In-Hospital Falls Prevention and Management

post session slide summary

We have created this resource as a supplement to the face to face training session

Aim of the session is

To provide a comprehensive overview of falls risk, management of risk and falls prevention strategies as part of a multi-disciplinary approach

Objectives

- Recognise the importance of timely and effective assessment of falls risk
- Develop understanding of the multifactorial risks associated with falls
- Understand and apply the falls risk bundle assessment and prevention measures
- Be aware of the importance of multi-disciplinary support and interventions in the prevention of falls

Please use your cursor to identify links embedded into images and highlighted text. These links offer further information on key topics Some links will require an access to NHS Lothian' intranet.

Falls prevention: a healthcare priority

Falls remain a common cause of harm to patients in acute hospitals, with as many as 27,000 falls recorded in Scotland every year (Scottish Government 2019)

National SPSP Inpatient falls reduction targets:

- 20% reduction in inpatient falls
- 30% reduction in inpatient falls with harm

By March 2024

Falls page

‘All healthcare professionals dealing with patients known to be at risk of falling should develop and maintain basic professional competence in falls assessment and prevention.’ (NICE 2013)

Falls and why they happen

What is a fall?

A fall is an event which results in a person coming to rest inadvertently on the ground or floor or other lower level.

Falls, trips and slips can occur on one level or from a height (WHO, 2021 fact sheet)

Why do people get up?

- Need the toilet
- Hungry/thirsty
- In pain/uncomfortable
- Heard a noise; think it's the door/phone/child/pet
- Frightened
- boredom

Why do people fall?

Health associated risk factors

Eyesight (varifocals and bifocals can cause falls)

Pain (eg arthritis in joints or desire to relieve pressure)

Strength – weakness in muscles due to periods of immobility, frailty or a condition such as stroke, Parkinson's, MS, etc

Lack of sensation/too much sensation in feet

Dehydration

Infection eg UTI, chest infection

Confusion/delirium/dementia

Incontinence/urge incontinence

Constipation

Dizziness/blackouts/seizures

Poor hearing/blocked ears

Why do people fall?

Medications which increase risk

Type of Medicine	Name
Sedatives/hypnotics	Diazepam, Lorazepam, Midazolam
Pain killers	Opiates (Morphine, Oxycodone, Codeine, Fentanyl) or non-steroidal anti-inflammatory drugs (Aspirin, Ibuprofen, Diclofenac)
Medications to manage high blood pressure	Atenolol, Bisoprolol, Metoprolol, Spironolactone, Candesartan, Losartan, Amlodipine, Nifedipine, Verapamil, Doxazosin
diuretics	Furosemide, Bumetanide
Antidepressants with a sedating effect	Amitriptyline, Trazodone
Drugs for psychosis/agitation	Haloperidol, Risperidone, Quetiapine
antihistamines	Cetirizine, Loratadine
Antimuscarinics (used for incontinence)	Oxybutynin, Tolterodine

polypharmacy

Why do people fall?

Environmental Risk Factors

- Lighting
- Clutter
- Inappropriate seating/mattresses/beds
- Access to bath/shower
- Flooring
- Wet floor
- Obstacles
- Noise
- Other people

Games | Falls Assistant

Spot the Hazard Game | Injury Matters

Everything else

Footwear
Clothing
Mobility equipment

Fear of falling…

Can be a predictor for falls however, sometimes provides a protective element

The biggest predictor for future falls is a previous fall, 66% chance of another fall within a year of the first fall

Assessing Falls Risk

NICE Recommendations

NICE 2013 and WHO 2023 both state that,

All people over 65 in a hospital (or care environment) should be classed as at risk of falls.

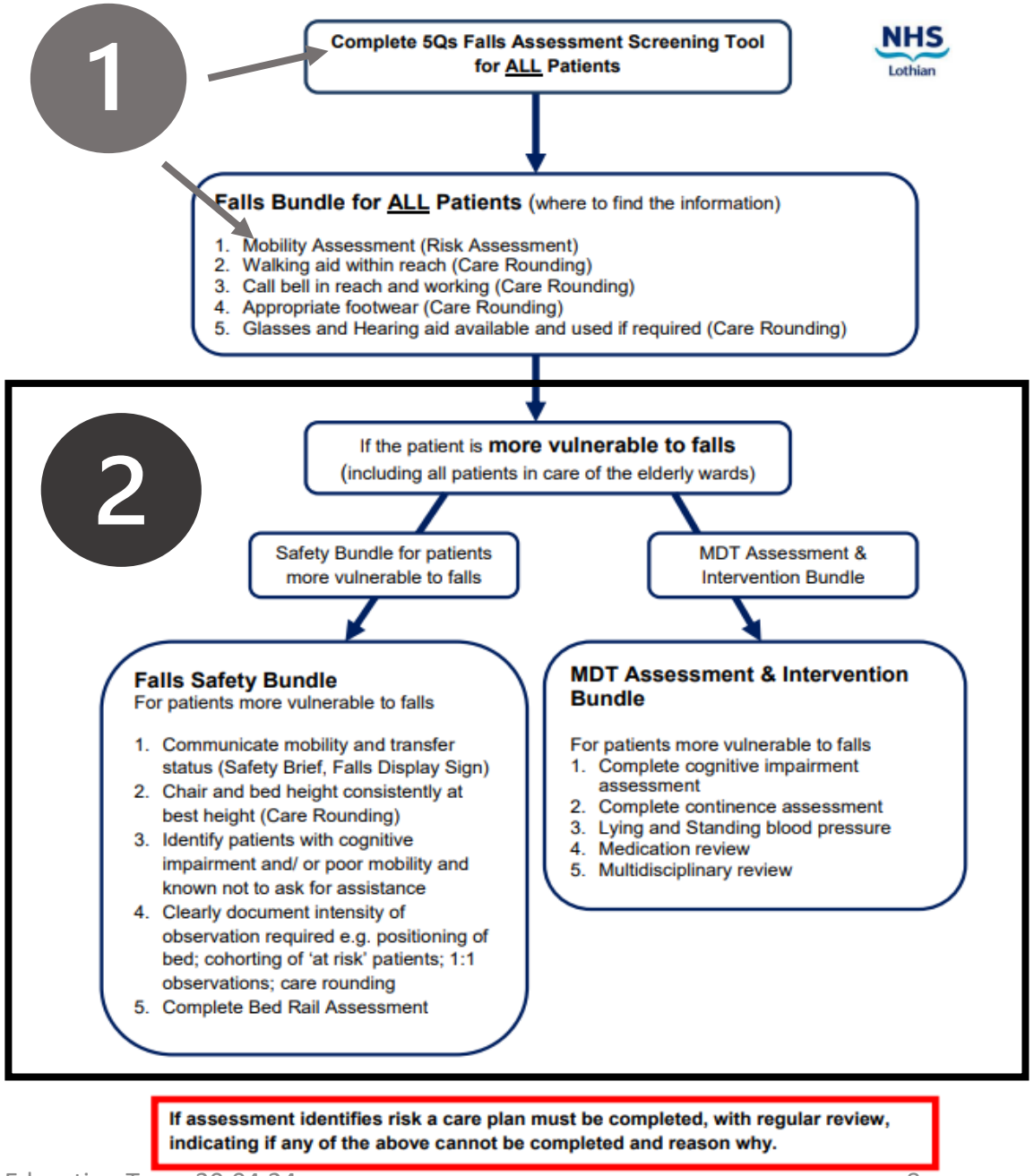
Older people who present for medical attention because of a fall, or report recurrent falls in the past year, or demonstrate abnormalities of gait and/or balance should be offered a multifactorial falls risk assessment

This assessment should be performed by a healthcare professional with appropriate skills and experience, normally in the setting of a specialist falls service. This assessment should be part of an individualised, multifactorial intervention.

Assessing Falls Risk

NHS Lothian falls prevention and intervention flowchart from

Procedure for the Prevention and Management of Adult Inpatients Falling in Hospital Settings



Assessing Falls Risk

trak falls risk assessment

The Falls Risk Assessment should be commenced as soon as possible **for all adult patients** who are admitted to hospital and **completed within 24 hours of admission.**

This is especially important for those aged over 65 and those with a history of falls or admitted due to a fall.

❖The falls risk assessment MUST be reviewed if the patient falls, their condition deteriorates or upon transfer to another ward.

❖This assessment should be **reviewed weekly** or sooner if deemed necessary (NHS Lothian)

1 **5Qs for all patients**

- Has the patient fallen in the last 6 months – including during this admission?
- Does the patient have a 4AT greater than 0 or acute confusion (delirium)?
- Does the patient attempt to walk alone although unsteady or unsafe?
- Does the patient or their relative/s have fear or anxiety regarding falling?
- Based on your clinical judgement, is this patient at high risk of falling?

If YES response to any question this identifies the patient as more vulnerable to falls.

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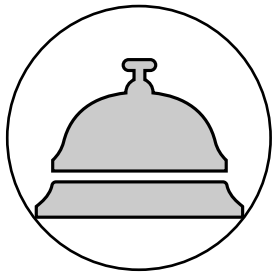
Assessing Falls Risk

Falls Bundle NHS Lothian 1

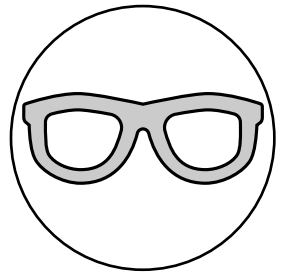
Mobility Assessment (Risk Assessment)

Walking aid within reach (Care Rounding)



Call bell in reach and working (Care Rounding)

Appropriate Footwear (Care Rounding)

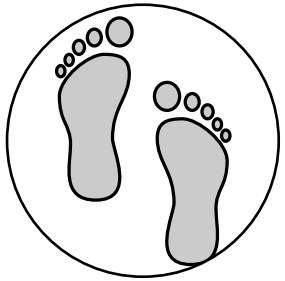


Glasses and hearing aids available and used if required (Care Rounding)

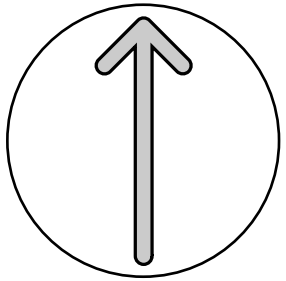
Complete for ALL patients

Assessing Falls Risk

Falls Safety Bundle for more vulnerable patients NHS Lothian 2



Communicate mobility and transfer status (Safety Brief, Falls Display Sign)



Chair and bed consistently at the best height (Care Rounding)

Identify patient with cognitive impairment and/or poor mobility and not known to ask for assistance

Clearly document intensity of observation needed e.g. Bed positioning, 1:1 observations, cohorting at risk patients, care rounding

Complete Bed Rail Assessment (Risk Assessment)

Complete for patients deemed at risk and all patients in medicine of the elderly wards

Assessing Falls Risk

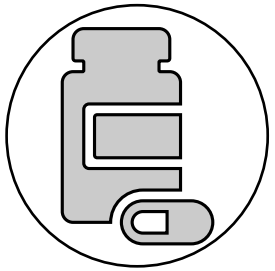
MDT Intervention and Assessment Bundle for more vulnerable patients NHS Lothian

2

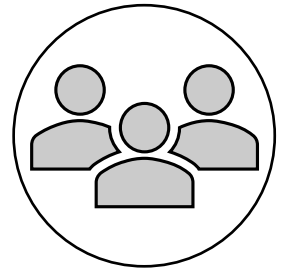
Complete cognitive impairment assessment

Complete Bladder and Bowels assessment

Lying and standing blood pressure



Medication review



Multidisciplinary review

Complete for patients deemed at risk and all patients in medicine of the elderly wards

Assessing Falls Risk

Contributory Health Issues

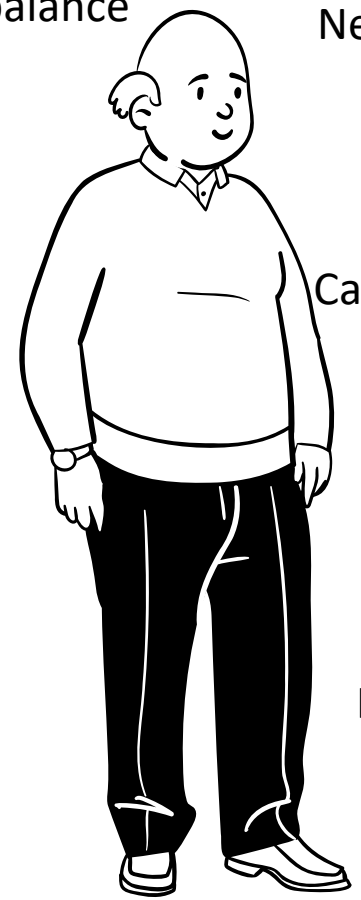
Senses
Visual impairment: cataracts, macro-degeneration, poor glasses.
Auditory issues: inner ear problems affecting balance

Respiratory
Breathlessness on exertion, poor O2 levels

Urinary and GI
Bladder and bowel dysfunction
Incontinence, constipation, infection

Musculo-Skeletal
Postural instability: lower limb weakness, gait, joint disease
foot problems, poor footwear

Medications
Poly-pharmacy – 4 or more medications
Particularly psychotropics and sedatives



Nervous System
Cognitive impairment: delirium and/or dementia
Neurological conditions: Stroke, Parkinson's, peripheral neuropathy
Psychological: fear of falling

Cardiovascular
Cardiac disease: arrythmias, aortic stenosis -
Postural hypotension & syncope

Medical History and conditions
Acute illness
Underlying health conditions exacerbation/deterioration
History of falls: causes, fear of further falls

Age

Management and Prevention

Patients identified at risk of falling should have a multidisciplinary assessment and intervention bundle and the documentation of management plan completed.

Some risk factors may not be modifiable but should be identified and acknowledged.

Actions taken will vary from individual to individual depending on their risk factors. *See following sections*

Long term medical conditions

Medical problems should be considered, particularly in patients who are unable to communicate the source of their distress

Constipation

Urinary incontinence

Pain

Osteoporosis: DEXA scan and bone protection therapy

Postural Hypotension: medication review where there is a significant drop in BP in standing.

Neurological disease: specific treatment considerations

Corrective treatment or management of medical issues contributes to effective risk management of falls.

Management and Prevention

Cognitive impairment

Patients who are confused are one of the largest groups of individuals at risk of falls within the hospital setting.

Patients with dementia or delirium are particularly vulnerable and can

- become disorientated when in an unfamiliar environment
- Be at increased risk of wandering.
- Have poor safety awareness
- Confusion, whether acute or chronic, should be **screened** for using the 4AT, or if a fuller screening is required, a Mini-Mental State Examination (MMSE).

Establish a **collateral history** from carers and relatives to determine if the problem is **acute or chronic.** It is important to ask:

- Does the patient has a diagnosis of dementia?
- Have the confused episodes occurred before and under what circumstances?

These individuals require careful management with regular orientation and nursing in a well-lit environment.

Management and Prevention

Delirium and falls.

Delirium is one of the most common signs of deterioration in frail older adults.

'PINCHME' indicates the most common causes (there are others)

Delirium can last for days/weeks/months

Can be hypoactive, hyperactive or mixed.

The person may present at A&E, OOH, GP after a fall, which may be the first indicator of delirium

SQiD: Single Question in Delirium

- Ask: " Is this person more confused or drowsy lately?"
- If yes: screen for delirium using 4AT and TIME bundle
- When recording new confusion on NEWS C should continue to be documented until resolved. This may take weeks.
- When delirium is ongoing for weeks consider the "special instructions" box to clarify escalation plan

Management and Prevention

Acute illness

- Acute illness in older people can lead to worsening of gait problems, increased confusion and unsteadiness.
- A fall may be the only presenting feature of acute illness.
- In hospital, a fall may be the first sign that a patient has acutely deteriorated.
- The interaction between risk factors is complex and a multidisciplinary review to address prevention is required (NHS Lothian 2017)

For patients admitted due to a fall or collapse, or who have a history of falls, first line management requires a medical review in order to establish whether there is an acute illness. This will include a history, full physical examination and medication review.

Common underlying causes include:

- Delirium
- Infection
- Sepsis
- Syncope
- AF, TIA and Stroke

Treatment of acute illness will contribute to reducing falls risk

Management and Prevention

Medications

- **Anti-coagulants**: Anticoagulation with heparin or warfarin may not be safe in an individual with recurrent falls, particularly if they sustain a head injury. Ward teams should seek pharmacist's advice.
- **Sedation**: Sedatives should be avoided if possible as they often worsen unsteadiness and can cause paradoxical agitation.
- **Anti-hypertensives:** A medication review is vital if the patient is found to have significant postural hypotension (defined as a drop of 20mmHg or more in systolic BP +/ minus a drop of 10mmHg in diastolic).

Equipment and environment

- Bedrails: review current policy
- Mobility Aids: assessed and correct for patient, patient able to use safely
- Footwear: comfortable, enclosed shoe with grip.
- Bed space: reduce/remove clutter. Ensure equipment is not a hazard

Management and Prevention

Multidisciplinary and multifactorial interventions should be employed to help reduce the risk of falling

- Physiotherapy assess gait, posture and mobility aids, and provide strength and balance training.
- Occupational therapy assess risk of falls and environmental hazards when engaging in everyday functional tasks with patients
- Podiatry ensure good foot and nail care for optimal mobility (complete basic foot care learnpro module)
- Ophthalmology If reversible visual problems are suspected such as poor glass prescriptions
- Audiology

Management and Prevention

Communication

Safety brief - Patients who are identified as at risk of falling require to be identified at the ward safety brief and may be escalated at the site safety huddle.

Care planning and Documentation - A safety bundle should be initiated and a person centred plan of care completed with input from the patient, and if appropriate, their relatives.

Family

- Falls prevention information should be provided on admission and relatives / carers encouraged to actively participate in minimising the risk of falls
- Information should be provided about the process of risk assessment and management to relatives and carers. A leaflet is available for this purpose for inpatients and written information should be displayed on the wards
- Patients and families should take an active role in care planning to ensure that it is person centred
- Use of the "Getting to know me" document will help to provide useful personal information for staff to provide person centred care.

Enhanced Care Interventions

increased supervision

- If the person is showing signs of stress or distress then a systematic approach to identify the cause is recommended to help identify possible trigger**. Challenging behaviour – a systematic approach to assessment**
- An increased risk of falls may require the person to be placed in an **observable area** e.g. near the nurses' station.
- A consideration may be to co-hort the person into a **multi-bedded room** and ensure that a member of staff is always present to assist

1:1 CARE

- **All other alternatives should be considered before requesting 1:1 observation.** Please see (Appendix 5) Page 9 of 19
- If 1:1 care is provided then an **hourly summary** of the person's presentation must be recorded.
- 1:1 care should be **assessed every 24 hours** by the multi-disciplinary team (if possible) and stepped down as soon as the person's safety has improved

Falls Sensor Guidelines v4 (scot.nhs.uk)

Falls sensor patient leaflet (scot.nhs.uk)

Enhanced Care Interventions

Assessment of Capacity

- **Assessment of Capacity** should be completed to determine whether treatment should be carried out under the guidance of Adults with Incapacity Act.
- if uncertain, psychiatry advice should be sought.
- This is particularly important if considering the use of falls sensors, bed rails or wander guard.
- Staff can also refer to the Safe and Effective use of Bed Rails policy.

Adults with Incapacity Act 2000

- **The Act** aims to protect people who lack capacity to make particular decisions, but also to support their involvement in making decisions about their own lives as far as they are able to do so.
- Anyone authorised to make decisions or take actions on behalf of someone with impaired capacity must apply the following principles….

Enhanced Care Interventions

Adults with Incapacity Act 2000

Principle 1	Principle 2	Principle 3	Principle 4	Principle 5
Benefit	Least-restrictive option	Take account of the wishes of the person	Consultation with relevant others	Encourage the person to use existing skills and develop new skills
Any action or decision taken must benefit the person and only be taken when that benefit cannot reasonably be achieved without it	Any action or decision taken should be the minimum necessary to achieve the purpose. It should be the option that restricts the persons freedom as little as possible	In deciding if an action or decision is to be made, and what that should be, account must be taken of the present and past wishes and feelings of the person as far as these may be understood.	Take account of the views of others with an interest in the person's welfare. The act lists those who should be consulted whenever practicable and reasonable. It includes the person's primary carer, nearest relative, named person, attorney or guardian, if there is one.	Encouraging and allowing the adult to make their own decisions and manage their own affairs and, as much as possible, to develop the skills needed to do so.

Complaints

- Investigation Report 201404874 | Highland NHS Board | SPSO
- Investigation Report 201403146 | Lothian NHS Board | SPSO
- Investigation Report 201306190 | Borders NHS Board | SPSO
- Investigation Report 201204018 | Lothian NHS Board | SPSO
- Investigation Report 201202679 | Fife NHS Board | SPSO

Post Falls: bundle

The person should **not be moved** until they have been **checked for signs and symptoms of fracture or potential spinal injury**. The **top to toe assessment** should be completed and documented

Safe manual handling methods must be used if there are any signs and symptoms of fracture or potential for spinal injury

Where **head injury** has occurred or cannot be excluded (e.g. unwitnessed fall) **neurological observations must be recorded** and the frequency and duration documented, based on medical guidance

Medical examination should take place within agreed timescales following a fall especially those with a high vulnerability to injury, or who have been immobilised due to injury

Conduct a post fall review / rapid root cause analysis to learn how **further falls can be prevented** for the person and for wider learning

Developed by NHS Lothian Clinical Education Team 30.04.24

Post falls: care

Assessment by the staff member witnessing the fall

IS THE PERSON:

- Unresponsive: check airway > signs of life?
- No signs of life: call cardiac arrest team > start CPR
- Responsive? ask about pain > assess for injury, consider first aid

- **ABCDE Assessment** prior to moving
- **Top-to-toe assessment** for injury by nursing staff (where competent) or Dr
- Assess the **environment**, is it safe?
- NB **spinal injury** caution > Advice re spinal board
- Consider how to best get the person off the floor.

- **All falls should be reported** to Medical staff at time of incident
- Is **Head injury** suspected or Unwitnessed fall? > Neuro observations immediately > GCS out of 15 > inform Dr
- **Dr should review pt ASAP**, particularly where injury is evident/nurse has concerns
- Where top-to-toe has be carried out and no injury noted, **Dr review should still be within 12 hours,** if deemed safe.
- **Falls risk assessment** should be carried out and care plan updated.
- Note falls risk above bed space
- **Information about falls risks** should be discussed with patient and relatives

Post Falls: Communication and Documentation

- **Next of kin informed ASAP** of the situation
- Assessment **outcome documented** in patients notes
- Where serious injury is sustained consultant should also be informed

DATIX reporting

- completed ASAP, incident number shared with charge nurse
- Including details of circumstances of fall and actions taken.

All falls which involve harm are subject to incident investigation and if a fracture or death occurs they are reviewed by senior management teams. This is important to ensure safety and enable reflective practice so that lessons may be learned.

Management

NICE 2013

"In successful multi-factorial intervention programmes the following specific components are common (against a background of the general diagnosis and management of causes and recognised risk factors):

strength and balance training

home **hazard assessment** and intervention

vision assessment and referral

medication review with modification/withdrawal"

To summarise:

- Reducing falls risks is a healthcare priority
- We can improve outcomes through risk management and falls prevention, using an MDT approach.
- Ensuring the falls pathway becomes embedded in practice will support this.

How will you set about reducing falls risk in your area?

References & Resources

- Policy and Protocol for the Assessment and Management of Adult Hospital Patients with Falls (nhslothian.scot)
- NAIF annual report 2023 | RCP London
- World guidelines for falls prevention and management for older adults: a global initiative | Age and Ageing | Oxford Academic (oup.com)
- Overview | Falls in older people: assessing risk and prevention | Guidance | NICE
- Breast Care Nurse Service (scot.nhs.uk) (falls sensor leaflet – no idea why it says this!!)
- Falls Sensor Guidelines v4 (scot.nhs.uk)
- Jacqueline C T Close, Stephen R Lord, Fall prevention in older people: past, present and future, *Age and Ageing*, Volume 51, Issue 6, June 2022, afac105, https://doi.org/10.1093/ageing/afac105
- Ambition 4. Target more specialist, personalised care and support - National falls and fracture prevention strategy 2019-2024 draft: consultation - gov.scot (www.gov.scot)