Royal College of Physicians

National Audit of Inpatient Falls (NAIF)

Supporting best and safe practice

in post-fall management in inpatient settings

Contents

Foreword

The National Audit of Inpatient Falls (NAIF) is part of the Falls and Fragility Fracture Audit Programme (FFFAP) and is commissioned by NHS England and Wales. NAIF collects information about people who sustain a femoral fracture in inpatient settings in England and Wales. Post-fall management is audited against National Institute of Clinical Excellence (NICE) quality standard 86, statements 4, 5 and 6.

- **Quality statement 4:** Checks for injury after an inpatient fall
- **Quality statement 5:** Safe manual handling after an inpatient fall
- **Quality statement 6:** Medical examination after an inpatient fall

While there have been small increases in performance against these standards over the past 3 years, there is plenty of room for improvement. In 2021, 71 % of inpatients who sustained a femoral fracture were checked for an injury before moving. However, injury was suspected in only 47 % of those checked (NAIF report 2021). If a femoral fracture is suspected, this will impact on subsequent decision making, such as choosing to safely move the patient from the floor using flat lifting equipment and facilitating prompt medical assessment. Not recognising the possibility of a serious injury could at best increase the pain and distress associated with the fall and at worst delay management, leading to poorer outcomes. People who sustain a femoral fracture as an inpatient are twice as likely to die within 30 days than those who fracture in a non-inpatient setting (NAIF 2021 interim report), highlighting the vulnerability of inpatients who sustain serious fall-related injuries, and the importance of high-quality and safe post-fall management. However, there are no simple or easy solutions to achieve this.

A considerable amount of thought and energy has gone into this document, which begins by attempting to answer the question 'What is a post-fall check?'. This has been a challenging question to grapple with, having to consider what is feasible to deliver at scale and in a variety of organisations ranging from community and mental health settings to acute hospital wards.

Supporting best practice is more than a set of instructions. This document provides a toolkit for implementing best practice in both post-fall check procedures and the subsequent actions. The toolkit presents three adoption models and an implementation guide to support choice of model and ascertain organisational training requirements.

This document is the result of a multidisciplinary collaboration bringing valuable contributions and expertise from colleagues with paramedic, specialist trauma, orthogeriatric, acute, community and mental health nursing, and allied health backgrounds. I am extremely grateful for their contributions and patience through this process. I hope this document will support trusts and local health boards with practical ways in which they can improve post-fall management and as always, appreciate any feedback or suggestions.

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Aims and objectives of post-fall management recommendations

Aims:

- To minimise harm to patients from incorrect management after an injurious fall
- To ensure prompt access/referral to ongoing treatment when injury has occurred
- To reduce variation(s) in post-fall management within inpatient settings.

Objectives:

1. To clarify what constitutes a post-fall check for injury
2. To support the timely identification of injuries that need prompt and specific management to minimise the harm associated with the fall
3. To avoid over-complicating post-fall management, ie prolonging time spent on the floor
4. To recommend the skills and additional training required to deliver high quality post-fall management
5. To provide guidance on how to implement best practice in post-fall management processes, training and competencies.

Who is this document for?

This document is designed to be useful for anyone with a responsibility for delivering safe and effective care in inpatient settings, including but not limited to:

- falls steering group members
- executive and non-executive board members with responsibilities including falls
- safety and quality leads
- falls coordinators
- clinical leaders including matrons, ward managers, service leads, clinical directors and departmental leads
- clinical staff including nurses, care assistants, doctors and allied health professionals
- education leaders including education and training leads, practice development nurses, moving and handling trainers
- patient experience leads.

This work has been developed to be used by organisations providing health services for individuals receiving care in an inpatient setting. This includes acute, community and mental health inpatient settings. The information here may be helpful for non-hospital inpatient settings such as care homes or supported living complexes, but has not been designed specifically for these settings.

What is a post-fall check?

A brief assessment with the purpose of:

- checking whether there is a serious medical cause of the fall that needs an immediate medical response
- identifying important injuries resulting from the fall that may influence the way in which a patient is moved from the floor and the subsequent medical response.

Purpose of the post-fall check

The post-fall check seeks to identify potential injuries, not to make a formal diagnosis.

Suspicion of injury will then guide how the patient is moved from the floor, subsequent observation and assessment and the urgency of a post-fall medical review.

What is included in this document?

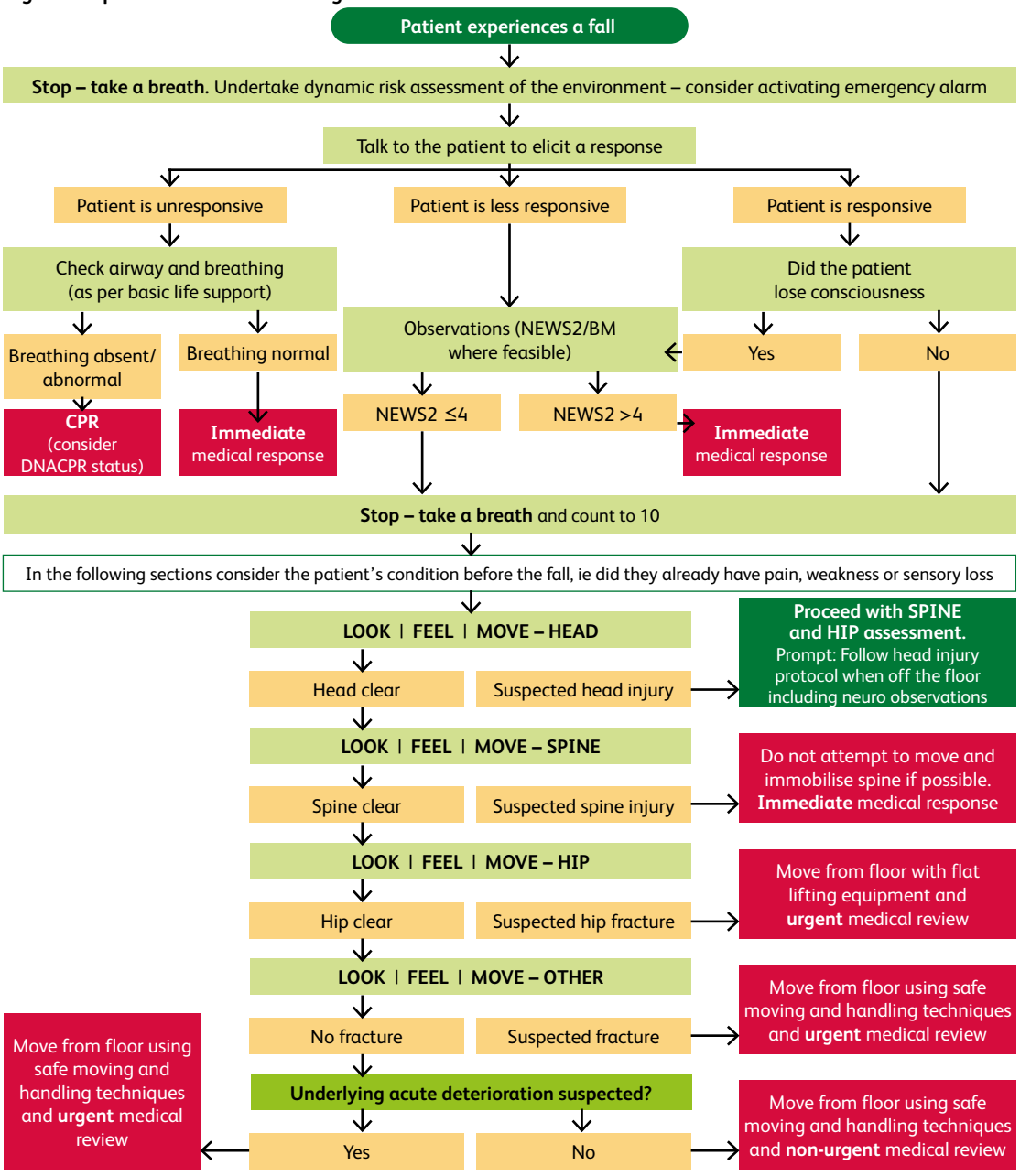
This document includes a decision-making flow chart to guide action after an inpatient fall in healthcare settings. The following section provides more detail about each component of the decision-making flow chart. The latter part of the document includes a toolkit to support implementation of post-fall management processes, competencies and training (at organisational, site and/or inpatient ward/unit level).

The post-fall decision-making flow chart

This provides an at-a-glance illustration of the recommended assessment and actions to be taken after an inpatient fall. This is what is considered to be an effective post-fall check for injury (see Fig 1). The flow chart must be used in conjunction with the information in the LOOK | FEEL | MOVE section, which provides more detail on how to conduct each assessment component.

The assessments and actions recommended in this flow chart presume the competency of the clinical staff who are expected to undertake them. A framework to support the development of post-fall competencies and training in line with this flow chart is included in the latter part of this document.

Fig 1. The post-fall decision-making flow chart



How to do the LOOK | FEEL | MOVE assessment

The following sections and tables provide instructions on how to perform the LOOK | FEEL | MOVE assessments for the head, spine, hip and other body parts/ systems. The assessments should be carried out in the order indicated in the flow chart, starting with look, progressing onto feel and move if indicated.

The feel section refers to asking the patient about symptoms rather than the assessor touching the patient to establish possible sites of injury. In developing this document there was much debate about whether to include palpation of anatomical structures as part of the assessment process. We concluded that palpation was a specialist skill, and it would be impractical to expect all clinical staff to be able to perform this safely or effectively. Clinical staff who are competent in palpation skills can use these alongside the LOOK | FEEL | MOVE assessment.

CPR – cardiopulmonary resuscitation

If the patient is not breathing or breathing is abnormal and/or has no pulse:

- follow organisational policy for cardiac arrest
- in acute settings – make a crash call and commence CPR (consider DNACPR (do not attempt cardiopulmonary resuscitation) before starting CPR)
- in non-acute settings without crash team – call an emergency ambulance on 999 and commence CPR (consider DNACPR before starting CPR)
- follow organisational infection control policies for CPR
- CPR can be performed on certain inflatable flat lifting equipment (ie HoverJack). It is advised to check with suppliers for different devices.

DNACPR

- This DNACPR decision will have been made by a doctor or advanced clinical practitioner (ACP) and recorded either in paper or electronic format.
- When a DNACPR is in place, if the patient stops breathing or their heart stops, cardiopulmonary resuscitation should not commence, and a dignified death should be enabled.
- A DNACPR is only applicable to cardiopulmonary resuscitation interventions when breathing and/or pulse have stopped – it does not affect decisions about any other forms of treatment if the patient is still breathing and has a pulse.
- Alternatives to the DNACPR, such as the ReSPECT document, also contain this information.

If a patient has deceased on the floor, flat lifting equipment may be easier to use than sling hoists to transfer the person into a bed.

Patients who require an immediate medical response

Patients who are breathing but unresponsive or with reduced responsiveness and/or who have a National Early Warning Score (NEWS2) score of ≥4

- Make sure the patient's airway stays clear. If they are unresponsive and there is no suspicion of spinal injury, place the patient in the recovery position.
- Summon an immediate medical response from an appropriately trained team.
  - In acute settings consider a crash / medical emergency team (MET) call if the patient is very unstable and/or a medical review is not immediately available.
  - In non-acute settings without a crash/MET team, call for an emergency ambulance on 999.
- While waiting for medical support:
  - undertake continuous NEWS2 observations (ie leave saturations probe in place)
  - watch the patient at all times for changes in respiratory rate or level of consciousness
  - perform blood pressure measurement and repeat regularly if abnormal
  - perform blood glucose measurement (BM) (and if the patient is a known diabetic with low BM, follow care plan for hypoglycaemia)
  - observe for any seizure activity (fitting) and manage as per considerations below.

Head

Look

- Did the patient hit their head when they fell?* Do they have obvious facial or head injuries (bruises or lacerations), or was the fall unwitnessed?†
- Does the patient have **new** asymmetry of pupils?
- Is the patient on anticoagulant or anti-platelet medication, do they have a blood clotting disorder, or have they had recent brain surgery?
- Has the patient had any **new** reduction in level of alertness, loss of consciousness or seizures since the fall?

Feel

- Is the patient complaining of **new** headache, memory loss, dizziness, double vision or vomiting after the fall?

If the patient is confused or unable to give accurate answers, look for non-verbal signs of pain.

Response if head injury is suspected

Continue with the post-fall assessment flow chart, paying particular attention to assessing the neck before moving.

When the patient is off the floor, conduct:

- regular neurological observations in line with NICE head injury guidelines
- urgent medical review within 30 minutes.
- CT head if indicated.

If in a community setting without medical cover:

- call for an emergency ambulance on 999 and report a suspected head injury
- while waiting for support, continue with regular ABC, NEWS2 observations, neurological observations, reassure the patient and keep them warm.

* A fall from standing height is sufficient to result in a head injury.

† A fall is witnessed if the patient is able to remember and give an accurate account of what happened, or if it was observed by another person who is able to remember and give an accurate account of what happened.

Spine

Look

- Was the fall from higher than standing height (ie down the stairs or over the rails of a raised bed)?
- Is there obvious **new** neck or spinal deformity?
- Have you already identified external evidence of head or facial injuries?
- Does the patient have a history of spinal fracture, or do they have osteoporosis or another condition that affects bone composition (such as cancer with metastases)?

Feel

- Is the patient complaining of **new** pain in the neck or spine?
- Is the patient complaining of **new** weakness or sensory changes (eg pins and needles or loss of sensation) in the arms or legs?

If the patient is confused or unable to give accurate answers, look for non-verbal signs of pain/weakness.

If you suspect a spinal injury after 'looking and feeling', do not continue to the 'move' section – proceed to spinal immobilisation / call 999.

If you do not suspect a spinal injury after completing the 'look' and 'feel' assessment, proceed to 'move and then assess the hip'.

Move

- Can the patient rotate their neck 45^0 to the right and left?
- Is the patient able to move both arms and legs?

Always consider the patient's condition prior to the fall (ie – did they already have pain, weakness or sensory loss).

Response if spinal injury is suspected

Aim to keep the patient as still as possible using in-line manual immobilisation until either the equipment is available to safely move the patient from the floor or emergency services arrive.

- Do not attempt to correct a known kyphosis or scoliosis.

In an acute setting (setting with scoop stretcher and appropriate hoist where medical cover is available):

- contact the specialist retrieval team if available
- if no retrieval team, transfer to the bed using 10-degree log roll, scoop stretcher and head blocks as tolerated – a cervical collar is not indicated
- organise immediate medical review.

In a community setting (or setting without access to scoop board, hoist equipment or medical cover):

- call for an emergency ambulance on 999 and report a suspected spinal injury
- while waiting for support, continue with regular ABC, NEWS2 observations, reassure the patient and keep them warm.

Do not use a sling hoist to transfer the patient.

Hip

Look

- Is either leg shortened or rotated?
- Is there any new deformity (is the leg misshapen)?

Feel

- Is the patient complaining of new pain in the hip?

Move

- Can the patient raise each leg, keeping the knee straight and lifting the heel from the ground without significant pain (one at a time)?

Always consider the patient's condition prior to the fall (ie – did they already have pain, shortening, deformity or weakness).

If the patient is confused or unable to give accurate answers, look for non-verbal signs of pain.

Response if hip fracture is suspected

In an acute setting (or setting where flat lifting equipment and medical cover is available):

- transfer the patient to the bed using flat lifting equipment (see glossary for definition) – **do not use a sling hoist**
- conduct urgent medical assessment (within 30 minutes of the fall).
- give analgesia within 30 minutes of the fall.

In a non-acute setting (without access to flat lifting equipment or medical cover):

- call for an emergency ambulance on 999 and report a suspected hip fracture
- consider keeping the patient comfortable on the floor if ambulance transfer likely to be rapid – to avoid unnecessary transfers
- conduct urgent medical assessment (if medical cover is available)
- consider giving analgesia if ambulance support is likely to take longer than 30 minutes
- if a prolonged wait for ambulance support is anticipated, consider the risks of moving the patient (increased pain) against the risks of a prolonged period on the floor (pressure ulceration, hypothermia, rhabdomyolysis) and if indicated, arrange to use an alternative safe moving and handling technique to move the patient into bed. In such an event, it may be necessary to use a sling hoist or other lifting device.

Other

Look

- Did the patient fall onto an outstretched arm?
- Is there any obvious **new** deformity/asymmetry/laceration/significant bruising in the chest, arms or legs?

Feel

- Is the patient complaining of **new** pain in the ribs/chest when moving/coughing/taking a breath in?
- Is the patient complaining of **new** pain anywhere?

Move

- Ask the patient to lift and move both arms and legs (one at a time).
- Ask the patient to take a deep breath.

If the patient is confused or unable to give accurate answers, look for non-verbal signs of pain.

If other fracture suspected

In an acute setting (or setting where flat lifting equipment and medical cover is available):

- consider using flat lifting equipment if a humeral, rib or pelvic fracture is suspected
- for other fractures the patient can be moved from the floor using the most appropriate method (accounting for other injuries and their ability to get up independently)
- conduct urgent medical assessment (within 30 minutes of the fall)
- give analgesia within 30 minutes
- if humeral fracture suspected, arrange for chest X-ray, in addition to humeral X-rays, to check for rib fractures.

In a non-acute setting (without access to flat lifting equipment or medical cover):

- call for an emergency ambulance on 999 if there is no access to flat lifting equipment on site and no onsite medical cover
- consider keeping the patient comfortable on the floor if ambulance transfer is likely to be rapid – to avoid unnecessary transfers
- conduct urgent medical assessment (if medical cover is available)
- consider giving analgesia if ambulance support is likely to take longer than 30 minutes
- if a prolonged wait for ambulance support is anticipated, consider the risks of moving the patient (increased pain) against the risks of a prolonged period on the floor (pressure ulceration, hypothermia, rhabdomyolysis) and if indicated, arrange to use an alternative safe moving and handling technique to move the patient into bed.

Other considerations

Seizures/fitting

Patients may fall due to a seizure/fit which may require specific actions.

If seizure/fit is ongoing:

- aim for avoidance of injury during seizure
- check if there is a seizure management plan and prescription in place and follow this
- record the duration of the seizure
- commence medical management of seizure if prolonged.

When the seizure/fitting has stopped:

- continue with the post-fall check flow chart to ensure injuries are not missed
- move the patient from the floor (using the most appropriate method for any injury)
- carry out NEWS2 observations once off the floor
- conduct urgent medical review (within 30 minutes) if no previous history of seizures, long duration of seizure or change in neurology or consciousness after the seizure. Otherwise ensure non-urgent review (within 12 hours).

Loss of consciousness (syncope)

Patients may fall due to a transient loss of consciousness or syncope which may require specific actions.

For a patient with a witnessed loss of consciousness that has resolved:

- do NEWS2 observations before moving from the floor (ensure stable pulse and blood pressure before attempting to move*).

If concerned about low or high pulse or low blood pressure (pulse less than 40 or more than 130, systolic blood pressure less than 90mmHg):

- treat as a patient who requires an immediate medical response
- seek immediate medical support.

In acute settings with medical cover, seek on-hand medical support or consider crash/MET call.

In settings with no medical cover, call for an emergency ambulance on 999 and continue ABC and NEWS2 observations until support arrives.

- Ensure the patient is comfortable on the floor.
- If available in the setting, do an ECG.

If pulse and BP are stable:

- continue with the post-fall check flow chart to ensure injuries are not missed
- move the patient from the floor (using the most appropriate method for any injury)
- carry out NEWS2 observations once off the floor
- conduct urgent medical review (within 30 minutes).

* Consider access to BP machines that can reach to measure a BP from the floor.

Underlying illness as a cause of falls

Sometimes falls are a sign that a patient has had an acute medical deterioration. It is important to review the patient's condition after a fall to ensure no new medical problems are missed.

There are many possibilities, but observations can reveal: hypoglycaemia, hypoxaemia or sepsis. If a stroke is suspected, this requires timely assessment and intervention.

Once off the floor:

- NEWS2
- Blood glucose level measurement (BM)
- Glasgow Coma Scale (including new confusion)
- Check for signs of a new stroke (facial weakness: can the person smile? Has their mouth or eye drooped? Arm weakness: can the person raise both arms. Speech problems: can the person speak clearly and understand what you say?).
- Refer for urgent medical review (within 30 minutes) if there are concerns about a change in medical condition even if no injuries are suspected.

Falls without suspected injury or health deterioration

- Medical assessment within 12 hours of the fall
- Review multi-factorial falls risk assessment and update as appropriate

All falls – other actions

- Inform next of kin with the patient's permission. If the patient is unable to consent, inform lasting power of attorney (LPA) or first contact in best interest (in line with duty of candour).
- Consider responsibilities with respect to duty of candour.
- Undertake hot de-brief or other rapid review of circumstances as indicated.
- Report on local incident reporting system.

Additional considerations

- It is usually not possible to diagnose a fracture without radiological confirmation. If there is any suspicion that the patient has a fracture after the post-fall check, move from the floor using the method that is least likely to cause harm to the patient.
- There may be occasions when a fall occurs in a location where it is not possible to access with a hoist. If hoisting is indicated, use moving and handling methods to move the patient to a place where they can be hoisted.
- There will be differences in responses between acute settings which have 24-hour medical cover and community or mental health settings where there may not be rapid access to medical assessment. These recommendations give alternative options for different settings.
- Trusts should audit access to flat lifting equipment and consider the feasibility of having such equipment available on all sites. When flat lifting equipment is available, its location should be known to all clinical staff and training in its use provided.
- Settings without access to 24-hour cover may develop services that support patients who fall. These may include on-site fall retrieval teams that include clinical staff who are competent in post-fall checks and management. Consideration should also be given to access to analgesia.

Post-fall management implementation toolkit

Post-fall management models

Each organisation should develop a bespoke implementation model based on their unique context. Factors relating to the inpatient population, such as clinical acuity and the prevalence of fall risk factors as well as the skill-mix of healthcare professionals, will influence the model selected.

Below are three examples of how such factors might influence the development of a post-fall management model.

Context	What are the issues?	What is the impact?	Considerations for implementation
Community rehabilitation ward	Patients are mostly older people with multiple fall risk factors. Increased exposure to falls as they engage in rehabilitation.	Ward with a high frequency of falls needing to frequently enact effective post-fall management.	Ensure the workforce on this ward has capability and capacity to meet frequent demand for effective post-fall management.
Mental health units for adults	Limited access to 24/7 medical cover and units often staffed by mental health nurses (RMNs). Falls are infrequent.	Ability to retain competence and confidence within the workforce to conduct post-fall checks impact due to low frequency of falls.	Aiming for comprehensive competency attainment among unit staff is unlikely to be efficient. May be better to focus on training a smaller group of 'link practitioners'. Alternatively, consider a model which involves regular refresher training which is scenario based and practical in nature. A model that supports maintenance of skills and competencies is required.

Context	What are the issues?	What is the impact?	Considerations for implementation
A large acute hospital	Falls frequent on medical, surgical and older people's wards in a medically unstable patient population. Widespread requirement for competencies in basic life support (BLS), NEWS2. Healthcare professionals on site with specialist trauma training.	High demand for post-fall management which is frequently clinically complex.	A model that uses a peripatetic specialist service to attend falls may be considered.

Suggested models

The following are suggested models for implementing post-fall management practice in an organisation. A combination of models will probably be required on different sites or specific wards/units within each organisation. Model selection should include input from training and development as well as moving and handling leads.

- **Model 1:** Specialist peripatetic teams with remit for post-fall management
- **Model 2:** Network of post-fall management link practitioners
- **Model 3:** Wide-ranging post-fall management competency achievement

For the purpose of describing the models, the following definitions apply:

- **Clinical staff:** doctors, nurses, allied health professionals and healthcare assistants.
- **Ward-based clinical staff:** doctors, nurses, allied health professionals and healthcare assistants that spend >75% of their clinical role working on a ward or have responsibility in the running of the ward.

Model 1

Specialist peripatetic teams with remit for post-fall management

- Site-based peripatetic team to provide 24/7 'on-call' service to attend inpatient falls.
- Team may include medical, nursing, allied health professional (AHP) staff with competency to:
  - perform a post-fall check before the patient is moved from the floor
  - support safe movement from the floor
  - arrange diagnostic investigations as indicated*
  - prescribe analgesia*
  - support ward staff with post-fall actions/observations as indicated
  - support transfer for further management if indicated.
- Team members may have advanced clinical training (such as trauma training or Silver trauma).*
- All clinical staff should also be trained and competent in BLS and NEWS2 as first responders to a fall.

Advantages of model 1

- Training and development targeted at a small pool of staff.
- Small pool of staff with regular experience in post-fall management will result in safer and more effective practice.

Disadvantages of model 1

- Could be costly unless it can be successfully merged with other site management duties.
- Removes the responsibility for post-fall management from clinical teams, which could lead to deskilling of competent clinicians, posing a risk in the event that the specialist team cannot attend an inpatient fall in a timely manner.
- Would be susceptible to staff turnover, sickness and redeployment and there would need to be a process in place to ensure effective succession planning, retaining specialist skills.

* Model 1 is likely to be the most feasible in acute settings with 24/7 access to staff skilled in trauma management. The team may be able to provide a more comprehensive approach at the time of the fall, including organising investigations, providing a diagnosis and starting treatment.

In mental health and community settings, medically qualified professionals may not be available 24/7, there may not be access to diagnostics and there may be limited access to analgesia prescriptions. Responses in mental health and community settings should focus on determining the need for conveyance by ambulance to an acute hospital.

Model 2

Network of post-fall management link practitioners

- Link practitioners appointed at ward or unit level (as deemed appropriate) and staffing arranged to ensure 24/7 availability of a trained post-fall management practitioner. This post may or may not be supernumerary, depending on anticipated demand.
- Practitioners may be medical, nursing or AHP staff who are competent to:
  - perform a post-fall check before the patient is moved from the floor
  - support safe movement from the floor
  - support access to medical assessment, prescription of analgesia and ongoing observations (without necessarily providing these directly).
- All clinical staff should also be trained and competent in BLS and NEWS2 as first responders to a fall.

Advantages of model 2

- Training and development targeted at a moderate-sized pool of staff.
- Improved distribution of accountability for falls management while ensuring training and experience remains sufficiently focused to maintain effectiveness and safety.

Disadvantages of model 2

- Would add complexity to rotas and require robust planning to ensure practitioner coverage.
- Likely to be significant staff turnover in these roles which would require robust recruitment, training and development processes.
- Cost if practitioner posts are supernumerary.

Model 3

Wide-ranging post-fall management competencies

- All clinical staff trained in BLS and NEWS2.
- All ward-based clinical staff with an inpatient role will be able to:
  - perform a post-fall check before the patient is moved from the floor
  - support safe movement from the floor
  - support access to medical assessment, prescription of analgesia and ongoing observations.

Advantages of model 3

- Falls are everyone's business. Encourages all staff to buy into fall prevention and management activities.
- Prompt, effective management for patients.

Disadvantages of model 3

- Issue with skills retention if not required to use very often (this approach will work better on wards where falls are frequent).

Implementation guide

This implementation guide is designed to support organisations to select the most appropriate implementation model / combination of models. We have suggested three models:

- **Model 1:** Specialist peripatetic teams with remit for post-fall management
- **Model 2:** Network of post-fall management link practitioners
- **Model 3:** Wide-ranging post-fall management competency achievement

A combination of models may be required. For example, an acute site may use model 1, whereas for the community / mental health sites model 2 would be a better fit, with some wards where there are more falls adopting model 3. The questions below should be used to better understand the organisational priorities, what is required for safe, effective post-fall management and what is feasible.

The guide ascertains the type of ward/ unit/site as this will influence the frequency of falls, complexity of management and skill-mix of the clinical staff. It asks about fall rates as this will give an indication of demand for post-fall management and it recommends looking at audit data and findings from reviews to highlight development priorities.

The suggested models are not exhaustive, and organisations are encouraged to develop and adapt these to best fit their circumstances.

Choosing the model

1 Questions about the organisation

Question	Answer	Suggestions for model choice
What is your organisation type?	> Acute > Community > Mental health > Integrated	The acuity of patients may determine your approach to training. Trusts providing different services or with different sites (ie community/acute/MH) should consider different approaches for each area.
Site-specific questions (if multiple sites within organisation, answer separately for each site)		
Question	**Answer**	**Suggestions for model choice**
Is there 24-hour on-site cover by a doctor?	Y/N	Sites without access to trained and competent medical cover overnight and/or at weekends will need a process for managing fall-related injuries that meets NICE quality standards. There should be a healthcare professional (HCP)* on shift on each site who is trained and competent to perform the post-fall check process and make a decision about movement from the floor and/or conveyance for medical assessment.
Does the site provide trauma services (diagnostics, surgical management of trauma)?	Y/N	If there are no acute services on site, any patient with suspected trauma would need to be conveyed by ambulance services to a suitable hospital. There would need to be at least one individual on shift on site who is able to perform the post-fall check and decide whether conveyance is indicated. Local processes to enable conveyance must be clearly defined eg a 999 call.
Is there prompt access to trauma expertise for inpatients?	Y/N	If there is access to inpatient trauma expertise, consider the capacity of this service to provide peripatetic in-reach to support post-fall management on other wards.
Is flat lifting equipment available for all inpatients on the site?	Y/N	NAIF recommends flat lifting equipment be available on all sites where there are inpatients. If not available, ambulance services may be needed to provide support with flat lifting.

* The number of staff available with post-fall management competencies would depend on the expected incidence rate (number of falls), the size of the site and the other duties of the designated HCP.

2 Question about inpatient ward falls rates

Use inpatient ward falls data to inform the post-fall management implementation approach for each ward. List the number of falls per year, fall rates (use the rate over 2 years if numbers are low) and falls with moderate and severe harm or death for each ward in the table below.

Wards/unit name:	Number of falls (per year)	Rate of falls (per 1,000 occupied bed days)	Number of falls with moderate harm or death (per year)	Number of falls with severe harm or death (per year)

Suggestion for model choice:

Wards/units where falls occur frequently, and/or there are high numbers of falls with severe harm, should consider adopting model 3 for clinical staff who regularly work there. Wards/units with a low occurrence of falls and few falls with severe harm may prefer to focus training on a 'link practitioner' (ie model 2). Trusts are encouraged to use their own data and judgement to determine what constitutes a 'high' fall ward or unit.

Use the space below to reflect on which model would work in your organisation:

Deciding on priorities for post-fall management processes

3 Questions about post-fall management of femoral fracture

Post-fall management performance for patients with femoral fracture in the National Audit of Inpatient Falls (NAIF) can be found here: https://fffap.org.uk/fffap/naifrep.nsf/charts/KPIsoverview?open&org=[ALL]

Complete the table below using trust data:

Proportion of patients who sustained a femoral fracture following a fall while receiving care in your organisation in the past 12 months who were:
Checked for injury after sustaining a femoral fracture:
Moved from the floor using flat lifting equipment:
Assessed by a medically qualified professional within 30 minutes:
Date of review:

Suggestion for implementation of the post-fall management process:

Use these data to consider whether there are any specific priorities for the organisation in terms of post-fall management.

For example, if a low proportion were checked for injury, consider further analysis to understand why this didn't happen and how clinical staff can be supported with improvement.

4 Questions about learning from falls

Is there learning from hot debriefs / after action reviews relating to post-fall management that may influence provision?

Suggestion for implementation of the post-fall management process:

Use this information to consider whether there are any specific priorities for the organisation in terms of post-fall management that have emerged from post-fall review processes.

Use the space below to reflect on post-fall management in your organisation:

Scoping the training requirements

Once you have chosen the model, or combination of models, complete the table below to identify the competencies and training required and define the gaps where current competency and training status cannot meet the requirements of the selected model.

Use this table to plan how training gaps might be filled and to review the feasibility of the chosen delivery model. Add information about the staff groups to the column on competencies to reflect the different needs depending on profession and role.

Use the space below to reflect on training requirements in your organisation:

Skill	Required for model Y/N	Competencies			Required for model Y/N	Training		What is required to adopt the chosen model (gap analysis)?
		Trust competencies already in use (note the staff groups required to achieve these – are changes required?)	**New competencies needed** (note the staff groups who will require this)			**Covered in existing training programmes** (note the programme and staff group)	**Not covered in existing training programmes** (note which programmes could be used)	
Observations								
ABC assessment	Yes				Yes			
Blood glucose testing	Yes				Yes			
Neurological observations and GCS	Yes				Yes			
NEWS2 measurement and interpretation	Yes				Yes			
Lying/standing BP	Yes				Yes			
SBAR	Yes				Yes			
Life support	Yes				Yes			
Basic life support: ABC, CPR, defibrillator and recovery position	Yes				Yes			
Specific post-fall assessments	Yes				Yes			
Assessment of neck and limb movement	Yes				Yes			
Moving and handling	Yes				Yes			
Backward/reverse chaining methods	Yes				Yes			
Log rolling	Yes				Yes			
Retrieval from the floor when cannot access with the hoist	Yes				Yes			
Spinal immobilisation	Yes				Yes			
Use of flat lifting equipment	Yes				Yes			

Implementation suggestions

Before implementing new post-fall management processes, training and competencies, consider:

- relevant stakeholders
- implementation strategies
- training resources.

Relevant stakeholders

Ensure that relevant stakeholders are included in the implementation guidance process.

A steering group should be assembled including representatives with responsibilities for falls, patient safety and education. Patient-facing clinicians (including a range of different wards/units to represent categories of fall rates) and executive support should be represented as stakeholders.

Implementation strategies

Use quality improvement principles to implement changes.

- Consider using methods such as fishbone diagrams to better understand challenges to delivery.
- Use quality improvement methods such as Plan, Do, Study, Act (PDSA) to plan and evaluate.
- Don't try to change everything at once and start with the highest priority actions (for example, if there is no flat lifting equipment available, address that before thinking about a training programme for using flat lifting equipment).
- Make small changes and measure the impact.
- Involve stakeholders throughout the process.
- Consider how to scale up and sustain effective change.

Training resources

After conducting the gap analysis for training requirements, scope the ways in which your organisation could deliver training and achieve the additional competencies required. Some of this training may already exist as mandatory clinical training, some is available through education providers (such as E-Learning for Health). Other training may need to be designed for your organisation. The training provision resource in 'useful information' below provides more detail on what is available.

Useful information

Training provision

Skill	Suggested methods of delivery
ABC assessment	Basic life support (BLS) – ELfH
Blood glucose testing	Clinical skills (RGN/RMN training) Introduction to blood glucose monitoring on ELfH
Neurological observations and GCS	Glasgow Coma Scale in ELfH Consider bespoke training
NEWS2 measurement and interpretation	ELfH
Lying – standing blood pressure	Use RCP resources Consider bespoke training
SBAR	ELfH Consider bespoke training
Basic life support: ABC, CPR, defibrillator and recovery position	Mandatory trust training
Assessment of neck and limb movement	QualSAFE™ first aid at work training – 3-day course Bespoke case-based learning scenarios
Backward/reverse chaining methods	Bespoke training provided by falls team or physiotherapy
Log rolling	Consider bespoke training
Retrieval from the floor when cannot access with the hoist	Consider bespoke training
Spinal immobilisation	QualSAFE™ first aid at work training – 3-day course. Information on not moving and contacting 999 (relevant for non-acute settings)
Use of flat lifting equipment	Bespoke training using local equipment
Moving a patient from the floor	Mandatory moving and handling training

Potential developments for training resources

RCP may seek funding or collaborators to develop:

- short training videos for post-fall check techniques
- posters to support post-fall management protocols
- templates for case-based learning sessions.

Tools used as part of post-fall check

ABC

Assessment of airway, breathing and circulation: www.resus.org.uk/library/abcde-approach

NEWS2

Assessment of pulse, blood pressure, respiratory rate, temperature, oxygen saturations and oxygen requirements. It also considers level of consciousness or new confusion: www.england.nhs.uk/ourwork/clinical-policy/sepsis/nationalearlywarningscore/

Non-verbal pain assessment

For people with neurological, cognitive or communication impairments who may not be able to effectively communicate pain. In these cases, it is recommended that a non-verbal pain assessment is used. An example of this is the PAINAD scale: http://dementiapathways.ie/_filecache/04a/ddd/98-painad.pdf

Glossary

ABC assessment	Assessment of airway, breathing and circulation as part of basic life support (BLS) management.
Acute inpatient setting	Inpatient setting where a patient receives active, short-term treatment for a condition. Will have 24/7 medical cover.
Analgesia	Medication to treat and manage pain.
Anticoagulant and antiplatelet medication	Oral anticoagulant medications are listed here: bnf.nice.org.uk/treatment-summary/oral-anticoagulants.html Parenteral anticoagulant medications are listed here: Parenteral anticoagulants | treatment summary | BNF content published by NICE Antiplatelet medications are listed here: bnf.nice.org.uk/treatment-summary/antiplatelet-drugs.html
Asymmetry of pupils	Pupil size should also be noted and is usually recorded in the diameter range of 1–9 mm. Asymmetry is when the pupils are not the same size.
Base of the skull	The part of the skull at the back of the head that is attached to the neck.
BLS	Basic life support
BM	Blood glucose level measurement
Cervical collar	A collar that is placed around the neck and used to keep the neck still in certain situations.
Cervical spine	The neck – consists of seven vertebral bones that connect the head to the trunk.
Coccyx	The base of the spine – sometimes called the 'tailbone'.
Community inpatient setting	Inpatient setting where a patient receives longer-term treatment or rehabilitation for a condition. Setting may not have onsite 24/7 medical cover.
CPR	Cardiopulmonary resuscitation
CT head scan	A scan of the brain. Used by doctors to identify a head injury, stroke or other condition affecting the brain, skull or surrounding tissues.
CXR	Chest X-ray. Used by doctors to identify injury to the lungs or chest wall, infections or other lung conditions.
Deformity	When the normal structure of the skeleton (the bones or joints) looks abnormal. Eg abnormal lumps, limb or spinal position.
DNACPR	Do no attempt cardiopulmonary resuscitation (see section above on this).
Duty of candour	Every healthcare professional must be open and honest with patients (or where appropriate the patient's advocate) when something that goes wrong with their treatment or care causes, or has the potential to cause, harm or distress (GMC).
ECG (electrocardiogram)	A test that checks the heart rhythm and electrical activity using sensors attached to the skin.

Flat lifting equipment	Mechanical methods to move a patient from the floor while they remain in a flat position avoiding any bending of the spine or hips. These come in the form of inflatable devices or special hoist attachments. Inflatable devices are positioned under the patient while flat and inflate evenly to bring the patient to the height of a bed, where a patient transfer slide can be used. Flat lifting hoists usually require a specific hoist attachment so the hoist can be used with a scoop stretcher. A hoist used for this purpose must be able to operate from floor level.
GCS	Glasgow Coma Scale
Head blocks	Blocks used to keep the head still and avoid neck movement. May be used when a neck injury is suspected to keep the neck still.
Head injury	An injury to the head. This might include a skull fracture, damage to brain tissue or a bleed on the brain. Head injuries have the potential to be very serious and can be fatal.
Hip fracture	Hip fractures are cracks or breaks in the top of the thigh bone (femur) close to the hip joint. They're usually caused by a fall or an injury to the side of the hip (NHS).
Hoist	Equipment used for lifting and lowering patients. Includes any accessories used in doing so.
Hot debrief	A process that takes place quickly after a fall (or other incident) to capture instant reflections to be used for future learning and to ensure those involved are supported.
Hypoglycaemia	Low blood sugar levels
Hypothermia	Low body temperature (see NEWS2)
Hypoxaemia	Low oxygen levels (see NEWS2)
Immediate medical response	A situation where medical assessment and intervention is needed with immediate effect. In settings without crash teams/onsite medical response teams, this will require a 999 call. Care teams responding to this situation should provide first aid consisting of basic life support (airway and breathing assessment and CPR if indicated). If the setting has the equipment and staff skill set, NEWS2 should be carried out.
In line immobilisation	A method to stabilise the neck and spine to minimise any movement which could make an injury worse.
Kyphosis	Kyphosis is curvature of the spine that causes the top of the back to appear more rounded than normal.
Laceration	A tearing or splitting of the skin.
Log roll	A procedure used to turn a patient while keeping the spine stable.
Loss of consciousness	A state of loss of responsiveness. Syncope (see below) is a transient (short-lived) loss of consciousness.
LPA	Lasting power of attorney
Medical cover	A doctor available in the inpatient setting to undertake urgent reviews of patients who have had a deterioration in their condition or an injury.

MET	Medical Emergency Team, a usually multidisciplinary team able to quickly respond to a rapidly deteriorating patient and provide critical care input.
Multi-factorial falls risk assessment	An assessment of factors known to increase the risk of falling.
National reporting system	Central database of patient safety incident reports.
NEWS2	National Early Warning System 2 (see above for details).
Non-urgent medical response	Medical review required within 12 hours. Usually indicated for fall without an injury.
Observations	A set of assessments used to monitor a patient's condition. These include the measures that form the NEWS2 and may also include blood glucose measurement and neurological observations (Glasgow Coma Scale and pupil size and reactivity).
Osteoporosis	Osteoporosis is a health condition that weakens bones, making them fragile and more likely to break.
PAINAD	Pain Assessment in Advanced Dementia Scale (PAINAD). A pain scale used to provide a universal method of analysing the pain experienced by people in late-stage dementia.
Patient	For the purposes of this document, patient refers to the individual receiving inpatient care who has experienced a fall.
PDSA	Plan, Do, Study, Act. A quality improvement model
Pressure ulceration	Injury to the skin and underlying tissue, primarily caused by prolonged pressure on the skin.
QualSAFE	A company that provides first aid at work qualification.
ReSPECT	A process and accompanying document that is used to discuss and record advance care decisions.
RGN	Registered general nurse
Rhabdomyolysis	A breakdown of muscle tissue that leads to muscle fibre content being released into the blood. This causes damage to the kidneys. Prolonged time on the floor after a fall without any change in position can cause this.
RMN	Registered mental health nurse
Safe moving and handling	Methods used to protect and prevent injury when moving or transporting loads. In this context, it refers to moving a patient from the floor. Safe for the healthcare professional – avoiding patient lifting. Unless the patient can get up mostly using their own effort, hoisting equipment should be used. Safe for the patient – using lifting equipment decreases the risk of the patient sustaining another fall and reduces skin or joint damage from poor handling. When a hip fracture is suspected, flat lifting equipment should be used.
SBAR	Situation, Background, Assessment, Recommendation. A technique that can be used to facilitate prompt and appropriate communication.
Scoliosis	A sideways curve of the spine.
Scoop hoist	A device used for hoisting people with suspected spinal or hip injuries. It is a hard board that is placed under the person (log roll techniques are used). Should be used with the correct hoist machine and attachment and requires training to use.

Seizures/fits	Caused by sudden bursts of electrical activity in the brain that temporarily affect how it works. Some seizures cause the body to jerk and shake, while others cause problems like loss of awareness or unusual sensations. They typically pass in a few seconds or minutes.
Sensory changes	Numbness in the skin (no feeling or reduced feeling when the skin is touched). Pins and needles or hot/cold sensation. These may occur only in certain parts of the body depending on the cause.
Sepsis	Sepsis is the body's extreme response to an infection. It is a life-threatening medical emergency. The NEWS2 is designed to pick up the early signs of sepsis.
Silver trauma	Trauma and injuries occurring in older patients who usually have underlying frailty and multiple health conditions.
Spinal immobilisation	Strategies used to stabilise the spine after injury to prevent spinal cord damage.
Spinal injury	Damage to the spinal cord which is temporary or permanent. It causes alteration or loss of sensation and muscle strength below the level of the damage and can result in permanent paralysis.
Stroke	A stroke is a serious life-threatening medical condition that happens when the blood supply to part of the brain is cut off.
Syncope	The medical term for fainting. This is a transient (temporary) loss of consciousness caused by reduced blood flow to the brain.
Urgent medical response	Medical review required within 30 minutes. Usually indicated for fall where an injury is suspected or the patient has fallen because of a serious medical condition such as stroke, syncope or sepsis.

Supporting guidance

NICE falls guidelines
www.nice.org.uk/guidance/cg161

NICE falls quality standards
www.nice.org.uk/guidance/qs86

NICE head injury guidance
www.nice.org.uk/guidance/cg176

NICE head injury quality standards
www.nice.org.uk/guidance/qs74

NICE hip fracture guidance
www.nice.org.uk/guidance/cg124/

NICE hip fracture quality standards
www.nice.org.uk/guidance/qs16

NICE spinal injury initial management guidance
www.nice.org.uk/guidance/ng41

NICE stroke diagnosis and early management guidance
www.nice.org.uk/guidance/ng128/

NICE trauma quality standards
www.nice.org.uk/guidance/qs166

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