Good Practice Guidance: Medicines and Falls Prevention in Care Homes

Introduction

Falls and fall-related injuries are common and can be serious problem for older adults. Falls can impact a resident's overall health, wellbeing, and quality of life. Falls related injuries can result in pain, causing a fear of falling and reduce an individual's independence.

Frailty is associated with an increased risk of falls. NHS England describes frailty as a loss of resilience that the body's natural ability to recover is reduced after an illness, accident, or stressful event. Therefore, it is important to review and minimise risk factors to reduce the likelihood of falls in an individual.

Impacts of falls include:

- Fractures of the hip, femur, humerus, wrist and rib
- Loss of independence, loss of confidence, fear of falling, limited social and physical activity
- Soft tissue injuries
- Bleeding and bruising (Haematoma)
- Confusion
- Ageing faster
- Hospitalisation and immobilisation
- Disability
- Death

Risk factors that increase the risk of falls include:

- Resident's level of frailty
- Medications e.g. sedatives, antihypertensives, antipsychotics
- Balance problems, muscle weakness, Dizziness, spinning/swaying sensation (vertigo), nausea and vomiting
- Physical problems e.g. not using mobility aids correctly such as walking sticks and frames
- Poor eye sight and impaired hearing
- Environment e.g. poor footwear, poor lighting
- Behavioural and cognitive problems e.g. poor memory, confusion,
- Dehydration and malnutrition
- Cardiovascular problems
- Conditions which affect the brain and nerves (Neurological problems)
- Low blood glucose levels (Hypoglycaemia)
- Low body temperature below 35^0C (Hypothermia)
- Low blood pressure when standing after sitting or lying down, causing feelings of dizziness and/or fainting) (orthostatic hypotension)

Care plans should take a resident's falls risk into account. A resident should be risk-assessed and appropriate action taken to reduce the risk of falls and prevent harm.

Multifactorial Falls Risk Assessment

Residents should be offered a Multifactorial Falls Risk Assessment by an appropriate healthcare professional if:

- They have been to their GP or admitted to hospital because of a fall
- Have had recurrent falls in the past year,
- Have gait and/or balance problems

A Multifactorial Falls Risk Assessment may include the following:

- Reviewing falls history
- Assessment of gait, balance and mobility, and muscle weakness. Consideration needs to be given to the resident's toenail length, as it can increase the risk of falls. Care staff carrying out toenail care should be trained and competent. Residents with diabetes should have an annual foot care review.
- Assessment of osteoporosis risk (bone health)
- Assessment of the older person's perceived functional ability and fear relating to falling
- Assessment of sight e.g need for spectacles. Consideration needs to be given to residents who have varifocals as they can cause balance impairment.
- Assessment of memory and thinking problems (cognitive impairment) and neurological examination
- Assessment of urinary incontinence
- Assessment of home hazards
- Cardiovascular examination
- Medication review

Bone Health

Residents with frailty, reduced mobility or balance issues and multiple co-morbidities (e.g. Parkinson's disease, osteoporosis) are more likely to experience problems with bone health.

Consider assessing nutritional status including vitamin D intake as part of a multifactorial falls risk assessment, followed by supplementation where clinically appropriate.

Age UK has local falls prevention services which can be found here

Structured Medication Review (SMR)

Falls may occur as a result of new medications or changes to doses. Medications can increase the risk of falling due to their mode of action and/or side effects e.g. dizziness, sedation, confusion, low blood pressure or blood pressure being low when standing up from sitting/lying.

Older adults are more susceptible to the side effects of medications because of age related changes to the liver, kidney, central nervous system and heart.

A medication history and SMR should establish:

- The reason the medication was prescribed.
- When it was started,
- If it is still safe, effective, and appropriate for the resident.
- Aim to minimise the risk of falls due to its mode of action and/or any side effects of the medicines

SMRs play an important part in falls prevention. All residents should have their medications reviewed:

- On admission to a care home

- Following a fall (usually within two weeks to identify and review any medications that may be contributing to their falls risk.)
- Changes to their clinical condition

Inform GPs to any changes in a resident's mobility, balance, coordination, or alertness, especially following medication changes which may have increased their risk of falls.

Residents at high risk of falling (e.g. with recurrent, unexplained or injurious falls) should be considered for specialist referral and multidisciplinary support. Contact your local community providers for falls support.

Complex residents can be referred to the NHS Frimley MOCH team for an SMR by completing the 'Referral to MOCH team form',. This is available on the NHS Frimley ICB website.
All referrals can be emailed to the Generic MOCH Mailbox: frimleyicb.moch@nhs.net

Commonly prescribed medicines that can contribute to falls.

The table below lists commonly prescribed medicine classes that can contribute to increased falls risk.

When risk assessing residents in care homes for falls risk, it is important to consider the medicines listed in this table and to refer for review where needed.

Medicines class/indication:	Possible problems which could increase the risk of falling:
Antihypertensives used to lower blood pressure e.g. ramipril, amlodipine	Lowers blood pressure causing dizziness when getting up from sitting or lying. Ensure residents take time standing up from a sitting or lying position
Antiarrhythmics used to control and abnormal heart rhythm e.g. bisoprolol	Lowers heart rate
Water tablets e.g: furosemide	Dehydration and/or dizziness
Urine incontinence e.g. oxybutynin	May cause blurred vision, drowsiness or confusion.
Depression e.g. mirtazapine, sertraline	May cause drowsiness, confusion or slowing of reactions.
Anxiety e.g. diazepam, lorazepam	May cause drowsiness, confusion or slowing of reactions.
Antipsychotics used to treat psychosis and/or agitation e.g. olanzapine, quetiapine, haloperidol, risperidone	May cause drowsiness, confusion or slowing of reactions.
Sedatives used for insomnia e.g. zopiclone, temazepam	May cause drowsiness, confusion or slowing of reactions.
Antiepileptics used to treat epilepsy e.g. lamotrigine, phenytoin	May cause drowsiness, confusion or slowing of reactions.
Opioid painkillers e.g. morphine, codeine	Strong pain killers may cause slowing of reactions, impaired balance, drowsiness or confusion.
Medications for nerve pain e.g pregabalin, amitriptyline	May cause sedation leading to falls
Diabetes e.g. gliclazide	Lower blood sugar can cause confusion, weakness or feeling light-headed.

Medications for enlarged prostate e.g tamsulosin	Lowers blood pressure causing drowsiness and/or dizziness when getting up from sitting or lying. Ensure residents take time standing up from a sitting or lying position
Antihistamines used to treat allergies e.g. loratadine	May cause drowsiness, blurred vision or confusion
Medicines used to treat Parkinson's disease e.g. co-careldopa (Sinemet®) co-beneldopa (Madopar®)	Lowers blood pressure causing drowsiness and/or dizziness when getting up from sitting or lying. Ensure residents take time standing up from a sitting or lying position. Can also cause delirium

References

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- PrescQIPP Bulletin 87. Care homes - Medication and falls 2.1, December 2014
- Gallagher P, Ryan C, O'Connor M, Byrne S, O'Sullivan D, O'Mahony D. STOPP (Screening Tool of Older Persons' Prescriptions)/START (Screening Tool to Alert Doctors to Right Treatment) criteria for potentially inappropriate prescribing in older people: version 2. Age and Ageing 2014; O: 1-6
- Medication and the Risk of Falls in Older People- Bedfordshire Luton and Milton Keynes ICB Care Home Medicines Optimisation team – January 2023, Review date – January 2025
- Good Practice Guidance: Structure Medication Review (SMR) for Social Care Professionals Frimley ICB
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