



CLINICAL GUIDELINE

Prevention and Management of Falls, Adults Aged 16 and Over

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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Introduction



1.1 Introduction

A fall is a symptom, not a diagnosis. It can be a marker for the onset of frailty, the first indication of a new or worsening health problem and/or can represent a tipping point in a person's life, triggering a decline in independence. For the patient, the consequences of falling can include fracture, soft tissue or head injury, fear of falling, anxiety and depression, which may all lead to a loss of confidence and more limited participation in everyday activities.

Falls are commonly associated with frailty, but it is not only frail people who fall. Falls are not an inevitable consequence of old age, and many falls can be prevented by well organised services and organisations working in partnership with the person and their carers. Falls prevention and management is not the preserve of one profession, service or organisation.^{1,2,3} The consequences of a fall cut across all agencies working with people at risk of falling. Adverse outcomes for patients which impact on the NHS include increased morbidity, longer stays in hospital and higher rates of discharge to institutional care.^{4,5} An economic evaluation published in 2013 estimated that the annual cost to health and social care services in Scotland of managing the consequences of falls was in excess of £470 million.⁶

All agencies working with people at risk of falling can be part of the solution. Effective falls prevention and management can make a significant contribution to achieving the proposed National Outcomes for Integration, specifically, supporting people to look after and improve their own health and wellbeing, live in good health for longer, live independently at home and maintain or improve the quality of their lives. Whilst it is acknowledged that all falls cannot be prevented, this guideline contains evidence-based interventions that should allow staff to identify and manage risk as effectively as possible.

1.2 Drivers for Change

The Acute Adult programme of the Scottish Patient Safety Programme run by Health Improvement Scotland, aims to contribute to a significant reduction in harm and mortality to acute adult inpatients. The falls subgroup of this programme aims to reduce falls and falls with harm in inpatients by 20% and 30% through the implementation of a national guidance and change package illustrated by the Falls Driver Diagram.⁷ However, falls remain a common cause of harm to patients in an acute setting, with falls being the cause of approximately 1/3 of all reported safety incidents. Over 2000 falls are reported across Scotland's hospitals every month and approximately 250,000 falls are reported nationally (UK) every year. Each health board has to report to HIS the rate of falls and falls with harm per 1,000 bed days.

Because falls are so important the Scottish Government has outlined national standards and targets for improvement. For acute settings, the Scottish Patient Safety Programme identifies and describes key indicators for improvement within NHS GGC Care Assurance Standards to ensure and assure safe/effective and person centred care is delivered. Care Assurance Standard 2 covers falls prevention and management.⁷

1.3 Definitions

Definition of a fall

"A sudden unintentional change in position, causing one to land on a lower level, or on an object, the floor, or the ground".⁸

Definition of a fall with harm

"Any instance where a fall with harm is identified. Harm will be where another secondary care intervention is necessary (steri-strip, suture, and/or management of dislocation, fracture, head injury, death), and/or a patient has fallen and received harm or injury requiring radiological investigation (x-ray, ultrasound, MRI or CT) with a confirmed harm (SPSP 2012)" NB occurrence of a radiological investigation should not lead to an automatic categorisation of 'harm' (harm must be confirmed by the investigation). Minor harms (e.g. grazes, light bruising, small cuts) would be excluded.

Definition of a serious fall

A fall resulting in a fracture or head injury or a fall resulting in death.

Note – if a person deliberately places themselves on the ground, this is not classified as a fall.

Falls Risk

2.1 Risk Factors

There are many known risk factors for falls. ⁹ The main ones are listed below:

- Increasing age in later years in adulthood.
- Physical Illness (e.g. infection, acute illness).
- Impaired gait and balance - neurological conditions (e.g. stroke, Parkinson's); joint conditions (e.g. arthritis, joint replacements); foot conditions (e.g. ulcer, overgrown toe nails); sensory impairment (e.g. neuropathy); vestibular conditions (e.g. Benign Paroxysmal Positional Vertigo).
- Syncope or pre-syncope (e.g. cardiac arrhythmia, aortic stenosis).
- Postural hypotension.
- Previous injury/fracture.
- Polypharmacy.
- 'At risk' drugs (e.g. antidepressants; sedatives; neuroleptics).
- Cognitive impairment (e.g. dementia, delirium).
- Depression.
- Generalised anxiety.
- Specific fear of falling and activity restriction on the basis of anxiety.
- Visual/Hearing problems.
- Nutrition & hydration.
- Weight loss.
- Lifestyle – alcohol/drug abuse.
- Prolonged bed rest.
- Incontinence.
- Environmental factors (e.g. bed rails, seating, lighting, uneven surfaces).
- Inappropriate footwear or clothing.

Osteoporosis and falls risk are integral to fracture prevention and therefore cannot be considered in isolation of each other. Regardless of a patient's falls history, staff must act in a proactive manner to address any known or identified falls risk factors.

2.2 Falls Risk Assessment

Falls prevention including self-management, general safety precautions and patient specific interventions must be discussed with the multi-disciplinary team, patient, and relatives / carers. Involvement of relatives / carers and the multi-disciplinary team is particularly important for those patients with cognitive impairment as they may be unable to retain information themselves.

All interventions considered and / or implemented must be documented in the patient record. It must be acknowledged that promotion of a patient's liberty and independence should be balanced against the associated risk of falling; therefore any intervention must take into consideration these competing priorities. **See appendix for In patient falls risk**

Falls Prevention Specialist Equipment

Specialist equipment can be used to assist in providing individual care to people who have fallen, or are at risk of falling. The use of this equipment – specialist seating, lap straps, bed and chair alarms, and bedrails is classified as a form of mechanical restraint and as such, must be individually assessed and continually reviewed by the multi-disciplinary team. Restraint must be carefully considered in the context of patient safety and the human rights and dignity of the individual and taking into consideration capacity/consent. ^{10,11}

3.1 Staff Responsibilities

Staff involved in delivering patient care utilising mechanical restraint equipment must:

- Have had prior training, and understand the safe use and fitting of that particular piece of equipment and any accessories.
- Ensure that capacity and consent are considered in line with AWI/MHA
- Have documented the rationale for the use of mechanical restraint equipment.
- Ensure that the continuing use of mechanical restraint equipment is regularly assessed by the multi-disciplinary team and all decisions taken are documented.
- Ensure that carers and next of kin, where appropriate, understand the rationale for using the equipment and accessories.
- Ensure equipment and accessories are in good working order and are checked regularly.
- Ensure equipment and accessories are clean.
- Report any incident involving equipment and accessories.
- Remove and report faulty equipment.
- Report and discuss any shortfall in equipment availability with senior staff.

3.2 Decision Making

Patients must be assessed individually to ensure that the most appropriate form of equipment or accessory is chosen. Staff should use their professional judgement to assess the risks and benefits for individual patients, and patients should be involved in decision making when they have the capacity to do so. When patients do not have the capacity to participate in these decisions, staff must attempt to involve the welfare Power Of Attorney or welfare guardian, ensuring that decision making processes uphold the principles of AWI/MHA. It is also good practice to involve relatives/carers in these decisions.

The decision to use specialist equipment for an individual, and the reasons for doing so, must be agreed and reviewed regularly by the multi-disciplinary team. All decisions taken must be recorded in the patient record and the care plan updated accordingly. This information must be easily accessible to all relevant staff caring for the patient.

3.3 Seating



All patients must be assessed for suitable seating as part of their falls risk assessment and care planning. The initial assessment can be done by any member of the multi-disciplinary team. Safe seating has lots of advantages for patients including prevention of falls, pressure ulcers, deconditioning and prevention of other bed rest related issues e.g. constipation etc. Wherever possible patients should be assisted or encouraged to sit in a chair for all meals and this will allow for the optimal physical position for safe swallowing, eating and drinking.

The following must be considered when a patient is sitting out of bed:

- Seat should be wide enough to support body mass but not too wide that it might cause the patient to lean to one side of the chair, thereby disrupting spinal alignment.
- Seat depth and height are correct when the patient's bottom is at the back of the chair and their feet are flat on the floor. The patient's knees and ankles should be at 90 degrees. The seat should fully support the patient's thighs but not touch the back of the knees.
- The patient should be able to support their head and neck themselves or the chair back should be high enough to support the head and neck when required.
- Shoulders should not be hunched when arms are on the armrests.
- The base of the chair should be firm.
- The patient should feel comfortable.
- The patient's pressure ulcer risk and repositioning requirements.
- The length of time a patient has been sitting for. A patient may fatigue whilst sitting for an extended period of time and may require a change of positioning or seated time broken up by rest periods.
- Drinks, personal belongings and call buttons, where used, must be accessible to the patient.

Care must be taken when additional pressure relieving cushions are used. Re-assessment of the suitability of the patient's seat with cushion in situ must take place. Pillows must not be used to sit on.

3.4 Specialist seating



Patients must have a multidisciplinary review by Occupational Therapy and/or Physiotherapy to consider the use of specialist seating when:

- The available standard chairs do not fit the patient according to the above recommendations.
- The patient cannot maintain their own posture in the chair.
- The patient frequently slips out of the chair.
- The patient complains of discomfort related to the chair.

Do not use pressure relieving cushions in conjunction with specialist seating as the cushion may alter the seat height, and make the seat unsuitable for the person.

Where appropriate seating is not available then please escalate to clinical manager and contact moving and handling.

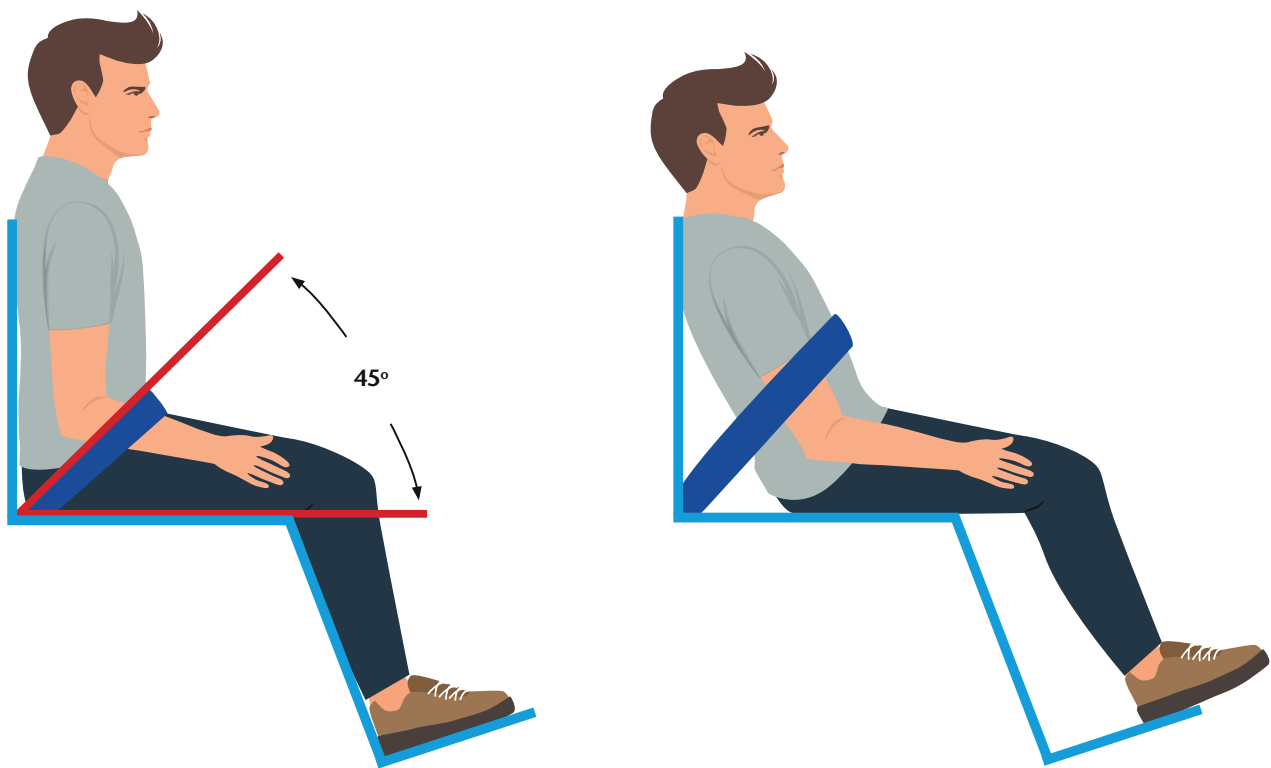
3.5 Lap straps



To promote patient safety it may be necessary to manage the patient's care through the use of specialist seating with personalised adaptations, which may involve the application of a pelvic, lap, seat or waist belt and also straps or harnesses. Lap straps should not be commonly used and should only be used where other options are not appropriate.

Patients must be assessed individually to ensure that the use of lap straps is the most appropriate and least restrictive method of preventing potential falls from a chair.

Patient safety may be compromised if lap straps or seating accessories are used improperly. For safe use of a lap strap, patients must be able to sit at or near to a 90 degree angle (see Figure 1). A poorly fitted or poorly adjusted belt may lead to the patient slipping down and possibly out of the seat (see figure 2). Users or carers with poor co-ordination or limited strength in their hands may find it difficult to operate some types of fastening/release or adjustment mechanism.



3.6 Bed and Chair Alarms



To promote patient safety it may be necessary to manage the patient's care through the use of a bed and/or chair alarm. These alarms are usually a pressure sensitive mechanism encased in a plastic pad that detects patient movement as the individual attempts to rise up off the pad. This action triggers an alarm noise.

Bed and chair alarms are thought to have a part to play within the multifaceted approach to falls prevention, although there is no evidence base for their use, or recently published studies on their efficacy. However, they can serve as an "early warning system" alerting staff when patients attempt to leave their bed or chair unassisted. To be effective, they need to be implemented with care and with a clear understanding of their limitations.

Bed and chair alarms are not used in all inpatient areas. If using bed and chair alarms please adhere to the following guidance.

Prior to prescribing a bed or chair monitor. Please consider the patients suitability for this equipment. Bed and chair monitors are **not suitable for all patients. For guidance on this please see flowchart in appendices.**

When not to use a bed and chair monitor alarm

- When you will not be able to hear or respond to the alarm.
- The patient is distressed and is getting up frequently.
- If the patient will become distressed with the noise of the monitor alarm or equipment.
- If other patients in the room will become distressed with the monitor alarm.
- If the patient is likely to interfere with any part of the monitor.
- The patients skin integrity is likely to be compromised – Will the monitor act as a barrier to the effectiveness of the pressure relieving equipment?
- The monitor has exceeded the expiry date or any part of the equipment is damaged.

Criteria for prescribing a bed and chair monitor alarm

- The patient is considered to be a high falls risk.
- The patients mobility assessment shows that their bed and/or chair transfers are unsafe.
- The patient is likely to get up unattended without assistance or buzzing for help.
- The patient is not distressed or restless and not likely to get out of bed or chair on a frequent basis.
- The rationale for use has been discussed with the patient or relative or carer, if appropriate.
- The patient, their relative or carers should be provided with the **NHSGGC Bed & Chair monitoring leaflet. See Appendices NB: The Nurse in Charge will advise on where to access a Bed & Chair Monitor.**

A bed or chair monitor is requested but unavailable or unsuitable for the patient

The following interventions should be in place:

- Update the patient falls risk assessment / interventional checklist and care plan.
- Assess the patient safety needs in relation to the level of observation required.
- Prescribe hourly care rounding interventions.
- **A patient monitoring chart** should be in place to monitor and record any risk taking. Evaluate the patient's safety needs using the information from the patient monitoring chart and update this chart every 2 hours.
- If possible move the patient to an **area of high observation**.
- If possible **cohort the patient with other patients at high risk of falling** where there will be **constant observation**.

Patient monitoring and documentation to be in place when bed and chair monitors are in use

Patients prescribed bed and chair monitors require a high level of observation:

- Prescribe one hourly care rounding interventions.
- **The patient care plan** should clearly detail the rationale for using the bed and chair monitor and this should be reviewed on a daily basis.
- **A patient monitoring chart** should be in place. Update this chart **two hourly** and evaluate safety interventions.
- All staff should be aware that the bed and / or chair monitor is in place. Discuss the patients falls risk at **safety briefs and MDT meetings**.

Follow the manufacturers instructions on how to use the monitors, including:

- If using both bed and chair monitors, please ensure the appropriate connection from either bed or chair is plugged into the port found on control box.
- **Before use**, check the monitor has not expired (See expiry date).
- **If the alarm** is not working or staff suspect it isn't functioning properly **remove from use immediately** and review the patients level of observation and safety interventions.
- Alarms should be checked to ensure that they are undamaged and power supplies are patent. The equipment safety checks should be recorded on the **patient monitoring chart**.
- **Complete a DATIX report** if any faults are found with the bed and / or chair monitor.
- The equipment should be cleaned in conjunction with the manufacturers instructions and NHSGGC Infections Control Guidelines.

3.7 Bedrails



Patients may be at risk of falling from bed for many reasons including impairments in physical, cognitive and functional abilities. Bedrails are designed to reduce the risk of patients accidentally slipping, sliding, falling or rolling out of bed. Bedrails will not prevent a patient leaving their bed and falling elsewhere, and should not be used for this purpose. Bedrails are not intended as an aid for a patient to manoeuvre him / herself e.g. sitting forwards in a bed, rolling over etc (unless specifically identified in the bed manufacturers user guide that this is an appropriate use of the bedrail).

There is some evidence to suggest that bedrail use may increase the risk of serious injury if patients attempt to climb over them to exit the bed, or become entrapped within the rails.¹² Hence use of bedrails must be individually assessed and continually reviewed by the multi-disciplinary team, with decisions made always taking into account the benefits and risks for the individual patient.¹⁴

3.8 Definition of a Bedrail

Bedrails can be classified into two different types:

- Integral types - these are incorporated into the bed design and supplied with / or offered as an optional accessory by the bed manufacturer, to be fitted later.
- Third party types - these are not specific to any particular bed model. They are attachable and detachable and intended to fit a wide variety of metal framed beds from different suppliers.

3.9 Where to Use Bedrails?

| Where to Use | Where NOT to use |
|--|---|
| <ul style="list-style-type: none">• When prescribed as part of care planning to prevent slipping, sliding, falling or rolling from the bed.• If the patient is being transported on their bed or trolley.• In areas where a patient is under the influence of / recovering from anaesthetic or sedation and is under constant observation. | <ul style="list-style-type: none">• When not prescribed as part of care planning.• As an aid for a patient to manoeuvre him/her self in bed (<i>unless specifically identified in the bed manufacturers user guide that this is an appropriate use of the bedrail</i>).• Where there is a risk of the patient climbing over or through the bedrail.• As a method of restraint. |



3.10 Bedrails Risk Assessment

Staff should use their professional judgement to consider the risks and benefits for individual patients by referring to the information on the back of the Bedrails Risk Assessment. A patient / carer information leaflet is also available to facilitate discussion.

The assessment of whether to use bedrails must be reviewed when the patient's:

- Physical condition changes and this change may affect risk of slipping, sliding, falling or rolling from the bed (e.g. new stroke).
- Cognitive or safety awareness changes which may affect the safe use of bedrails (e.g. increased agitation and attempts to climb over the bed rails).
- Care environment and or care provision changes (e.g. the patient moves wards or between sites).

As a minimum requirement, bedrails assessment must be reviewed:

- On admission within 24 hours.
- Weekly in all acute and rehabilitation areas.
- Monthly in long term care areas.
- If the care environment or care provision changes.
- After an in patient fall

Bedrails can only be used without the need for **formal** risk assessment in the immediate pre and post operative period when sedative or anaesthetic medication has been administered, or when the patient is sedated / anaesthetised within an intensive care setting (Level 3) and one to one nursing care is provided. Formal assessment is not required when bedrails are used for the transportation of patients between areas. Informal assessments of bedrail use should continue until the patient is fully conscious.

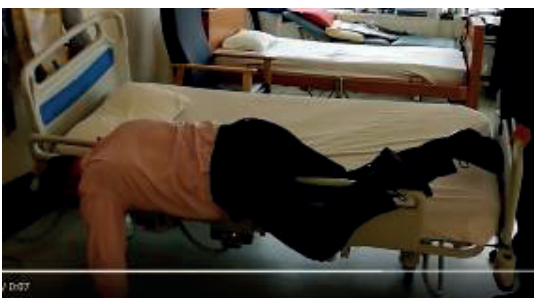
For Patients Pre and Post Surgery/ Procedure/ Transportation who are known / suspected to have ongoing personal safety needs i.e. patients with mobility or cognitive health issues - a Risk Assessment document **MUST** be completed and reviewed as per the bedrail policy.

3.11 Potential Hazards



Patient safety may be compromised if bedrails are used improperly. As such, careful consideration must be given as to the need for their use in addition to the many other possible interventions available to reduce falls risk.

Possible hazards include entrapment of a limb or body part, injury from falling over rails, or suffocation on padded accessories (eg. bumpers). In addition there is the risk of the bed tipping onto its side if a patient attempts to climb over the bedrails whilst the wheels of the bed are pointed sideways (see diagram below).



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Risk of bed tipping onto side.



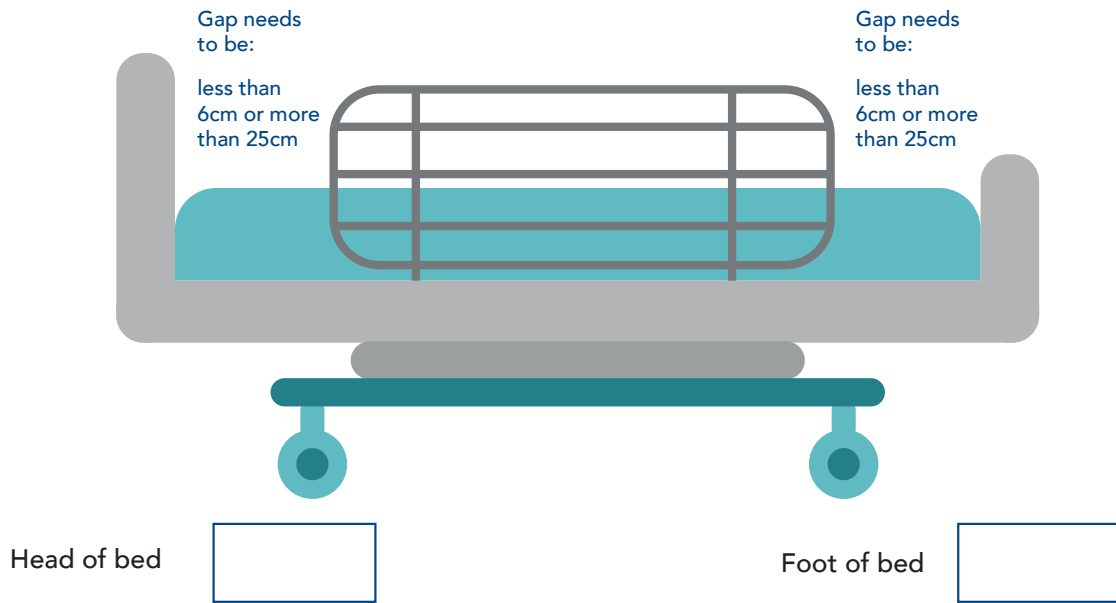
Wheels as seen from the end of the bed.

Repeat the risk assessment and update the care plan if any such hazards are present. Be aware that wires and cables attached to equipment can become damaged or disrupted by bedrail use (e.g. call buzzer detachment from socket).

To help avoid hazards, consideration must be given to the following:

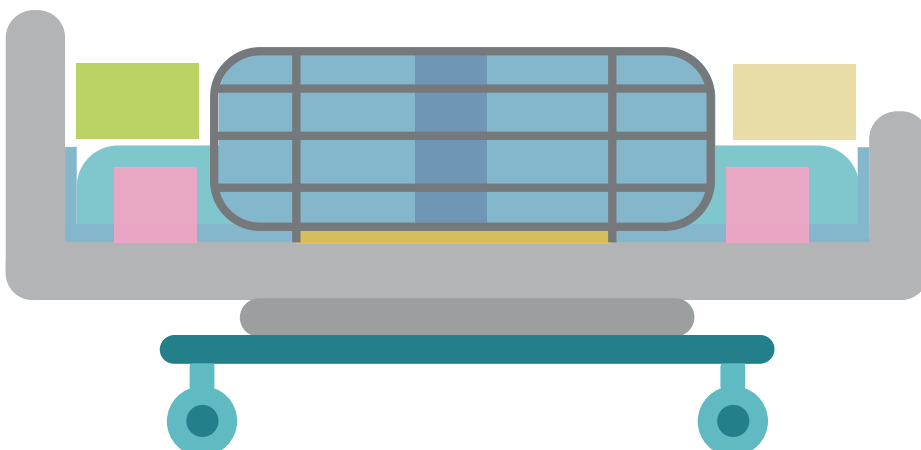
1. Patient and Bed Size:

- The size and shape of the patient’s head and body. Unusual patient head or body size or shape (e.g. wearing bulky dressing, head and neck braces) may lead to entrapment.
- The overall height of the mattress in relation to the bedrail height. Tall mattresses may lead to patients rolling over the bed rails. Extra height bedrails must be used.
- Bumpers may reduce the risk of the patient striking their limbs on the bedrail. However, there may be risk of suffocation if the face becomes compressed against the bumper.
- The gap between the head and foot of the bed in relation to the bedrail position must follow standard advice to avoid potential entrapment of the patient’s head, body or limbs - see figure below.



- After attending to a patient, ensure the bedrail is fully engaged to avoid the patient rolling over on top of it.
- Ensure the bed is returned to a height suitable for the patient after cleaning or care procedures.

Common areas for risk of entrapment

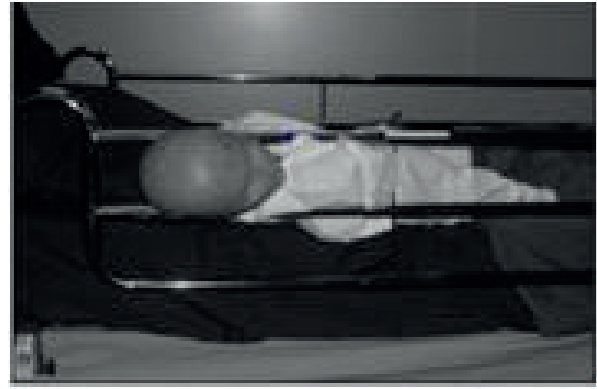


- Within Rails
- Between headboard and rail
- Between footboard and rail
- Between bottom of rail and mattress
- Between rail and bed base
- Between rail and bed base
- Between rail and other equipment

Examples of Hazards:



Head & body entrapment because insufficient gap left between head of bed and bedrails.



Entrapment due to unusual head size.

Head & body entrapment because bedrails applied inappropriately to the bed or not securely elevated.



Patient rolling over bedrails because extra height mattress used with normal height bedrails (extra height bedrails should have been used).

2. Bed Wheel Position:

- After moving a bed, ensure the wheels are pointing to the head or foot end of the bed. The easiest way to do this is to finish moving the bed by pushing it towards **or** pulling it away from the wall at the head end of the bed.
- Prior to working with a patient on the bed, check the wheels are pointing to the head or foot end of the bed - see figure below.

Wheels as seen from the end of the bed



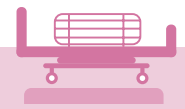
3. Using different bed types and trolleys:

- When using profile beds in different bed configurations, be aware of potential entrapment to limbs depending on the patient's body position.
- Bariatric beds must be used with a compatible extra-wide mattress.
- Trolleys are usually narrower and higher than standard beds and therefore can present additional hazards for the patient. Patients must not be left unattended on trolleys when bedrails are not in use.
- When patients are being transported on a trolley, bedrails must always be used.

3.12 Hi-Lo/Low Profile Beds



Some individuals are at risk of either slipping, sliding or rolling out of bed or getting up and walking unaided when it is not safe to do so. Others may become agitated if they feel restrained by the use of bedrails. Bed rails should not be used in these situations. Instead a Low Profile bed should be considered. Staff should consider that the use of these beds will impact the ability of the individuals to perform a sit to stand transfer.



3.13 Placement of Mattress on the Floor

The decision to nurse a patient on a mattress on the floor should only be taken when all other interventions to keep them safe in bed (including the use of a low level bed) have been exhausted. Placing a mattress on the floor must be done for the least amount of time possible. Patients must be assessed individually to ensure that this is the most appropriate method of preventing potential falls from bed. Staff should use their professional judgement to assess the risks and benefits for individual patients. Patients should be involved in decision making when they have the capacity to do so.

The decision to place a mattress on the floor must be:

- Discussed and agreed with all relevant parties (eg. the patient, senior medical staff, registered nurse /midwife, staff, and AHP) as soon as practicable. When patients do not have the capacity to participate in these discussions, staff must attempt to involve the welfare Power of Attorney or welfare guardian. It is also good practice to involve relatives/carers in these decisions. The outcome of the discussions must be documented in the patient record.
- Documented in the nursing care plan.
- Reviewed daily.
- Accompanied by a Moving and Handling risk assessment. This must be reviewed daily.

The following must be taken into account when placing a mattress on the floor:

- The placement of the mattress on the floor must be done in a way which is not demeaning to the patient.
- The mattress must be placed in a bed space.
- The nurse call button, if in use, must be beside the patient at all times.
- Drinks and personal belongings must be accessible to the patient.
- A generic risk assessment should be completed to ensure the environment immediately around the patient is made safe for the patient and staff. Care must be taken when placing call buttons, personal belongings, drinks, equipment etc.

For further information on bed rails and alternatives please see the MHRA Safe Use of bed rails guidance.

 **Bed rails: management and safe use - GOV.UK (www.gov.uk)**

Interventions

4.1 Orthostatic Hypotension

Orthostatic hypotension (where blood pressure drops after standing up from a lying or sitting position) is a recognised risk factor for falling.

Patients with this condition may describe upon rising up and/or moving, symptoms of light-headedness, unsteadiness, nausea, blurring or tunnelling of their vision and sometimes an ache across their neck and upper back. If a significant drop in blood pressure on standing is confirmed, modification of the patient's lifestyle factors and prescribed medications can improve symptoms and reduce falls risk.¹⁵ Current guidance suggests that a lying and standing Blood Pressure measurement should be carried out in the following circumstances:

- *anyone 65 and over admitted to hospital
- *anyone admitted with a fall
- *anyone who has an inpatient fall

There may be circumstances where this is not possible or appropriate such as when a patient is at end of life or is unable to stand due to injury etc. This should be documented in the patient record.⁹

4.2 How to Measure Lying and Standing Blood Pressure (BP)

The following method must be used to accurately measure postural BP changes:

- Have the patient lying flat for at least 5 minutes and then take a BP measurement.
- Record this as the 'Lying BP'.
- Stand the patient up as briskly as possible and take a BP measurement immediately.
- Record this as 'BP standing 0mins'.
- Keep the patient standing and take repeated BP measurements at 1, 2 and 3 minutes.
- Record these measurements as 'BP standing 1min', 'BP standing 2mins' and 'BP standing 3 mins'.

Any symptoms experienced by the patient must be recorded. If the patient remains symptomatic or the BP continues to fall at 3 minutes, then further BP measurements whilst standing should be attempted until BP normalises.



Falls and Fragility Fracture Audit Programme



How to measure a lying and standing blood pressure (BP) as part of a falls assessment

1. Identify if you are going to need assistance to stand the patient and simultaneously record a BP.
2. Use a manual sphygmomanometer if possible and definitely if the automatic machine fails to record.
3. Explain the procedure to the patient.

| Position | Time | Action |
|----------|------------|--|
| Lying | 0 min | Ask the patient to lie down for at least five minutes. |
| | 5 mins | Measure the BP. |
| | 0 - 1 mins | Ask the patient to stand up (assist if needed). Measure BP after standing in the first minute. |
| Standing | 3 mins | Measure BP again after patient has been standing for three minutes. |
| | | Repeat recording if BP is still dropping. |
| | | In the instance of positive results, repeat regularly until resolved. If symptoms change, repeat the test. |

Notice and document symptoms of dizziness, light-headedness, vagueness, pallor, visual disturbance, feelings of weakness and palpitations.

Advise patient of results and if the result is positive:

- a. inform the medical and nursing team.
- b. take immediate actions to prevent falls and/or unsteadiness.

A positive result is:

- a. A drop in systolic BP of 20mmHg or more (with or without symptoms).
- b. A drop to below 90mmHg on standing even if the drop is less than 20mmHg (with or without symptoms).
- c. A drop in diastolic BP of 10mmHg with symptoms (although clinically less significant than a drop in systolic BP).

4.3 Definition of a Significant Blood Pressure Drop

Orthostatic Hypotension is present when following a postural change there is:

- a ≥ 20 mmHg drop in systolic BP levels,
- or ≥ 10 mmHg drop in diastolic BP levels,
- or a drop of the systolic BP to <90 mmHg.

Lesser drops in BP, particularly from low baseline measurements, may also be significant especially when symptoms or signs are present. In older people orthostatic hypotension is often an intermittent finding and tests may need to be repeated.

Results should be recorded on the lying/standing blood pressure chart.

LYING / STANDING BLOOD PRESSURE CHART
Lying and Standing Blood Pressure (BP) measurement is a key intervention in falls prevention and management. It is best checked in the early morning.

Please check Lying and Standing BP as follows:

1. Lay the patient flat for at least 5 minutes. Take BP and record in 'L' column below.
2. Stand the patient up. Take BP and record in the '0 minutes' column below.
3. Keep patient standing for 3 minutes. Take BP at 1 minute and 3 minutes of standing and record in the appropriate columns below.
4. Record any patient symptoms at each BP measurement and record below. (eg. feels faint, dizziness, light-headedness, nausea, vomiting, unsteadiness, visual disturbance, loss of consciousness).

Date: _____ **Time:** _____ **Date:** _____ **Time:** _____ **Date:** _____ **Time:** _____

| BP | L | | | S (minutes) | | | L | | | S (minutes) | | | L | | | S (minutes) | | | BP |
|-----|---|---|---|-------------|---|---|---|---|---|-------------|---|---|---|---|---|-------------|---|---|-----|
| | 0 | 1 | 3 | 0 | 1 | 3 | 0 | 1 | 3 | 0 | 1 | 3 | 0 | 1 | 3 | 0 | 1 | 3 | |
| 250 | | | | | | | | | | | | | | | | | | | 250 |
| 240 | | | | | | | | | | | | | | | | | | | 240 |
| 230 | | | | | | | | | | | | | | | | | | | 230 |
| 220 | | | | | | | | | | | | | | | | | | | 220 |
| 210 | | | | | | | | | | | | | | | | | | | 210 |
| 200 | | | | | | | | | | | | | | | | | | | 200 |
| 190 | | | | | | | | | | | | | | | | | | | 190 |
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| 80 | | | | | | | | | | | | | | | | | | | 80 |
| 70 | | | | | | | | | | | | | | | | | | | 70 |
| 60 | | | | | | | | | | | | | | | | | | | 60 |
| 50 | | | | | | | | | | | | | | | | | | | 50 |

Symptoms: _____

Symptoms: _____

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4.4 Postural Hypertension

The underlying cause for postural hypotension should be investigated and treated where possible. The patient/carer must be educated on strategies that can help them self-manage their symptoms and reduce their risk of falls associated with these. A leaflet is available to assist with these discussions. [Dropping Blood Pressure NHS Glas Cly.pdf \(bgs.org.uk\)](#) Please also see the resource below for details on self-management strategies.

Orthostatic Hypotension

This poster provides information and advice for patients who experience symptoms due to a drop in blood pressure on standing. This is called Orthostatic Hypotension (OH).

- 1 What is orthostatic hypotension?**

When we sit or lie down, blood pools in the legs.

If you have OH, the body is slower to push the blood back up to the brain when you stand.

This may cause dizziness or light-headedness. It can cause falls and/or blackouts in some people.

It is therefore important to take care when you stand up.

Symptoms are often worse in the morning or overnight so take care at these times.

Lots of medications can cause OH, your doctor will review this.

Useful resources:
Orthostatic Hypotension Patient Information Video
- 2 What should I do to stop symptoms?**

Fluids
Stay well hydrated. A glass of water before standing can boost the blood pressure.

Exercises
Fist, buttock and calf clenching exercises. Crossing and uncrossing your legs. Try these before standing up.

Changing Position
Avoid sudden standing from a bending or stooping position. Take your time!

Meals
You may find that your symptoms are worse after a big meal. If so, try eating smaller, more frequent meals.

Heat
Avoid over heating as this can lower your blood pressure.

Alcohol
Avoid excess alcohol as this drops your blood pressure.
- 3 What should I do if I get symptoms?**
 - 1 Sit down immediately.
 - 2 Clench and unclench your fists. Squeeze your muscles in the legs and buttocks. This helps the blood flow back up to the brain.
 - 3 If symptoms persist lie down flat if possible.
 - 4 Get up cautiously when you feel well again, but if you have further symptoms, be prepared to sit down promptly.
- 4 What your doctor may do?**

Sometimes compression stockings or medical corsets are used to stop blood collecting in legs and pelvis. Your doctor may discuss this with you.

4.5 Contenance



There is good evidence to support the link between incontinence and falls. Many falls in hospital can be linked to toileting, either happening in the bathroom itself or related to trying to access the bathroom. It is reported that approximately 10% of in patient falls occur unwitnessed in bathrooms.¹⁶

There are several possible reasons for this including:

- Urge incontinence can lead to someone rushing to the toilet leading them to take risks/lose their balance.
- If a person is incontinent due to suffering from a UTI this can cause delirium, drowsiness and hypotension each of which can be a contributing factor to falls.
- Patients may not wish to bother staff or wait for a staff member to assist and may take risks trying to access toileting facilities themselves.
- Patients with a cognitive impairment many not be able to use the nurse call bell to call for assistance when assistance is required.
- Using unfamiliar toileting facilities can lead to slips/trips/confusion.

Having effective methods for assessing continence issues and putting in individualised care plans can assist with preventing falls. Some strategies include:

- Ensuring patients are adequately hydrated and discourage caffeinated drinks.
- Ensuring bowels are moving regularly.
- Offering regular opportunities to go to the toilet e.g. during Care Rounding - this should be done by all members of the ward team.
- Adequate supervision in bathroom areas.
- Environmental considerations such as adequate signage and lighting.¹⁷

It should be noted that a high frequency of care rounding i.e. one hourly should be put in place for people with a cognitive impairment and continence problems.

4.6 Delirium/Cognitive Impairment



Delirium is defined as an acute onset syndrome with disturbance in attention, awareness and cognition. It can be caused by a number of things including, infection, constipation, urine retention and medication changes. It is treatable, but in order for effective management it must be identified early. There are differing types of Delirium including Hyperactive and Hypoactive. Delirium can last a few hours or as long as several weeks or months. It can fluctuate. This is a common condition in in-patient settings with approx. 20% of older adults presenting to hospital suffering from a delirium. This percentage increases within DME wards and ICU's.¹⁸ It can also worsen existing cognitive impairment/dementia symptoms. There is evidence that patients who fall during their stay in hospital are often demonstrating signs of delirium at the time or 1 day prior to the fall. It has also been shown that improving delirium awareness/identification and treatment can reduce in patient falls rates.

In GG&C the tools that are used to detect delirium are an instrumental part of the falls risk assessment process these include:¹⁹

- The SQID (Single question in Delirium): Is your patient more confused/drowsy than normal. This is embedded within the care rounding documentation.
- The 4AT and TIME bundle. Completion of this is prompted through the Falls risk assessment paperwork.

People living with dementia are also at risk of falls in our hospitals. There are several reasons for this from physical changes, visual and visuospatial issues as well as cognitive issues. In order to deliver the best personalised care the "Getting to Me" document should be filled in with the patient and family/carers.

Stress and Distress is a collective expression for a number of behaviours that can lead to an individual being more likely to fall. This may include – anxious or agitated behaviours such as "calling out" etc. It can often be an indicator of underlying causes such as pain, frustration or postural BP. If a patient is at risk of or displaying stress and distress then staff should develop a person centred care plan for stress and distress which should include commencing a Patient Monitoring chart.

Some strategies that staff can take whilst caring for someone with delirium/living with dementia are listed below:

- Try to keep their environment quiet and calm, encourage them to get up in the chair during the day and ensure that they are well hydrated and are eating properly.
- Minimise unnecessary moves whether that is bed space, ward or cross site. It is also recommended that transfers do not occur during the night as this can increase disorientation.
- Make sure they have access to their sensory aids e.g. glasses or hearing aids.
- Where possible try to involve family or friends, reassure and try and orientate them to time and place.
- Reading familiar books or letters, playing calming music can lessen agitation and requesting familiar items from their home e.g. picture or pillow can help them feel safe.

Further guidance on the identification and treatment of delirium can be found in SIGN 157.²⁰

🌐 **Risk reduction and management of delirium (sign.ac.uk)**

🌐 **A guide to Delirium Care in the time of COVID-19 (840) (nhsggc.org.uk)**



4.7 Enhanced interventions

There are many circumstances where patients may require an enhanced level of observation from either a registered nurse / midwife or healthcare support worker. In relation to the risk of falls these are:

- The patient has a Cognitive Impairment/Delirium and is in need of additional supervision or support to reduce potential risk when mobilising.
- The patient has had multiple falls during hospital admission.

For further guidance on the use of and appropriate processes to follow please refer to the

🌐 **Guidelines for the Observation of Patients with Acute Behavioural Disturbance in Acute Division Wards**

This guideline is in the process of being updated.

4.9 Footwear



Many people are admitted to hospital without any footwear or with footwear that may be unsafe. It is important that an assessment of footwear and foot health is carried out on admission.

In accordance with [NHSGGC Footwear guidance](#) the features of a good fitting shoe:

- Laces or Velcro fastening to allow for changes associated with swollen foot or ankles or dressings.
- Sufficient width and depth in the toe area.
- Ample width and length fitting.
- Natural material if possible e.g. leather to absorb sweat, odour.
- Broad heel stable base – no stilettos.
- If possible no seams particularly inside the shoe where harm can occur e.g. Corns, callous.
- If possible always choose shoes instead of slippers.

As temporary measure Non-Slip socks may be used until suitable footwear is available.

- They are not intended to be worn as socks under footwear
- The correct size must be used (see manufacturer's guidelines)
[BRO_Falls_prevention_ML688_EN_Feb_2022.pdf](#)
- Not suitable for leaking legs/wounds or poor circulation
- On occasion, Non –Slip Socks may be suitable for patients who:
- Do not have suitable footwear
- Frequently get out of bed at night and walk without slippers
- Remove their shoes during the day

If suitable footwear is not available contact the patient's next of kin to supply them, this is an important part of falls prevention and for rehabilitation. This is particularly important if a patient normally wears adaptive footwear, the absence of which could greatly reduce the patient's ability to mobilise safely. The [NHSGGC Footwear guidance](#) offers further advice on safe foot wear.

4.10 Foot care



Problems with feet and painful feet may lead to an increase in falls risk. This is because good foot and ankle health is key in establishing and maintaining the bodies balance. Simple foot problems can affect a patients walking pattern due to pain and altered biomechanics. Additionally systemic conditions can alter the feeling in patient's feet which can affect the ability to feel their feet on the ground, therefore making quick response for good balance difficult. During regular foot hygiene staff should monitor foot health including skin condition, nails and sensation. There are educational resources to help support [personal footcare](#) and the recognition of red flags. Where red flags such as pressure damage presents please refer appropriately using trakcare. Where swelling is an issue patients should be encouraged to elevate their legs when sitting but also complete simple circulatory exercises such as circling of feet, up and [personal footcare](#) advice should be offered as necessary to patient, family members or carers.

4.11 Vision and Hearing loss



Changes to eyesight such as visual acuity, contrast sensitivity, depth perception and visual field changes can all increase the risk of falls.²¹ The falls risk assessment prompts staff to assess if glasses are worn, to check that they are available, are clean and in use. Be aware that certain types of glasses such as bifocals can affect a patient's risk of falls when walking and completing stairs.

Check whether patients are able to see any signs clearly and be aware that if they have any deficits in their peripheral vision that this can affect the ability to detect obstacles.

Ask when they last had their eyes checked (it is recommended that anyone over the age of 65 should have their eyes tested once/year), and if you have any concerns relating to vision or eye health then report this to medical staff. Vision assessment should be undertaken to determine whether or not a patient has any vision impairment. The RCP have a bedside vision tool that can be used to do this.



Staff should ensure belongings are close to hand as this will prevent patients over reaching and ensure environment is clutter free. If a patient is unable to use the nurse call bell due to visual impairment there should be an increase in care round frequency to address their needs.

Hearing loss is another factor that can lead to an increase in falls risk.²² It can also affect the ability of patients to understand advice given to them. For this reason consideration should be made to the method of information delivery and staff should endeavour to seek confirmation from the patient that they have understood the information being relayed to them e.g. talk back method.

If hearing aids are worn, they should be checked to confirm they are working and in use. If they are not working the battery may need replaced. If they don't have their hearing aids in then the patient's family/carer should be asked to bring them in where possible. For those who use British Sign Language (BSL) an interpreter should be used. If there are any concerns with regards to a patients hearing then referral to audiology should be considered.

4.12 Medication



Consideration must be made to the medications being administered to all patients who are identified as being at risk of falling. There are several medications that can increase a patient's risk of falling, for example medications which can cause dizziness, drowsiness and low blood pressure, such as diuretics, anti-hypertensives, sedation, opiates and anti-psychotics.²³ There are also some medications that can increase the likelihood of harm from falls, for example steroids and anti-platelets. A review of medication should be undertaken with those who have been admitted with a fall or who sustain an in patient fall, take four or more medicines and/or those who take high risk medicines. There may be alternative medication that can be prescribed or where appropriate some medication may be de-prescribed. Consideration should also be made to whether there have been any recent changes to medication, the patient's compliance with medications, any side effects reported by patient and whether they are on any bone protection medication.

Any concerns should be discussed with ward pharmacist or medic.

4.13 Maintaining Strength, Balance and Function



Deconditioning is a complex process of physiological change following a period of inactivity, bedrest or sedentary lifestyle.

It can lead to the development of complications such as skin breakdown, pressure sores, confusion and fatigue. Many patients lose the ability to carry out routine daily functions like bathing, dressing, getting out of bed and walking, due to unnecessary bed rest. In addition by not getting dressed into day clothes people can become low in mood and demotivated, feeling like they should stay in bed all day and not actively take part in recovery programs. This inactivity can lead to up to 65% of older patients experiencing a decline in function during hospitalization putting them at an increased risk of falls, which can increase their hospital stay and have a detrimental effect on their discharge condition and destination.

Deconditioning in older people with frailty may start within hours of their lying on a trolley or bed, it is known that bed bound patients lose **1-5%** of their muscle strength every day they are in bed. Many patients spend up to 83% of their inpatient time in bed and a further 12% in a chair.²⁴ Studies have also shown that many older people walk only a few steps a day during their hospital stay.²⁵

4.14 Benefits of Activity



All staff can promote activity by:

1. Get patients up out of bed, especially for meal times.
2. Encourage patients to wear their own comfortable clothes.
3. Get patients moving whenever they possibly can - On completion of every care rounding contact patients should be encouraged where possible to at least stand up.
4. Where appropriate patients should be prescribed evidence based strength and balance exercises.
5. Patients should be encouraged to actively participate in personal care and ADL's.

Patients should be encouraged to get out of bed as soon as possible and appropriate during their hospital admission. Referral should be considered to physiotherapy and occupational therapy if there are any concerns about a reduction in mobility, ability to complete ADL's or if the patient has a history of falls. If a patient brings in their own walking aid then staff should check this for safety including checking ferrules for wear and tear. If patient normally requires a walking aid but doesn't have one on admission then one should be supplied at the first opportunity to encourage ability to move. Where there is concern with regards to safety with walking aid then a review by a physiotherapist should be requested. If a patient uses small aids at home to assist with their ADL's e.g. a long handled shoe horn or an "Easy Reach" efforts should be made where possible to have these available as this may help the patient maintain independence.

In NHS GG&C The Active Wards initiative is an AHP lead Quality Improvement Approach to encouraging physical and meaningful activity in our wards with the aim of supporting all staff to play a role in preventing our patients from becoming deconditioned.²⁶

Active Wards Principles

- All patients and those involved in their care are supported to understand the benefits of being active in hospital and on discharge.
- We take every opportunity to encourage patients to be physically active.
- We minimise environmental barriers to promote physical activity*
- We have a culture where enabling physical activity* is everyone's* responsibility.

Key

- * Everyone is defined as all staff groups, patients, carers, family, friends.
- * Physical Activity includes a wide range of energy expending activities involving body movement, the activity should be person centred and tailored to individuals needs.

NHS GGC Active Wards Principles Harvey et al. (2020)

The active wards principles are:

As an introduction a Learnpro module is available for staff to improve their knowledge of deconditioning and promotion of activity. Further information can be found ([🌐 active wards staffnet link](#)) Some areas will have dedicated Activity Coordinators and/or Volunteers who in addition to ward staff can have an instrumental role in encouraging activity, however, it is all staffs responsibility to encourage mobility.

4.15 Food, Fluid and Nutrition



Malnutrition and dehydration are individual risk factors for falls.

There is evidence to suggest that ensuring that patients have adequate food and fluid intake can reduce the risk.²⁷

To help prevent falls this should be included within regular care rounding as well as regular nutritional screening and implementation of MUST step 5.

Consider completing Learnpro modules for further learning on malnutrition (Specialist Subjects GGC 270-274).

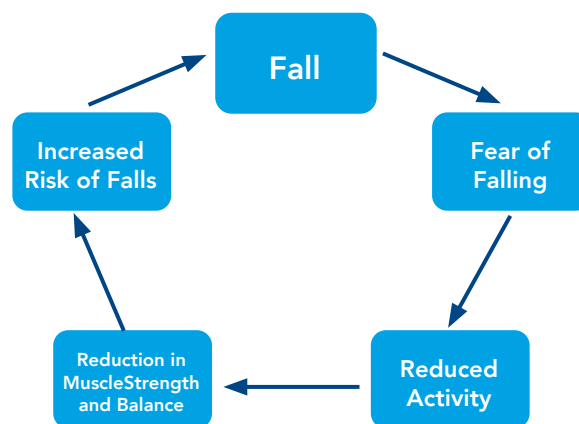
Other contributing factors to falls may include suboptimal glycaemic control and low Vitamin D levels. These should be monitored and discussed with appropriate members of the health care team.



4.16 Fear of Falling

It is not just physical injuries that must be considered. Falls can significantly impact on a person psychologically. With loss of confidence, fear of falling, anxiety/depression, social isolation / withdrawal and others being of real concern, as this can lead to increased dependency, delayed rehab and recovery and an increase requirement for health and social care services. This can in part be explained by the Cycle of Falling (see fig below). This cycle explains how the psychological impact of falls can result in physical changes that lead to a higher risk of falling again. It is therefore essential that we consider both the physical and psychological impacts so that this cycle can be broken. If a patient demonstrates a fear of falling during their stay then steps should be taken to address this. Having compassionate conversations and engaging patients in an active ward environment can help overcome these fears. However this should be considered during discharge planning.

4.17 Cycle of Falling



4.18 Environment



The hospital environment itself can contribute to falls risk in our patients. All staff should be responsible for monitoring and maintaining a safe environment for patients. Any concerns or hazards should be reported to ward management and/or estates. Ward layout and design should be considered when placing a patient who is at risk of falls in an appropriate bed space. Where a risk is not modifiable a risk assessment should be completed and mitigations put in place.

Common issues that can cause falls are:

- Lighting issues- dim lighting at night or glare from bright light can both contribute to falls.
- Spillages causing a slip hazard.
- Trip hazards such as – trailing wires, patient clothing, drip stands etc.



4.19 Patient Education

Assessing falls risk and implementing preventative interventions must always be completed where possible with the patient and/or their family/carers. It is important that patients themselves understand their risk of falling and in particular any increased risks as a result of being an inpatient e.g. unfamiliar environment, changes to health status etc.²⁸ Evidence shows that tailoring of advice is a more effective method for behaviour change therefore it is essential that individualised advice and information is discussed/issued.²⁹ This will allow the patient where possible to make informed decisions about their care and ensure they can play an active role in their recovery and rehabilitation. All adults at risk of falls who are admitted to our hospitals should be provided with a copy of the "Staying Active Avoiding Falls in Hospital leaflet" and this should be discussed with them and their family or carers. Other useful information resources should be highlighted as well.

These include:

- NHS Inform website  [Preventing falls | NHS inform](#)
- Up and about leaflet  [Up and about \(healthscotland.com\)](#)
- Falls assistant web resource  [Falls Assistant | Home](#)



4.20 Staff Education and Training

Ensuring that all staff have a good knowledge of falls prevention interventions is key to achieving the goal of reducing in patient falls.^{28,30} There are 6 Falls Prevention and Management Learnpro modules (listed below) which are mandatory for all clinical staff.

- GGC:215 An Introduction to Falls.
- GGC:216 The Falls Bundle of Care.
- GGC:217 Risk Factors for Falls (Part 1).
- GGC:218 Risk Factors for Falls (Part 2).
- GGC 219 What to do when your patient falls.
- GGC:221 Bedrails.

Compliance with these modules is monitored and reported regularly by the Health and Safety Team. Falls prevention is also part of the corporate induction programme and there are recorded presentations for both registered nurses/midwives and Healthcare Support Worker available on the Falls Staff Net Homepage.

Local training is also available from the Hospital Falls Prevention Team.

4.21 Falls Link Workers



A link Worker is defined in NHS GG&C as:

"A person that is, or is moving towards being a subject specific champion, a resource, improvement and monitoring person for an identified topic of practice or care"

This role can be undertaken by either a RN, HCSW or an AHP.

Specifically we expect Falls link workers objectives to be:

- Implement a falls information board.
- Implement a falls safety board.
- Compile a falls resource folder for the ward.
- Undertake audits and identify areas of improvement and undertake QI work.
- Raise awareness about falls prevention through education.

Specialist training sessions are provided by the Hospital Falls Prevention Team to all Falls Link Workers. There is a programme of training dates across all sectors.

Management of a Fall

5.1 Management of a Fall

Staff must assess the patient for any obvious signs of injury. If an obvious injury has been sustained, or the patient is distressed or in discomfort, then immediately refer to medical staff or Hospital at Night team (HaN) or the on call medical team for assessment. All assessments and interventions must be documented in the patient's record. See 6.2 for additional information.

Identifying those at risk of head injury³⁴

NICE have identified the following risk factors as increasing the risk of sustaining a brain injury. Please consider when assessing a patient post fall who:

- Are aged ≥ 65 years
- Have coagulopathy (history of bleeding, clotting disorder) e.g. those who are currently taking Anticoagulants/ Antiplatelets, those who have had recent or are currently receiving chemotherapy and patients with abnormal coagulation especially platelets less than 50.
- Sustained a Dangerous Mechanism of Injury e.g. Fall from > 1 metre or 5 stairs
- Show signs of an obvious head injury e.g. Laceration, Bruising, Loss Of Consciousness, Amnesia, 2 episodes of Vomiting or Seizure
- For further guidance on investigation of suspected head injuries please see Recommendations | Head injury: assessment and early management | Guidance | NICE

If a head / neck injury is suspected:

- The patient must not be moved.
- The patient must be immobilised until reviewed by medical staff / HaN staff.
- Registered nursing/midwifery must initiate observations to include:
 - respiratory rate, heart rate, blood pressure, temperature, oxygen saturations National Early Warning Score (NEWS2).
 - Glasgow Coma Scale.
 - pupil size & reactivity.
- Medical staff must examine the patient and commence investigations.
- The patient must only be returned to bed / chair after consideration of safe manual handling methods³¹.
- Neurological observations including the Glasgow Coma Scale must be recorded until the GCS is equal to 15 or equal to the patient's pre-fall score (if known). The minimum frequency for these observations must be:
 - half hourly for 2 hours,
 - then 1 hourly for four hours,
 - until no longer required as advised by medical staff,
 - any deterioration must be reported to medical staff and observations should return to half hourly.

If a fracture is suspected:

- In the lower limb – immobilise until a medical / HaN review is undertaken.
- In other areas - the patient must only be returned to bed / chair after consideration of safe manual handling methods³¹.
- Registered nursing/midwifery must initiate observations to include:
- respiratory rate, heart rate, blood pressure, temperature, oxygen saturations NEWS2.
- Medical staff must examine the patient and ensure an x-ray is carried out.

If no obvious injury has been sustained and the patient is not distressed or in any discomfort:

- The patient must only be returned to bed / chair after consideration of safe manual handling methods³¹.
- The patient must be reviewed by medical staff within 24hrs of the fall.

All falls regardless of severity or setting must:

- Prompt a review and update of the locally agreed risk assessment tool and person centred care plan.
- Be recorded in Datix in accordance with NHS GGC Incident Management Policy³².
- Be communicated to the multi-disciplinary team to enable management and intervention of falls risk.
- Be discussed with relatives / carers, taking into account individual patient circumstances.

5.2 Recognising a Hip Fracture



The possibility of a fractured hip should initially be considered for any patient with any of the following presentations:

- Pain reported in hip/groin or on palpation of lateral aspect of thigh, **and/or**
- New shortening and/or external rotation of the lower limb, see figures 1 & 2 **and/or**
- Unable to straight leg raise without or with additional resistance applied due to pain in leg anywhere from knee to hip.

If any of these symptoms are present a hip fracture should be presumed and patient should be moved off the floor using the Hoverjack as per post fall protocols. An urgent x-ray (AP pelvis and AP and lateral of affected hip) should then be organised.

As some hip fractures are not always immediately apparent post fall further monitoring should be carried out and if the patient demonstrates any of the following symptoms following being assisted off the floor or in the preceding days then x-ray must be considered.

- New pain in hip on mobilizing **and/or**
- Mobility deteriorated since fall, or reluctant to mobilise **and/or**
- Mobility changed/deteriorated since fall with a more asymmetrical or antalgic gait (inability to lift non-injured side-not able to weight bear on effected side).

Figures 1 & 2 - Shortening and external rotation of the lower limb.



The left foot is externally rotated.



The left leg is shortened

The Scottish standards of care for hip fracture state "Following clinical confirmation or diagnosis of a hip fracture, local protocols should ensure the efficient and safe transfer of the patient to an orthopaedic ward."³³

5.3 Glasgow Coma Scale

GCS

Following a head injury, suspected head injury or where a fall has been unwitnessed and a head injury can't be ruled out the Glasgow Coma Scale should be measured. This is contained within the National Early Warning Score (NEWS2). Please refer to the [National Early Warning Score \(NEWS\) 2 Standardising Assessment Guideline \(874\)](#)

The Glasgow Coma Scale must be recorded until the GCS is equal to 15 or equal to the patient's pre-fall score (if known). Any deterioration must be reported to medical staff.

The minimum frequency for these observations must be:

- half hourly for 2 hours,
- then 1 hourly for four hours,
- then 2 hourly thereafter until deemed stable by medical staff.

5.4 Reporting and Investigation



Across all NHSGGC settings slips, trips and falls must be recorded in Datix.

At all times NHSGGC aims to learn from any falls incident and encourages all staff to engage in the Datix system. It is never the intention of investigations to apportion blame to an individual but instead to understand how the incident arose and what to do to prevent similar incidents in the future.

An incident must be reported if it:

- results in injury or ill health.
- is contrary to the specified or expected standard of patient care or service.
- places patient(s) or staff member(s), or visitor(s), contractor(s) or member(s) of the public at unnecessary risk of harm.
- places NHSGGC in an adverse position with potential loss of reputation.
- places NHSGGC property or assets in an adverse position or at risk of loss or damage.

Falls should be considered for managerial review in accordance with Health and Safety / RIDDOR (Reporting of Injuries, Diseases, and Dangerous Occurrences Regulations) guidelines.

A fall must be reviewed to establish if it was avoidable. This review will identify if there were any deficiencies in care which may have contributed to the fall occurring, and from which learning can be identified.

If the fall resulted in a fracture, brain trauma or death, this is classed as a serious outcome. All fractures (excluding digits) and head injuries must be recorded in Datix as a category 4 incident. Deaths resulting from a fall must be recorded as a category 5 incident. Both category 4 and 5 incidents must then be escalated via the briefing note template as a Significant Adverse Event (SAER) and subject to appropriate review within directorate processes as per NHS GGC Incident management and reporting policy 2020.³² Please see flowcharts in appendices for further detail.

For category 1 to 3 incidents, the following questions will help identify if a significant adverse event review is required. An answer of 'YES' to any of these questions requires the Lead / Senior Nurse / Midwife to decide if a SAER is needed:

- Was there a problem with any equipment involved in this case?
- Has there been a breach of policy or procedure?
- Is there something you think should have been done differently in this case?
- Do you feel there is any learning to be gained from investigating this event? (Would something be done differently next time?)
- Are there any patient / family concerns regarding the treatment / care / outcome?
- Are there any management concerns related to the event or individuals involved?
- Is there currently any interest from the Procurator Fiscal?
- Do you believe this event was avoidable?

5.5 Procurator Fiscal investigations



Should a fall incident require to be investigated by the Procurator Fiscal staff will be asked to supply additional information around the circumstances of the fall. This is done using a template of questions (see appendix for details).

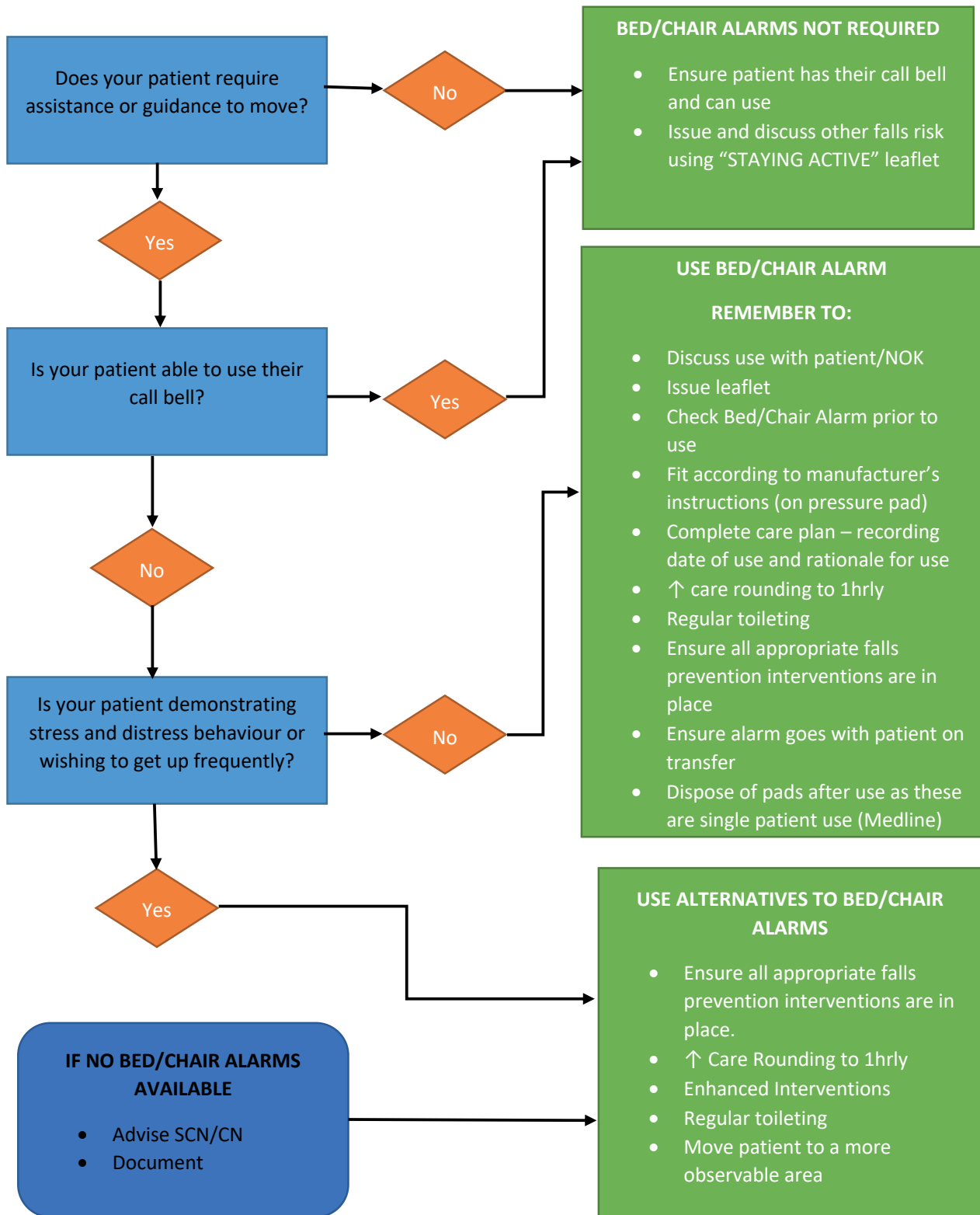
Appendices

6.1 Bed/Chair Alarm Decision Support Guidance

Bed/Chair Alarm Decision Support Guidance

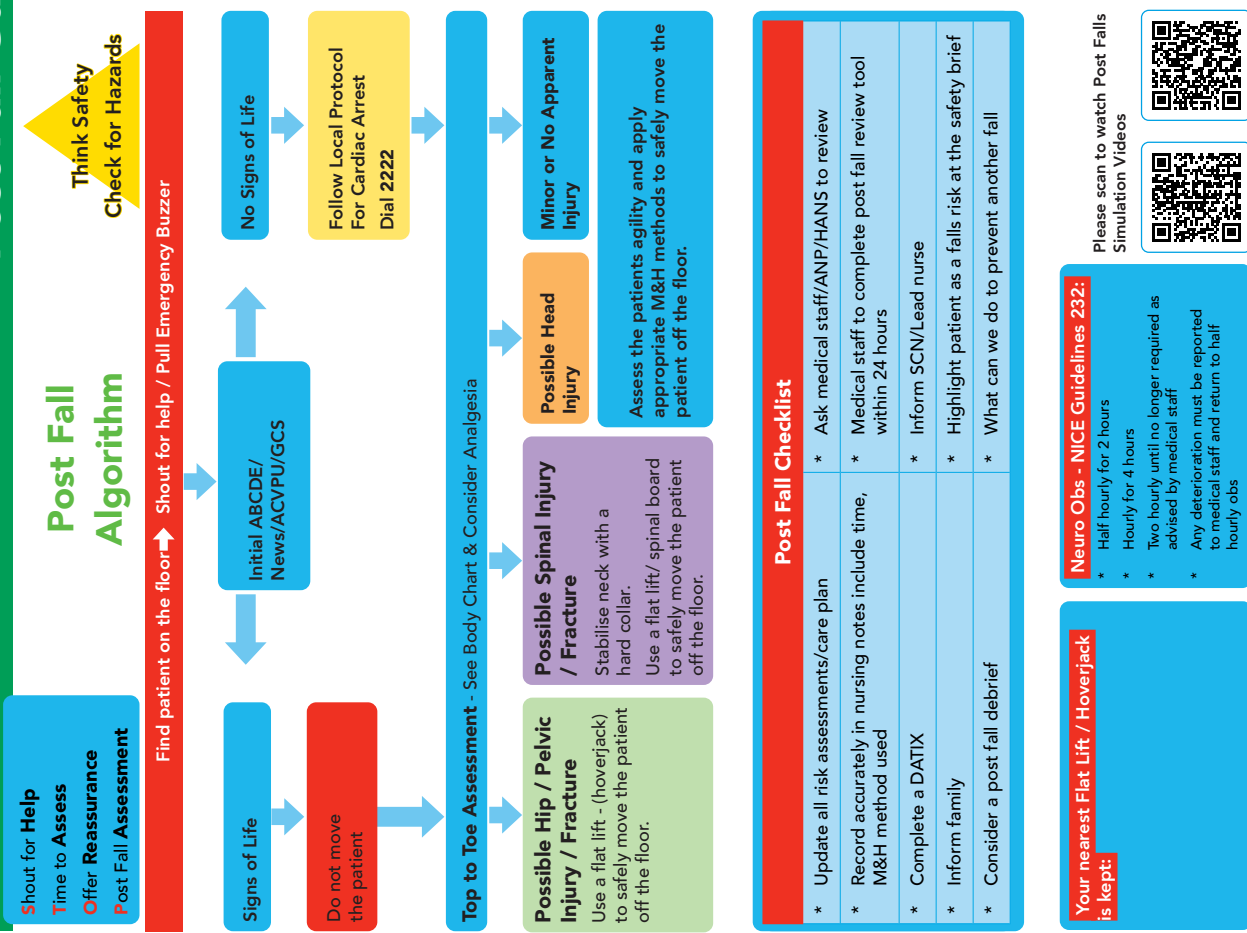
The following flowchart will support your decision making around whether bed/chair alarms are appropriate for your patient. Please consider this prior to deciding on their use.

Remember that bed/chair alarms do not prevent falls, they just indicate an intention to move.

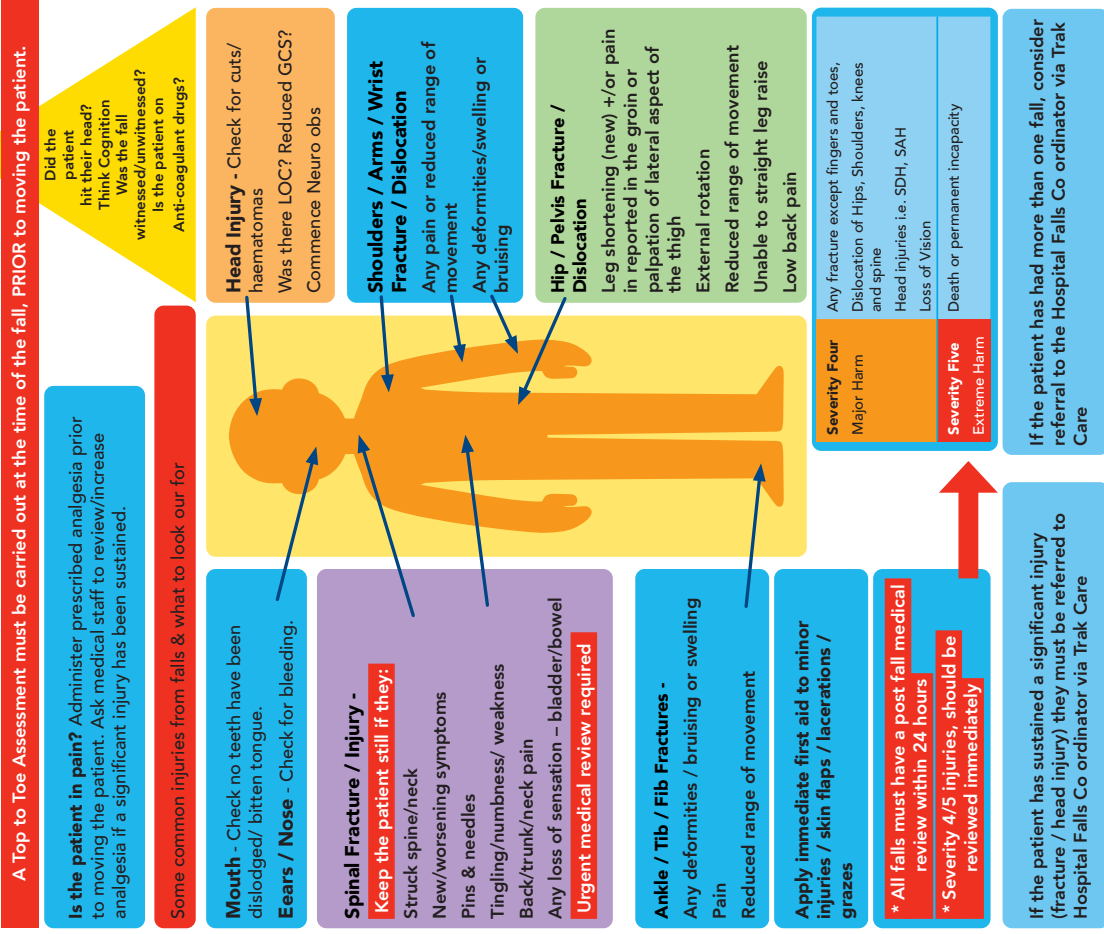


Post Fall Guidance

Post Fall Algorithm

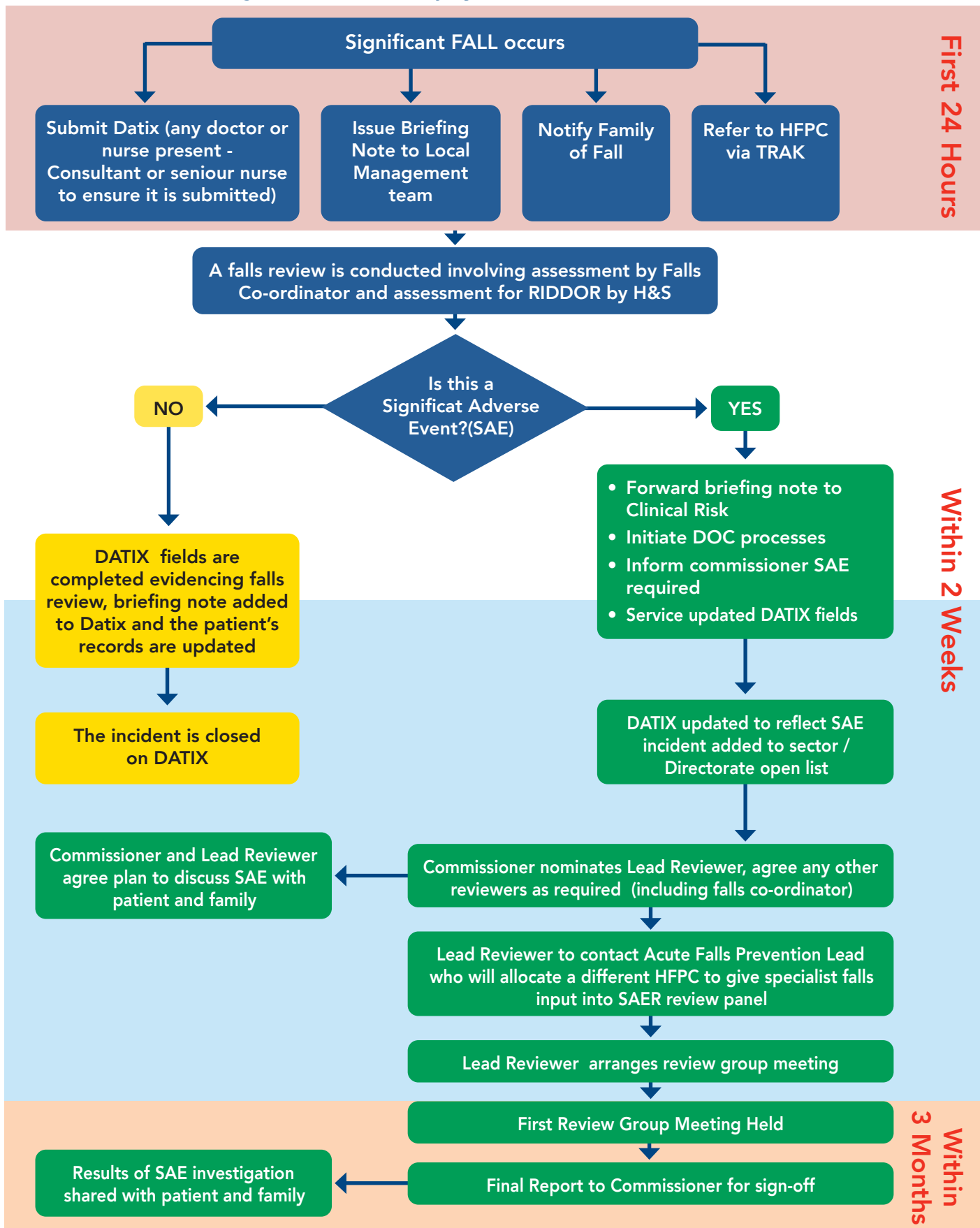


Top to Toe Assessment Body Chart



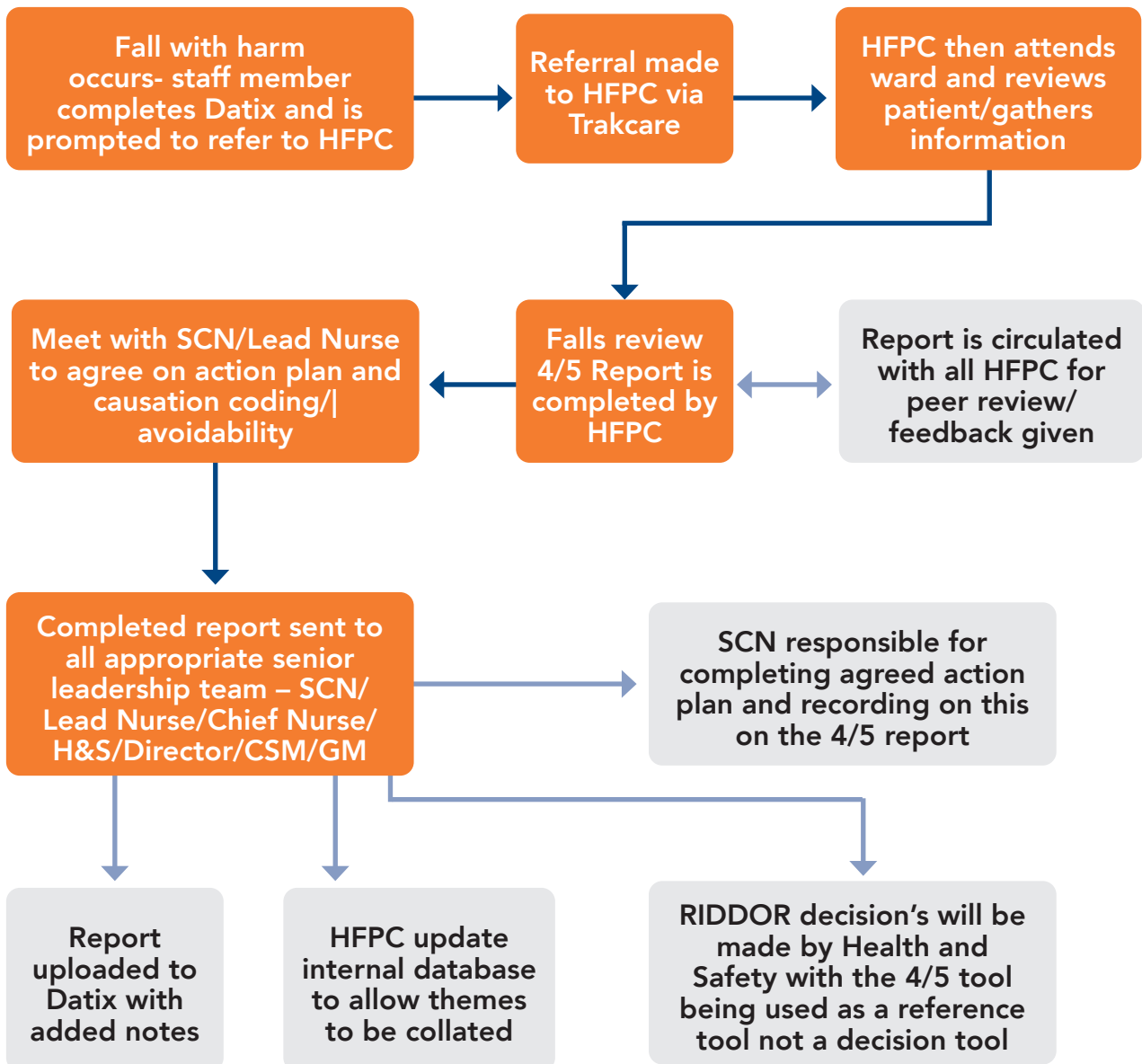
6.3 Process of Incident Notification

Process of Incident Notification when a Significant Fall (resulting in death, head injury or fractures occurs)



6.4 Process for the Completion of the Severity 4/5 Falls Harm Review

This process is for Acute Inpatient areas. For Mental health areas the 4/5 falls review is completed by the SCN within the area

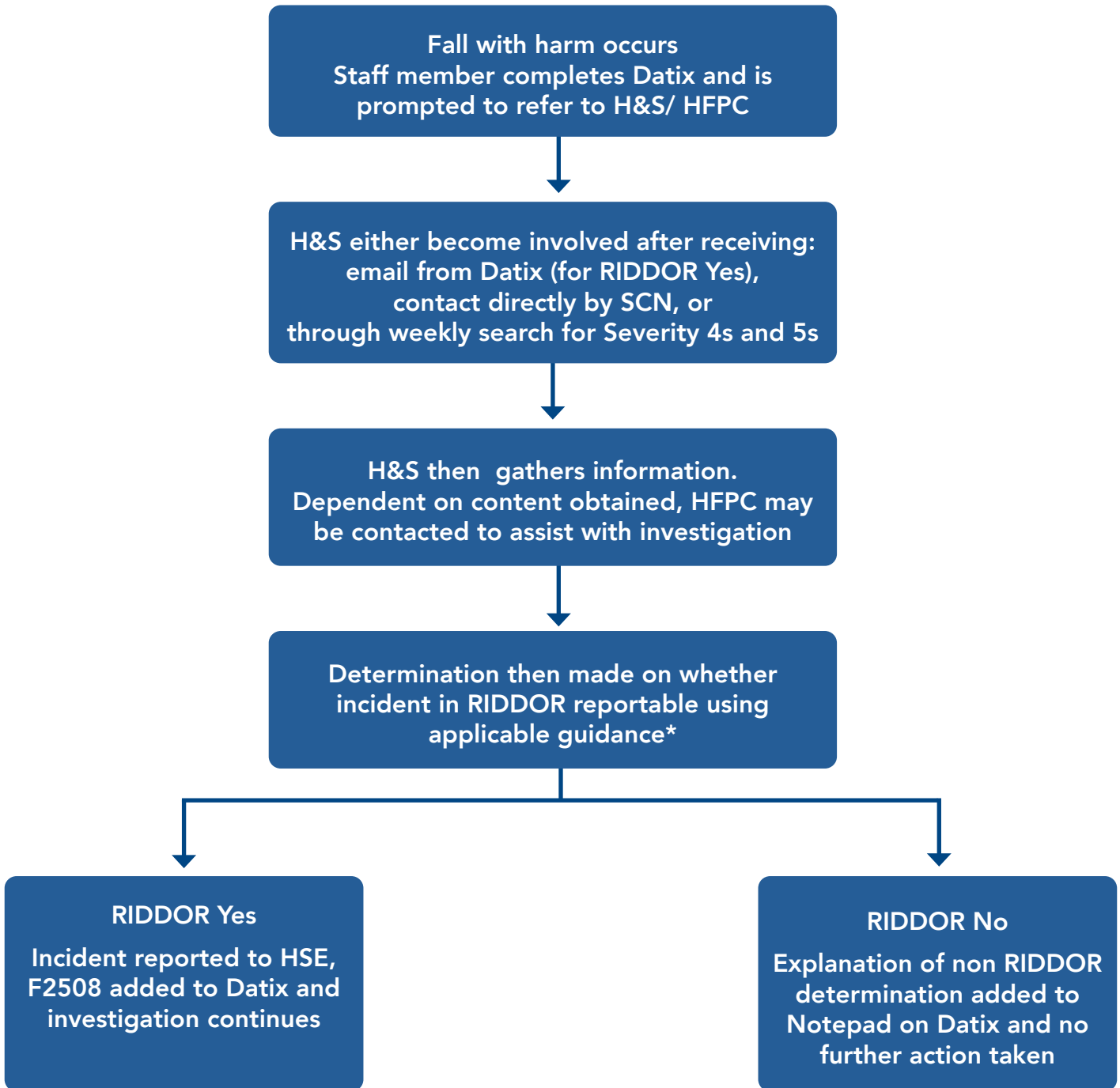


Learning themes are collated and discussed at identified meeting in each sector to ensure dissemination and monitoring of themes

It is good practice to have a post fall debrief. Consideration should be made to staff/team welfare during this process. If any issues staff should be sign posted to well being resources/chaplaincy service

A Key Performance Indicator of 75% of all 4/5 harm reports should be completed within 2 weeks has been set to monitor effectiveness of this process.

6.5 Health and Safety Falls Investigation Process



6.6 Reporting injuries, diseases and dangerous occurrences in health and social care Guidance for employers (HSIS1 rev3)

Section 3: Injuries and ill health involving people not at work

Patient/service user fall incidents

A fall is reportable under RIDDOR when it has **arisen out of or in connection with a work activity**. This includes where equipment or the work environment (including how or where work is carried out, organised or supervised) are involved.

Reportable:

- A confused patient falls from a hospital window on an upper floor and is badly injured.
- A service user falls in the lounge area, there is previous history of fall incidents, but reasonably practicable measures to reduce the risks have not been put in place.
- A service user falls out of bed, is injured and taken to hospital. The assessment identified the need for bedrails but they, or other preventative measures, had not been provided.
- A service user trips over a loose or damaged carpet in the hallway.

Not reportable:

- A service user falls and breaks a leg. They were identified as not requiring special supervision or falls prevention equipment. There are no slips or trips obstructions or defects in the premises or environment, nor any other contributory factors.
- A service user falls out of bed and is taken to hospital. There was a detailed assessment in the care plan identifying that fall protection was not required.
- A service user is found on the floor, no-one has seen it happen, and/or there are no obvious work-related contributing factors. There was a detailed assessment in the care plan, which identified that fall protection was not required.
- In some circumstances, it may not be clear whether the accident that caused the injury arose out of or was connected to the work activity.

Example 1

A service user (who is capable of understanding and following advice) falls off the toilet, having previously been advised not to get up, is injured and taken to hospital. They have been left alone for dignity reasons. Their care plan identified that the individual should have assistance or supervision.

Reportable:

- The member of staff left the service user out of earshot and without a call bell they could use, or had not responded promptly when they did call, as adequate supervision had not been provided.

Not reportable:

- The member of staff returned to help them as soon as they called to say they have finished. Or if the service user had got up without calling for help, it would not be reportable.

Example 2

An incontinent service user slips on their own urine when returning back from the toilet and receives a major injury.

Reportable if:

- the assessment had identified the resident needed help for toileting and it was not provided;
- the fall took place in an area of the home where it was foreseeable the resident may slip due to a spillage and the home had failed to assess risks from floor surfaces or act on their assessment.

Example 3

A patient falls from a stretcher while being manoeuvred into an ambulance and suffers a hip fracture.

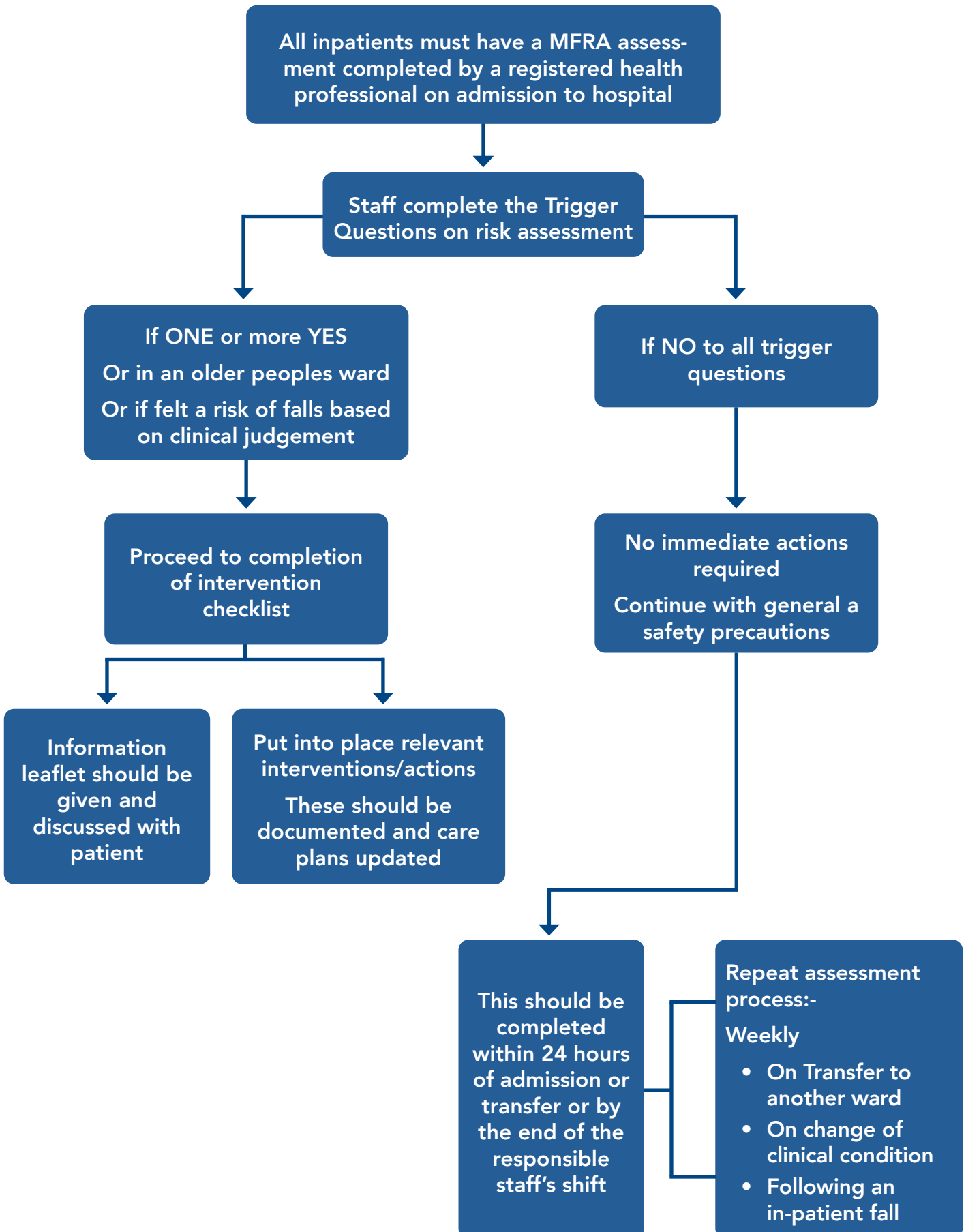
Reportable if:

- the paramedics had chosen the wrong piece of equipment to move the patient, or had not received the appropriate training about safe use of the equipment, or were not following a safe system of work;
- the paramedics were aware the patient had a history of aggression and failed to take this into account when moving them. The patient subsequently becomes aggressive and falls from the stretcher.

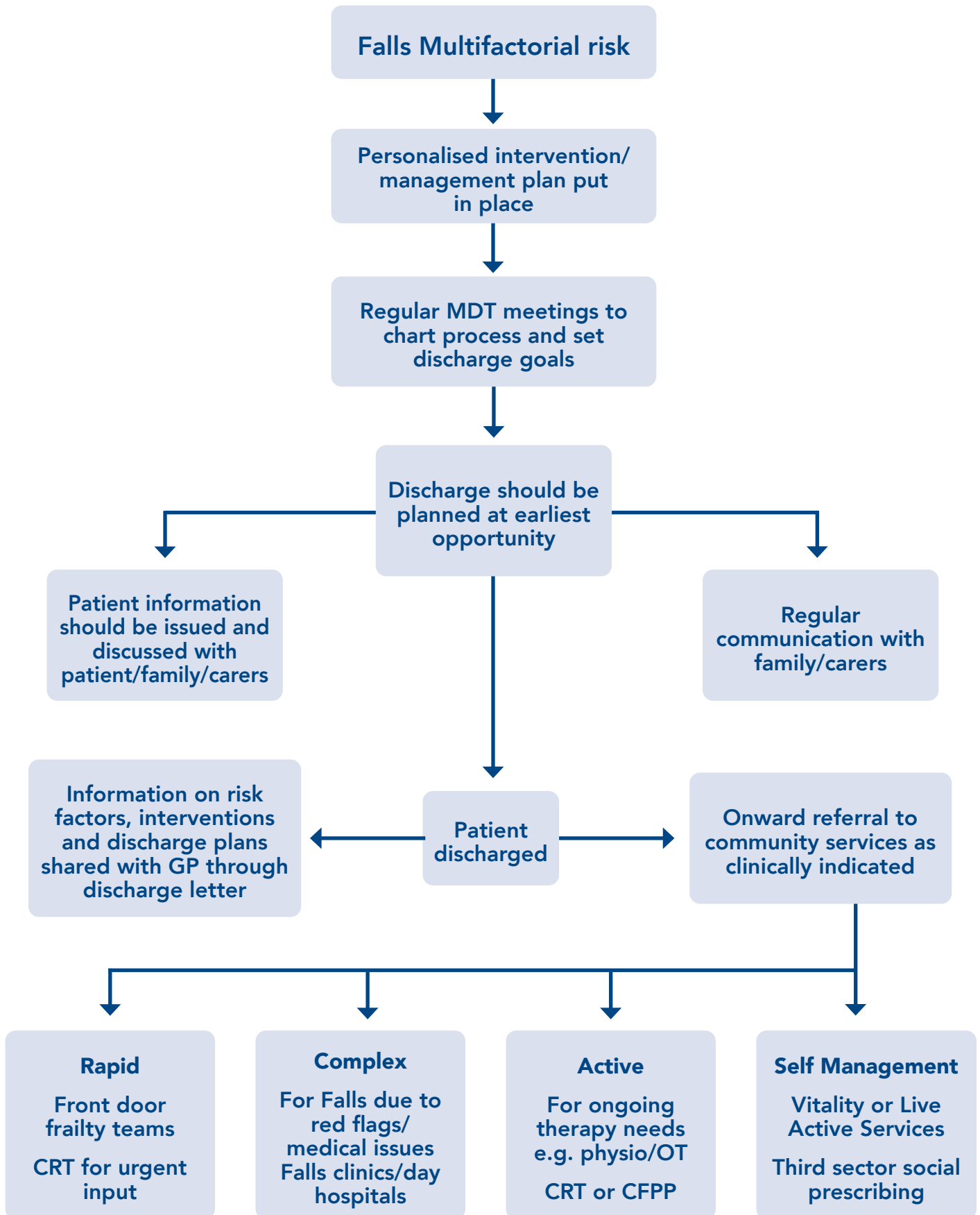
Not reportable if:

- the patient became unexpectedly aggressive, struggled and fell.
- You may need to consult the patient's/service user's care plan to decide what care was assessed as being appropriate for them. If you still are unclear, ask for advice.

6.7 In-patient Multifactorial Falls Risk Reduction Assessment Flow Chart



6.8 Falls Discharge pathways



6.9 Harm Severity Matrix

| Falls -Severity Scoring | Example of Harm |
|--|---|
| Severity One Negligible Harm | Small bumps, grazes, redness or minor bruises |
| Severity Two Minor Harm | Minor lacerations requiring steri strips, skin flaps, moderate bruising |
| Severity Three Moderate Harm | Laceration requiring sutures. Fractures of the fingers and toes. Dislocation of fingers, toes and wrist, ankles. Significant bruising |
| Severity Four Major Harm | Any fracture except fingers and toes, *Where a pathological fracture is sustained as a result of a fall discussion should be carried out as to whether a harm review is required* Dislocation of Hips, Shoulders, knees and spine. Heads injuries i.e. SDH, SAH Loss of Vision |
| Severity Five Extreme Harm | Death or permanent incapacity |

6.10 Procurator Fiscal Questionnaire

1. Was the patient/resident prone to falls?

2. Had the resident/patient been the subject of a risk assessment to assess fall risks and suggest safety measures?

3. What were these measures?

4. Were the measures identified in the risk assessment implemented?

5. Was the risk assessment regularly reviewed and updated? Please advise dates and outcomes.

6. Has the fall resulted from the condition of the floor, or some other environmental factor such as poor housekeeping?

7. Was there a failure in a piece of equipment such as a hoist?

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