NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Guideline

Falls: assessment and prevention in older people and in people 50 and over at higher risk (update)

Draft for consultation, October 2024

This guideline covers assessment of falls risk and interventions to prevent falls in people aged 65 and over, and people aged 50 to 64 who are at higher risk of falls. It aims to reduce the risk and incidence of falls, and the associated distress, pain, injury, loss of confidence, loss of independence and mortality.

This guideline will update NICE guideline CG161 (published June 2013).

Who is it for?

- Health and social care practitioners
- Local authorities
- Care home providers, managers and staff
- Commissioners and providers of health and social care services
- People aged 65 and over, their families and carers
- People aged 50 to 64 with a condition or conditions that may put them at risk of falls, their families, and carers.

What does it include?

- the recommendations
- recommendations for research
- rationale and impact sections that explain why the committee made the recommendations and how they might affect services
- the guideline context.

Information about how the guideline was developed is on the guideline's webpage This includes the evidence reviews, the scope, details of the committee and any declarations of interest.

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Contents

Recommendations

People have the right to be involved in discussions and make informed decisions about their care, as described in NICE's information on making decisions about your care.

Making decisions using NICE guidelines explains how we use words to show the strength (or certainty) of our recommendations and has information about prescribing medicines (including off-label use), professional guidelines, standards and laws (including on consent and mental capacity), and safeguarding.

Healthcare professionals and social care practitioners should follow our general guidelines for people delivering care:

- Patient experience in adult NHS services
- Babies, children and young people's experience of healthcare
- Service user experience in adult mental health
- People's experience in adult social care services
- Shared decision making
- Medicines adherence
- Medicines optimisation
- Multimorbidity
- Decision making and mental capacity

1.1 Identifying people at risk of falls for further assessment

1.1.1 Do not use falls risk prediction tools to predict a person's risk of falling.

Community and hospital outpatient settings

1.1.2 In community and hospital outpatient settings, determine the most appropriate falls assessment and management approach for people who are aged 50 to 64 with a condition that could increase the risk of falls and people aged 65 or over by asking about the details of any falls. This can be done:

- when a person presents after a fall **and**

- by opportunistically asking people (for example, in routine appointments and annual health checks) whether they have fallen in the past year.

1.1.3 Offer comprehensive falls assessment and management for people who have fallen in the past year and:

- are living with frailty **or**
- were injured in a fall **or**
- have experienced loss of consciousness related to a fall **or**
- have been unable to get up independently after a fall **or**
- have had 2 or more falls.

See the sections on:

- comprehensive falls assessment **and**
- community and hospital outpatient settings – comprehensive falls management.

1.1.4 For people who have fallen in the past year and who do not fulfil any of the criteria for comprehensive falls assessment and management in recommendation 1.1.3, assess their gait and balance.

1.1.5 For people who have fallen in the past year who have a gait or balance impairment, offer a falls prevention exercise programme and consider a home hazard assessment (see the section on community and hospital outpatient settings – people who have fallen once in the past year and have a gait and/or balance impairment).

1.1.6 Offer health and lifestyle information (see the section on information and education) for people aged 50 to 64 with a condition that could increase the risk of falls and people aged 65 or over who:

- have not fallen in the past year **or**
- have had a single fall in the past year and do not have a gait and/or balance impairment.

Hospital inpatient and residential care settings (including nursing homes)

1.1.7 Offer comprehensive falls assessment and management to people in hospital inpatient and residential care settings who are aged 50 to 64 with conditions that could increase their risk of falls, or are aged 65 and older.

Also see the sections on:

- comprehensive falls assessment
- hospital inpatient settings – comprehensive falls management **and**
- residential care settings – comprehensive falls management.

For a short explanation of why the committee made these recommendations and how they might affect services, see the rationale and impact section on identifying people at risk of falls for further assessment.

Full details of the evidence and the committee's discussion are in:

- evidence review B: clinical assessments
- evidence review C: accuracy of screening tools
- evidence review D: electronic patient records
- evidence review E: methods of assessment.

1.2 Comprehensive falls assessment

1.2.1 Offer a comprehensive falls assessment for people who:

- are in community and hospital outpatient settings, and meet the criteria in recommendation 1.1.3 **or**
- are in hospital inpatient and residential care settings, and meet the criteria in recommendation 1.1.7.

1.2.2 Consider including the following in the comprehensive falls assessment to identify the person's individual fall risk factors:

- gait, balance and mobility, and muscle weakness assessment
- osteoporosis risk assessment
- assessing the person's perceived functional ability and asking about fear of falling
- assessment of any visual impairments
- assessment of any hearing impairments
- assessing cognition and/or mood
- a neurological examination
- a cardiovascular examination (including lying and standing blood pressure test)
- assessment of urinary continence
- footwear and foot condition assessment
- asking about diet, weight loss and fluid intake
- assessment of alcohol misuse
- asking about dizziness and performing a Hallpike–Dix manoeuvre if indicated
- a structured medication review.

1.2.3 Ensure that the person’s multiple individual risk factors identified in the comprehensive falls assessment are promptly addressed with appropriate interventions to reduce their risk of falls. See the sections on comprehensive falls management in:

- community and hospital outpatient settings
- hospital inpatient settings **and**
- residential care settings.

For a short explanation of why the committee made these recommendations and how they might affect services, see the rationale and impact section on comprehensive falls assessment.

Full details of the evidence and the committee’s discussion are in:

- evidence review C: accuracy of screening tools

- evidence review E: methods of assessment.

1.3 Interventions to reduce the risk of falls

Community and hospital outpatient settings – people who need comprehensive falls management

These recommendations are for people in community and hospital outpatient settings who are aged 50 to 64 with conditions that could increase their risk of falls and people aged 65 and older, who need comprehensive falls management to reduce their risk of falling (see the section on identifying people at risk of falls for further assessment).

1.3.1 Ensure that interventions to reduce a person's risk of falls promptly address their individual multiple fall risk factors, as established in the section on comprehensive falls assessment.

Medication review

1.3.2 Consider carrying out a structured medication review:

- to identify any medicines that may increase the person's risk of falls **and**
- consider adjusting their medicines to reduce that risk.

Also see the section on medication review in the NICE guideline on medicines optimisation and the section on reviewing medicines in the NICE guideline on medicines adherence.

1.3.3 For older people taking psychotropic medicines (which cause an increased risk of falls):

- review any psychotropic medicines **and**
- discuss the risks with the person **and**
- plan withdrawal as appropriate.

Also see the NICE guideline on medicines associated with dependence or withdrawal symptoms.

Vitamin D supplements

1.3.4 Although there is insufficient evidence to support taking vitamin D supplements specifically to lower the risk of falls, encourage people to follow NHS advice on taking vitamin D to maintain bone and muscle health. Also see the NICE guideline on vitamin D: supplement use in specific population groups.

Home hazard interventions

1.3.5 Offer a home hazard assessment and intervention, carried out by an occupational therapist, using a validated tool.

Surgical interventions

1.3.6 If the person has visual impairment caused by cataracts, refer them to an ophthalmologist (also see the NICE guideline on cataracts in adults).

1.3.7 If the person has experienced falls with an unexplained cause:

- investigate possible cardioinhibitory carotid sinus hypersensitivity as a cause **and**
- consider cardiac pacing if indicated.

Falls prevention exercise programmes

1.3.8 Consider a falls prevention exercise programme for people who need comprehensive assessment and management.

1.3.9 Falls prevention exercise programmes should:

- be delivered by appropriately trained professionals
- be tailored to the person's specific needs, preferences, goals and abilities
- focus on functional components related to the person’s risk of falls, such as balance, coordination, strength and power
- include regular exercise progress reviews

- be delivered in such a way, including duration of programme, to bring about physical activity behaviour change related to physical activity and sedentary habits.

1.3.10 Consider cognitive behavioural approaches for people who have a fear of falling who do not respond to strength and balance exercises.

Community and hospital outpatient settings – people who have fallen once in the last year and have a gait or balance impairment

These recommendations are for people in community and hospital outpatient settings who are aged 50 to 64 with conditions that could increase their risk of falls and people aged 65 and older, who do not need comprehensive falls management interventions (see the section on identifying people at risk of falls for further assessment), but may benefit from specific interventions to reduce their risk of falling.

Falls prevention exercise programmes

1.3.11 Offer a falls prevention exercise programme (also see recommendations 1.3.9 and 1.3.10).

Home hazard interventions

1.3.12 Consider a home hazard assessment and intervention, carried out by an occupational therapist, using a validated tool.

For a short explanation of why the committee made these recommendations and how they might affect services, see the rationale and impact section on interventions to reduce the risk of falls (community and hospital outpatient settings).

Full details of the evidence and the committee's discussion are in evidence review F: interventions for prevention of falls in community settings.

Hospital inpatient settings – comprehensive falls management

These recommendations are for people aged 50 to 64 with conditions that could increase their risk of falls and people aged 65 and older, who are in hospital inpatient settings.

1.3.13 Ensure that interventions to reduce a person's risk of falls promptly address their individual multiple risk factors as established in the section on comprehensive falls assessment, taking into account whether the risk factors can be improved or managed during the patient's expected stay. This can be facilitated by:

- using a validated tool to assess the person for delirium **and**
- taking into account risk factors related to the ward environment **and**
- providing individually tailored education sessions that the person is able to engage with and participate in; for people who lack capacity, see the NICE guideline on decision making and mental capacity.

1.3.14 At discharge from hospital, consider referring the person to community services so that risk factors identified during their hospital stay that would also be relevant in their discharge destination can be addressed.

Medication review

1.3.15 After the person has had a structured medication review, consider making appropriate adjustments to their medicines to reduce the risk of falls. Also see the section on medication review in the NICE guideline on medicines optimisation and the section on reviewing medicines in the NICE guideline on medicines adherence.

Vitamin D supplements

1.3.16 Although there is insufficient evidence to support the use of taking vitamin D supplements specifically to reduce the risk of falls while in hospital, encourage people to follow NHS advice on taking vitamin D to maintain bone and muscle health. Also see the NICE guideline on vitamin D: supplement use in specific population groups.

Physical activity and exercises

1.3.17 Encourage people to remain active during their hospital stay by:

- reassuring them that they should not usually avoid or restrict activity **and**
- helping them to be less sedentary and more active, for example, encouraging them to get out of bed, regularly stand up and walk around, and participate in exercise activities, if appropriate.

For a short explanation of why the committee made these recommendations and how they might affect services, see the rationale and impact section on interventions to reduce the risk of falls (hospital inpatient settings).

Full details of the evidence and the committee's discussion are in evidence review G: interventions for prevention of falls in hospital settings.

Residential care settings (including nursing homes) – comprehensive falls management

These recommendations are for older people aged 50 to 64 with conditions that could increase their risk of falls and people aged 65 and older, who live in residential care settings.

1.3.18 Ensure that interventions to reduce a person's risk of falls promptly address their individual multiple risk factors as established in the section on comprehensive falls assessment, taking into account whether the risk factors can be resolved, improved or managed. This can be facilitated by assessing whether delirium may be contributing to the person's falls risk.

Medication review

1.3.19 Carry out a structured medication review as described in the section on reviewing medicines in the NICE guideline on managing medicines in care homes:

- to identify any medicines that may increase the person's risk of falls **and**
- consider adjusting their medicines to reduce that risk.

Also see the section on medication review in the NICE guideline on medicines optimisation and the section on reviewing medicines in the NICE guideline on medicines adherence.

1.3.20 For older people taking psychotropic medicines (which cause an increased risk of falls):

- review any psychotropic medicines **and**
- discuss the risks with the person **and**
- plan withdrawal as appropriate.

Also see the NICE guideline on medicines associated with dependence or withdrawal symptoms.

Vitamin D supplements

1.3.21 Although there is insufficient evidence to support taking vitamin D supplements specifically to reduce the risk of falls, encourage people to follow NHS advice on taking a vitamin D supplement to maintain bone and muscle health. Also see the NICE guideline on vitamin D: supplement use in specific population groups.

Physical activity and exercise

1.3.22 Encourage people to remain active by:

- reassuring them that they should not avoid or restrict activity **and**
- helping them to be less sedentary and more active, for example, by encouraging them to get out of bed, regularly stand up and walk around, and participate in exercise, as appropriate.

1.3.23 Consider an exercise or movement class or programme for people in residential care settings. These should be tailored to the person's abilities and preferences and could be on an individual or group basis.

For a short explanation of why the committee made these recommendations and how they might affect services, see the rationale and impact section on interventions to reduce the risk of falls (residential care settings [including nursing homes]).

Full details of the evidence and the committee's discussion are in evidence review H: Interventions for prevention of falls in residential care settings.

1.4 Maximising ongoing participation in falls prevention interventions

1.4.1 In all settings, maximise the likelihood of people participating in falls prevention interventions as follows:

- Consider providing supervised exercises, and offer people a choice in how exercises are delivered, for example, face-to-face or online sessions
- Discuss and agree with the person what changes they are willing and able to make to reduce their risk of falls
- Agree and encourage change with the person, and address potential barriers, for example, if a person doubts that they can complete the exercises or has a fear of falling.

1.4.2 When developing falls prevention programmes, staff should ensure that:

- the interventions are flexible enough to accommodate each person's different needs and preferences **and**
- the programmes promote the value of social contact.

For a short explanation of why the committee made these recommendations and how they might affect practice, see the rationale and impact section on maximising ongoing participation in falls prevention interventions.

Full details of the evidence and the committee's discussion are in evidence review I: maximising participation, adherence and continuation of falls prevention interventions.

1.5 Information and education

In all settings

1.5.1 In all settings (community and hospital outpatients, hospital inpatients and residential care), if a person is at risk of falling, discuss ways that they can reduce their risk as well as improve their overall wellbeing, and provide information that they can take away. Involve the person's family and carers as appropriate. Topics to discuss include the following:

- That a person's risk of having a fall depends on their individual risk factors (for example, increasing age, taking certain medicines, or having low blood pressure or cataracts), and that some risk factors can be modified (for example, by undertaking appropriate exercise interventions, having a medication review, or having cataract surgery).
- That some falls are preventable, with suggestions and ideas to reduce the risk of falling, tailored to their individual risk and circumstances.
- How interventions to prevent falls (for example, those focusing on exercise and staying active) can help, and how to stay motivated (for example, by participating in a group programme).
- What to do if they have a fall, including how to get up, and when and how to seek help.
- Sources of further information, for example, local and national organisations and support groups.

For more guidance on communication (including different formats and languages) and providing information, see NICE's guideline on patient experience in adult NHS services.

In hospital inpatient settings

1.5.2 If a person is at risk of falling and is in a hospital inpatient setting, discuss the points in recommendation 1.5.1, and also discuss ways that they can reduce their risk and improve their wellbeing in this setting. Topics to discuss include the following:

- That a person's risk factors may change when they are in hospital.
- How to move around safely and stay as active as possible while in hospital, and when and how to seek help (for example, if they need to call for assistance to go to the bathroom).
- How to use unfamiliar equipment during their admission, for example, bed controls and the call bell.
- How they, or hospital visitors such as family members, carers and friends, can alert staff about potential falls hazards.
- What support may be available after they are discharged from hospital to reduce their risk of having a fall.

In residential care settings (including nursing homes)

1.5.3 If a person is at risk of falling and is in a residential care setting, discuss the points in recommendation 1.5.1, and also discuss ways that they can reduce their risk of falls and improve their wellbeing in this setting. Topics to discuss include the following:

- How to move around safely and stay as active as possible, and when and how to seek help.
- How to use equipment in residential settings, for example, bed controls, call bells and movement sensors.
- How they, or visitors such as family members, carers and friends, can alert staff about potential falls hazards.

For a short explanation of why the committee made these recommendations and how they might affect services, see the rationale and impact section on information and education needs.

Full details of the evidence and the committee's discussion are in evidence review A: information and support.

Terms used in this guideline

This section defines terms that have been used in a particular way for this guideline.

Comprehensive falls assessment

An assessment that aims to identify a person's risk factors for falling.

Comprehensive falls management

Management of falls using interventions tailored to address the risk factors identified in a comprehensive assessment. Individual interventions may be directly carried out by 1 or more health professionals in a specialist falls team (for example, a medication review by the team pharmacist or a home hazard modification by the team occupational therapist) or by referrals for further action (for example, a referral to ophthalmology for consideration of cataract surgery).

Conditions that increase the risk of falling

A long-term health condition such as heart disease, dementia or hypotension.

Psychotropic medicines

Psychotropic medicines work in the brain. They affect behaviour, mood, consciousness, thoughts or perception. They include antipsychotic, antidepressant, anxiolytic, mood stabilising, and antiepileptic medicines.

Supervised exercise

Exercises sessions (which may be one-to-one or in a group, in person or online) that are supervised by a professional, trained non-professional or volunteer who is present during the exercise session.

Recommendations for research

The guideline committee has made the following recommendations for research.

Key recommendations for research

1 Wearable technologies for falls risk assessment

How accurate are wearable technologies in identifying risk of falls?

For a short explanation of why the committee made this recommendation for research, see the rationale and impact section on comprehensive falls assessment.

Full details of the evidence and the committee's discussion are in evidence review E: methods of assessment.

2 Environmental interventions in hospital inpatient settings

Do interventions addressing the ward environment reduce the risk of falls in hospital inpatient settings?

For a short explanation of why the committee made this recommendation for research, see the rationale and impact section on interventions to reduce the risk of falls (hospital inpatient settings).

Full details of the evidence and the committee's discussion are in evidence review G: interventions for prevention of falls in hospital settings.

3 Supervision interventions in hospital inpatient settings

Does enhanced supervision lead to a reduction in the incidence of falls in hospital inpatient settings?

For a short explanation of why the committee made this recommendation for research, see the rationale and impact section on interventions to reduce the risk of falls (hospital inpatient settings).

Full details of the evidence and the committee's discussion are in evidence review G: interventions for prevention of falls in hospital settings.

4 Interventions for people in residential care settings with dementia

What interventions that address behavioural and psychological symptoms of dementia are most effective in reducing the risk of falls in care home residents with dementia?

For a short explanation of why the committee made this recommendation for research, see the rationale and impact section on interventions to reduce the risk of falls (residential care settings).

Full details of the evidence and the committee's discussion are in evidence review H: interventions for prevention of falls in residential care settings.

5 Assistive technologies

Do assistive technologies in community settings reduce the incidence of falls?

For a short explanation of why the committee made this recommendation for research, see the rationale and impact section on interventions to reduce the risk of falls (community and hospital outpatient settings).

Full details of the evidence and the committee's discussion are in evidence review F: interventions for prevention of falls in community settings.

Rationale and impact

These sections briefly explain why the committee made the recommendations and how they might affect services

Identifying people at risk of falls for further assessment

Recommendations 1.1.1 to 1.1.7

Why the committee made the recommendations

Falls risk assessment tools

Limited evidence was found on assessment tools that identify people at risk of falls in hospital, residential care or community settings. The evidence related to tools did not reach an acceptable threshold of sensitivity or specificity. They were also impractical to use in some settings.

The committee discussed the complexity around assessing the risk of falling, including how the environment, the person and their individual risk factors can lead to falls, and agreed that it is not possible to predict a fall with any accuracy. They agreed that risk assessment tools are not particularly useful and can be a distraction because they only stratify people into high- or low-risk categories without recommending any further intervention.

In community settings, a number of studies assessing gait and balance (such as the Timed Up and Go [TUG)] test) were identified. Although the committee agreed that these tests are helpful in observing gait and balance problems, they do not predict a person's risk of falling. The committee acknowledged that case-finding of people who have had a previous injury from a fall or have had multiple falls, have frailty or have gait or balance problems, is useful to identify those who may need a more detailed assessment and would benefit from a more comprehensive management approach. The committee agreed that the same recommendations for community settings should apply to hospital outpatients.

The committee noted that risk assessment tools are not generally used in a hospital setting because the resources required to carry out assessments are often not available, and the results are not used to make management decisions.

Most residents in care homes are likely to be frail and are already considered at risk of falls. For both hospital inpatient and residential settings, it is usual practice to carry out a comprehensive falls risk assessment because the person is considered as being at high risk of falling.

Assessing the risk of falls

The only evidence identified on how to clinically assess a person's risk of falls came from studies that investigated clinical judgement or the healthcare professional's knowledge of the patient. No evidence was identified on the most accurate methods of assessment. Evidence was only available for hospital and residential settings.

A few studies reported history of falls as a prognostic factor. The committee agreed that this is a good indicator and a previous fall would trigger a referral for further assessment. The risk of falls is commonly picked up in community and hospital outpatient settings, where a healthcare professional will use the opportunity of the person presenting for an appointment or health check to identify people at risk of falls, for example, if a person has an unsteady gait, or if their knowledge of the person and their medical condition suggests they could be at higher risk of falls. However, the committee also acknowledged that, because of the short consultation time (for example, in a GP appointment), a healthcare professional will have limited opportunity and time to assess a person's falls risk. They also noted that it is current practice in community settings to assess risk based on observation and ask a person about any history of falls, often during appointments with a nurse or physiotherapist.

The committee agreed with the falls risk assessment recommendations for people who report having had a fall in the past year in the current falls guideline and decided to adapt these, and clarify the criteria for who should be offered a comprehensive falls assessment and management. For people who have fallen but do not meet the criteria, the committee agreed they should have a gait and balance assessment as recommended in the current falls guideline and decided to use this with which to base their recommendations.

How the recommendations might affect services

The recommendations reflect current practice and will have a minimal resource impact.

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Comprehensive falls assessment

Recommendations 1.2.1 to 1.2.3

Why the committee made the recommendations

Limited evidence was found on the accuracy of individual risk factor assessment in identifying the risk of falls in older adults. Risk tools including minimum data set, comprehensive assessments, balance and gait assessments or wearable technologies, were included.

The committee agreed that the evidence did not identify which methods of assessment are most useful at predicting risk of falls. The tests tended to only assess 1 aspect associated with falls risk, such as balance or gait, and did not assess the examine other possible predictors. The committee agreed that any risk assessment tools should be used in conjunction with a comprehensive falls assessment, to reflect the multifactorial nature of falls. This should include a range of assessments such as gait, balance and mobility, osteoporosis risk, visual and hearing impairments, cognition, neurological and cardiovascular examination, continence, and diet and fluid intake.

There was little evidence on wearable assessment technologies that met the inclusion criteria, because most of the studies identified are laboratory-based studies and therefore were not included. The committee agreed that further research in a real-world setting is required, and made a recommendation for research about the accuracy of wearable technologies in identifying the risk of falls.

How the recommendations might affect services

The recommendations reflect current practice and are unlikely to have a resource impact.

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Interventions to reduce the risk of falls

Community and hospital outpatient settings

Recommendations 1.3.1 to 1.3.12

Interventions to reduce the risk of falls for people presenting in community and hospital outpatient settings depend on the person's individual factors, and the characteristics and context of any falls that they have had. The committee agreed

the criteria that would make a person eligible for a comprehensive falls management approach, and each of the following interventions are discussed in this context.

There was evidence on the clinical benefits of a medication review and withdrawing psychotropic medication in the community setting. It is current practice to carry out a review of a person's medicines, but this is not specifically to reduce falls. The committee agreed that a person's medication should be reviewed and potentially changed to reduce symptoms and adverse events, or to improve quality of life. Withdrawal of psychotropic medicines is difficult and needs to be reduced very slowly.

Most of the evidence for vitamin D showed no difference in the rate or number of falls, and the committee agreed that the clinical evidence did not support using vitamin D supplementation as an intervention to prevent falls in an older population. Vitamin D is part of standard care for people with a deficiency. The committee agreed the need to follow national public health guidance on vitamin D supplementation.

The evidence showed a clinical benefit of home hazard interventions to reduce falls. In most studies, this was a hazard assessment with modifications carried out in the home. The committee noted the greater clinical benefit seen in people who had fallen at least once in the previous year. Greater benefit was shown when interventions were delivered by an occupational therapist. Health economic modelling confirmed that home hazard assessment and modifications carried out by an occupational therapist are less costly and more effective.

Limited evidence, in terms of quantity and quality, found a clinical benefit for cardiac pacing and cataract surgery in reducing the rate of falls. The committee discussed the recommendation for cardiac pacing made in the previous falls guideline and agreed that it should be retained. The committee agreed that cataract surgery is a simple and effective intervention, and that people should be referred to an ophthalmologist, and referred to the NICE guideline on cataracts in adults.

Overall, the large body of evidence showed some benefit for exercise as an intervention to reduce falls. The type of exercise included in the studies varied, but often included functional components related to the risk of falls, such as balance,

coordination and strength. The committee agreed that exercise programmes should be individualised based on an assessment, and tailored according to the level of risk of falling. A person's progression and continuing benefit from the exercise programmes should be reviewed regularly. This would also include discussing with the person the importance of continuing to exercise beyond the structured programme, and explaining that exercise should be made part of everyday activity for life to maintain benefit.

The committee discussed the small amount of evidence for psychological interventions, all of which were for cognitive behavioural therapy (CBT), which showed some benefit although results were mixed. The committee discussed that in their experience, a small number of people who have a fear of falling may be referred for CBT. The evidence did not include fear of falling, but the committee discussed how this can have a significant detrimental effect on quality of life. Although there was not enough evidence to support a CBT programme, the committee agreed cognitive behavioural approaches could be considered for people who have a fear of falling and do not respond to strength and balance exercises.

People who have not met the criteria for a comprehensive falls assessment and management but who have fallen in the last year and have been identified as having a gait or balance impairment may benefit from specific interventions to reduce their risk of falling. The committee agreed that the evidence supports a falls prevention exercise programme for this population. People at lower risk are more likely to benefit from exercise to prevent future falls than those with more frailty who are at greater risk of falling when exercising. A recommendation to consider a home hazard assessment and intervention was made to reflect the greater clinical benefit seen in people who had fallen more than once in the previous year. Health economic modelling also found that home hazard assessment and modifications are cost effective.

There was not enough evidence on assistive technologies such as footwear and foot devices, self-care and assistive devices, so the committee made a recommendation for research on whether assistive technologies in community settings reduce the incidence of falls.

Hospital inpatient settings

Recommendations 1.3.13 to 1.3.17

Limited evidence was found on medication review in hospital inpatient settings. A medication review would typically be carried out if a person was prescribed medicines known to increase the risk of falls, or they had a condition that could increase their risk of falling. Adjustments to a person's medication may need be made as a result of a review, and this would usually be part of a comprehensive falls risk assessment.

Limited evidence was identified for vitamin D and nutritional support. The committee agreed the evidence was not sufficient to recommend these for falls prevention. However, vitamin D is already recommended in NHS advice and other NICE guidelines for maintaining bone and muscle health, so the committee referred to these sources.

Most people are not in hospital long enough for an exercise intervention to have an effect on preventing falls. Therefore, there was limited evidence on the use of these types of interventions in hospitals, so the committee did not recommend specific exercises or exercise programmes for people in hospital inpatient settings. However, they agreed it is important to encourage people to remain as active as possible to prevent deconditioning and falls, but this can be done simply through usual movement, such as standing or walking, rather than structured exercise.

The range of environmental interventions included the type of flooring, low beds, identification bracelets and bed alarms, but the evidence was only in small, single studies. No benefit was found for identification bracelets that indicate if a person has previously fallen, but the committee acknowledged that 'tagging' is commonly used in hospital to enable staff to closely observe people identified at risk of falls, and provide more support with, for example, eating, getting out of bed and going to the bathroom. The committee agreed the need for more research on enhanced supervision interventions such as bay tagging and identification bracelets, and interventions addressing the ward environment such as ward layout, beds and alarms, because inpatient falls are a leading cause of hospital-related harm.

The committee made a recommendation for research on whether interventions addressing the ward environment reduce the risk of falls in hospital settings, and a further recommendation for research on whether enhanced supervision leads to a reduction in the incidence of falls in hospital settings.

Residential care settings (including nursing homes)

Recommendations 1.3.18 to 1.3.23

No evidence in residential care settings was identified. The committee agreed, based on their knowledge and experience, that in residential care settings, it is current practice to carry out a review of a person's medicines, although this is not specifically to reduce falls. The committee agreed that a person's medication should be reviewed and potentially changed to reduce symptoms and adverse events, or to improve quality of life. Withdrawal of psychotropic medicines is difficult and needs to be reduced very slowly.

Limited evidence showed a benefit in vitamin D and calcium supplementation in reducing fracture rates. The committee discussed the benefit of vitamin D supplements and acknowledged that this is standard care for people known to have a vitamin D deficiency, in line with existing guidance.

There was no evidence that any particular type of exercise was better than another, but there was evidence about the effectiveness of exercise in reducing the rate of falls. Exercises offered in residential care settings typically emphasise strength, gait and balance. A high level of supervision is often required because people in residential settings often have frailty or a cognitive impairment. The committee agreed that residents who are more mobile are likely to see a greater benefit from exercise interventions, although being mobile in itself does increase the risk of falling.

There was a lack of evidence on interventions for people with dementia. Cognitive impairment caused by dementia is common in residential care settings, and this population has an increased risk of falls because they are more likely to have gait and balance impairments and be taking medication that increases falls risk. Because no studies were identified that evaluated specific pharmacological or non-

pharmacological interventions targeting behavioural and psychological symptoms related to dementia, the committee made a recommendation for research on interventions for people in residential care settings with dementia.

How the recommendations might affect practice

Home hazard assessment and modifications delivered by an occupational therapist has been shown to be cost effective, but there is likely to be an impact on resourcing and implementation in terms of staff capacity. The remaining recommendations reflect current practice and will have a minimal resource impact.

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Maximising ongoing participation in falls prevention interventions

Recommendations 1.4.1 and 1.4.2

Limited evidence was found for methods of improving participation in, adherence to or continuation of falls prevention interventions. All the studies were carried out in community settings and had low numbers of participants. Although most of the interventions used in the studies showed some benefit in terms of improving adherence or participation, the evidence was very low quality, so the committee based the recommendations on their experience and consensus. For supervised exercise, benefits were seen in terms of participation or adherence interventions delivered by group sessions or remotely via live video compared with those delivered with no support. This was reflected in the committee's experience. The committee noted that the social aspects of group activity can have a beneficial effect and help relieve loneliness or feelings of isolation. In their experience, people are more likely to continue with exercise as part of a group rather than when exercising individually. However, they also recognised that some would prefer individual exercise sessions, so a personalised approach is needed, and people should be offered choice in how exercise is delivered. In-person sessions may be more suitable for people with more frailty and could require more supervision.

How the recommendations might affect practice

There is variation in how falls prevention exercise programmes are delivered. The recommendations may result in more people adhering to supervised exercise

interventions, and this could require more staff time to provide supervision. However, there is flexibility in how supervision can be undertaken. Often, an exercise programme can be a mixture of supervised and unsupervised. For example, a programme can start as face to face then people can do it themselves with regular telephone check-ins. The committee agreed that, in their experience, not everyone would opt for supervised exercise. Some people may not feel comfortable exercising in front of others or find attending regular classes difficult to manage or travel to, and consequently would choose online exercise programs. Also, any additional costs would be offset by the reduced falls and associated cost savings resulting from improved adherence to fall prevention exercises. As a result, the resource impact is unlikely to be significant.

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Information and education

Recommendations 1.5.1 to 1.5.3

Why the committee made the recommendations

A qualitative review examined the information and education needs of people at risk of falls. Overall, the themes reported in the evidence aligned with the committee's knowledge and experience of NHS-based practice and falls prevention interventions in the UK. Therefore, the committee were confident in making recommendations based on these findings and supplemented any gaps in the evidence base with their consensus opinion and their knowledge and experience.

One of the most prevalent themes to emerge from the evidence related to empowerment. Discussions that are positive and include information about falls prevention were found to be helpful, but discussions that inadvertently give the wrong messages can create fear and anxiety, and lead to people avoiding activity.

The most common information need identified in the evidence was about risk factors. The committee echoed this and recommended that these should be discussed with the person and agreeing what changes would help reduce their risk of falls. The committee agreed it is important to make people aware of their individual risk factors, and to give personalised information about falls prevention. Prevention strategies for

other specific falls risks may include review of a person's medications, referral, for example, to podiatry for gait issues, or an optician if vision is a problem. People should also be offered information and support to reduce the risk of falling in the home, for example, checking there is adequate lighting, removing trip hazards, and installing equipment such as grab rails or fall alarms.

Information on the value of exercise or strength and balance interventions and how to engage with these safely should be included in discussions or written information. The evidence showed the benefit of engagement with social networks and community groups, and that older people are more likely to adhere to group-based falls prevention activities because they promote encouragement and support from peers to maintain activities and improve motivation.

In hospital settings, people need additional information about operating and navigating unfamiliar equipment and environment. Falls prevention in hospital is largely dependent on factors such as call bells, nurse supervision, falls alarms, bed rails and walking aids. These are likely to be unfamiliar to patients who will need advice on how they work and when to use them. The committee agreed that discharge planning from hospital, including ensuring people know about what support is available to reduce falls risk after discharge, is important, particularly if a person is not going back to their usual setting, or their falls risk or mobility needs have changed.

The committee agreed that people's information needs are similar regardless of the setting. One of the main points discussed by the committee is the importance of maintaining an active lifestyle and ensuring that people are staying safe while being as active as possible. They recognised that in residential care settings, there is a fine balance between maintaining safety of residents to avoid falls and promoting exercise and encouraging engagement in activities. Activity can be promoted by providing information and education for people and their families on the benefits of exercise, and advice on how to maintain an active lifestyle safely in the specific setting.

How the recommendations might affect services

Although the recommendations are for different settings, in terms of resource impact, they are unlikely to be significantly different. The recommendations reflect current good practice.

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Context

A fall is ‘an unexpected event in which the participants come to rest on the ground, floor, or lower level’. Although falls can occur at any age, they become increasingly common as people get older. Around a third of people aged 65 and over, and around a half of people aged 80 and over, fall at least once a year. The impact of falls, especially in people aged 65 and over, includes distress, pain, injury including fractures, loss of confidence, loss of independence, and mortality. The consequences of fractures are significant, with a 1-year mortality rate of 31% after a hip fracture.

Between 2019 and 2020, there were around 234,800 emergency hospital admissions in England related to falls among people aged 65 and over. Around 157,370 (67%) of these admissions were among people aged 80 and over.

There are a large number of risk factors for falls. These include:

- a history of falls
- lower levels of strength because of a decline in muscle mass
- impaired balance because of declines and changes in sensory systems, the nervous system, and muscles
- polypharmacy and the use of psychotropic and antiarrhythmic medicines
- visual impairment
- environmental hazards
- frailty.

There is an increased risk of falling among some people under 65, including those with underlying conditions such as Parkinson’s disease and diabetes. This updated guideline reviews methods of identifying people aged 50 to 64 who are at risk of falls in all settings (including homes and social care settings) and would benefit from preventative measures.

Falls can occur in any setting but are the most reported patient safety incidents in acute hospitals and mental health trusts in England and Wales. Therefore, the identification of people at risk of falls and measures to prevent falls in these settings, requires special consideration. This update reflects changes in evidence related to

falls in hospital, to encourage the uptake of similar measures at home and in social care settings, and to reflect national developments, such as the work of the National Falls Prevention Coordination Group.

Finding more information and committee details

To find NICE guidance on related topics, including guidance in development, see the NICE topic page on injuries, accidents and wounds.

For details of the guideline committee, see the committee member list.