Guidance on use of bed rails

How bed rails are used differs between Victorian healthcare services, including public residential aged care facilities. This document recommends a standard approach to their use, informed by experts, clinicians and consumers. It will help clinicians understand when and how to use bed rails safely. It is also intended for anyone who purchases, assembles or maintains bed rails. The guidance has been created using a consensus approach and has been referenced where there is supporting evidence.

Injuries and deaths have occurred in Australia and overseas due to the use of bed rails. Injuries happen when people try to climb over or through gaps in the bed rails[1] and some people have suffocated between the mattress and bed rails.[2,6]

Bed rails can be used safely. But they should only be used in limited circumstances where the benefits outweigh the risks.

Bed rails are considered a restraint when they are used to intentionally prevent a person from getting in and out of bed.[7] This is still the case if a person (or their medical treatment decision maker) requests or consents to their use, and when used in an emergency.

Definitions

Bed: 'Medical bed' as per IEC/ISO Standard, Medical Electrical Equipment, 2015 - Part 2-52: Particular requirements for basic safety and essential performance of medical beds (IEC 60601-2-52:2009/A1:2015).

Bed rails: An adjustable device made of metal and plastic components attached to one or both sides of an adult medical bed. Bed rails may be different lengths and heights and may be used with padding, mesh covers or inserts between the railings.

Clinical assessment: A comprehensive assessment of the patient's condition including their physiological, cognitive and psychosocial status and can be conducted by medical, nursing or allied health staff.

Medical treatment decision maker (MTDM): Someone (e.g. a carer) who is responsible for making medical treatment decisions for a person who does not have decision-making capacity.

Person: An adult patient, client, consumer or resident for whom the decision about bed rail use is being made.

WHEN TO USE BED RAILS

Bed rails are recommended for use if the person is closely monitored and:

- being transported on a bed or trolley
- recovering from anaesthetic and is not yet fully alert
- on a bed and waiting for medical imaging.[19]

You can use bed rails temporarily to help with bed mobility – for example, to help the person to reposition.

We do not recommend blanket use or removal of bed rails.[12]

Bed rails should **not** be used:

- against a person's wishes
- when a person has delirium, is disorientated, agitated or wanting to get out of bed (and may try to climb over the bed rails)[2,12]
- when a person can mobilise safely and independently, unless the person has requested to use bed rails.

Requests to use bed rails

A person and/ or their MTDM may request bed rails to prevent the person from falling from the bed,[2] reduce fear of falling out of bed, or help with bed mobility or positioning.

If a person has capacity and requests bed rails, you are obliged to use them even if it goes against your advice. In these situations, we recommend you:

- talk the patient through risk of using bed rails
- thoroughly document the person's request, including the person's acceptance of the risk.

A MTDM cannot insist on the use of bed rails for a person who does not have capacity. This is because bed rails are not considered a medical treatment by law. The only exception is when the person is subject to an enduring power of attorney for personal matters that specifically authorises the use of bed rails.

Reporting serious adverse events

Use of physical or mechanical restraint resulting in serious harm or death is classified as a sentinel event and must be reported to Safer Care Victoria. For more information, go to **www.bettersafercare.vic.gov.au/sentinel-events.**

CONDUCTING AN INDIVIDUAL ASSESSMENT

Conduct an individual assessment of the risks and benefits of using bed rails for each person.[4,12,19,21,24]

Involve the person or their MTDM in the assessment and discuss the risks and benefits with all parties.[4,19]

Consider alternatives to bed rails and discuss these with the person or their MTDM.[11,26]

Alternatives to bed rails

- Provide increased supervision of the person
- Locate the person in a high visibility area
- Use family or trained volunteers to provide supervision of the person
- Lower an adjustable-height bed
- Use a floorline bed
- Use a larger bed
- Use other equipment such as bed poles, slide sheets, crash mats, use of bed mechanics
- Use positional wedges, such as pillows
- Sit the person out of bed during the day
- Diversional activities and therapies

Always assess the risks and benefits of any alternatives and discuss these with the person and/or the MTDM.

Document the assessment, discussion and outcome.

GETTING CONSENT TO USE BED RAILS

Obtain consent from the person before using bed rails.

When they do not have capacity, obtain informed consent from the MTDM.

In emergency situations you can use bed rails without consent. But please obtain consent as soon as possible after using bed rails.

A person may withdraw their consent at any time.

Consumer information

Provide consumer information both verbally and in writing, outlining the risks and benefits associated with the use of bed rails.[19]

Make this information available in languages other than English to meet the needs of people from cultural and linguistically diverse backgrounds.

Documentation

If you are considering using bed rails, please document:

- the clinical justification for using or not using bed rails, including specific risks and benefits discussed with the person and/or their MTDM
- an agreed plan to address the underlying reasons for the request for bed rails
- the circumstances in which the bed rails are to be used
- risk reduction strategies, specific to the person, if the decision is made to use bed rails
- the level of monitoring required
- indicators for cessation
- any alternatives considered or trialled
- written information provided
- consent by the person or their MTDM for the use of bed rails.[11]

REDUCING RISK WHEN USING BED RAILS

Set up

Ensure the call bell and personal items are within easy reach of the person.

Consider positioning the bed in its lowest height setting.

Encourage the person to participate in activities of daily living, including mobilisation and maintaining independence.

Regular observation

Conduct and document regular observation of the person while bed rails are in use.[11]

Increase frequency of visual observation of people who cannot use a nurse call bell or communicate they require assistance.

Anticipate the person's physical and psychological needs and address these regularly. For example, the need for toileting, food, drink, pain medication, changing position for comfort and to relieve pressure, activity to relieve boredom.

Consider the risk of entrapment or suffocation for people whose presentation may increase their risk of harm when bed rails are used. For example, people with impaired cognition, sensory impairment or involuntary movements.[2,12]

Monitor the person for functional decline. Review clinical indicators such as changes in cognitive or physical function to determine ongoing suitability for the continued use of bed rails.

Regular review

Review the decision to use bed rails:[11]

- every shift while in a hospital setting
- at every clinical contact while in a community setting or person's home.

Discuss these decisions with the person and/or their MTDM, and then document them.

Duration of use

Use bed rails only for as long as you have to, aligning with:

- your service's policies around the use of restraint (health services)
- requirements under the Quality of Care Amendment (Minimising the Use of Restraints) Principles 2019 (residential aged care facilities).[11]

Reduce the need and use of restraints, including bed rails, through early identification and assessment of behaviours of concern, and development of risk reduction strategies.

Alerting the care team

Make sure anyone involved in directly caring for the person is aware that bed rails are in place.

Remind the care team of the risks of bed rails: agitation, distress, attempting to climb over bed rails, entrapment and suffocation. They should receive education and training.

Organisational policies

Share your organisation's policies and procedures to guide the use of restraints, including:

- the level of clinical assessment required, including review of physiological, psychological and social needs
- the level of monitoring required
- the documentation required
- the reporting mechanism to the governing body.

EQUIPMENT

The bed, mattress and bed rails combination should meet the IEC/ISO Standard, Medical Electrical Equipment, 2015 - Part 2-52: Particular requirements for basic safety and essential performance of medical beds (IEC 60601-2-52:2009/A1:2015).[12,18] Organisations must ensure that bed rails are installed according to the manufacturer's instructions.

Entrapment or asphyxiation may occur due to gaps between the rails of a bed rail, between the mattress and bed rail, and between the bed rail and bedhead or bed end. To address the gaps:

- the correct bed rail for the bed should be used
- a matching set of bed rails should be used
- the bed rail covers and mattress should comply with the Standard.

Clinical staff should ensure the mattress is compatible with the bed and bed rails.[14,19] Clinical staff should be aware of the increased risk for the person when the original mattress is not being used:

- when using a pressure mattress overlay, the height of the mattress will increase in relation to the bed rails
- an air mattress can be compressed and widen the space between the mattress and the rail or create a ramp for the person to roll
- clinical staff should be aware of the risk of medical tubing or electrical cord getting caught when adjusting bed rails.

Clinical staff should be aware of the person being at increased risk of entrapment when using split bed rails. The gaps between the bed rail, bedhead or bed end, and the area where the bed rail splits may vary depending on the profile of the bed.

Slide-under-mattress bed rails should not be used due to the risk of movement and gaps created by the bed rails, which may increase the risk of entrapment and suffocation.[5]

If bed rails are used in the person's home, the person and/or their MTDM should be shown how to check the bed rails daily and be provided with contact information for any concerns.

REFERENCES

1. Anderson, O, Boshier, PR, Hanna GB, 2012, 'Interventions designed to prevent healthcare bed-related injuries in patients (review)' *Cochrane Database of Systematic Reviews*, Issue 1. Art. No.:CD008931, p.1-30.

2. Australian Commission on Safety and Quality in Health Care 2018, *Australian sentinel events list (version 2)*, Australian Commission on Safety and Quality in Health Care, Sydney.

3. Bellenger, E, Ibrahim, J, Bugeja, L, Kennedy, B 2017, 'Physical restraint deaths in a 13-year national cohort of nursing home residents', *Age and Aging*, vol. 46, issue 4, p.688-693.

4. Federal Register of Legislation 2019, Quality of Care Amendment (Minimising the Use of Restraints) Principles 2019, *Aged Care Act 1997* <https://www.legislation.gov.au/Details/F2019L00511>

5. Healey, F, Oliver, D, Milne A, Connelly J, 2008, 'The effect of bedrails on falls and injury: a systematic review of clinical studies', *Age and Aging*. vol.37, issue 4, p.368-378.

6. International Electrotechnical Commission 2015, Medical electrical equipment - Part 2-52: Particular requirements for the basic safety and essential performance of medical beds, 60601-2-52:2009, IEC/ISO, Geneva Switzerland.