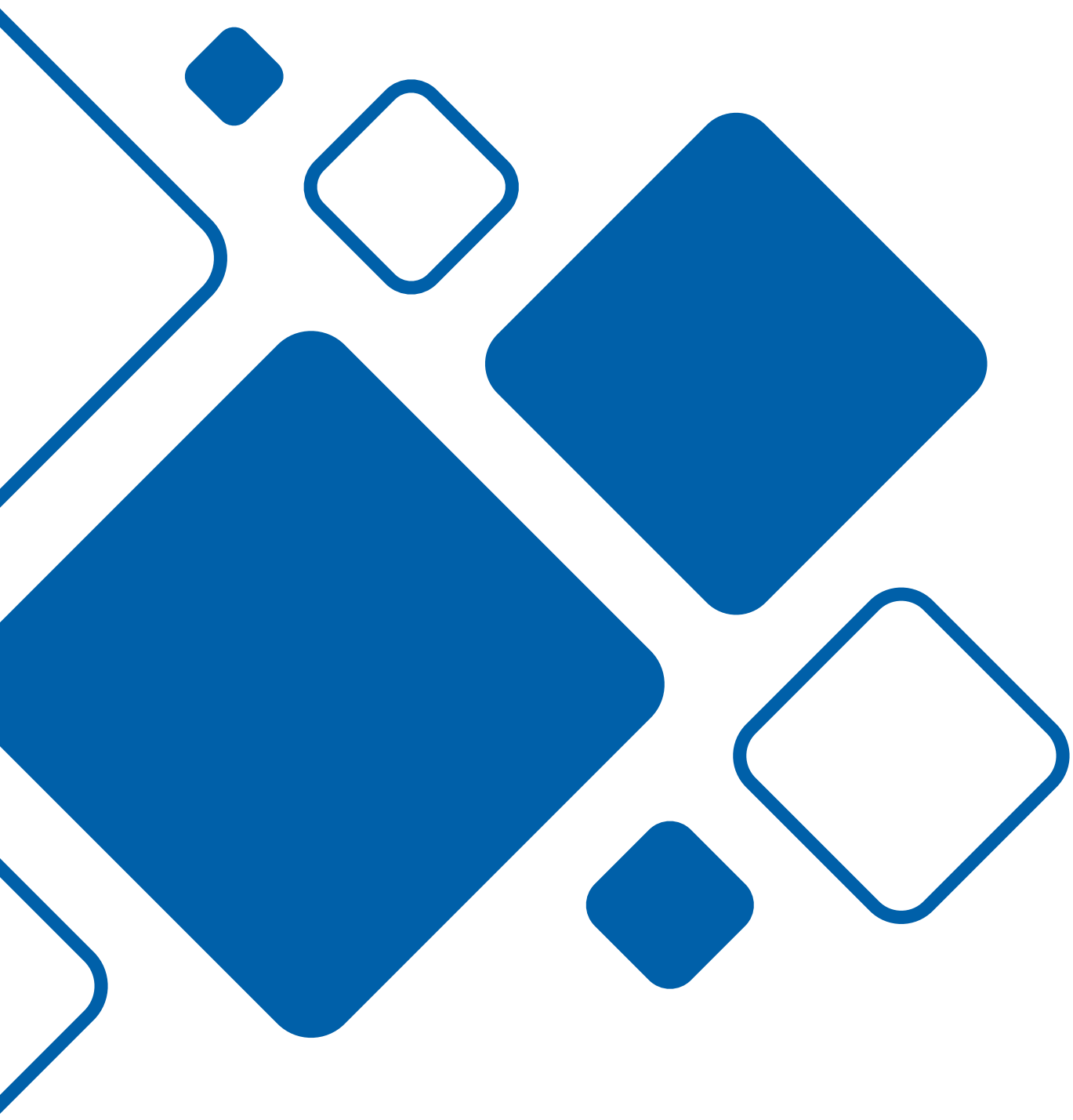
NURSDOC

POLICY NUMBER: **87**

POLICY TITLE: **BED RAIL GUIDANCE**

WHO MUST ABIDE BY THIS POLICY? **ALL HOSPITAL STAFF, DOCTORS, NURSES AND CARERS**



BED RAIL GUIDANCE

THE PURPOSE OF THIS POLICY

When bed rails are used during the course of a work activity, such as in a care home or hospital, the employer or self-employed person providing them must ensure that they are safe.

HSE - WHAT IS THE RISK?

Bed rails, also known as side rails or cot sides, are widely used to reduce the risk of falls. Although not suitable for everyone, they can be very effective when used with the right bed, in the right way, for the right person.

However, accident data shows that bed rails sometimes don't prevent falls and can introduce other risks.

Poorly fitting bed rails have caused deaths where a person's neck, chest or limbs become trapped in gaps between the bed rails or between the bed rail and the bed, headboard, or mattress.

Other Risks Are:
- Rolling over the top of the rail
- Climbing over the rail
- Climbing over the footboard
- Violently shaking and dislodging rails
- Violent contact with bed rail parts

Bed rails are 'medical devices', which fall under the authority of the Medicines and Healthcare Products Regulatory Agency (MHRA). MHRA enforces the Medical Devices Regulations and the General Product Safety Regulations to ensure medical devices are acceptably safe. MHRA guidance on the 'Safe Use of Bed Rails' (Device Bulletin DB 2006(06)) and details of when and how to contact them can be found on the MHRA website[1].

WHAT DO YOU NEED TO DO?

When bed rails are used during the course of a work activity, such as in a care home or hospital, the employer or self-employed person providing them must ensure that they are safe

Risks Identified During Inspection include:
- Trapping between poorly fitting mattresses and bed rails
- Rolling over the top of the bed rails when overlay mattresses reduce their effective height
- Trapping between the bed rail and mattress, headboard or other parts because of poor bed rail positioning.

Bed Rails need Careful Management. Users should ensure:
- They are only provided when they are the right solution to prevent falls
- A risk assessment is carried out by a competent person taking into account the bed occupant, the bed, mattresses, bed rails and all associated equipment
- The rail is suitable for the bed and mattress
- The mattress fits snugly between the rails
- The rail is correctly fitted, secure, regularly inspected and maintained
- Gaps that could cause entrapment of neck, head and chest are eliminated
- Staff are trained in the risks and safe use of bed rails

HSE advises users to take into account the dimensions in British standard BS EN 1970:2000 (to be withdrawn on 1st April 2013) and BS EN 60601-2-52:2010 when assessing risk and ensuring correct fitting. Manufacturers and suppliers of bed rails also have a duty to ensure that equipment is safe for use and you should refer to their instructions.

INTRODUCTION

- Bed rails should only be used / provided to prevent someone falling out of bed, and should only be used as a **last resort**. They must never be used to limit freedom of movement or as a method of restraint. Bed rails should not be used as a mobility aid unless they have been specifically designed to do so.
- Bed rails can successfully prevent falls, but their incorrect use can result in serious injury or death.
- Correct fitting is essential and will follow the completion of a Risk Assessment (see appendix 5). They must only be issued once a full risk assessment has been undertaken by an appropriate clinician/ practitioner and consent has been gained.
- Clinicians/ practitioners should refer to the relevant Equality and Diversity policy to ensure the assessment encompasses these values.

TERMINOLOGY/DEFINITIONS

- The term 'bed rails' will be used throughout this document for clarity, however this term covers items known commonly by other names such as: safety sides, side rails, bed guards, cot sides and bed side rails.
- All bed rails should have recognised product standards for dimensions: the previous standards of BS60601-2-38 [2] or BS EN 1970 [3] have been replaced by BS EN 60601-2-52:2010 (see appendix 1).

ALTERNATIVES TO BED RAILS

It is far better to eliminate the risks of entrapment wherever possible. Alternatives to bed rails must be considered as part of the risk assessment process and before considering the type of bed rail the individual may require, it should first be considered if there are safer alternatives for example.

Repositioning the bed.
Beds with variable height used in the lowered position.
Height beds; assess the needs of the carer and provision of care, including moving and handling.
Alarm systems(e.g. pressure sensor mat) to alert carers that a person has moved from their normal position or wants to get out of bed.
The use of falls mats/ crash mat/ fallout mats/ temporary mattress on floor, positioned appropriately to ensure a soft landing (from a lowered bed). Arrangements must be made to ensure the person can be assisted back off the floor.
Body positioning devices, for customers with specific clinical conditions.
Crisis management 'one to one' cover.
Alternatives styles of bed rails e.g. mesh sides, inflatable bed sides etc.

RISK ASSESSMENT

- Following the initial identification of risk, a risk assessment should be completed by an appropriate practitioner to confirm risks and identify potential solutions. Bed rails should never be issued without an appropriate risk assessment being completed.
- The risk assessment must be made available to the individual/ person designated to act on their behalf and all involved in the care of the individual. The control measures stated must always be in place. The risk assessment is to be stored in the care plan within the patient's/customer's home and within Nursdoc patient records.
- The content of the risk assessment should be discussed and agreed with the individual or person designated to act on their behalf.
- The individual/ person designated to act on their behalf may request or insist on the use of bed rails. Initially the full risk assessment should be completed to identify suitability of bed rail use. Should the assessment indicate that bed rails are not required this should be explained to the patient and/or relative, and alternatives will be discussed.

- Where agreement cannot be reached the risk assessment outcome will determine the utilisation of bed rails and staff will be supported by their organisation. All decision making and alternative suggestions will be documented fully in the individual's clinical/ customer record (please see "Consent", section 6 below).

RISKS TO CONSIDER

- Check the manufacturer's guidance, which should indicate when the use of bed rails may be inappropriate.
- Consider the types of bed that the bed rail is to be used with. It is always preferable to use adjustable or profiling beds which have compatible integral bed rails. The bed side rail and bed / mattress combination must be compatible.
- All new equipment must be designed to limit the gap between the bed rail and headboard to 60mm or less. Any old equipment which cannot accommodate the new dimensions must be subject to an individual assessment to ensure safety for the customer.
- Ensure there are no entrapment hazards with spaces which are too large. Refer to the bed rails dimension diagram (see appendix 1) for details on measurements required and ensure all measurements are accurate.
- Avoid bed rails designed for a divan bed on a wooden or metal bedstead. This could create gaps and risk entrapment.
- Consider the suitability of rails for small adults where they may be a greater risk of entrapment.
- Avoid using a mattress overlay on top of an existing mattress where the additional height lessens the effectiveness of the bed rail and may permit the individual to roll over the top. Extra height bed rails are available if mattress overlays are to be used. The clinician/ practitioner providing the mattress overlay MUST take responsibility for a full review of the risk assessment in relation to the possible provision of extra height rails.
- The risk of entrapment between the side of the mattress overlay and the bed rail may be increased due to the soft, easily compressible nature of the mattress edge.
- Following the initial identification of risk, the person making the assessment must complete a risk assessment form. This form must be available within the individuals care plan within the patient's customer's home.

CONSIDERATIONS FOR THE PROVISION OF BED RAILS AND ACCESSORIES

Consent

- The provision of bed rails will be discussed with the individual and, if appropriate, their relatives or carers.
- The consent of the individual will be obtained and recorded on the assessment.
- Where you believe the individual might lack mental capacity for this decision, a Mental Capacity Assessment must be carried out by a clinician/ appropriately trained practitioner. If it is deemed that the person does lack mental capacity, a best interest decision will need to be considered following consultation with other appropriate adults, recorded in the approved format and stored within the patient/ customer records. It is essential that this process follows the organisation's guidance in regard to the Mental Capacity Act.
- Please refer to your organisation's Consent Policy and local guidance providing details regarding how to assess mental capacity and the process for making best interest decisions on behalf of the person without the mental capacity to consent.
- The risk assessment will highlight the best solution for that individual. If the health care professional has performed a risk assessment, and it has shown that bed rails are not appropriate/ unsafe, they must not issue the equipment even if there is external pressure to do so.
- The patient's/ customer's health, safety and welfare is paramount so whilst the organisation welcomes the views of relatives and will take those views into account when completing a risk assessment, if this compromises the patient's/ customer's safety in any way the professional view and risk assessment must override the wishes of the relative, even if the relative is an authorised Lasting Power of Attorney for Health and Welfare.
- Should the individual refuse to have bed rails after the assessment has been discussed, this must be recorded and retained within the individual's records and alternative measures put in place to minimise the risk of harm. If the patient/customer or relative does not agree the clinician/ assessor must record this and give advice as to the consequences of failure to follow professional clinical guidance.
- If the patient/ customer or relative does not agree we must record this and give advice as to the consequences of failure to follow professional clinical guidance.
- If the patient's/customer's safety is likely to be compromised and the family is not in agreement with the professional's opinion, the clinician/practitioner must seek advice regarding legal position and consider what measures can be taken to protect the patient/ customer.
- Nursdoc cannot be held responsible for the checking or maintenance of privately purchased bed rails nor for any resulting incident, particularly if they have been assessed as being inappropriate/ unsafe

Bed Rail Bumpers

- Bumpers must be issued with all bed rails.
- These are padded accessories or enveloping covers and are mainly used to prevent impact injuries. They can also reduce the potential for limb entrapment, as long as they are securely fitted to the bed or rail.
- They can also introduce entrapment risks, should they move or compress, along with the risk of suffocation if they are not air permeable. This should be established from the manufacturer.

Adjustable/Profiling Beds

- Additional care is necessary when using bed rails with adjustable/ profiling beds. Some beds have a single piece bed rail along each side of the bed; when the bed profile is adjusted entrapment hazards can be created which are not present when the bed is in the all-horizontal position.
- Some beds, such as hi-low beds often have two pairs of bed rails fitted, at both the head and the foot end. These split bed rails also require additional vigilance because the space between the head and foot end rails varies according to the bed profile adjustment; therefore entrapment hazards may be created when the bed is adjusted to particular profiles.
- Care should be taken to use the appropriate rails specifically designed for use with profiling beds, as instructed by the bed manufacturer. Both pairs (at each end of the bed) may be required to be used together when the individual is left unattended.

Mattress Overlays/Higher Mattresses

- Mattress overlays can present specific problems because they effectively reduce the height of bed rails relative to the top of the mattress, which may allow the individual to roll over the top of the bed rail. In addition the edge of the mattress may compress and create an entrapment risk.
- Many divans rely upon the weight of a mattress to hold the bed rail assembly in place, therefore if a lightweight mattress is fitted this could cause the whole assembly to move with the individual and tip off the bed.
- If this combination is unavoidable, the manufacture should be consulted for advice and additional securing systems such as straps (mattress overlays would normally only be specified/ provided by health providers).
- When bed rails are considered in combination with an air mattress, the mattress supplier should be contacted for advice.
- The clinician/practitioner responsible for providing mattress overlay/higher mattress should assess for extra height bed rails.

Headboards and Footboards

It is likely that these items will also be required when bed rails are fitted. It is essential that these do not create an entrapment risk, either between the headboard and/or footboard, rail or within the design of the headboard and footboard itself.

Boards with ornamental posts can catch clothing and should not be used for individuals who may not be in control of their movements.

INCIDENTS INVOLVING BED RAILS SUPPLIED

Any incidents involving bed rails must be reported and recorded on an incident report form to the contracting organisation.

- Incidents have resulted from:
- Incompatibility or unsuitability of a bed rail for the bed type
- Incorrect or omitted risk assessment and consideration of the physical size of the bed occupant
- Bed occupant attempting to climb over the rails
- Inappropriate gaps:
  - Between the end of the bed rail and the headboard
  - Between the mattress and lowest rail of the bed rail device
  - As a result of the individuals weight compressing the mattress
- Poor design e.g. very large spacing's between the rails
- Movement of the bed rail away from the side of the divan mattress
- Use of a mattress overlay which reduces the effective height of the device
- Use of an air mattress which was too light to keep the bed rail assembly in position on the divan bed
- Bed rails in poor condition from lack of maintenance

Those bed occupants who might be at greater risk of entrapment in/ by bed rails because of a physical or clinical condition. These include older people or adults/ children with:

- Communication problems or confusion
- Dementia
- Repetitive or involuntary movements
- Impaired or restricted mobility

REASSESSMENT FOR INDIVIDUAL PATIENTS/ CUSTOMER BY CLINICIAN/ PRACTITIONER

- Where there is any change in the behaviour or health of the individual, or any changes or additions to the equipment, bed or mattress a formal review must take place.
- A review of the assessment for bed rails should be undertaken if indicated following a planned maintenance check
- If there are concerns relating to the on-going use of the bed rails, their use should be discontinued. Where possible the bed rails should be removed and alternative solutions to maintaining the individual's safety should immediately be sought.
- When individuals purchase bed rails via Direct Payments or independently, they assume ongoing responsibility for review and maintenance of the bed rails.

TRAINING

Training relating to the fitting, review /use of and maintenance checks of bed rails is strongly recommended. For online training resources please see section 12.

All carers who are using bed rails in any environment must undertake training / instruction in the use of the equipment.

MAINTENANCE

- Bed rails must be maintained in accordance with the manufactures guidelines at all times. In accordance with the MHRA Managing Medical Devices Guidance 2014, it states that medical devices are to be included in a planned preventative maintenance (PPM) to ensure suitability.
- Where the is a formal care or enablement package in situ, the assessor must advise the carers that it is their responsibility to complete the monthly maintenance checklist as a part of the planned preventative maintenance (PPM) programme as a minimum.
- Care staff must visually check the bed rails prior to each use, make any necessary adjustments and report any areas of concern. The maintenance review checklist must be completed monthly by formal/ informal carers and an on-going record kept on the Bed rails Monthly Review Form in the patient/ customer record.
- If there are concerns relating to the on-going use of the bed rails, their use should be discontinued. Where possible the bed rails should be removed and alternative solutions to maintaining the individual's safety should immediately be sought.

ADDITIONAL RESOURCES

It is strongly advised that all those involved in the provision and installation of bed rails and have the on-going care provision for the individual, ensure that they have read the following information (particularly DB2006(06) V2.0 from MHRA) and have viewed the online training/taken part in the training on the safe use of bed rails.

- NB The link below provides details of the amended gap recommendations from April 2013.
  www.hse.gov.uk/foi/internalops/sims/pub_serv/07-12-06/

- MHRA Safe Use of Bed rails Device Bulletin, November 2012
  www.dhsspsni.gov.uk/db_2006_06 v2.pdf
  www.mhra.gov.uk/Publications/Safetyguidance/DeviceBulletins/CON2025348

The following site provides on-line training from BUPA and the HSE. It should be supported by local management to ensure that the standards within the training are achieved and maintained.

NB the recommended gaps have been amended since the production of this training and although the content is still relevant, where it refers to measurements the new guidance should be followed.

- Online training on the safe use of bed rails: HSE Guidance
  www.hse.gov.uk/healthservices/bed rails/index.html

Further guidance on Managing Medical Devices can be obtained from the MHRA link below:

- MHRA Managing Medical Devices
  www.dhsspsni.gov.uk/dbni-2014-02.pdf

- The MHRA (Medicines and Healthcare products Regulatory Authority) have issued several MDA (Medical Device Alerts) notices on the risks associated with bed rails, see the links below for further information:

Safe Use of Bed rails Poster
www.gov.uk/government/publications/safe-use-of- bed-rails-poster

- NPSA Bed rail Guidance Matrix:
  www.rcplondon.ac.uk/sites/default/files/documents/bedrailsassessment.pdf

APPENDIX 1: NEW COMBINED STANDARD BS EN 6061-2-52:2010

Fig 1: Standard Bed Rail

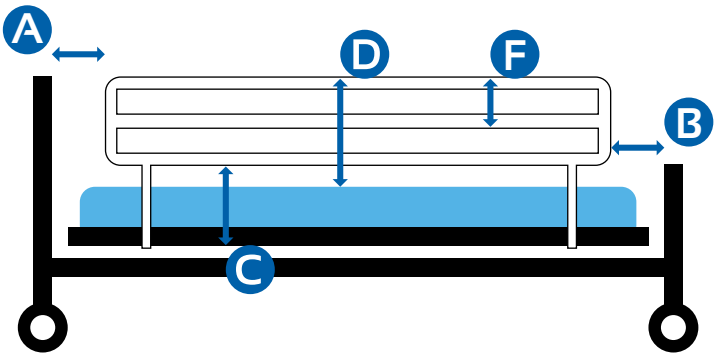
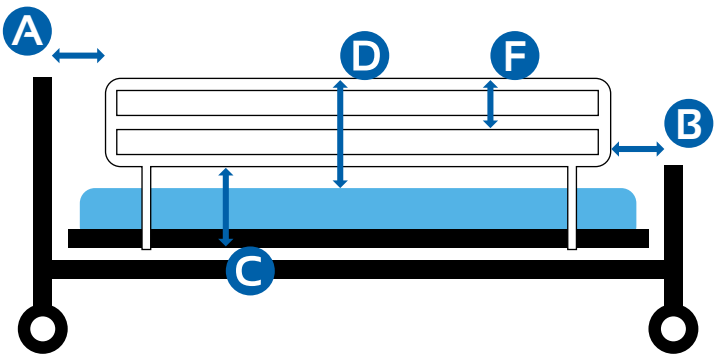


Fig 2: Split Bed Rail



A	Head Board: 60mm gap or less *
B	Foot Board: 60mm gap or less – Or 318mm or more *
C	Gap between the mattress platform (bed) and the bottom of the bed rail – 60mm gap or less.
D	The height that the top of the bed rail much reach above the mattress (without compression) is 220mm or more (be conscious that measurement C is not compromised)
E	Gap between split bed rails (Fig:2) 60mm or less – Or 318mm or more
F	Gap between any elements of the bed rail must be 120mm or less – FOR ALL BED RAILS

If you need to ensure a gap of 60mm or less at both ends it will be necessary to order specialist item of equipment . It is not possible to have 60mm (or less) gaps at both A and B

N.B. Bumpers must be folded into position and fixed using a safety pin

MAINTENANCE CHECKLIST FOR BED RAILS

Name of person undertaking check:	**Date of check:** **Time of check:**
Job title:	**Customer reference/ Patient NHS number:**
Name of Customer/Patient:	**Date of birth of Customer/Patient:**
Serial or Identification number and make of bed rail (if no identification number available, then ensure one is agreed through line management):	
Type and make of bed (metal or divan, domestic or hospital type etc).	
Note other components fitted (such as bumpers)	

RISK	YES	NO	COMMENTS
The measurements are correct in accordance with appendix 1			
Manufacturers' instructions are available with the bed rails (provided on issue/ delivery)			
Bed rails are fitted according to manufacturer's instructions			
There is no rust, (which can affect the ease of adjustability of telescopic			
All welded joints are sound, (no signs of failure or cracking)			
There is no cracking of paint or coating (may be an indication of structural failure)			
There is no flaking chrome plating or sharp edges (could cause injury)			
There are no missing locking handles and fixing clamps			
The plastic sockets on the clamps secure			
There are no loose fixings (may affect the rigidity of the assembly)			
All nuts are of the self- locking type			
There is no free play in joints (this could indicate loose, worn or incompatible components?			
There are no stripped threads on bed frame clamps (which could prevent them being tightened)			
All clamps / brackets are secure and a tight fit on the bed frame			
There are no bends or distortions in the bed rail or components preventing free movement			
All inflatable/ padded sections (e.g. mattress, bumpers etc.) are intact with no damage and fitted securely to the bed where appropriate			
The bed is fitted with a pair of the same type/ model of bed rails (fitted to both sides of the bed)			
Other comments/problems found:			
If "yes" to any of the above questions please contact the commissioning authority			

RISK ASSESSMENT FOR THE USE OF BED RAILS FOR ADULTS

Refer to the JOINT Procedures /Policy document on bed rails prior to completion Ensure a copy of this risk assessment is contained within the individuals care plan.

A risk assessment must be carried out with the individual and those involved in their care before use and reviewed and recorded after each significant change in the individuals health or condition

Patient/ Customer Name:	**Patient NHS/ Customer reference number:**	**Date:**
Date of birth:	**Time of assessment:**	
Assessors Name:	**Job title:**	
Assessor signature:		

	YES	NO	REASON NOT SUITABLE
Have you considered alternatives to bed rails?			
Beds with variable height used in the lowered position			
Beds with variable height used in the lowered position			
Special made 'low height' beds (remember the needs of the carer and provision of care for safe moving and handling people)			
Alarm systems to alert carers that a person has moved from their normal position or wants to get out of bed.			
The use of falls mats, positioned appropriately to ensure a soft landing (from a lowered bed).			
Body positioning devices, for customers with specific clinical conditions.			
Crisis management 'one to one' cover			
As a temporary measure, mattress on the floor			
Other, please state			

(Tucked in sheets and blankets maybe considered a form of restraint and should not be considered as an alternative.)

BED RAILS MAY NOT BE RECOMMENDED IF ANY OF THE FOLLOWING CRITERIA APPLIES SEE NPSA RISK MATRIX (APPENDIX 6 BELOW)	YES	NO	STATE WHO / WHERE YOU OBTAINED THIS INFORMATION FROM (HOSPITAL, SOCIAL WORKER, RELATIVE ETC.)
Does the person have full mental capacity?			
Is the person confused of disorientated or at risk of climbing out of bed.			
Does the person get out of bed independently e.g. to use the toilet?			
Is there an alternative method of bed management which could be used?			
Will the use of a bed rail increase the risk?			
Are there other means to reduce the risk of falling from bed?			
Could the patient's/customer's health or behaviour increase the risk of entrapment?			
If the patient/customer is particularly small, has this been considered?			
Does the patient/customer have an unusually large or small head?			
Consider the needs of the carer to be able to raise/lower bed rails?			

Tick the bed that is to be used with the bed rails
(Solid base beds are preferred, slatted or sprung base beds are not suitable for use with bed rails)

Divan	Wooden bed frame	Metal bed frame	Hospital bed	Hospital type Profiling bed	Domestic type profiling bed
Hi-lo bed		Hi-lo bed to floor		Other (describe)	
Single	Double	Manufacturer if known:			
Total bed height (mm)		Mattress type and depth (mm):			
If there is a hospital profiling bed in place please go to question 6					

	YES	NO
1. Is there a headboard present?		
2. Is there a footboard present?		
3. Is a pillow lifter fitted to the bed?		
4. Is there an additional mattress on the bed?		
5. Is there an alternating air pressure relief (or dynamic) mattress on the bed?		
6. Would bed rails be lowered in the event of the use of a hoist?		
7. Does customer have any clinical attachments such as catheter tubing etc.? (these could become trapped within the rails)		
A yes to any of the above questions shows a risk has been identified and the use of bed rails may not be appropriate.		
Bumpers		
Mattress Overlay, (Will this raise height above recommended level?)	**State TOTAL mattress depth:**	
Detail other equipment		

	YES	NO	COMMENTS
Is there a risk associated with the patient's size/ build?			
Does the manufacturer/supplier provide any information on special considerations or contra-indications?			
Do you have enough information from the supplier to be able to select and fit the bed rail appropriately?			
Is the bed rail suitable for the intended bed, according to the supplier's instructions?			
Do the fittings or mattress allow the bed rail to be fitted to the bed securely, so that there is no excessive movement?			
Does the benefit of any special or extra mattress outweigh any increased entrapment risk created by extra compression at the mattress edge?			
Are the bed rails high enough to take into account any increased mattress thickness or additional overlay?			
Are gaps avoided that could present an entrapment risk to the bed occupant?			
Is their head or body large enough not to pass: (Refer to gap dimensions in Appendix 1) • between the bars of the bed rails? • through any gap between the bed rail and side of the mattress? • through the gap between the lower bed rail bar and the mattress, allowing for compression of the mattress at its edge?			
Are gaps between bars / rails less than 120mm?			

Is the headboard to bed rail end gap 60mm or less?			
Is the footboard to bed rail end gap less than 60mm or more than 318mm?			

	YES	NO	IF NO, EXPLAIN REASON WHY
Is the patient/ customer fully aware of the reasons for the assessment?			
Has the customer and/or relatives/carers been fully informed of the reasons for using or not using bed rails?			
Have the customers values been fully considered as required by the Equality and Diversity Policy			
Has this been documented in the patient's/ customer's care plan?			

Having completed the checklists above; is the provision of bed rails absolutely necessary?	**Yes**	**No**
If the answer to the above is yes; state clearly why, include any medical condition(s):		
Any other information:		
Have you discussed this assessment with the individual and or their relatives / carers?	**Yes**	**No**
Is the individual in agreement with the placement of bed rails? If no, the provision of bed rails must not proceed and other safety measures considered	**Yes**	**No**

BED RAILS MONTHLY REVIEW FORM

Please note: Copy to be retained with patient/ customer care plan Remember to undertake the maintenance check at the same time as the review

USE OF BED RAILS MONTHLY REVIEW RECORD				
DATE	TIME OF REVIEW	DECISION	NAME OF REVIEWER	SIGNATURE

APPENDIX 7: EQUALITY IMPACT ASSESSMENT TOOL

Any identified a potential discriminatory impact must be identified with a mitigating action plan to address avoidance/reduction of this impact. This tool must be completed and attached to any SCH approved document when submitted to the appropriate committee for consideration and approval.

EQUALITY IMPACT ASSESSMENT TOOL			COMMENTS
1.	Does the policy affect one group less or more favourably than another on the basis of:	No	
	Race	No	
	Ethnic origins (including gypsies and travellers)	No	
	Nationality	No	
	Gender	No	
	Culture	No	
	Religion or belief	No	
	Sexual orientation including lesbian, gay and bisexual people	No	
	Age	No	
	Disability - learning disabilities, physical disability, sensory impairment and mental health problems	No	
2.	Is there any evidence that some groups are affected differently?	No	
3.	If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?	N/A	
4.	Is the impact of the policy/guidance likely to be negative?	No	
5.	If so can the impact be avoided?	N/A	
6.	What alternatives are there to achieving the policy/guidance without the impact?	N/A	
7.	Can we reduce the impact by taking different action?	N/A	