Falls are the commonest single reason for older people to present to urgent care and may be due to an underlying disease or impairment that is amenable to preventative intervention. In the Emergency Department we can identify those older patients who have fallen (or are at risk of doing so) and then initiate a multidisciplinary process to help avert further falls and injuries.
Key Recommendations

All Emergency Department (ED) healthcare professionals should develop and maintain basic professional competences in falls assessment and prevention.

Any older person who attends the ED after a fall should have a history taken of the nature of the fall, any previous falls and other relevant factors e.g. medical, drug and social history (including alcohol intake).

Any older person who attends the ED after a fall should undergo clinical evaluation which includes assessment of gait, balance and the risk of future falls.

Any patient deemed to be at high risk of further falls should be referred to the Falls Team for assessment after discharge from the ED.

Any patient who has suffered a fragility fracture should be referred back to their GP for osteoporosis screening.

All patients who have fallen should be given suitable oral and written advice regarding falls and their subsequent individual management.

Monitoring and audit of falls management in the ED are the responsibility of named leads of the senior medical and nursing teams.
Background

Falls are a major cause of disability and the leading cause of mortality due to injury in older people aged over 75 in the UK\(^1,2\). Each year, it has been estimated that there are approximately four million fall-related presentations to Emergency Departments\(^3\).

Precise figures for the overall annual costs of all falls in the UK are difficult to estimate but are undoubtedly significant. Hip fracture is the most common serious injury related to falls in older people, resulting in an estimated annual cost to the NHS of around £1.7 billion for England\(^1\). The overall mortality for surgical repair of hip fracture is high (29% in one study)\(^4\). As falls may therefore incur a high cost both to the individual and to society, preventing falls for those at greatest risk is essential.

With the exception of the most frail and oldest individuals, young children and athletes actually fall more often than other groups. However, amongst older people the combination of the high incidence of falling with a greater susceptibility to injury related to the high prevalence of clinical disease (e.g. osteoporosis) and age-related changes (e.g. slowed protective reflexes) can make even seemingly mild falls dangerous. Older women experience higher fall rates than men and are also more likely to experience serious injuries such as fractures.

Most falls do not actually result in serious injury\(^5\) but the consequences for an individual of falling or of not being able to get up after a fall may also include\(^1\):

- **Psychological problems**, for example a fear of falling and loss of confidence in being able to move about safely.
- **Loss of mobility** leading to social isolation and depression
- **Increase in dependency and disability**
- **Hypothermia**
- **Pressure-related injury**
- **Infection**

It is therefore essential that our Emergency Department systems and resources are adequate and designed to provide falls screening and management for the benefit of individual patients and the wider health economy.
Risk Factors

Falls have a multifactorial aetiology with more than 400 separate risk factors described\(^2\). Many older people who fall may be identified as being at risk through the presence of the following risk factors\(^1\):

**Intrinsic risk factors:**

- Living alone
- History of previous falls
- Strength, balance, gait or mobility problems
- Coexisting medical conditions e.g. epilepsy, cardiac disease
- Taking four or more medications; in particular psychotropic drugs such as antidepressants, stimulants, sedatives & tranquilizers, centrally sedating or blood pressure lowering medications
- Adverse drinking patterns
- Sensory impairment
- Impaired cognition or depression
- Postural hypotension
- Foot problems

**Extrinsic risk factors:**

- Poor lighting, particularly on stairs
- Stairs (not necessarily steep)
- Loose carpets or rugs
- Slippery floors
- Inappropriate footwear & trailing clothing
- Lack of safety equipment such as grab rails
- Hurrying

ED clinicians should ask about the presence of risk factors when conducting patient assessment.
ED Identification and Management

**Reception** - All older patients who have fallen will be registered in the usual manner by reception staff. The incident (whether it has led to an injury or not) will be recorded on OASIS as **Incident Type – Fall (or Collapse)**. This allows the retrospective identification of patients who have presented to the ED.

**Triage** - If the patient is triaged then observations must include pulse rate, blood pressure and temperature. Standing and lying pressures and BM must be checked if there is any history of dizziness, loss of balance or syncope. Any history of chest pain, shortness of breath or syncope should prompt an ECG. If the patient is found to have a temperature or reports any urinary symptoms then urinalysis should be performed.

**Medical assessment** - The Doctor, Physician’s Assistant or ENP should take a thorough history regarding the circumstances of the fall and it is important to differentiate between syncopal (e.g. cardiac and drug-related) and non-syncopal (strength, balance, vision etc.) causes. The history should also include the frequency and nature of previous falls, any difficulties with gait or balance, the use of walking aids and social circumstances (including alcohol intake). Medication evaluation (particularly identification of polypharmacy) may necessitate a review either in the ED or after discharge by the GP or Falls Team.

Clinical examination should identify any physical findings (especially cardiovascular or neurological) which may have been responsible for the fall. Observations of pulse rate and rhythm, blood pressure, and temperature should be performed in all cases. ECG, BM, urinalysis and standing/lying blood pressure measurement may be required based on the history and are mandatory in the frail, very elderly and those patients who are admitted to CDU. Individual patients may require other investigations based on the clinical picture.

Assessment of injuries must be careful and comprehensive. Consideration must be given to distracting injuries and the possibility of apparently ‘minor’ falls leading to significant injury. It is good practice to document (as a minimum) examination of the cervical spine, back, ribs and hips in all elderly patients who have fallen. For those patients who live in a care setting or receive care at home, documentation of pressure areas should be carried out (usually by nursing staff).

It is important to document how patients who have fallen walk. With regard to gait and balance testing, it is probably not necessary to undertake formal testing for a fit 70 year old who has no mobility problems and strides into the ED having sustained a minor injury after tripping over. However, if there is any apparent difficulty it is mandatory to undertake an assessment of gait and balance function using the ‘**Timed Up and Go Test (TUG Test)**’ (Appendix 2).
IMPACT and Falls Team Referral

It is our responsibility to ensure that discharge from the ED is done safely. Patient disposition can be in one of three ways:

1) For those patients who require inpatient admission no further action will be taken by the ED.
2) Well patients with no significant mobility problems and who are fit for discharge should be assessed for future falls risk (see below) and managed accordingly.
3) Patients who perform poorly in mobility tests (or for whom there are social concerns) should be assessed by the IMPACT team and may be admitted to CDU for this purpose.

Various scoring systems to assess future falls risk have been described but their utility is questionable. For the purposes of the ED at Russells Hall, high risk patients may be defined as those with any of the following features:

- A significantly injurious fall (includes all fragility fractures)
- Those with two or more intrinsic risk factors for falling
- Two or more falls in the past six months
- Gait or balance problems

All patients categorized as high risk for falling should be referred to the Falls Team. These patients should be given both verbal and written information in appropriate formats. All ED healthcare professionals (including members of the IMPACT team) can arrange referral to the Falls Team and a Falls Clinic (led by Dr Michael) runs weekly at Corbett hospital. It is the overall responsibility of the clinician in charge of the patient at the time of discharge to ensure that this is done.

Referrals are currently made by faxing the referral form (Appendix 1, available separately on the Hub) to Dr Michael’s secretary. The Soarian Electronic Patient Record will, in the near future, be used for electronic prompting and referral to the Falls Team.

Designing or running a service for falls cannot be done effectively without considering bone health, fractures and rehabilitation after injury. Any patient who has suffered a fragility fracture should be referred back to their GP for osteoporosis screening (see separate guideline on Hub).
Relevant Guidelines

The National Service Framework for Older People (2001)¹ set out a service profile that links falls and osteoporosis and has the following aim:

“To reduce the number of falls which result in serious injury and ensure effective treatment and rehabilitation for those who have fallen.”

The NSF recommends that older people who have fallen should receive help from a specialised falls service. Falls services can reduce the incidence of falls, thereby improving outcomes for older people and promoting their independence, and also reducing pressure on acute hospitals and community services.

NICE guidance (Clinical Guideline 21, 2004)² states that:

“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).”

and:

“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.”

The guidance also outlines clinician’s duties with regard to patient education, information giving and professional education:

“Individuals at risk of falling, and their carers, should be offered information orally and in writing about measures they can take to prevent further falls.”

“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.”

A review of the NICE guidance in 2011 did not lead to an update; however, the review did suggest that:

“Emergency Departments should have a more robust system of case identification and emphasising the need for multifactorial assessment and appropriate intervention. However, the chair stated the RCT evidence was insufficient within this area.”
The American Geriatrics Society/British Geriatrics Society guidance ‘Prevention of Falls in Older Persons (2010)’ makes recommendations relevant to ED practice:

1. All older individuals (seeking urgent care) should be asked whether they have fallen in the past year.

2. An older person who reports a fall should be asked about the frequency and circumstances of the fall(s).

3. Older individuals should be asked if they experience difficulties with walking or balance.

4. Older persons who present for medical attention because of a fall, report recurrent falls in the past year, or report difficulties in walking or balance (with or without activity curtailment) should have a multifactorial fall risk assessment.

5. Older persons who have fallen should have an assessment of gait and balance using one of the available evaluations.

6. Older persons who cannot perform or perform poorly on a standardized gait and balance test should be given a multifactorial fall risk assessment.

7. Older persons reporting only a single fall and reporting or demonstrating no difficulty or unsteadiness during the evaluation of gait and balance do not require a fall risk assessment.

The guidance also states:

“There is insufficient evidence to recommend for or against multifactorial or single interventions to prevent falls in older persons with known dementia living in the community or in long-term care facilities.”
The Royal College of Physicians’ ‘Report of the National Audit of Falls and Bone Health in Older People (2010)’\(^8\) points out that it is meaningless to have systems in place for onward referral for falls assessment or treatment and osteoporosis if patients are not routinely screened. The report states that:

“Neither Emergency Departments (EDs) nor fracture clinics are assessing falls and bone health risk in most patients, which suggests that accident and trauma services are focused on treating the injury and not the cause of the injury or reducing the chances of further serious injury.”

The RCP document recommends:

“..... all EDs and MIUs (should) ensure that they screen all older people for falls risk by asking about a history of falls in the previous 12 months and assessing for mobility and balance problems (e.g. with the Timed Up and Go Test). Patients identified as being at risk of falls should receive assessment for fracture risk (e.g. with the FRAX tool) and referred for appropriate falls and/or osteoporosis assessment and treatment.”

The ‘Silver Book: Quality Care for Older People with Urgent & Emergency Care Needs (2012)’\(^9\) makes the following recommendation for screening for falls risk in patients presenting to urgent care:

“Even if not presenting with a fall, all older people presenting to urgent care should be asked whether they have fallen in the past year. If a person reports a fall, a more detailed history of the frequency and circumstance(s) of falls should be taken. Further assessment depends on the level of future falls risk for that individual.”

It is also recommended that all older people reporting a single fall should undergo a simple assessment of gait and balance in the acute setting. The ‘Timed Up and Go (TUG) Test’ (Appendix 2) is suggested as a suitable tool for assessing gait and balance. This is a simple tool that is not time-consuming and can be undertaken after minimal training of Emergency Department staff.

The Silver Book describes ‘low-risk’ patients (who do not require further assessment) as those who have had a single, non-injurious fall and do not have problems with gait or balance. However the great majority of patients who have fallen will have attended precisely because they have sustained an injury so this definition may not be particularly useful in the ED setting. Those at higher risk are described as those who had suffered an injury due to a fall, had two or more falls in the previous twelve months or who have walking or balance problems. It is recommended that all high-risk patients undergo multifactorial falls assessment.
ED Falls Governance

Falls training is mandatory for all clinical staff within the Trust and forms part of the corporate induction for new employees. Refresher courses are part of the Trust’s mandatory training schedule and can be organised via the Learning and Development team. In addition, there is specialised training available for ED healthcare personnel which is organised by Anne Parry and Nick Stockdale.

Key clinicians with responsibility for organisation of ED falls management:

- **Nick Stockdale**  ED Consultant Clinical Lead for falls
- **Briony Howells**  Matron, Emergency & Specialty Medicine
- **Lynn Thompson**  Lead Nurse, Emergency Department
- **Raj Paw**  ED Consultant and Medical Head of Service
- **Corinne O’Callaghan**  ED Lead Nurse for falls
- **Anne Parry**  ED Practice Development Nurse
- **Liz Davies**  ENP Lead for falls
- **Christine Taylor**  Falls Co-ordinator
- **Jacqueline Bath**  Occupational therapist, IMPACT team
- **Atef Michael**  Consultant in Elderly Medicine
- **Alastair Marsh**  Consultant Trauma & Orthopaedic Surgeon

Together these individuals constitute the core of the ED Elderly Care Group which will meet quarterly and report to the Clinical Director for Emergency Care.

ED-specific annual audit of falls management will commence in 2013 after updates have been completed to the EPR.

**References**

1. **NSF for Older People**: Falls (Standard 6)
2. **NICE Clinical Guidelines 21**: The assessment and prevention of falls in older people
5. **Cochrane review**: Interventions for preventing falls in elderly people.
6. **Nursing Times 26th February 2009**
9. **‘Silver Book’ 2012**: ‘Quality Care for Older People with Urgent & Emergency Care Needs’.
Further Information

Dudley Ageing Well website:


NPSA guide to falls prevention:


Other useful web resources:

http://www.independentliving.co.uk/fall-prevention.html

http://www.ageuk.org.uk/get-involved/campaign/falls/

Originator: Mr N. Stockdale, Consultant in Emergency Medicine, DGOH
Date: November 2013

Review date: November 2016
Falls Team Referral Form  Russells Hall Hospital
Emergency Department

Date:

Patient name: ........................... Hospital number: ............................

Address: .............................................................................................................

Post code: ..............................

Telephone number: .......................... Next of kin: .................................

Dear Dr Michael / Falls Co-ordinator

Many thanks for reviewing this patient who attended the Emergency Department after a fall. Full details are available on the Soarian patient record.

Briefly describe circumstances of the fall and ED management

The patient was also referred to:  (circle as appropriate)

Fracture clinic:  Yes  No

GP Osteoporosis Screening:  Yes  No

Other services (state which):  Yes  No  .....................

Kind regards

Sign: .................................

Print name: ................................. Designation: .................................

Please phone Rehab. Centre (4705) or Dr Michael's secretary Angela Hubble (4763) with the patient details. Out of office hours please fax all forms through on 01384 244605 (fax 4605 if inside hospital).
Timed Up and Go (TUG) Test

Directions:
The timed “Up and Go” test measures, in seconds, the time taken by an individual to stand up from a standard arm chair, walk a distance of 3 metres (10 feet), turn, walk back to the chair and sit down. The subject wears their regular footwear and uses their customary walking aid.

Instructions to the Patient:
“When I say ‘go’, please stand up and walk to (the stated point), turn and then walk back to the chair and sit down again. Walk at your normal pace.”

Older adults who take longer than 14 seconds to complete the TUG have a high risk for falls and should be referred to the Falls Clinic.