Undertaking an individual multifactorial assessment for falls

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Whittington Health
Why risk assessment tools are no longer recommended

What an individual multifactorial assessment should include

What interventions reduce older patients’ risk of falling and/or the severity of a fall in hospital, compared with usual care?

Which interventions are the most effective
# Morse Fall Scale

<table>
<thead>
<tr>
<th>Item</th>
<th>Select Areas of Risk</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. History of Falling</td>
<td>□ No</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>□ Yes</td>
<td>25</td>
</tr>
<tr>
<td>2. Secondary Diagnosis</td>
<td>□ No</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>□ Yes</td>
<td>15</td>
</tr>
<tr>
<td>3. Ambulatory Aid</td>
<td>□ No</td>
<td>0</td>
</tr>
<tr>
<td>• None/bed rest/nurse assist</td>
<td>□ Yes</td>
<td>15</td>
</tr>
<tr>
<td>• Crutches/cane/walker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Furniture</td>
<td>□ Yes</td>
<td>30</td>
</tr>
<tr>
<td>4. IV Therapy/HepLock</td>
<td>□ No</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>□ Yes</td>
<td>20</td>
</tr>
<tr>
<td>5. Gait</td>
<td>□ No</td>
<td>0</td>
</tr>
<tr>
<td>• Normal/bed rest/wheelchair</td>
<td>□ Yes</td>
<td>10</td>
</tr>
<tr>
<td>• Weak</td>
<td>□ Impaired</td>
<td>20</td>
</tr>
<tr>
<td>6. Mental Status</td>
<td>□ No</td>
<td>0</td>
</tr>
<tr>
<td>• Oriented to own ability</td>
<td>□ Overestimates/forgets limitations</td>
<td>15</td>
</tr>
</tbody>
</table>

Total Morse Fall Scale risk score = ____.

Patient is (select 1) □ Low □ Medium □ High Risk for falls.

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**Falls Risk Assessment Tool**

**Resident’s Name**

**Date of Birth**

**Date of Assessment**

**Assessor’s Signature**

Choose one of the following options which best describes the resident’s level of capability when transferring from a bed to chair:

<table>
<thead>
<tr>
<th>Answer</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unable</td>
<td>0</td>
</tr>
<tr>
<td>Needs major help</td>
<td>1</td>
</tr>
<tr>
<td>Needs minor help</td>
<td>2</td>
</tr>
<tr>
<td>Independent</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose one of the following options which best describes the resident’s level of mobility:

<table>
<thead>
<tr>
<th>Answer</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immobile</td>
<td>0</td>
</tr>
<tr>
<td>Independent with the aid of a wheelchair</td>
<td>1</td>
</tr>
<tr>
<td>Uses walking aid</td>
<td>2</td>
</tr>
<tr>
<td>Walks with the aid of one person</td>
<td>2</td>
</tr>
<tr>
<td>Independent</td>
<td>3</td>
</tr>
</tbody>
</table>

Total the transfer and mobility score and answer the next question:

1. Is the combined transfer and mobility score 3 or 4?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>1</td>
</tr>
<tr>
<td>NO</td>
<td>0</td>
</tr>
</tbody>
</table>

2. Has the resident had any falls in the last 3 months?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>1</td>
</tr>
<tr>
<td>NO</td>
<td>0</td>
</tr>
</tbody>
</table>

3. Is the resident visually impaired to the extent that everyday function is affected?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>1</td>
</tr>
<tr>
<td>NO</td>
<td>0</td>
</tr>
</tbody>
</table>

4. Is the resident agitated?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>1</td>
</tr>
<tr>
<td>NO</td>
<td>0</td>
</tr>
</tbody>
</table>

5. Do you think the resident is in need of especially frequent toileting?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>1</td>
</tr>
<tr>
<td>NO</td>
<td>0</td>
</tr>
</tbody>
</table>

**Total of questions 1 – 5**

0 = low risk  1 = moderate risk  2 or above = high risk

Slips, trips and falls in hospital explains how to test existing tools, and explains that using a falls risk score to predict falls is not an essential part of falls prevention. Looking directly for risk factors that can be changed or avoided may be more effective at preventing falls.
1.2.1 Predicting patients' risk of falling in hospital

1.2.1.1 Do not use fall risk prediction tools to predict inpatients' risk of falling in hospital.

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

- 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.
Risk assessment tools

- High sensitivity and specificity
- High positive and negative predictive value
- Ease and speed of completion
- Good inter-rater reliability
- Minimal need for training and specialist equipment
- High adherence from staff
- Validated in the appropriate patient group
Risk assessment tools

- Negative predictive value – low risk patients
- Most high risk patients don’t fall
- Performance vs clinical judgement
- Don’t target interventions to reduce risk
Falls prevention programmes

- Take a year or more to have effect
- Reduce falls by 25% (max 30-40%)

So how can we reduce falls in hospitals ??
Types of falls

- **Accidental:**
- **Anticipated physiological:** patients who have risk factors that can be identified in advance, including abnormal gait, high-risk medication, urinary frequency or dementia
- **Unanticipated physiological:** patients who have a low risk of falls but suffer an event e.g. a seizure, stroke or fainting episode resulting in a fall that could not have been predicted
- **Behavioral or intentional falls:**
Factors associated with in hospital falls

- Muscle weakness
- Postural instability
- Confusion (delerium or dementia
- Agitation
- Urinary frequency or incontinence
- Previous fall
- Sedatives or sleeping tablets
- Visual impairment
- Environmental hazards
Challenges

Patient safety

- Patients rights (risk taking)
- Privacy and dignity
- Educational session by a trained research nurse targeting individual fall risk factors in patients at high risk of falling in acute medical wards achieved a significant reduction in risk of falling (RR 0.29, 95% CI 0.11 to 0.74) in 1822 patients.

- Multifactorial interventions in hospitals reduced rate of falls (RR 0.69, 95% CI 0.49 to 0.96; 4 trials, 6478 participants) and risk of falling (RR 0.71, 95% CI 0.46 to 1.09; 3 trials, 4824 participants)
Preventing falls in older people during a hospital stay

- 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

- Multifactorial assessment
- Multifactorial intervention
Multi-factorial assessment

- Cognitive impairment
- Continence problems
- Falls history (incl fear of falling)
- Footwear
- Health problems that increase risk of falling
- Medication
- Postural instability, mobility problems and/or balance problems
- Syncope syndrome
- Visual impairment
Multi-factorial interventions

- The inpatient environment MUST be safe and free from clutter and overcrowding
- Multi-factorial interventions MUST promptly addresses the patient's identified individual risk factors
- Takes into account whether the risk factors can be treated, improved or managed during the patient's expected stay
- Falls prevention interventions MUST be tailored to address the patient's individual risk factors
The ‘How to’ Guide for Reducing harm from falls

1. Reduce harm from falls
2. Leadership actions to reduce harm from falls
   - Board leadership: establish falls prevention group
   - Governance & risk leadership: improve analysis and learning from falls
   - Train and develop staff in falls prevention
   - Facilities & estates leadership: create a safe environment
3. Post fall protocols: care and secondary prevention
   - High risk patients
     - In depth assessment and multifaceted care plan
   - Ask about falls on every admission
4. Avoid unnecessary hypnotic/sedative medication
5. Ensure patients have appropriate footwear
   - Ensure call bell visible and within reach

Patient Safety First

Whittington Health

NHS
Patient Safety First

The 4 basics

- Ask patients on admission if they have fallen recently
- Avoid unnecessary sedative and hypnotic medication
- Ensure appropriate footwear
- Ensure call bells are within reach
An example of an individually targeted falls care plan
Based on the York randomised controlled trial (Healey et al. 2004)

<table>
<thead>
<tr>
<th><strong>Goal:</strong> To reduce likelihood of falls whilst maintaining dignity and independence</th>
<th><strong>State action taken:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Call.</strong> Ensure call bell explained and in reach. Consider alternatives for patients unable to recall use of call bell e.g. brass bell, move bed in sight of nurses’ station</td>
<td>Call bell in reach but may forget, will probably call her daughter’s name instead – moved to Bay 3 within earshot of nurses’ station</td>
</tr>
<tr>
<td><strong>Eyesight.</strong> Ensure eyesight is checked wearing glasses if worn; able to identify pen/key from bed length away? If eyesight too poor to identify objects, ask doctor to review. Ensure glasses/hearing aid are worn or within reach</td>
<td>Glasses broken in fall at home – family have ordered replacement and hope to collect 7/3. Has fair distance vision without them. Have suggested they order spare pair too.</td>
</tr>
<tr>
<td><strong>Bed and bedrails.</strong> Assess the need for bedrails (refer to policy). If likely to fall from bed, ensure the bed is at the lowest possible height unless this would reduce mobility or independence. Consider use of special low bed</td>
<td>Bedrails not appropriate as mobilises alone, even though unsteady, and might be confused enough to climb over. Bed set at right height for safe move from sitting to standing</td>
</tr>
</tbody>
</table>
The FallSafe care bundle
Bundle for all patients

1. A history of previous falls and of fear of falling is taken at the time of admission.
   > Admission processes and paperwork need to be changed to include these items.

2. Urinalysis is conducted on admission.

3. New prescriptions of night sedation are avoided.

4. A call bell is in reach.
   > The existing call bell system must be able to reach all patient beds and chairs.
   > Systems are needed for rapid repair of faulty call bells.

5. Appropriate footwear is available and in use.
   > Supplies need to be made available for patients without relatives or friends.

6. There is immediate assessment for and provision of walking aids.
   > Physiotherapists must train nursing staff to provide appropriate walking aids at the time of admission to the ward, or as soon as they might be required.
   > Walking aids need to be made available for each ward area, and need a suitable storage area.
Bundle for older and more vulnerable patients

7 A cognitive assessment (mini-mental state examination (MMSE) or abbreviated mental test score (AMTS)) is conducted in all admissions aged >70yrs.

8 Those at risk are tested for delirium (confusion assessment method).
   > Trusts must implement delirium screening as per NICE guidelines.

9 An assessment of risk versus benefit for use of a bedrail is conducted.

10 Visual assessment is conducted.
   > The ability to recognise objects from end of the bed can be used as a screen for severe eyesight problems, and fuller assessment should be carried out if required.

11 Lying and standing blood pressure are taken with a manual sphygmomanometer.

12 Medication is reviewed with respect to cardiovascular and central nervous system acting medications (see enclosure).
   > Nurses should request a review of medication to try and reduce the burden of drugs, particularly those associated with falls, and in patients who are unsteady, hypotensive, or have orthostatic hypotension.

13 Based on observation, toileting arrangements are assessed and planned (tailored to needs rather than the standard two-hourly arrangement).
Bundle for after a fall

14 After a fall, appropriate assessments and procedures are followed (see enclosure), including neurological observations in those who have hit their head or had an unwitnessed fall.

> Trusts have been mandated to include these procedures within their policies by July 2011.

15 A post-fall review (how can further falls be prevented for this patient) is conducted.

16 A complete incident report (all falls) is created.

17 A root cause analysis (lessons to prevent falls for future patients) is carried out for severe harm falls.
Equipment and Telecare
Essential care after an inpatient fall

- Head injury and neuro observations
- Delays in diagnosing fractures and other injuries
### Post Fall Protocol Checklist

**Do not move the individual unless they are independently able to do so.**

If they are conscious reassure them and keep them informed about what you are doing.

1. **Check ABC**
   - If Resuscitation required call for help
   - Start CPR
   - Put out cardiac arrest call on 2222

2. **Check Observations**
   - Check Pulse, Respiratory Rate, Saturations, Blood Pressure & Glasgow Coma Scale
   - Repeat after 15mins and again after 1hr even if patient independent
   - If any concerns call for medical help immediately

3. **Check For Injuries**
   - Check for Visible injuries – such as bleeding/bruising and treat as appropriate
   - Assess hazards – where has fall taken place, cause of fall e.g. slip or trip.
   - Assess patient ability – conscious level, injuries.
   - **Assess need for medical assessment** prior to moving patient. Ensure careful inspection of the patient with particular regards to the head and all limbs, palpitations or movement of any obviously injured limbs. Clearly identify signs of injury with an X upon the diagram. Referring for an Urgent Medical Assessment or Imaging dependent upon warning signs.

**Make decision on how to move patient:**

- If patient can move independently allow to do so.
- Repeat observations in 15mins and again in 1hr.

- **If patient unable to move independently:**
  - Stabilise any medical condition – if suspected neck or spinal injury or post cardiac arrest then use stretcher attachment to hoist located in ITU, Thorogood and A&E
  - Once stable then use appropriate sling to hoist into bed. – see Safer Handling Policy for information on fitting and sizing slings and hoisting.

### Next Steps:

1. **Document incident** - Event around the fall must be documented in nursing/Medical notes
   - Inform – Ensure the medical team are informed
   - Ensure patient detail is entered on Datix

2. **Report Incident on Datix** and remember to enter patient’s detail (Refer to Incident Reporting policy)

3. **Revisit falls prevention care plan and implement/update plan as required**

4. **Complete Falls Protocol Record**

5. **Complete Falls Guidance Sheet**

**Falls involving visitor or staff** – Refer to Slips, Trips and Falls Policy

- **A) Visitor** – Obtain individuals details, advise them to attend ED or their GP and complete Datix
- **B) Staff** – Advise to attend ED, occupational health or their GP and completed Datix
Summary

- Everyone’s responsibility
- Education and training
- Risk assessment tools alone do not work
- Interventions must be multiple and tailored
- Safe rounds can help
- Post falls protocols
- Learning from events and experience
Any questions?