HSP 24 Preventing falls from beds

Procedure Index

Briefings

Having read this procedure all key points must be communicated to all staff that deal with resident care. An associated presentation has been produced with this aim.

1. Introduction

There are numerous measures that can prevent falls or injuries from bed, such as special low beds and the use of bed rails. Some residents fall out of bed because their illness affects their balance whilst other accidentally fall out due to unknown reasons. Bed rails are used extensively within the care home environment to protect residents falling out of bed. A balance approach is required when identifying which solution is best for each resident.

2. The problem

Falls from bed without bedrails, as well as being more frequent are more likely to involve higher severity injuries. Head injuries are more likely to occur with beds without bed rails as it appears residents who fall from beds with bed rails often appear to have exited towards the foot of the bed feet first.

Introducing bed rails can also introduce additional risks. There have been several causes of injury involving bed rails, the most serious being the result of entrapment by the head or neck. Injuries can also arise from a resident attempting to climb over the bedrails or when a restless person strikes their head against the rails.

3. What the Regulations require?

Each resident should be assessed to determine the controls required to prevent them falling out of bed. Bed rails should only be used to reduce the risk of a resident accidentally slipping, sliding falling or rolling out of bed. Bedrails used for this purpose are not forms of restraint.

Decision about the best bed set up for the resident is a balance between completing risks.

4. Assessing the risks

There are numerous suitable options available when selecting the most appropriate bed set-up for a resident. Staff should use their professional judgement to consider the risks and benefits for individual residents.

Bed set-up	Benefits	Issues / risks to consider
Bed at 'normal height' Bed rails not used	• Bed at correct height for resident to get out of bed unaided. • Comfortable position for resident within room. • Care can be given without operating bed.	• Fall severity higher (possible fractures or head injuries).
Low to floor bed	• Fall severity likely to be reduced (due to height fallen).	• Falls from bed still potential to cause injury (Head injuries common as residents roll out and hit head). • Difficult for resident to get out of bed unaided. • Bed requires raising when giving care (this raising up / down may be excessive in some cases where extensive care is required).
Bedrails	• Prevent falls from bed. • Residents 'feel secure'. • Enable residents to re-position themselves. • Beneficial for visually impaired residents. • Effective with alternating mattresses.	• Restrict resident's independence. • Recorded falls tend to be feet first. • Falls over top of bedrails potential to be higher severity (greater height). • Create 'barrier' between resident and staff. • Entrapment risk if incorrectly fitted. • Resident may dislike as feel 'trapped'.
Crash mats	• Reduce severity of injury from falls.	• Residents can still roll and hit head on bedside furniture. • Difficult for carers to provide care (trip hazard). • Trip hazard if resident attempts to leave bed unaided.

Movement detectors / increased supervision	• Can be used with all beds.	• Requires immediate carer response to prevent fall. • Resident may feel independence reduced.
Positioning wedges	• Residents feel secure • No entrapment risk. • Enable residents to re-position themselves.	• Not fixed so position may change.

Residents climbing over bedrails

If residents are found attempting to climb over their bedrails, this should be taken as a clear indication that they are at risk of serious injury from falling from a greater height. The risks of using bedrails are likely to outweigh the benefits. Residents who are significantly confused and have enough strength and mobility to climb over bedrails are the most vulnerable.

Height of Beds

Beds should usually be kept at the lowest possible height at night to reduce the likelihood of injury in the event of a fall, whether bedrails are used. The exception to this is independent mobile patients who are likely to be safest if the bed is adjusted to the correct height for their feet to be flat on the floor whilst they are sitting on the side of the bed.

Beds will need to be raised when direct care is being provided. Residents receiving frequent assistance may be more comfortable if their bed is left raised, rather than it being constantly raised and lowered.

Bedrails – entrapment risk

Bedrails can potentially create gaps which can trap a resident's limb or head. The majority of the beds within EFHL have integral bed rails and these risks are generally removed by the bed design when used with the correct mattresses. Issues can occur when different combinations of mattresses are used. The following dimensions need to be checked.

- Between the end of bed rail and headboard. This should be either small enough to prevent a leg / arm getting caught (<60mm) or large enough not to get head or body caught (>250mm).
- Gap between compressed mattress and bottom of bedrail. Again risk here is a limb getting caught.
- The dimension between rails (must be <120mm to prevent head getting caught). This risk can be reduced entirely by putting a bumper cover over the rails.
- Height of top of mattress to top of bed rail (must be >220mm). This is critical if mattresses are replaced and the risk here is resident rolling over the top of the bedrail. (The top of the bedrail must be more than 220mm above the top of uncompressed mattress in at least 50% of the length of the mattress and with bed base in flat position.

Moving of Beds

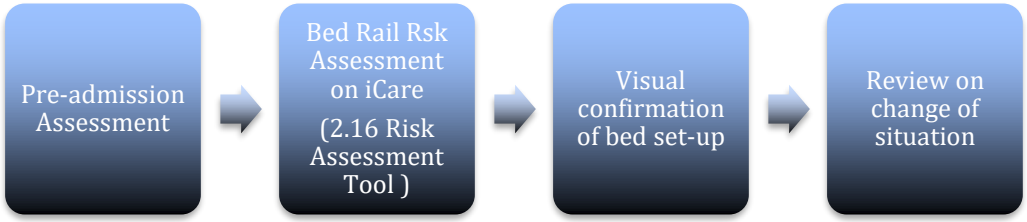
Profiling beds are provided with wheels to enable them to be moved. To prevent the bed from moving when in position all four leg brakes must be engaged.

Incidents have occurred where residents have sat down on the unsecured bed and it has shifted and they have fallen.

5. Risk assessment process

The resident should decide whether to have bedrails if they have capacity. If resident lacks capacity, staff have a duty of care to decide if bedrails are in the residents' best interests.

The assessment process involves the following steps.



Pre-admission bed rail assessment

Before a resident is admitted to the care home, a pre-admission assessment is completed. Part of the pre-admission is to review the residents sleeping arrangements and specifically whether bed rails are suitable.

The following guidance notes should be used to make the initial bed rail decision.

		Resident mobility		
		Resident immobile or hoist dependent	Resident is neither independent or immobile.	Resident can mobilise without help.
Resident mental state	Resident confused or disorientated	**Bedrails used with care**	**Bedrails are not recommended**	**Bedrails are not recommended**
	Resident is drowsy	**Bedrails used with care**	**Bedrails used with care**	**Bedrails are not recommended**
	Resident is alert	**Bedrails can be used**	**Bedrails can be used**	**Bedrails are not recommended**

As part of the pre-admission assessment it should also be verified whether the resident has previously been using bed rails.

The consent of the resident to the use of bed rails should be obtained.

Bed Rail Risk Assessment (iCare form – 2.16 Risk Assessment Tool – Bed Rail Pack)

The Bed Rail Risk Assessment on iCare must be completed for all residents as it documents the sleeping set-up. Some of the key information within the assessment maps into the My Sleep and Resting Care Plan.

iCare Risk Assessment tool Questions

No.	iCare Risk Assessment tool Questions	Info transferred to Care Plan (1)	Answer format
Q1	What is the residents room number?		Free text
Q2	Has the resident got 'atypical anatomy'		Yes / No

Q3	What bed is in use for the resident?		Free text
Q4	What mattress is in use for the resident?		Free text
Q5	What are the alternatives to bed rails that have been considered and or tried?		Free text
Q6	The risk of not using bed rails?		Drop down option
Q7	Total number of options selected in Q6		Free text
Q8	The risk of using bedrails		Drop down option
Q9	Total number of options selected in Q8		Free text
Q10	BED RAIL USE NOT RECOMMENDED IF THE NUMBER OF YES ANSWERS IN QUESTION 8 IS GREATER THAN THE NUMBER IN QUESTION 6	Yes	Drop down option
Q11	On what ground do you suspect there might be a reason to question the resident's capacity		Drop down option
Q12	Does the resident have an impairment of, or a disturbance in the functioning of the mind or the brain?		Drop down option
Q13	Describe type of impairment or disturbance in the functioning of the brain or the mind?		Free text
Q14	Is the impairment/disturbance sufficient that the resident lacks capacity to make a particular decision		Drop down option
Q15	Describe the setting in which you have assessed the resident capacity		Free text
Q16	Has a second opinion been sought		Free text
Q17	**Does the resident HAVE CAPACITY to make an informed decision in relation to the use of bed rails?**	Yes	Drop down option
Q18	**Other consideration**	Yes	Drop down option
Q19	Describe the actions to be taken if any of the options selected on Question 14 includes a "has not" answer	Yes	Drop down option
Q20	Have you consulted with and considered the views of the following people		Drop down option
Q21	Describe who has been contacted, when and their views		Free text
Q22	**Bed rails fitting risk assessment**	Yes	Drop down option
Q23	**If any "not acceptable" options been selected on Question 18, what actions are being taken**	Yes	Drop down option
Q24	Controls in place for residents with atypical anatomy		Free text
Q25	THIS FORM SHOULD BE REVIEWED MONTHLY OR BEFORE IF NECESSARY		

(1) Answers to this question transferred to My Sleep & Resting Care Plan.

Guidance on how to fill in this form is provided in Appendix A.

Visual confirmation of bed set-up

After completion of the Bed Rail Risk Assessment a visual confirmation should be completed on the bed set-up by care staff. This should confirm that the controls identified on iCare are in place.

This should confirm that:

- The appropriate mattress is in place.
- Bedrail bumper covers are in place if bedrails being used.
- If bedrails are in use, there is at least 220mm between mattress top and bedrail top.

  (If gap is not achieved this must be assessed and recorded on iCare).
- No entrapment hazards exist.
- Bed is appropriately positioned to enable care.

6. Atypical (small) residents

Adults of small stature using beds which are designed for use by adults with typical body dimensions present a risk as they are physically smaller patients and can get trapped in smaller gaps.

Small stature is defined as any one of:

- Less than 146cm in height
- Mass less than 40kg
- Body mass index of less than 17.

The Guidance states that Adults with atypical anatomy should be using beds compliant with BS EN 50637:2017 (children and small adults) unless there is a clinical reason for using a non-compliant bed.

EFH standard beds do not conform to this standard but conform to standards for adults (BS EN 60601-2-52:2010+A1:2015). As such detailed assessment is required, which should be documented with the Bedrail assessment in iCare, including any steps which need to be taken to reduce risk.

Appendix B provides guidance on additional information to check with an atypical resident.

7. Bed grab handles

Bed grab handles (also known as bed sticks or bed levers), are designed to aid mobility for the person in bed and to help them transfer to and from bed, rather than to prevent falls from bed.

Bed grab handles can pose the same hazards to users as bed rails, including entrapment. Their use should be carefully considered, risk assessed and documented using the environmental risk assessment form.

8. Training

All care staff should receive training in the use of bedrails as part of their induction.

9. Maintenance / Inspection

All beds within EFHL are inspected annually by an external specialist (currently Bakare). The inspection includes a detailed inspection of operation of the bed and verification that the bedrails are fit for purpose. Critical dimensions of bedrails are confirmed and any infringements are flagged up. Any safety critical recommendations from this inspection must be actioned immediately.

10. A Summary of the main points

Check that:

- Bed rail risk assessments are being completed for all residents.
- Bumper covers are always used with bedrails.
- Bed examinations by manufacturer are completed annually.
- Defects are reported immediately and rectified.

11. Associated documents

- HSP 24A Mattress and Bedrail Audit Tool

- RAG 24 Use of bed rails
- RAG 25 Using Profiling beds

12. Document history

Author	Steve Andrews (Health & Safety Manager)
Date of Implementation	07/01/2019
Date of next full review	01/01/2027

Issue	Date	Author	Reason
1.0	07/01/2019	Steve Andrews	New document.
2.0	13/01/2021	Steve Andrews	Full document review – no changes.
3.0	01/02/2024	Steve Andrews	Full document review – updated in line with MHRA new guidance issued 2023. New sections added Section 6 (Bed grab handles) and Section10 (associated documents).
3.0	24/02/2024	Steve Andrews	Banner updated, no other changes, issue number kept same.
4.0	21/02/2025	Steve Andrews	Added information around how to manage atypical residents, updated iCare Bed rail RA.

Appendix A: Guidance on how to complete Bed Rail Risk Assessment

This is a generic form and some of the questions don't fit exactly with EFHL best practice. Answers are not required for all questions. Attention should be given to questions highlighted in bold as the answers to these feed directly into the main Care Plan.

No.	iCare Risk Assessment Question	Answer options	Guidance to filling in
Q1	What is the residents room number?		
Q2	Has the resident got 'atypical anatomy'	**Yes** if any one of following apply: - • Less than 146cm in height • Mass less than 40kg • Body mass index of less than 17.	If Yes – add controls in place in Q24.
Q3	What bed is in use for the resident?		Details of bed
Q4	What mattress is in use for the resident?		Details of mattress
Q5	What are the alternatives to bed rails that have been considered and or tried?		Only answer question if bed rails not to be used.
Q6	The risk of not using bed rails?	• Falling from bed before • High risk of falling • Very overweight • Semi – conscious • Visual impairment • Partial paralysis • Seizures or spasms • Sedated, drowsy from strong painkillers • Delirious or confused • Affected by alcohol • On a pressure relieving mattress which gives at the sides • Bedrails already in place • A self-operated profiling bed (if yes, there maybe more likely to slip, roll, slide or fall out of bed). • Have osteoporosis	Relevant answers to the risk of not using bed rails are : - • Falling from bed before • High risk of falling. Some of the other conditions may increase the risk of falling.

		• Anticoagulant medication • Has fragile skin • Has a vascular disease • Malnourished • Resident wishes to use bed rails, due to anxiety / fear. Long term health conditions, eg Parkinsons disease (likelihood of nightmares)	
Q7	Total number of options selected in Q6		
Q8	The risk of using bedrails	• Bed rails will stop the resident being independent • The resident is likely to climb over the bed rails • The resident could injure themselves with uncontrolled movements, restlessness and confusion or fragile skin. • Could cause resident distress.	All are valid concerns . Note: If it is believed that resident is likely to climb over bed rails they should NOT be used.
Q9	Total number of options selected in Q8		
Q10	**BED RAIL USE NOT RECOMMENDED IF THE NUMBER OF YES ANSWERS IN QUESTION 8 IS GREATER THAN THE NUMBER IN QUESTION 6**	• The resident has been assessed, and the use of bed rails may be of benefit. • The resident has been assessed and bed rails are NOT TO BE USED.	Bed rail Assessment should be made as to whether their deployment will benefit resident. Select one option to describe decision made. Note: The number of Yes questions does not necessarily indicate best solution. (eg if believe resident climb over bedrails they should not be used irrespective of numbers).
Q11	On what ground do you suspect there might be a reason to question the resident's capacity	• The resident behaviours suggest they may lack capacity • The resident circumstances may suggest that they lack capacity eg severe side effects of medication, sectioned under the mental health act • Someone else has raised concerns about the residents capacity • There have been previous capacity issues • Other	
Q12	Does the resident have an impairment of, or a disturbance in the functioning of the mind or the brain?	• Yes • No	
Q13	Describe type of impairment or disturbance in the functioning of the brain or the mind?		

Q14	Is the impairment/disturbance sufficient that the resident lacks capacity to make a particular decision	• The resident can understand information relating to the decision. • The resident cannot understand the information relating to the decision. • The resident can retain the information long enough to make an informed decision. • The resident cannot retain the information long enough to make an informed decision. • The resident can weigh up/use the info to make an informed decision. • The resident cannot weigh up / use the info to make an informed decision. • The resident can communicate their decision by any means. • The resident cannot communicate their decision by any means.	
Q15	Describe the setting in which you have assessed the resident capacity		
Q16	Has a second opinion been sought		
Q17	**Does the resident HAVE CAPACITY to make an informed decision in relation to the use of bed rails?**	• The resident HAS CAPACITY to make an informed decision in relation to the use of bed rails. • The resident DOES NOT HAVE CAPACITY to make informed decision in relation to the use of bed rails.	Choose one of the two options available.
Q18	**Other consideration**	• Team has taken into account all relevant circumstances for this resident and the advantages / disadvantages to the resident of the decision made. • Team has not taken into account all relevant circumstances for this resident and the advantages / disadvantages to the resident of the decision made. • Team has taken into consideration that resident capacity could be restored in the future, to allow them to make a decision. • Team has not taken into consideration that resident capacity could be restored in the future, to allow them to make a decision. • Team has encouraged as far as is reasonably practicable the residents involvement in the decision to be taken in their behalf. • Team has not encouraged as far as is reasonably practicable the residents involvement in the decision to be taken in their behalf. • Team has taken intro account any previous wishes, feelings or requests made by the resident either written or verbal, on the decision to be made.	The first option should be the one selected in the majority of circumstances.

		• Team has not taken intro account any previous wishes, feelings or requests made by the resident either written or verbal, on the decision to be made. • Team has ensured that the decision can, as far as reasonably practicable, maintain the privacy and dignity of the resident. • Team has not ensured that the decision can, as far as reasonably practicable, maintain the privacy and dignity of the resident. • Team has made a decision in the circumstances is the least restrictive and invasive. • Team has not made a decision in the circumstances is the least restrictive and invasive.	
Q19	**Describe the actions to be taken if any of the options selected on Question 18 includes a "has not" answer**		
Q20	Have you consulted with and considered the views of the following people	• Anyone named by the resident to be consulted • Anyone engaged in the residents' care or treatment as a carer • Anyone designated as an Attorney under an existing and valid LPA • Any Deputy appointed by the Court of Protection	
Q21	Describe who has been contacted, when and their views		
Q22	**Bed rails fitting risk assessment**	• Bed rails are securely fitted • Bed rails are not securely fitted (TAKE ACTION / NOT ACCEPTABLE) • Bed rails were fitted by maintenance operative • Bed rails not fitted by maintenance operative (TAKE ACTION / NOT ACCEPTABLE) • The bed rail is suitable for the intended bed, according to suppliers instructions. • The bed rail is not suitable for the intended bed, according to suppliers' instructions (TAKE ACTION / NOT ACCEPTABLE). • The mattress is the correct type and size for the bed frame, the gap between the side of the mattress and the bed rails is no larger than 90mm. • The mattress is not the correct type and size for the bed frame, the gap between the side of the mattress and the bed rails is greater than 90mm. [TAKE ACTION / NOT ACCEPTABLE] • The distance between the top of the mattress and the top of the bed rail is greater than 220mm.	Answers should prioritise following options as they are most critical: The distance between the top of the mattress and the top of the bed ail is greater than 220mm. (If distance is achieved – GM should be informed and overall risk assessed. A comment show be entered into Q20 Note 1: The gap between the bed rail and side of the mattress must be less than 60mm (rather than 90mm stated in risk assessment). Note 2: Bedrails used within EFHL are part of bed frame and initially fitted by manufacturers or Maintenance

		• The distance between the top of the mattress and the top of the bed rail is less than 220mm. [TAKE ACTION / NOT ACCEPTABLE] • The distance between mattress and top / end board is less than 60mm. • The distance between mattress and top / end board is greater than 60mm. [TAKE ACTION / NOT ACCEPTABLE]. • The correct netted bumper are fitted to the bedrail. • There are no netted bumper fitted to the bedrail [TAKE ACTION / NOT ACCEPTABLE]. • There are bumpers (not netted) fitted to the bedrail [TAKE ACTION / NOT ACCEPTABLE]. • There is a link sheet fitted. • There isn't a link sheet fitted [TAKE ACTION / NOT ACCEPTABLE]	team. Care staff can operate and insert bedrail mid sections. Note 3: EFHL currently doesn't use net bumpers. Net bumpers reduce sense of claustrophobia but are less effective at providing padding. Note 4: Link sheets are not used within EFHL
Q23	**If any "not acceptable" options been selected on Question 18, what actions are being taken**		This is the key field for recording any additional key information. Eg where bedrails are being used which do not conform to British standard measurements in Q18 above.
Q24	Controls in place for residents with atypical anatomy		
Q25	THIS FORM SHOULD BE REVIEWED MONTHLY OR BEFORE IF NECESSARY		

Appendix B: Guidance on additional controls for 'atypical anatomy'.

Record the following measures have been reviewed

	Controls to review	Advice		Reasoning / *Examples for Controls*
1.	Size of adult	Document what element of resident makes them atypical.	•	Entrapment risk will vary due to atypical feature – risk of child entrapment different from an adult with very low body weight. *Resident has low BMI – size and shape of patient has been assessed*
2.	Type / model of bed	'Atypical residents' should be in latest model of bed available – this is the Evolution 400.	• Move resident to an Evo 400 bed. • Confirm latest bed type on documentation.	Beds are produced to the latest specifications at the time of manufacturer. Safety standards improve over time. Newer beds are most likely to be produced to better standards than older beds. They are also more likely to be in better condition. *Visually observed resident in Evo 400 bed.*
3.	Condition of bed	Is current bed in good condition?	• Confirm inspection of bed completed.	Confirmation that bed is structurally sound and performing as designed. *Bed in good condition.*
4.	Mattress fitting	Visually check the mattress fitting within bed frame. Look for gaps a small wrist can get trapped in.	• Confirm inspection of mattress / bed completed.	Frail / slim residents often on air mattresses – these don't fit as tightly as foam mattress. Would another mattress type fit better and remove / reduce any gaps. *Resident has a serious G4 pressure ulcer on her spine and is low BMI with fragile skin. Mostly in bed – needs an active mattress.*
5.	Bed rail arrangements	Review bed rail assessment	• Confirm inspection of mattress / bed completed.	Entrapment risk reduces if bed rails not used. Review whether bedrails required. *Full length bedrails used.*
6.	Bumpers	Bumpers must be fitted on all bedrails used for atypical residents		Bumpers must be fitted on atypical residents. Bumpers should be secure (velco on outside).

				Full length bumpers fitted. Does not move around in bed. Supported by pillows at night and turned by staff. Well fitted, checked for excessive movement and none identified.
7.	Capacity of resident	Confirm capacity of resident	• Record checked capacity of resident in relation to bedrails.	*Full capacity demonstrated to understand the use of bed rails. Resident feels safer with bedrails as she is used to a bigger bed.*
8.	Ability of resident to call help	Risk is higher is resident unable to call for help or use call bell.	• Record visual inspections timeframe.	Higher risk of increased severity of injury if resident unable to call for help. *Resident has full capacity and can use a call bell.*
8.	Movement during sleep	Higher risk if resident moves a lot during sleep.	• Record visual inspections timeframe.	Higher risks of entrapment if resident restless / moves a lot during sleep. *Resident does not usually move during sleeping. Bumpers fitted – does not move in bed or sleep against the bumpers.*
8.	How often is resident checked / re-positioned	Check frequency due to risk	• Record visual inspections timeframe.	Increase visual checks if concerns *Turned every 2 hours and checked hourly or more frequently.*