/unable to walk independently and the higher level falls patients who can achieve the required values for this test but cannot function fully in society eg:they may have a TUAG of 14 seconds which gives a walking speed of 0.43 m/sec however crossing roads in the UK requires a speed of 1.2m/sec. The focus must be on accessible, user friendly models of delivery, ensuring exercise interventions are based on the evidence components but are also individually tailored and progressed appropriately. There will be significant gains from	Anecdotal evidence:attended the Community Indicators' Programme workshop on falls in July 2014 –this is a national initiative supported by NHS Trust Development Authority and is endorsed by NHS England, CQC, Monitor ,the DOH and the National Commissioning Assembly –focussed on the development of nationally common indicators for community heath workstreams. With 12 different leads for falls providers across the country in the room –it was very apparent that there was a vast difference in the provision of falls exercises and that many of these services seemed to only deliver exercise to a very targeted population -actively excluding significant risk populations ie :those who could not complete the physical assessment measures of TUAG and 180 degree, those who could not get themselves to services which in some areas were hospital based, those with dementia. This issue of filtering was also identified in April 2014 at a SW London Falls steering group where the majority of providers sought to actively filter the referred population coming out into the community from an acute Trust eg:excluding dementia patients, those with COPD etc. Local implementation of effective model to address the needs of some of the lower ability populations:Access to Wellbeing in day centres –see section 5. The most frail groups that do not "fit" the middle band of ability appear to be the significant population of injurious falls: Eg:2013/14 National Hip Fracture database report showed 33.7% of hip fracture patients on admission had low cognitive score(dementia and/or delirium) compared to a previous meta-analysis in 2011 which

005	Wandsworth CCG	Key area for quality improvement 2 Suboptimal delivery of exercise for the population who do get filtered into the current system but have limited exit strategy for continued exercise	The evidence for the provision of exercise contained within NICE CG161 has been derived from the research studies which recommend for example a frequency of 3x week– the existing clinical models may not be delivering due to lack of understanding about the exercise parameters or practical difficulties delivering on this due to barriers.We need to understand the acceptability of intervention models and the barriers and facilitators for individual engagement	There is an inequity in provision across the country in the components of exercise programme (eg frequency/length) but also in the delivery model –including where exercise is delivered. There needs to be recognition of the barriers to exercise at organisational and individual level and creative implementation models to address the barriers. So the delivery of 1x week as mainly documented in the ref in evidence –may be user driven due to difficulty attending more than once or this may be due to cost and logistics of an organisation for a 3x week model.It may be that some services have implemented robust home exercise components to support single class attendance. We need to understand the barriers in order to address them and strive for more effective delivery models and also challenge longevity options. There is a gap in provision of community based exercise classes on exit from falls exercise programmes which are required to maintain the benefits obtained from the falls exercise programmes. There are opportunities for local authorities and health partners to work together on this ensuring a free flow between different provision arms as and when the patients condition changes.	Anecdotal evidence through scoping of current service provision at Community Indicators' Programme workshop on falls in July 2014 (see above)-highlight inequity. http://www.biomedcentral.com/1472-6963/8/233 A national survey of services for the prevention and management of falls in the UK 2008 Sarah lamb et al. The mean duration of the exercise programmes was 8 weeks and the mean number of sessions was 1.per week. This is well below the NICE guidelines. This was reinforced in the RCP audit as this found that "the frequency, intensity and duration of most programmes are low and do not meet recommended guidance" https://www.rcplondon.ac.uk/sites/default/files/documents/patient_and_public_involvement_report__2011_final.pdf This further identified that for those people who engage in falls exercise and complete , there is a gap in provision of community based exercise groups following exit from falls groups. **The Key messages from the RCP were** • Implementation of evidence-based exercise interventions by healthcare providers is incomplete and varies widely across participating sites. • There is a lack of long term follow-up classes for reducing falls in the community https://www.rcplondon.ac.uk/sites/default/files/documents/patient_and_public_involvement_report__2011_final.pdfin

005	Wandsworth CCG	Key area for quality improvement 3 Identification of priority sub-groups who require niched or targeted exercise interventions beyond the current recommendations	There is good evidence for high rate of admission and injurious falls for certain populations but little evidence within service delivery models for addressing these populations differently . An example would be diabetes patients at risk of falling. We know that studies have demonstrated benefits for this population with the existing recommended falls exercise components (strength,balance,power,coordination) –but a more holistic model of exercise addressing condition components that significantly impact on falls may be required for success in this group such as comprehensive exercise programmes that have the above components but also have aerobic training/cardiovascular exercises to address weight management, glycaemic control . Endurance training may offer similar benefits to strength	The Cochrane review (Gillespie et al 2012) states “to obtain maximum value for money effective strategies need to be targeted at particular subgroups of older people”. More directed and tailored delivery models for certain populations may be much more economical in terms of time commitments and finances and more effective in addressing whole person health issues. More niched delivery models developed with user groups for certain populations (with behaviour change integrated into the model)should improve the quality of service for significant high risk groups and effectiveness in the population impact for falls and injuries. Fallers with Type II diabetes benefit from the current model but their falls and fracture rates are higher than non-diabetics despite having similar bone density, outcomes post hip fracture are poorer (Semel et al 2010) and rates of recurrent falls are greater (Pijeprs, 2012). Niched exercise would be one component of a comprehensive delivery model to address complex co-morbity cohorts –in line with other quality workstreams focussed on integrated care.	In Wandsworth we have “streamlined” exercise provision for patients who have falls and osteoporosis. The training components for each of the exercise programmes is different. The patients who have osteoporosis and are at risk of falling start in the “falls” exercise programme first to stabilize and strengthen and then progress onto the bone health programme. A similar model is currently being reviewed for diabetes patients. Regarding the high rate of hospitalisation for people with injurious falls - “broad scale epidemiological studies have not identified specific subgroups of older people who need to be targeted” with a different delivery intervention. However in Austalia –as we have found locally during one of the clinical RCP audits _25% of admissions for falls/fractures were diabetic patients.http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3064867/. Hip fractures occur 2.8 times more frequently to people with type II diabetes compared to non-diabetics (Vittinghoff 2009). http://www.kingsfund.org.uk/sites/files/kf/integrated-care-patients-populations-paper-nuffield-trust-kings-fund-january-2012.pdf **No single ‘best practice’ model of integrated care exists. What matters most is clinical and service-level integration** that focuses on how care can be better provided around the needs of individuals, especially where this care is being given by a number of different professionals and organisations (Curry and Ham 2010). Moreover, **integrated care is not needed for all service users or all forms of care but must be targeted at those who stand to benefit most.** Liston m et al Feasibility and effect of

005	Wandsworth CCG	Key area for quality improvement 4 The use of behaviour change evidence to facilitate exercise uptake and adherence	Current provision models are physical intervention models that do not currently focus on motivational and self-efficacy components. Assessment of self-efficacy, readiness to change and levels of depression and anxiety could be completed in patients who appear to be at risk of difficulties adhering to exercise. This group may benefit from strategies to assist with behavioural change such as CBT and motivational interviewing, socratic questioning and goal setting. Additional support with adherence such as phone calls, buddying, peer support, groups and use of videos of others with similar needs engaged in exercise (vicarious learning) may help with compliance. The use of pedometers and accelerometers may also assist with motivation in this group.	Current provisions across the country deliver to the easiest to access groups who are ready and engaged for change. Up skilling clinicians involved in falls exercise programmes to enable them to identify people who may have difficulties with behavioural change and training them in strategies to facilitate engagement will enable access to a currently missing population. Staff resources and training could be reallocated from ineffective models to more evidence based behaviour modles which could improve uptake and success of programmes.	http://www.biomedcentral.com/1472-6963/8/233 This is a national survey of falls services in the UK completed by Sarah Lamb et al. This showed that “diadactic educational programmes are in common use, despite several randomised trials suggesting this to be an ineffective model of promoting behavioural modification, risk and fall reduction. Karen A et al. Barriers and motivations to exercise in older adults Preventive medicine 39,2004 Co-creating Health model of care for LTC http://www.health.org.uk/areas-of-work/programmes/co-creating-health/

008	Central London Community Healthcare Trust	Falls prevention and management including exercise programmes (with reference to the design, intensity and frequency including staff: participant ratio) within the care home setting including interventions for residents with dementia	Physical activity participation and targeted strength and balance training is integral to preventing accelerating functional and cognitive decline. Being able to demonstrate effectiveness of exercise programmes in care homes would support commissioning and also has the potential to reduce the rate at which health and social care needs decline amongst those living in residential/extra care settings	Current NICE guidelines shows that evidence is lacking in terms of robust RCTs in this area	NICE Falls 2013; Croker et al, 2013 (Age and Ageing), SCIE 2012
008	Central London Community Healthcare Trust	A significant number of people do not wish to engage with balance classes, it would be beneficial to have guidance on the evidence base around more 'functional' based rehab for fallers.	To increase the treatment options for people at risk of falls and engage more people who do not wish to participate with formal exercise.	May increase the engagement of patients who normally would not have participated with rehab and therefore may have remained at high risk of falls.	Integration of balance and strength training into daily life activity to reduce rate of falls in older people (the LiFE study): randomised parallel trial BMJ 2012;345:e4547 doi: 10.1136/bmj.e4547 (Published 7 August 2012)

010	College of Occupational Therapists	Key area for quality improvement 4 **Strength and balance training**	There is strong evidence that individualised exercise programmes that challenge both balance and strength reduce falls. However, for these programmes to be effective they have to be sufficient duration. These programmes should also be integrated into people's daily lives, as in the LiFE study. Activities to improve strength and balance should be incorporated into daily activities and occupations that are meaningful to the individual, to improve and encourage longer term participation in falls prevention interventions	The drive towards greater productivity and integrated service provision is welcomed but in many areas of practice this has meant that evidence based exercise programmes can no longer be delivered. Access to evidence based exercise programmes is variable and inconsistent.	http://www.ageuk.org.uk/Documents/EN-GB/For-professionals/Research/Falls_Prevention_Guide_2013.pdf?dtrk=true http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@pg/documents/digitalasset/dh_103151.pdf Clemson L, Fiatarone Singh M, Bundy A, Cumming RG, Weissel E, Munro J, Manollaras K, Black D (2010) LiFE Pilot Study: A randomised trial of balance and strength training embedded in daily life activity to reduce falls in older adults. Australian Occupational Therapy Journal, 57(1), 42-50. Clemson L, Fiatarone Singh MA, Bundy A, Cumming RG, Manollaras K, O'Loughlin P, Black D (2012) Integration of balance and strength training into daily life activity to reduce rate of falls in older people (the LiFE study): randomised parallel trial. British Medical Journal (Clinical Research Ed), Vol 345, e4547. Pritchard E, Brown T, Lalor A, Haines T (2013) The impact of falls prevention on participation in daily occupations of older adults following discharge: a systematic review and meta-analysis. Disability and Rehabilitation, July 18. [Epub ahead of print]. College of Occupational Therapists: *Occupational therapy in the prevention and management of falls in adults**

010	College of Occupational Therapists	Key area for quality improvement 5 **Exercise in extended care settings**	There is a lot of research about the wide range of health and wellbeing benefits from physical activity for older people. Research also tells us that there is a steady decline in activity with increasing age and frailty. Not all older people in Care Homes are able to participate in formal exercise programmes and physical activity plays a key role in improving general health and fitness.	Extended care settings including care homes are run by various organisations and there can be varying interpretations of the role of exercise and who should deliver this. Increasing physical activity should be addressed as part of this. The College of Occupational Therapists have developed a Living Well through Activity toolkit that supports staff to implement various activities to improve health and wellbeing and subsequently reduce falls. Up and About in Care Homes Improvement project – anecdotal feedback from care home staff is that increasing physical activity/exercise/mobility without appropriate assessment or interventions can lead to an increase in falls.	Care about physical activity http://www.bhfactive.org.uk/userfiles/Documents/Booklet.pdf http://www.cot.co.uk/sites/default/files/general/public/PH16Guidance.pdf#search="care home resource" http://www.scswis.com/index.php?option=com_docman&task=cat_view&gid=329&Itemid=378s-and-fractures-care-homes-older-people http://www.cot.co.uk/sites/default/files/general/public/Unit%202%20%E2%80%93%20Care%20home%20staff%20resources.pdf Delphi Study chair based exercise http://www.biomedcentral.com/1471-2318/14/65 Up and About in Care Homes – The management of falls and fractures in care homes for older people improvement project – lianne.mcinally1@nhs.net

011	Royal College of Physicians (RCP)	Key area for quality improvement 2 **Therapeutic exercise for older people who have fallen**	Therapeutic exercise, with individualised strength and balance training, reduces falls risk and falls rates and is recommended within NICE CG161. It is the most useful single intervention in falls prevention for community-dwelling older people and possibly the only such intervention deliverable at scale.	The National Audit of Falls and Bone Health in Older People showed that only 19% of older people who had sustained a non-hip fragility fracture commenced a therapeutic exercise programme, even though this is a group at high risk of further falls and fractures and even though 86% of health economies reported that they provided this service. Rates varied between health economies but very few areas achieved acceptable rates of referral. A related audit of exercise providers and older people who have participated in therapeutic exercise found that the duration and intensity of exercise was not usually at a level consistent with evidence. There is also evidence that a reduced 'dose' of exercise may remove any benefit in terms of falls reduction.	Falling standards, broken promises (RCP, 2011). Older people's experiences of therapeutic exercise as part of a falls prevention service (RCP, 2012)

013	Royal College of Nursing	Key are for quality improvement 1 Strength and balance training	Strength and balance training are recommended interventions Falls Assessment and prevention of falls in older people NICE guidelines (CG161) June 2013 and we feel that consideration/guidance needs to be available about how these interventions might be improved on by using technology in form of home based computer games such as the Wii etc and by using Apps to monitor and increase exercise.	The Royal College of Nursing feels that the way people access health interventions is changing and clinicians need to understand quality markers for these interventions.	Falls Assessment and prevention of falls in older people NICE guidelines (CG161) June 2013

017	Nottinghamshire Healthcare NHS Trust	Key area for quality improvement 1	There is strong evidence that individualised exercise programmes that challenge both balance and strength reduce falls. However, for these programmes to be effective they have to be sufficient duration. These programmes should also be integrated into people's daily lives, as in the LiFE study. Activities to improve strength and balance should be incorporated into daily activities and occupations that are meaningful to the individual, to improve and encourage longer term participation in falls prevention interventions	The drive towards greater productivity and integrated service provision is welcomed but in many areas of practice this has meant that evidence based exercise programmes can no longer be delivered. Access to evidence based exercise programmes is variable and inconsistent.	http://www.ageuk.org.uk/Documents/EN-GB/For-professionals/Research/Falls_Prevention_Guide_2013.pdf?dtrk=true http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@pg/documents/digitalasset/dh_103151.pdf Clemson L, Fiatarone Singh M, Bundy A, Cumming RG, Weissel E, Munro J, Manollaras K, Black D (2010) LiFE Pilot Study: A randomised trial of balance and strength training embedded in daily life activity to reduce falls in older adults. Australian Occupational Therapy Journal, 57(1), 42-50. Clemson L, Fiatarone Singh MA, Bundy A, Cumming RG, Manollaras K, O'Loughlin P, Black D (2012) Integration of balance and strength training into daily life activity to reduce rate of falls in older people (the LiFE study): randomised parallel trial. British Medical Journal (Clinical Research Ed), Vol 345, e4547. Pritchard E, Brown T, Lalor A, Haines T (2013) The impact of falls prevention on participation in daily occupations of older adults following discharge: a systematic review and meta-analysis. Disability and Rehabilitation, July 18. [Epub ahead of print].

010	College of Occupational Therapists	Key area for quality improvement 6 **Home hazard and safety intervention**	Home hazard reduction, as part of a multi-factorial falls assessment and intervention, can reduce falls and subsequent loss of independence.	Evidence has shown that an occupational therapist completing a home assessment is more effective than a “home hazard checklist” approach by other health and social care workers. This is because the OT will look at how the person interacts with their environment and works with the person to make changes acceptable to them. Due to pressure to reduce length of stay in hospital, home assessments are often not carried out following a fall and injury and referrals to community based services are dependent on local service provision. There needs to therefore be appropriate pathways and signposting to be able to access Occupational Therapy assessment where required.	College of Occupational Therapists: *Occupational therapy in the prevention and management of falls in adults** http://www.cot.co.uk/sites/default/files/commissioning_ot/public/Falls-Evidence-Fact-sheet.pdf Pighills AC, Torgerson DJ, Sheldon TA, Drummond AE, Bland JM (2011) Environmental assessment and modification to prevent falls in older people. Journal of The American Geriatrics Society, 59(1), 26-33.

017	Nottinghamshire Healthcare NHS Trust	Key area for quality improvement 2	Home hazard reduction, as part of a multi-factorial falls assessment and intervention, can reduce falls and subsequent loss of independence.	Evidence has shown that an occupational therapist completing a home assessment is more effective than a "home hazard checklist" approach by other health and social care workers. This is because the OT will look at how the person interacts with their environment and works with the person to make changes acceptable to them. Due to pressure to reduce length of stay in hospital, home assessments are often not carried out following a fall and injury and referrals to community based services are dependent on local service provision.	http://www.cot.co.uk/sites/default/files/commissioning_ot/public/Falls-Evidence-Fact-sheet.pdf Pighills AC, Torgerson DJ, Sheldon TA, Drummond AE, Bland JM (2011) Environmental assessment and modification to prevent falls in older people. Journal of The American Geriatrics Society, 59(1), 26-33.
001	HQT Diagnostics	Increase vitamin D to 75 nmol/L for everyone over age of 50 Half-life of Vitamin D is 30-60 days, so monthly supplementation is most effective	Increases muscle strength and reduces falls Helps to increase bone strength	Cheap, very effective and easy to do This is a major factor in preventing falls – **maybe one of the most significant**	http://ajcn.nutrition.org/content/84/1/18.full Estimation of optimal serum concentrations of 25-hydroxyvitamin D for multiple health outcomes Dr Heike Bischoff-Ferrari, 2006, American Society for Nutrition • Lower Extremity Functions – for older people: "8-foot walk time" showed major improvements above 60 nmol/L "Sit-to-stand time" showed major improvements above 40 nmol/L, (with continued minor improvements up to 120 nmol/L)

001	HQT Diagnostics	Simple self-test for Vitamin D deficiency	Easy diagnosis. Mayo Clinic says that this has a 93% correlation with a blood test for Vitamin D deficiency	This self-test can be done by patient at home, or in hospital or nursing home by Nurse or Doctor - ***without taking blood***	www.vitamindwiki.com/Quick,+free,+self+test+of+vitamin+D+deficiency
003	North London Hospice	Key area for quality improvement 3 Education and Information	Evidence recommends that those healthcare professionals working with at risk patients maintain a basic level of professional competence in falls assessment and prevention.	Current guidance sets out the information needs of the patient and their carers. There is evidence that the communication of information relating to falls risk and the sharing of assessments amongst healthcare professionals is often low. Guidance is lacking in terms of specifying the role that all healthcare professionals have in identifying falls risk factors, subsequently which professionals have responsibility for completing assessments and developing interventions. There is evidence that whilst the roles and responsibilities of nursing staff is widely recognised, this does not extend to allied health professionals and key support workers such as health care assistants. Expansion of guidance in this area may improve standards of risk identification and assessment and subsequently the implementation of interventions.	Fonda et al, (2006) Reducing serious falls-related injuries in hospital. Medical Journal of Australia, 184: 379-383 Healey et al, (2004) Using targeted risk factor reduction to prevent falls in older hospital inpatients. A randomised controlled trial. Age and Ageing, 33: 390-395 Royal College of Physicians (2012) Report of the 2011 inpatient falls pilot audit. https://www.rcplondon.ac.uk/sites/default/files/documents/inpatient-falls-final-report-0.pdf

015	SCM	Key area for quality improvement 5 **Professionals dealing with patients known to be at risk of falling should develop and maintain basic professional competence in falls assessment and prevention**	*Everyone who works on a regular basis with older people has a role to play in falls prevention. This role can range from providing simple information, advice, to identifying older people at risk, encouraging reporting of falls and signposting/referring to relevant services, to more specialist intervention.*	Falls and resultant fracture cut across all agencies working with older people and is not the preserve of one agency e.g. a specialist falls service. Those who work with older people should develop and maintain an appropriate level of knowledge and understanding on falls risk factors and how to manage this.	AGS/BGS Clinical Practice Guideline: Prevention of Falls in Older Persons http://www.medcats.com/FALLS/frameset.htm Royal College of Physicians https://www.rcplondon.ac.uk/resources/falls-prevention-resources Age UK/ NOS – Breaking Through http://www.nos.org.uk/document.doc?id=987 Social Care and Social Work In Scotland http://www.scswis.com/index.php?option=com_content&view=article&id=8365:the-management-of-falls-and-fractures-in-care-homes-for-older-people-national-project&catid=283&Itemid=695

010	College of Occupational Therapists	Key area for quality improvement 8 **Education and information giving**	One size does not fit all in terms of delivery of education/information giving. Older people have access to various methods of gaining education and information. The quality of this may vary depending on whom and where the information is provided. In Scotland there is National Learning Outcomes for Falls to ensure consistency of training and education for staff and a new National Leaflet has been produced for Falls in Community. There needs to be a pathway for education and information as there are key times when education and information giving is important to reduce falls e.g. on admission to hospital, respite, following a fall, prevention to prevent falls, following a fragility fracture.	There needs to be consistency and quality around the types of information given and competence of those giving the information.	http://www.sqa.org.uk/files_ccc/PreventionAndManagementOfFallsAndFractures-LearningOutcomes.pdf College of Occupational Therapists: *Occupational therapy in the prevention and management of falls in adults**

016	Vifor Pharma UK Ltd	Key area for quality improvement 1 Anaemia / iron-deficiency anaemia	Anaemia has been shown to be an independent risk factor for falls in the elderly.[1] Anaemia is also associated with mortality,[2,3] hospitalization and length of hospital stay,[3] and frailty.[4] Anaemia is prevalent in people at risk of falls in the UK. It is found to be present in 39% of women and 52% of men over the age of 65 years living in institutions, and in 13-38% of adults over the age of 75 years living in the community.[5] Iron deficiency anaemia is found in 6% of adults over 85 years living in the community and 5% of men over the age of 65 years living in institutions.[5]	In the UK Hospital Episode Statistics for 2012/13, ICD-10 codes associated with falls account for three of the top twenty emergency admission primary diagnoses in which anaemia is a secondary diagnosis.[6] Iron deficiency anaemia is the fourth most common ambulatory care sensitive (ACS) condition admitted to hospital, according to UK Hospital Episode Statistics for 2012/13.[6] Anaemia is often not recognised or appropriately managed.[7,8] There is no specific NICE guideline for the management of anaemia, therefore it should be incorporated into guidance and standards for other conditions.	1. Duh MS, Lefebvre P, Woodman RC et al. Anaemia and the risk of injurious falls in a community-dwelling elderly population. Drugs Aging 2008;25:325-34 2. Zakai NA, Katz R, Hirsch C et al. A prospective study of anemia status, hemoglobin concentration and mortality in an elderly cohort: the Cardiovascular Health Study. Arch Intern Med. 2005;165:2214-20 3. Penninx BW, Pahor M, Woodman RC et al. Anemia in old age is associated with increased mortality and hospitalization. J Gerontol A Biol Sci Med Sci 2006;61:474-479 4. Penninx BW, Guralnik JM, Onder G et al. Anemia and decline in physical performance among older persons. Am J Med 2003;115:104-10 5. Iron and Health. Scientific Advisory Committee on Nutrition 2010 6. UK Hospital Episode Statistics Data 2012/13. NHS Information Centre for Health and Social Care, under a commercial re-use license via Harvey Walsh Ltd. 7. Yates JM, Logan ECM, Stewart RM. Iron deficiency anaemia in general practice: clinical outcomes over three years and factors influencing diagnostic investigations. Posgrad Med J 2004;80:405-410 8. Logan ECM, Yates JM, Stewart RM et al. Investigation and management of iron deficiency anaemia in general practice : a cluster randomized trial of a simple management prompt. Postgrad Med J 2002;78:533-537

009	AGILE	Falls care pathway in the care home setting	CGA and Multifactorial integrated care planning and physical activity participation such as targeted strength and balance training is integral to preventing accelerating functional and cognitive decline.	Being able to demonstrate effectiveness of exercise programmes in care homes would support commissioning and also has the potential to reduce the rate at which health and social care needs decline amongst those living in residential/extra care settings. Current NICE guidelines shows that evidence is lacking in terms of robust RCTs in this area	NICE Falls 2013; Croker et al, 2013 (Age and Ageing), SCIE 2012
008	Central London Community Healthcare Trust	Cost effectiveness and QALY adjusted life years related to falls prevention programmes broken down relative to level of acuity/complexity of falls risk i.e. one off fall no impairment, and also recurrent falls/hip fracture requiring institutional care	Current NICE guidelines shows little or no impact on QALYs or cost effectiveness of falls prevention services due to the diversity/wide spectrum of need amongst those studies analysed. Need to be able to demonstrate which falls pathways/service models are best fit for those requiring post fall/fracture rehabilitation so as to inform commissioning needs and service stratification	Currently coding and cost analysis of fall is so variable and unstandardized that it is not possible to demonstrate effectively the cost effectiveness of falls prevention models of care – essential if we are to commission relative to need and include service modelling for those with low versus high need to ensure most effective allocation of resource.	NICE 2013; Tian et al, 2013 (Torbay King's Fund Study)

009	AGILE	Cost effectiveness and QALY adjusted life years related to falls prevention programmes broken down relative to level of acuity/complexity of falls risk i.e. one off fall no impairment, and also recurrent falls/hip fracture requiring institutional care	Current NICE guidelines shows little or no impact on QALYs or cost effectiveness of falls prevention services due to the diversity/wide spectrum of need amongst those studies analysed. Need to be able to demonstrate which falls pathways/service models are best fit for those requiring post fall/fracture rehabilitation so as to inform commissioning, service design and stratification in both the acute and community care setting	Currently coding and cost analysis of fall is so variable and unstandardized that it is not possible to demonstrate effectively the cost effectiveness of falls prevention models of care – essential if we are to commission relative to need and include service modelling for those with low versus high need to ensure most effective allocation of resource.	NICE 2013; Tian et al, 2013 (Torbay King's Fund Study)

008	Central London Community Healthcare Trust	Define best practice and most cost effective service models to allow long term falls prevention programmes to be accessible to older adults to meet the 50 hours recommended exercise for sustained falls prevention	12 week exercise programmes may reduce falls short term but will not result in sustained falls prevention for up to a year post fall. If the NHS is to become more preventative and reduce consequences of falls, evidence is needed to inform commissioning of services meeting evidence base for exercise participation and to meet patient expectation	Ensure long term falls prevention is an outcome of falls prevention programmes	RCP, 2012; NICE, 2013; Age UK 2013

009	AGILE	Define best practice and most cost effective models of care to enable long term falls prevention programmes to be accessible to older adults to meet the 50 hours recommended exercise for sustained falls prevention	12 week exercise programmes may reduce falls short term but will not result in sustained falls prevention for up to a year post fall. If the NHS is to become more preventative and reduce consequences of falls, evidence is needed to inform commissioning of services meeting evidence base for exercise participation and to meet patient expectation	Ensure long term falls prevention is an outcome of falls prevention programmes	RCP, 2012; NICE, 2013; Age UK 2013
008	Central London Community Healthcare Trust	Pain to be recognised as a risk factor for falls	At present not recognised by NICE but there is now evidence to support that older people with pain are more likely to fall. May help to highlight the importance of effective pain management for older people.	To highlight the emerging evidence base	Several pieces of research looking at multiple pain sites and foot pain as indicators for increased risk of falls but currently missing from NICE 2013, NICE: Falls risk assessment as a risk factor for falls/high risk fallers.

012	National Osteoporosis Society	Integration of care across the whole pathway for hip fracture patients	Hip fracture patients should be discharged from hospital as soon as they are medically fit, to continue without a break, their rehabilitation in the most suitable environment.	While in most trusts a consultant orthogeriatrician has responsibility for the inpatient pathway, once the patient leaves hospital there is very little coordination or management of their care (as recommended by NICE QS16 for Hip Fracture). The hospital setting is not conducive to relevant rehabilitation (the patient's usual setting is more appropriate), however not enough patients are able to access suitable levels of rehabilitation.	The NICE Quality Standard for Hip Fracture (QS16)
012	National Osteoporosis Society	**Intensive rehabilitation post operative following hip fracture**	Fifty per cent of people who suffer a hip fracture (often as a result of a fall) do not return to former levels of mobility and independence and may no longer be able to live at home Intense rehabilitation in the early post-operative stages, which includes balance, strengthening and endurance exercise, has been shown to improve outcomes.	There is variation in practice with very few physiotherapy services able to offer rehabilitation to hip fracture patients seven days a week. The focus of rehabilitation is almost exclusively focused on mobilising the patient to be discharged from hospital, rather than starting intensive rehabilitation.	Koot VC, Peeters PH, de Jong JR, et al. Functional results after treatment of hip fracture: a multicentre, prospective study in 215 patients. The European journal of surgery = Acta chirurgica. 2000 Jun;166(6):480-5.

015	SCM	**Key area for quality improvement 3** **Health Promotion forms an integral part of falls prevention**	Healthy lifestyles reduce the risk of chronic disease in older age and build the confidence to stay active and independent Promoting healthy lifestyle and strong bones is a key activity to reduce likelihood of falls and fractures in later life	There is a need for greater community awareness of the importance of physical activity and nutrition in relation to healthy ageing and motivation to adopt these behaviours. These are key factors in reducing falls in older people as well as contributing to overall health and wellbeing. Supporting programmes which improve optimal peak bone mass during early life, and physical activity, healthy eating and maintaining independence during adult life can help reduce the burden of falls and resulting injury on health and social care services.	Public Health Outcomes Framework 2013-2016: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216159/dh_132362.pdf DOH Prevention package for older people: http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Publicationsandstatistics/Publications/dh_103146 WHO Global Report on Falls Prevention in Older Age: http://www.who.int/ageing/publications/Falls_prevention7March.pdf The King's Fund – http://www.kingsfund.org.uk/publications/exploring-system-wide-costs-falls-older-people-torbay

005	Wandsworth CCG	Key area for quality improvement 5 Delivering a model of assessment, exercise and activity that meets the needs of dementia patients and carers	This group are high risk of falls and fractures but have been excluded from a number of studies of falls prevention interventions and as stated above in key area 1 they are also excluded from existing services, A traditional falls risk assessment has a significant subjective component and requires people to be able to follow detailed instructions. Although carers may be able to assist with engagement in conventional models – the current assessment tools are largely designed and delivered to non-cognitively impaired populations. There needs to be a recognition that only some of the dementia population are living in care homes and that addressing this organisational working groups will not address needs of all. In http://www.londonhp.nhs.uk/wp-content/uploads/2011/03/01-Dementia-	By focusing on improving health and wellbeing of this population –it may be a more effective delivery model for the prevention of falls and fractures in this population. The principles around activity/exercise training are embedded in this but the delivery is different – however the initial objective again is transitioning people from sedentary behaviour to active. Although there may be a recognition that current delivery models are not suitable to meet the needs of some of this population –there have been little developments to progress service delivery models to enable access to an effective model. A different system of information gathering is required using the person with dementia and other sources (family carers etc) ,different communication strategies, tools and measures. Any intervention requires a creative approach and focus on the individual, including relevant life history to enable engagement in meaningful activity that may reduce their falls risk. The activities will need to be designed to try and include and embed the principles of exercise training used for falls programmes but implemented in a way to improve meaningful activity and recreation levels . The core health professional required for this workstream are Physiotherapists and Occupational therapists.	

007	Tees Esk and Wear Valleys NHS Foundation Trust	Key area for quality improvement 1	Individuals with dementia are at higher risk of falls than there age related counterparts. Falls risks can be reduced, and managed with positive patient outcome in people with dementia	Falls have a significant impact on all those concerned which also includes those who suffer from dementia. 700,000 people in the UK have dementia. 15,000 younger people in the UK have dementia. It is acknowledged that the exact number of people with dementia is underestimated by up to three times. By 2025 there will be over 1 million people diagnosed with dementia (LSE 2013). NICE falls guidelines should acknowledge that falls can be managed positively for those who have dementia	The National Patient Safety Agency. The How to guide for reducing harm from falls in mental health inpatient settings https://www.rcplondon.ac.uk/sites/default/files/documents/npsa-how-to-guide-falls-mental-health.pdf
012	National Osteoporosis Society	**Follow up rehabilitation in the community**	Frail and elderly people, who have been hospitalised from falls and resulting fractures, require ongoing, consistent and regular rehabilitation, (that continues when they leave hospital without a break) in order to return to their pre fracture capabilities and prevent recurrent falls.	There is variation in practice, a national survey undertaken by the Chartered Society of Physiotherapy highlighted that over half of hip fracture patients do not receive follow up physiotherapy within the first four weeks of being discharged from hospital. This means they are at risk of further falls and the co-morbidities associated with a lack of mobility – pressure sores, DVTs, chest infections and depression. They are likely to need more input from the GP, attendance at A&E and re-admission to hospital	Auais MA, Eilayyan O, Mayo NE. Extended exercise rehabilitation after hip fracture improves patients' physical function: a systematic review and meta-analysis. Physical therapy. 2012;92(11):1437-51. http://ptjournal.apta.org/content/92/11/1437.full.pdf Latham NK, Harris BA, Bean JF, et al. Effect of a home-based exercise program on functional recovery following rehabilitation after hip fracture: a randomized clinical trial. JAMA : the journal of the American Medical Association. 2014 Feb 19;311(7):700-8

008	Central London Community Healthcare Trust	Vestibular Rehabilitation and Falls Prevention Exercise	Because vestibular dysfunction is under diagnosed but highly prevalent amongst older people who fall. Vestibular dysfunction is common in older adult fallers and better recognition of these problems will lead to better management.	VRT is beginning to be integrated into balance retraining programmes but further evidence is needed.	In older adults without a diagnosed vestibular disorder, recent evidence suggests the incorporation of vestibular exercises into a general balance rehabilitation may provide further improvements in postural and gait stability and falls risk compared to current best practice programmes i.e. OTAGO. Pavlov & Liston, 2013 (AGILE)
009	AGILE	Vestibular Rehabilitation and Falls Prevention Exercise	Because vestibular dysfunction is under diagnosed but highly prevalent amongst older people who fall. Vestibular dysfunction is common in older adult fallers and better recognition of these problems will lead to better management.	VRT is beginning to be integrated into balance retraining programmes but further evidence is needed.	In older adults without a diagnosed vestibular disorder, recent evidence suggests the incorporation of vestibular exercises into a general balance rehabilitation may provide further improvements in postural and gait stability and falls risk compared to current best practice programmes i.e. OTAGO. Pavlov & Liston, 2013 (AGILE)
004	NHS England	Thank you for the opportunity to comment on the engagement exercise for the above Quality Standard. I wish to confirm that NHS England has no substantive comments to make regarding this consultation.			

011	Royal College of Physicians (RCP)	The RCP is grateful for the opportunity to respond to the engagement exercise for the quality standard on falls. In doing so, we have liaised with RCP Clinical Effectiveness and Evaluation Unit which runs the Falls and Fragility Fracture Audit Programme. We would like to make the following comments			
011	Royal College of Physicians (RCP)	Additional developmental areas of emergent practice **Use of technologies (e.g. ultra-low beds, alarms) and observation strategies (e.g. intentional rounding, 'specialling') to reduce inpatient falls or harm from falls**	Evidence is lacking for effectiveness of these interventions, yet healthcare providers are investing significant resource in new equipment and in staffing, possibly without benefit.	Quality improvement requires that practice follows best evidence for effectiveness, where such evidence exists. Evidence may emerge that these interventions are effective. In the meantime, it is important that Quality Standards do not include non-evidenced interventions.	