Falls Prevention Workbook
Identifying risk factors with Multifactorial Falls Risk Assessment

What is a fall?
A fall is defined as an event which causes a person to, unintentionally, rest on the ground or lower level (World Health Organisation). A fall is not necessarily the result of a major intrinsic event (such as a stroke) or overwhelming hazard. It is a type of incident which includes slips, trips, falls and faints.

It is not a fall when:
- Staff lowered a patient to the floor or their descent had been controlled
- Staff or others had witnessed the patient lowered themselves on the floor
- The patient has capacity and reports they lowered themselves on the floor
- Staff or others witnessed the patient roll from hi/lo bed

What causes a fall?
The causes of having a fall are multifactorial (many factors) – a fall is the result of the interplay of multiple risk factors. These risks are categorised intrinsic (occur within the body) or extrinsic (out with the body). It is the combination and number of risks that increases risk of falling. Behaviours can also increase that risk. Below are a few examples of risk factors to falls:

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<td>Inappropriate height of chair, bed, toilet etc.</td>
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<td>Problem with vision / eyesight</td>
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<td>Problem with feet</td>
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<td>Infection</td>
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<td>Depression</td>
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</tbody>
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What is a Multifactorial Falls Risk Assessment (MFRA)?

The Multifactorial risk assessment is an evidence based approach recommended by NICE (2013) where interventions are focused to modifiable risk factors to reduce the incidence of falls. Multifactorial risk assessment (MFRA) allows the identification of risk factors that predisposes someone to fall and is used to direct the individual to the appropriate assessment and appropriate intervention.

Whose responsibility is it to complete a Multifactorial Falls Risk Assessment?

This should be performed by a health care profession with the appropriate skills and experience. All clinical staff (Doctors, Registered Nurses, Occupational and Physiotherapists) working with older people should develop and maintain a basic professional competence in falls assessment and prevention. Clinical staff completing MFRA are responsible for actioning a plan to address the risks identified. (NICE, 2013)

When to carry out Multifactorial Falls Risk Assessment?

- On admission
- On transfer to another clinical area
- Where the medical or physical condition has changed
- After a fall
- Any change of medication (with falls associated risk)
- At least weekly if there is no change

Where will Multifactorial Falls Risk Assessment form be kept?

Adult In-patient Nursing Risk Assessment and Prescription of care

Identifying those at risk of falling

All people 65 or older who are admitted to hospital must have a multifactorial assessment for their risk of falling during their hospital stay. People aged 50 to 64 who are admitted to hospital and are judged by a clinician to be at higher risk of falling due to of an underlying condition are also covered by the NICE guideline recommendations on assessing and preventing falls in older people during a hospital stay. (NICE CG 161)

Bed Rails Assessment

Bed rails assessments using the Safety Matrix Tool must be carried out before use and then reviewed and recorded after each significant change in the patient’s condition. The assessment tool is based on the patient’s level of orientation and mobility. Staff must employ professional/clinical judgement as to the most appropriate course of action to take according to patients need. The points to consider during a risk assessment include:

- Is the person likely to fall from their bed?
- If so, are bed rails an appropriate solution or could the risk of falling from bed be reduced by means other than bed rails

When to carry out bed rails assessment

- Each patient's admission to the hospital within 4 -6 hours
- On transfer to another clinical area
- When there is a change in medical and physical condition
- Every 24 hours/daily if use of bed rail is ‘recommended’
- At least weekly if usage is ‘not recommended’
- After a fall

Falls Prevention Care Plan

A falls prevention care plan must be completed for all patients identified as “at risk” of falling, stating intervention/action taken to be tailored/individualised according to the patient’s needs.

A multifactorial falls risk assessment and a bedrail assessment must be the first stage of falls prevention and should be undertaken for all patients to identify patients at risk of falling within 4 to 6 hours of admission.
Common Falls Risk Factors in hospital: Postural hypotension

**What is a postural hypotension?**
Postural Hypotension or Orthostatic Hypotension is a significant cause of falls leading to injury and morbidity in elderly population. It can present with clinical symptoms of dizziness, syncope and falls when the patient changes position. **Postural hypotension is defined as a drop in blood pressure of at least 20 mmHg systolic and 10 mmHg diastolic on standing upright typically inducing dizziness and syncope.**

**How to measure lying and standing blood pressure?**
1. Explain procedure to the patient.
2. The first BP including pulse rate should be taken after lying for at least five minutes.
3. The second BP and pulse rate should be taken after standing in the first minute.
4. A third BP and pulse rate should be taken after standing for three minutes.

**Symptoms of dizziness, light-headedness, vagueness, pallor, visual disturbance, feelings of weakness and palpitations should be documented.**

**What is the indication of a positive Postural Hypotension?**
- A drop in systolic BP of 20mmHg or more (with or without symptoms)
- A drop to below 90mmHg on standing even if the drop is less than 20mmHg (with or without symptoms)
- A drop in diastolic BP of 10mmHg with symptoms

**OVERVIEW in measuring lying and standing BP**

**Indication**
- All patients age >65 years
- At risk of falling
- History of falls
- History of Postural hypotension
- Syncope / Collapse
- After an in-patient fall
- High risk medications

**The patient can stand safely for at least 1 minute or up to 4 minutes with / without mobility aids or assistance**

**Measure and record L/S BP within 24 hours of assessment**

**If the patient is too unwell to stand on admission, delay L/S BP measurement**

**Review the patient’s ability to stand daily**

**Measure and record L/S BP when practicably possible and safe**

**If systolic BP drops ≥20 mmHg or if the diastolic BP drops ≥10mmHg with or without symptoms**

**Contraindication**
- Lying and standing BP must not be undertaken to patients who are:
  - Bed / chair bound
  - Immobile
  - Spinal injuries
  - End of Life pathway
  - hip fracture / s
  - acute respiratory distress
  - acute stroke

**NURSING MANAGEMENT**
- Inform the patient’s consultant team including OT/PT
- Repeat lying and standing BP daily until deficit is resolved
- Ensure the patient is well hydrated and or drinking regularly
- Ensure the patient uses the call bell and supervision if they are unable to call for help
- Ensure the environmental temperature is not high or hot
- Promote measures decreasing straining in micturition and defecation.
- Advise the patient to take time when getting out of bed or in changing position.

**MEDICAL MANAGEMENT**
- Identify reversible causes and underlying associated medical condition
- Consider reducing or discontinuing medications that may be exacerbating the problem
- Surgical consulting teams may consider referral to a medical consultant
- Consider Non-pharmacological treatments and / or Pharmacological treatments as appropriate

**THERAPIST MANAGEMENT**
- Complete lying and standing BP prior to mobility session if it had not been undertaken
- Continue therapy sessions as medical condition allows
- Assess to determine the safest moving and handling technique
- Assess for mobility aids and provide as appropriate
- Patient education for discharge
- Community falls referral and assess equipment needs for discharge
What is Osteoporosis?
After the age of 35 bone loss begins to occur very gradually. The cells responsible for breaking down bones (osteoclasts) begin to work more quickly than the cells responsible for building them (osteoblasts). The result is age related bone loss. If this loss becomes severe osteoporosis can develop. Osteoporosis causes ones to become porous and fragile with a higher risk of fracture. It is often referred to as the ‘silent disease’ as sometimes no symptoms are present until a bone is broken. Spinal fractures can be painless and osteoporosis may go undetected until late stage complications present e.g. kyphosis.

Osteoporosis risk factors
(Some of these are modifiable)
- Inactivity
- Poor dietary calcium
- Vitamin D deficiency
- Smoking
- Excess alcohol
- Low body weight (BMI <19)
- Untreated early menopause (<45)
- History of a low trauma fracture
- Family history
- Rheumatoid arthritis
- Long term corticosteroid therapy

Prevention & Treatment of Osteoporosis
- Calcium
- Vitamin D
- Stop smoking
- Increase activity
- Reduce alcohol intake
- Medications include bisphosphonates

Confusion and falls
The common factors for confusion in hospital are delirium and dementia. If we fail to recognise the signs of the patient’s confusion we may assume that patients remember all they’ve been told; for example: how to get help by using call bell or where to find toilets. These patients are much more vulnerable to falling in hospital because they:
- may forget they need to ask for help
- may put themselves at risk due to agitation and anxiety
- may find it difficult to recognize hazards in the unfamiliar hospital environment
- may forget how to use mobility aids safely
- may unable to adapt to any problems they have with mobility for example stroke or injury
- will find it difficult to save or catch themselves if they start to fall.

Delirium
Delirium is very common in hospital patients but can easily be missed because symptoms are assumed to be due to dementia. It can be triggered by:
- any infection (urinary tract infections, chest infections and bacteraemia
- medications especially strong pain killers
- withdrawal from alcohol or medication
- any major metabolic problem- e.g. low sodium, renal failure
- hypoxia- e.g. from respiratory or cardiac failure
- a combination of several of these triggers

Dementia
Dementia is a neurological condition with physical as well as cognitive effects which may sometimes include:
- changes in walking pattern
- a drop in blood pressure on standing

Patients with dementia are very vulnerable to delirium so in hospital patients frequently have delirium on top of dementia. If a patient is wandering or has become agitated always assume it’s for a reason and try to find out why.

Other conditions can also lead to confusion, including brain injuries and alcohol or drug intoxication.
Common Falls Risk Factors in hospital: Bed rails, poor fluid and dietary intake, Incontinence

**Bed rails**

Bed rails, also known as side rails or cot sides, require careful management when employed to reduce the risk of falls. They are not suitable for everyone and should only be used if the benefits outweigh the risks; they can be very effective when used with the right bed, in the right way, for the right person. However, incident data shows that bed rails sometimes don’t prevent falls and can introduce other risks such as:

- rolling over the top of the rail
- climbing over the rail
- climbing over the footboard

**Occasions when bed rails must be used:**

- if a patient is being transported on a trolley or bed
- if a patient is recovering from an anaesthetic or sedation whilst under constant supervision

**Bed rails should not be employed if:**

- the patient is agile/active and confused enough to climb over the rail
- the patient is independent
- the patient is on Hi/Lo bed

Bed rails must **NOT** be used as a means to prevent the patient from getting out of bed or from leaving their bed as this will be perceived as a form of restraint.

It is unlikely that one type of bed and bed rail will be suitable for a wide range of users with different physical sizes and needs.

Risk assessments should be carried out before use and then reviewed and recorded after each significant change in the bed occupant’s condition, and **daily during its period of use** according to the Trust policy.

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**Poor Fluid and Dietary Intake**

Malnutrition and dehydration has been identified as one of the risk factors for falls in older people, since it can lead to a deterioration in mental state and increase the risk of dizziness and fainting. The maintenance of adequate levels of nutrition and hydration in older people can help prevent falls.

**What is my role in mitigating risks associated with poor fluid and dietary intake?**

- Completion of nutritional assessment will help identify patients at risk of malnutrition.
- Monitor patient's food and fluid intake.
- Nutrition and hydration requirements are identified and action taken as appropriate
- Refer patients to Dietician if indicated

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**Incontinence**

Incontinence, particularly of urine, is a falls risk factor. Patients who often and repeatedly rush to the toilet are maybe passing small amounts, increase their risk of falling. This is worse at night time when incontinence can be most troublesome and there is the added problem of it being dark.

**What is my role in mitigating risks associated with incontinence?**

- Perform urinalysis and bladder scan if indicated
- Determine the most appropriate frequency of intentional care rounds to offer and provide patient’s positioning, personal needs and trips to the toilet. E.g. hourly care rounding until the issue with incontinence had been treated.
- As soon as the risk has been recognised, decide to make changes of bed allocation. Patients may need to be positioned near the toilet wherever possible so that they have less distance to walk and maximises their opportunity to be safely independent.
Poor mobility, balance and gait
Gait and balance disorders are among the most common causes of falls in older person and often lead to injury. Most changes in gait that occur in older adults are related to underlying medical conditions, particularly as these conditions increase in severity, and should not be viewed as merely an inevitable consequence of ageing. A balance problem is a condition that makes a person feel unsteady or dizzy. Having good balance is important for many everyday activities, such as going up and down the stairs. It also helps a person walk safely and avoid tripping and falling over objects in their way.

Medical conditions associated with gait and balance disorders may contribute to gait and balance disorders for a variety of reasons, such as causing pain, dyspnoea (shortness of breath), imbalance, diminished strength, limited range of motion, poor posture, decreased sensory perception, fatigue, deformity, and decreased awareness of and ability to adapt to and traverse through possibly hazardous surroundings. In addition, recent surgery or hospitalisation and other acute medical illnesses may lead to gait and balance disorders. The use of multiple medications (four or more) as well as specific classes of medications can lead to gait disorders and an increased rate of falls.

Mobility aids
The use of mobility aids such as a walking cane/stick or rollator frame can provide additional support and assist with balancing for anyone with reduced mobility. They can help to reduce the strain on the legs and they allow individuals to carry out their day-to-day activities more safely.

What is my role in mitigating risks associated with poor mobility and gait?
- Completion of moving and handling assessment will help identify a patient has a poor mobility, balance and gait problem.
- The therapy team’s mobility assessment and care plan are applied in the care plan
- Encouraging patients to do as much as they can for themselves helps them to stay active and strong.
- The correct mobility aid is used by the patient and that it is within easy reach at all times for single use.
- For patients who are sharing mobility aids, ensure they are consistently able to ask for help.

Environment
When patients are well and fit most activities within their home can be completed with little effort or thought, however, due to ill health/being resulting in reduced mobility, normal activities may become more challenging. Small adaptations in the hospital can reduce that risk.

Allocation of bed
Falls prevention includes planning to locate patients where their clinical needs can best be met.

What is my role in mitigating risks associated with hospital environment?
- Ensure the following areas in the ward are free of clutter:
  - Patients surrounding or bed area
  - Patient walkways/path to toilet
  - Toilets and bathroom
- Night lights are adequate at night time and during periods where it is too dark for patient to see properly.
- Spillages are dealt with immediately and wet areas are properly sign posted.
- New admissions may need to be positioned in a high visibility area or cohort bay for observation until their risk and care needs are fully identified.
- Patients transferred from Critical Care Unit and patients returning from Theatre/Recovery Department are positioned in a high visibility area until care needs are fully established.
Common Falls Risk Factors in hospital: ITU step down, inappropriate footwear

**Intensive Therapy Unit (ITU) step down**

Most patients who require critical care do so either because they require monitoring post major surgery or because they have been critically ill, requiring support for one or more system failure; e.g. acute respiratory failure. When the patient is deemed fit enough to be transferred out of critical care by their very nature they will remain vulnerable and require careful monitoring in the new area.

**What is my role in mitigating risks associated with patients who has just been transferred from ITU?**

- Communication must take place at the earliest opportunity to allow the ward to make the arrangements required for the patient such as Hi/Lo bed or additional staffing.
- **Avoid step down transfer overnight** (between 22:00hrs and 07:00hrs). Patients that have been transferred out of intensive care units at night have been found to fare significantly worse than those transferred during the day.
- SBAR handover to the receiving ward must include:
  - Medical condition
  - Cognition status
  - Mobility to include limb weaknesses
  - Moving and handling care plan
  - Level of observation required i.e. cohort nursing or 1:1 supervision
  - Falls prevention strategies implemented

**Inappropriate footwear and foot problems**

Patients who fell and injured themselves often were found wearing inappropriate footwear. Unsafe footwear can cause loss of balance, and poor gait and the risk of falls increases for those whose muscular strength and balance is already impaired.

One of the main causes of foot problems such as bunions and corns is badly-fitting shoes. Apparently, three out of four people over the age of 65 wear shoes that are too small. Perhaps it is because we do not realise our feet actually get bigger as we age, and besides this the feet and ankles may become swollen because of chronic medical conditions.

> It is often a combination of foot problems and inappropriate footwear that increases the risk of falling.

**Suitable footwear**

Suitable footwear that is properly designed and fitted will protect and support the foot. This is important for maintaining independent mobility and preventing falls.

**What is my role in mitigating risks associated with inappropriate footwear and foot problems?**

- Completion of multifactorial falls risk assessment will help identify that the patient has unsafe footwear
- Offer/provide correct size non slip socks to patients who do not have their own footwear
- Ensure anti-embolic stockings with grip are used by patients if clinically indicated.
- Encourage and advise patients and their family/carer to bring in suitable, safe and appropriate footwear to the hospital.
- Advise patients about the following points on shoes and falls prevention:
  - Shoes should cushion and support your feet, feel comfortable and fit well
  - Laces, buckles or Velcro straps hold the feet firmly in place, preventing them from slipping forwards
  - High heels and opened backed slippers should be avoided
  - Garments such as trousers / skirts / dressing gowns should not trail on the ground
- Refer to the podiatrist if indicated.
Why is poor eyesight and hearing a problem?

Eyesight and hearing play a vital role in maintaining balance and during movement. Older people with sight problems, including wearing the wrong prescription glasses or dirty glasses, are more likely to fall. Glasses with bifocal and varifocal lenses make objects and surfaces seem closer than they are and can cause falls. This can be especially problematic when on the stairs. Many older people blame changes to their eyesight on ageing, but only an eye examination can separate a serious visual impairment from ‘normal’ ageing changes.

Age related vision loss.
- Macular Degeneration
- Cataracts
- Glaucoma
- Diabetic Retinopathy
- Hemianopia’s after a stroke

Below are pictures of vision losses which increases risk of falls:

**MACULAR DEGENERATION**
Is a degenerative condition affecting the central part of the retina resulting in distortion or loss of central vision.

**CATARACTS**
The lens of the eye becomes progressively opaque, resulting in blurred vision.

**GLAUCOMA**
is a condition of increased pressure within the eyeball, causing gradual loss of sight.

**DIABETIC RETINOPATHY**
is a complication of diabetes that causes damage to the blood vessels in the retina. It can lead to vision loss and total blindness.

**HEMIANOPIA’s**
is a defective vision or blindness in half of the visual field. Visual field deficit on one side often occurs as a result of stroke syndrome.
What is my role in mitigating risks associated with poor eyesight and hearing problems?

- The RCP (Royal College of Physician) recommends a bedside vision check to alert staff for any visual concerns that the patient may have. The image below is the vision check tool that we use in this Trust to assess patients' eyesight at the bedside and a referral form to the Orthoptist for visual assessment.

- Ensure patients with poor vision can easily access call for help either by using call bell system or any practical alternative if patient is unable to use call bell.

- Ensure patients’ eyeglasses/spectacles and hearing aids are within their reach and encourage patients to wear when they are awake.

- Bedside vision check proforma is available to print on the Falls intranet site with a referral form to Orthoptist for visual assessment if indicated.

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Distance vision check image 1

Hello and Welcome

Referral form to Orthoptist for Visual Assessment

Patient addressograph

Department of Orthoptics

Date: __________________________

Word: __________________________

Reason for referral: ☐ Unable to see/read sentence or pictures in the tool

Does the patient usually wear glasses? Yes/No

If yes, was the test performed with their glasses on? Yes/No

Does the patient think their vision has deteriorated from their normal vision? Yes/No/DON'T KNOW

Comments (optional): __________________________

From: __________________________

Name: __________________________

Job Title: __________________________

Signature: __________________________

Sent to: Mrs Rosamary Russell

Head Orthoptist

Orthoptic Department

QEH

☐ A copy is retained in Medical Notes

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Near vision check image 2

I can read this sentence

Disclaimer

These checks are designed to be done by a nurse. Image 1 should be held at eye level of the patient.

Copy of vision test image 2 should be held at arm’s length or held close to face. Print and repeat test with glasses off.

患者通常戴眼镜吗？

是/否

如果戴眼镜，测试是在戴眼镜时进行吗？

是/否

患者认为他们的视力比正常视力差吗？

是/否/不知道

备注（可选）：____________________________

来自：____________________________

姓名：____________________________

职位：____________________________

签名：____________________________

发送给：Mrs Rosamary Russell

正畸科主任

正畸科

QEH

□ 医疗记录中保留一份副本
Medications which increases risks of falls

Medications are among the most common causes of increased fall risk in older people and are usually among the easiest risk factors to change. Falls may be the consequence of recent medication changes, but are usually caused by medicines that have been given for some time.

Polypharmacy/Multiple medications

Individuals on four or more medicines prescribed are at greater risk of having a fall. Research identified sedatives and hypnotics, antidepressants and benzodiazepines demonstrated a significant association with falls in elderly individuals.

Sedation is one of the most common causes of drug-induced falls. Elderly people are more susceptible to Central Nervous System side effects of excessive sedation, increased body sway and slowing of reaction time.

Control of blood pressure at rest and movement is already impaired in the elderly which means that they are more likely to suffer drug-induced postural hypotension, which can lead to dizziness and falls.

Falls can be caused by almost any drug that acts on the brain or circulation. Usually the mechanism leading to a fall is one or more of:

- **sedation**, with slowing of reaction times and impaired balance
- **hypotension**, including orthostatic (postural) hypotension
- **bradycardia**, tachycardia or periods of asystole

Below are drug categories that have a higher propensity to falls; e.g. those acting on the brain and heart.

<table>
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<tr>
<th>Drug Category</th>
<th>Examples</th>
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<tr>
<td>Sedatives – Benzodiazepines &amp; &quot;Zs&quot;</td>
<td>Temazepam, Nitrazepam, Diazepam, Lorazepam, Clordiazepoxide Zopiclone</td>
</tr>
<tr>
<td>Sedating antidepressants</td>
<td>Amitriptyline, Dosulepin, Imipramine, Nortriptyline, Lofepramine, Clomipramine</td>
</tr>
<tr>
<td>Drugs for Psychosis and Agitation</td>
<td>Chlorpromazine, Haloperidol, Risperidone, Quetiapine, Olanzapine, Fluphenazine</td>
</tr>
<tr>
<td>SNRI Antidepressants</td>
<td>Venflaxine, Duloxetine</td>
</tr>
<tr>
<td>Opiate Analgesics</td>
<td>All Opiates and related Analgesics e.g. Codeine, Morphine, Tramadol, Oxycodone, Buprenorphine</td>
</tr>
<tr>
<td>Anti-convulsants</td>
<td>Phenytoin, Carbamazepine</td>
</tr>
<tr>
<td>Parkinson’s disease: Dopamine agonists</td>
<td>Ropinirole, PramiipeXole, Co-beneldopa, Co-careldopa, Rotigotine, Rasagiline, Selegeline</td>
</tr>
<tr>
<td>Alpha Receptor Blockers</td>
<td>Doxazosin, Indoramin, Prazosin, Tamsulosin, Terazocin, Alfluzosin</td>
</tr>
<tr>
<td>Beta Receptor Blockers</td>
<td>Atenolol, Sotalol, Bisoprolol, Propanolol, Carvedilol, Timolol eye drops</td>
</tr>
<tr>
<td>Antianginals</td>
<td>Glyceril Trinitrate (GTN), Isosorbide Mononitrate, Nicorandil</td>
</tr>
<tr>
<td>Angiotensin Converting Enzymes Inhibitors (ACEIs)</td>
<td>Lisinopril, Ramipril, Enalapril, Captopril, Perindopril</td>
</tr>
<tr>
<td>Thiazide diuretics</td>
<td>Bendroflumethiazide, Chlorthalidone, Metolazone</td>
</tr>
</tbody>
</table>
**Safety measure: approaches/strategies/equipment useful to mitigate falls risk factors**

*Red dot* is the symbol used by the Trust to identify patients at risk of falling. They are placed at:
- the patient’s bedside board
- the patient’s safety board

The ‘*This is me/my hospital passport*’ document is intended to provide staff with information about the person with dementia, LD or those unable to communicate as an individual. This will help improve the care and support given while the person is in an unfamiliar environment.

‘*My hospital passport*’ is available in your clinical area.

*The patient information leaflet* explains how patients and carers might help to recognise and reduce their own falls risks while in hospital and the potential risks and benefits associated with bedrail usage.

The ‘*patient information leaflet*’ is available in your clinical area.

**Call bells** are frequently used by patients to request help from nursing staff and it is important that we should respond to the call promptly.

Some patients may be unable to use call bell due to cognitive, visual, or physical reasons and considerations must be given that an alternative is provided to meet patients’ needs.

**Appropriate footwear** is an important component to prevent people falling generally, but especially so around the hospital. We must actively encouraging patients to bring and use their own footwear where appropriate. Ensure to offer/provide correct size non-slip socks / or stockings with grip if indicated.

Various sizes *non-slip socks and stockings with grip* are available in your clinical area.
Safety measure: approaches/strategies/equipment useful to mitigate falls risk factors

**Dycem non-slip netting** can be useful for patients who tend to slip from their chair. You would simply cut the non-slip netting to desired size and place on patients’ cushions and seats. It is soft, flexible, slip-resistant netting with a wide mesh that allows air to circulate whilst maintaining comfort.

Supply for your ward can be ordered through Powergate

**Falls Alarms** are monitoring alarm devices used as an automatic call bell to notify staff that a patient who is at risk of falling is about to get out of bed, chair, toilet or commode, without asking for assistance. There is a high risk that a patient may fall if unaccompanied in patients who have a cognitive impairment and/or do not know that they need help, and will not be able to use the call bell.

**Falls alarm** is provided by your clinical area

**Disposable sensor chair pad** is ordered through MEL ext. 4925

**Multiple use stealth chair and bed underpad** is ordered through Powergate or contact Falls Prevention Co-ordinator Ext 4594 or Bleep 2655

**Hi/Lo Beds** are designed so that they can be adjusted to the lowest height close to the floor to prevent patients falling from a standard bed. Hi/Lo beds are used to prevent falls; they are not used to restrict or restrain patients.

Please refer to guide when to use Hi/Lo located at Falls intranet page

Order via Portering services, if none available request via Medical Equipment Library (MEL)

**RITA (Reminiscence Interactive Therapy Activity)**
It aims to evoke memories, stimulate mental activity and improve well-being by discussing events and experiences from the past with activity such as listening to music, watching video clips etc.

**Wards with RITA** (Stanhoe, Tilney, Windsor, Gayton, West Newton)

**Meaningful activities**
Encourages patients to engage in meaningful/supportive activities to promote cognitive stimulation and support physical, sensory and psychological well-being such as listening to their favourite playlists, art activities, jigsaw, puzzle, board games or use of RITA.
Special Observations
The special observations provide a period of safety for patients during temporary distress, when they are at risk of falls, may have potential for rapid deterioration or risk of harming themselves and/or others. This raised level of supervision is used by nursing staff when they assess the patient’s risks that will require special observations level 2 to Level 4.

Level 2-Intermittent Observation / or at least 30 minutes monitoring
This is an increased observation from level 1 standard observation for patients who after assessment may be deemed to have a potential risk of falling due to mild confusion and are not able to use call bell.

Level 3-Continuous Observation within Eyesight / Cohort Nursing
The patient had been assessed to be at increased risk to well-being requiring continuous observation within staff eyesight or cohort nursing due to their clinical condition or for example, a history of falls, advanced dementia, liable to make an attempt to harm themselves or others at any time.

Level 4-Continuous Observation / One nurse to one patient
This is the highest level of special observation for patients who are at significant risk to well-being presenting an immediate risk of harm to themselves and/or others.

Important things to consider in ‘specialling’ patients at increased risk:
Registered Nurses:

- Completion of risk assessment (e.g. falls, suicidal risks) will help identify patients requiring special observation on admission to ED or in any clinical area.
- Consider DoLS checklist for patients who may require Level 3 or 4, and refer to Safeguarding Team for review on Ext. 3255 or Bleep 3564
- Review the care of the patient every shift and their behavioural charts, and consider speciality referrals such as Mental Health Liaison Service and Learning Disabilities and Autism Team.
- Document decisions to reduce, continue or discontinue special observations.
- Escalate to Matron if additional staffing is required

Staff delivering special observations and support to patients should:

- Engage and interact with the patient.
- Monitor the patient’s behaviour, document and report to Registered Nurse of any changes.
- Meet the needs of the patient to help avoid worsening confusion or agitation such as; diet and fluids, pain control, maintaining mobility, relieving constipation and personal hygiene.
- Refer to or update if necessary “My Hospital Passport”
- Utilise the “Meaningful Activity” resources to create a pleasurable activity experience
- Should undertake special observation for no more than one hour continuously
- Handover the care at the beginning and at the end of the period of observation
- Complete the “Behaviour Chart” and “Activity Record” and care provided for the patient.
Management of Falls
It is essential that all members of staff are familiar with the Trust’s post fall protocol on how to safely manage a patient who has fallen on the floor.

**POST – FALL PROTOCOL**
(Must be led by a Nurse in Charge of the shift or Senior Registered Nurse)

### Perform Immediate Assessment
- Check ABC (Airway, Breathing, Circulation), follow Resuscitation Guideline if appropriate
- Record observations (TPR, BP, O2 saturations, EWS & Blood Glucose)
- Neurological observations (commence if fall unwitnessed & follow guidance for patients receiving anti-platelet/ anti-coagulation therapy)
- Assess for injury (see guide overleaf)
- Categorise injury (No Harm/ Minor or Suspected Significant Injury)
- Ask the patient what happened/ trying to do (What were you doing? / Why do you think you fell?)
- Check if patient is on Anti-platelets / Anti-coagulation (If yes, follow guidelines overleaf)
- Call/ inform Medical staff / H@N or NNP

**NURSE LEAD IS RESPONSIBLE FOR CHECKING THAT ASSESSMENT AND ACTION TO TAKE BOX IS COMPLETED, SUPERVISING RETRIEVAL, ENSURING MEDICAL STAFF/ H@N OR NNP HAVE BEEN INFORMED AND THAT ANY DELAY IN INVESTIGATION OR TREATMENT IS ESCALATED TO MATRON / SENIOR NURSE ON CALL**

#### NO HARM / MINOR INJURY
With or without superficial cuts & bruises

Administer first aid as appropriate

Determine the safe method of retrieval:
- Allow patient to get up without assistance
- Use chair to assist
- Use HOIST with 2 members of staff
- Use Hover Jack/ Mat for the larger patient

MDT Review:
- Medical team or NNP to review patient within 2 hours including a medication review
- OT/PT to assess as appropriate

#### SUSPECTED SIGNIFICANT INJURY
Possible fracture of limb, Injury to spine, neck or head

Suspected fracture limb/hip

Suspected spinal or head injury

Nurse patient on floor
Call for urgent medical (F1 ≥) assessment and management (within 30 minutes)

Nurse patient on floor
Call for immediate senior medical (staff grade F2 ≥) assessment and management

Immobilise affected limb/hip

Call 2222 or CCOT if appropriate
Contact A&E (2552) for advice/equipment

Determine the safe method of retrieval:
- Scoop stretcher
- Hover Jack / Mat
- PAT slide
- Stretcher / Bed

Log roll patient with 8 members of staff

X-ray / CT scan within one hour

Follow Spinal and Head Injury guidelines

Inform Risk Management within 48 hours if significant injury confirmed & commence RCA. Share any lessons learnt with family & staff
### SIGNS and SYMPTOMS – Types of injury after a fall

<table>
<thead>
<tr>
<th>MINOR INJURY</th>
<th>SIGNIFICANT INJURY</th>
</tr>
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<tbody>
<tr>
<td><strong>Superficial lacerations, cuts, skin tears and bruises</strong></td>
<td><strong>Patients who hit their head with suspected/obvious injury</strong></td>
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<tr>
<td><strong>Head</strong></td>
<td><strong>Head trauma with coagulopathy and/or dementia</strong></td>
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<td></td>
<td><strong>Loss of consciousness/unresponsive/post traumatic seizure</strong></td>
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<td><strong>Panda eyes (bruising around eyes) and blurred vision</strong></td>
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<td><strong>Bleeding or CSF leakage from ears or nose</strong></td>
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<td><strong>Dizziness, headache and vomiting</strong></td>
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<td></td>
<td><strong>Difficulty staying awake after a fall</strong></td>
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<td></td>
<td><strong>Onset of confusion, disorientation and memory loss</strong></td>
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<td></td>
<td><strong>GCS less than 14/15 on initial assessment</strong></td>
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<tr>
<td></td>
<td><strong>Any drop in GCS (Glasgow Coma Score – 15) within 2 hours from initial assessment</strong></td>
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<tr>
<td><strong>Neck</strong></td>
<td><strong>Pain, swelling, lump and inflammation</strong></td>
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<td></td>
<td><strong>Back pain and headache</strong></td>
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<tr>
<td><strong>Spine</strong></td>
<td><strong>Tenderness over spine</strong></td>
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<tr>
<td></td>
<td><strong>Neurological deficit – upper or lower limb weakness</strong></td>
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<td><strong>Altered or absent sensation in the hands or feet</strong></td>
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<td></td>
<td><strong>Paraesthesia (numbness, pins and needles)</strong></td>
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<tr>
<td><strong>Hip</strong></td>
<td><strong>A shortened or externally rotated leg</strong></td>
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<td><strong>Pain and/or presence of restricted movement</strong></td>
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<td></td>
<td><strong>Not able to weight bear on affected leg</strong></td>
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<tr>
<td><strong>Upper/ Lower</strong></td>
<td><strong>Tenderness or pain on a range of motion</strong></td>
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<td><strong>Pain, swelling at the site &amp; maybe obvious deformity</strong></td>
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<tr>
<td><strong>Limb</strong></td>
<td><strong>Unable to move affected limb</strong></td>
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<td><strong>Delayed capillary refill and new onset of sensory loss</strong></td>
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### EQUIPMENT LOCATION

- **SCOOP STRETCHERS**
  - Terrington SS, Tilney, Necton, SAU, West Newton
- **HOVER JACK & HOVER MAT (+Pump)**
  - MEL Ext. 4925
  - Out of hours via Porters

- **C-SPINE IMMOBILISATION**
  - Includes neck collar
  - Located in A&E
- **Consultant or a senior doctor F2 ≥ is responsible for:**
  - Decision on using C-spine immobilisation kit (collar)
  - Application of collar
  - Decision to remove collar
  - Documenting decision

### INVESTIGATIONS

- **ROUTINE**
  - ECG (Electrocardiogram)
  - Blood tests (FBC & Electrolytes)
  - Sepsis screening
  - Urine test (Urine dip/ MC&S)

- **SUPESED SIGNIFICANT INJURY**
  - Within one hour after the fall
  - Head CT scan
  - Spine X-ray and CT scan
  - Hip X-ray
  - Other specific X-ray

### POST-FALL ASSESSMENT & MANAGEMENT FOR PATIENTS RECEIVING ANTI-PLATELET OR ANTI-COAGULATION

A patient with a known coagulopathy, and those on anti-coagulation therapy, are at increased risk of bleeding, traumatic brain injury and intra-thoracic or intra-abdominal haemorrhage.

**Assessment & management post-fall to include:**
- Medical review of anti-platelet & anti-coagulation therapy
- Close monitoring & observation to identify late manifestation of head injury for up to 72 hours
- Check INR/APPT (document as appropriate)

**Patients with coagulopathy include those with:**
- Alcohol dependency, chronic liver disease, bleeding disorders, renal failure & end stage haemodialysis and those on anti-platelet or anti-coagulation therapy

**Anti-platelet therapy includes:**
- Aspirin, Clopidogrel, Dipyridamole & Prasugrel

**Anti-coagulation therapy includes:**
- Warfarin, Heparin, Enoxaparin, Dalteparin & Rivaroxaban

### HEAD INJURY GUIDANCE

**Recommended minimum frequency of Neurological Observations for suspected head injury:**

- ½ hourly basis until GCS =14/15
- When GCS = 15 then frequency is:
  - ½ hourly for 2 hours
  - 1 hourly for 4 hours then
  - 2 hourly for 4 hours until further medical review

Increase the frequency of Neuro Obs if there are on-going concerns.

**Report signs such as:**
- Persistent vomiting
- Severe or increasing headache
- Confusion
- Agitation
- Changes in alertness