Position Statement: Bed Sticks, Poles and Rails

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Occupational Therapy AUSTRALIA

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About Occupational Therapy Australia

Occupational Therapy Australia is the professional association for occupational therapists in Australia.

Our members are qualified occupational therapists employed throughout the public and private sectors. They provide holistic health care, rehabilitation, and consultancy to clients.

Our mission is to provide member benefits through access to local professional support and resources, and through opportunities to contribute to, and shape, professional excellence.

For more information about Occupational Therapy Australia, visit www.otaus.com.au.

Glossary of Terms

Bed stick/bed pole (terms are used interchangeably): These terms describe a piece of equipment with a metal tube that extends vertically up the side of a mattress, and either extends under the mattress or is clamped on to a bed frame.

Portable Bed Rail: A portable **bed rail** is any product or device that is attachable and removable from a bed, not designed as part of the bed by the manufacturer, and is installed on or used along the side of a bed.

Integrated Bed Rail: An integrated bed rail is usually part of an electric or profiling bed, designed by the manufacturer and attached to the side of the bed. These may or may not be permanent.

Asphyxiation: to die or lose consciousness due to impaired breathing.

Entrapment: where a person is caught, trapped or entangled in the spaces in or around the bed rail, mattress or bed frame.

Provision of Bed Sticks/Poles and Rails

This position statement informs services of the requirement for occupational therapist involvement in the prescription of bed sticks/poles and rails and aims to assist occupational therapists in understanding and mitigating risks associated with bed stick/ pole and rail use.

Introduction

"Occupational therapy is a client-centred health profession concerned with promoting health and well-being through occupation. The primary goal of occupational therapy is to enable people to participate in the activities of everyday life. Occupational therapists achieve this outcome by working with people and communities to enhance their ability to engage in the occupations they want to, need to, or are expected to do, or by modifying the occupation or the environment to better support their occupational engagement". 2

Bed sticks/poles and rails have traditionally been used in most settings where people receive care, prompted by issues such as risk of injury, impaired mobility, nocturia, incontinence, sleep disturbances and mental health issues (Rollins, 2013).

Occupational therapists are often involved in the recommendation and provision of bed sticks/poles particularly. Bed sticks/poles are a frequently used and readily available item of assistive technology in Australia. They are primarily used to improve bed mobility, and to assist with transferring in and out of bed.

Whilst bed sticks and poles are generally used to assist getting in and out of bed, bed rails have traditionally been used to prevent people falling from their beds (Rollins, 2013),

although the available evidence indicates that they are ineffective at doing this and in fact pose a risk.

Bed Sticks and poles are not designed or recommended for the purpose of reducing the risk of a person falling out of bed.

Policy and Environment Context

The following environmental factors were considered while developing this statement:

- There were no Australian Standards regarding bed sticks at the time this statement was developed
- There are no legislative or regulatory requirements regarding bed sticks
- There is a lack of peer-reviewed scholarly evidence regarding bed stick use and safety, although some is available on bed rails. A review of the available literature was completed through partnership with the Nepean Blue Mountains Local Health District (NSW) Working Party on Bed Sticks and Poles in 2016/17.
- Coroner's reports and associated bulletins provide recommendations for appropriate bed stick prescription and maintenance.
- Injuries and deaths have resulted from the inappropriate prescription or use of bed sticks. Evidence is available from published reports (e.g. coronial inquests) as well as anecdotal reports by occupational therapists.
- Inquests have highlighted that key risk factors for asphyxia due to entrapment by a bed stick include any, or a combination of, reduced cognition, limited mobility, medication use, inadequate monitoring, the aged-care environment, and positioning of the bed stick.

Bed Sticks/Poles

Occupational Therapy Australia acknowledges there are inherent risks associated with both use and non-use of assistive equipment. Occupational Therapy Australia recommends that occupational therapists should **always** be involved in assessing clients and environments for bed stick/pole suitability to minimise risk. Prescription of any assistive equipment involves complex reasoning. This guidance document highlights scenarios where bed sticks are generally contraindicated, although their use or non-use should always be subject to practice reasoning by an appropriately qualified health professional. This guideline aims to support good practice in the use of bed sticks/poles, promoting safe application and appropriate use.

Bed sticks/poles pose a risk of injury or death, with documented cases of asphyxiation by entrapment, and anecdotal reports of impalement and falls. In environments where behaviour may be challenging, they may also have the potential to be used to harm others.

To promote public safety, occupational therapists involved in the recommendation and provision of bed sticks/poles should implement appropriate risk assessment and mitigation. The provision of bed sticks/poles should not be considered a first line intervention in situations of reduced bed mobility and difficulty completing bed transfers, and alternative options should always be considered prior to the provision of bed sticks/poles.

Alternative Options:

Alternative options vary, and could include the teaching of different transfer techniques, using a rehabilitation approach, using alternative pieces of assistive technology such as a leg lifter, overhead pole/aid, or profiling bed, utilising supervision or carer assistance if available and suitable, or using crash mats/floor padding.

If alternative options are explored and a bed stick or pole is still indicated, occupational therapists should implement and document a **comprehensive** risk assessment and mitigation plan.

A risk assessment should include cognitive, perceptual and motor functioning, including the potential for fluctuation in abilities, involuntary movement, mobility, history of falls, bed stick positioning, and the context in which the equipment is used. The potential risk of entrapment should be carefully assessed, as should the type of bed and mattress the device is being used on, and the availability of monitoring and review. Consideration should be given to whether immediate access to assistance would be available, should entrapment occur, and whether the device will interact or interfere with other devices.

Risk Assessment and Mitigation:

A risk assessment and mitigation procedure should be particular to individual services, but should at a **minimum** ensure:

- KA524 Bed poles should no longer be used in residential aged care facilities;
- Any gap between the bed pole vertical component and the mattress be eliminated;
- Regular monitoring of the bed stick position;

And fully consider:

- where a low to high risk exists, alternatives should be considered where appropriate, e.g. alternative equipment (e.g., bed rail, overhead bed aid, bed ladder, adjustable bed)
- the client's cognitive, perceptual and motor capacity, including fluctuation and history
- the impact of medication on cognition
- mobility (including limited mobility and involuntary movements)
- the overall environment in which the bed stick is to be used
- capacity of the client, carer, and/or support staff to regularly monitor the equipment and reposition as necessary
- positioning of the bed stick (a bed stick should typically be close to the waist, and not close to the head/upper body; positioning of the stick under the mattress should ensure that the client's weight aids in stabilising the device)
- mattress type (increased risk where the mattress size is disproportionate to the client or equipment; Increased risk with air mattresses)
- method of transfer;
- multifactorial falls assessment and prevention
- bed height
- personal (e.g., hip) protectors
- cushioned flooring
- raised mattress edges
- supervision or surveillance
- alarm use
- the availability of support workers;

- where a bed stick is used, the client or nominated decision-maker should be informed of the relevant risks;
- bed stick design that reduces risk of movement of impalement; and,
- the least restrictive options available.

Contraindications:

Scenarios where bed poles/sticks are generally **contraindicated** include any or all of the following:

- residential care facilities,
- anywhere where there is the potential for a gap to open up between the vertical component of the bed stick and the mattress and where regular monitoring of the bed stick position is not possible.
- poor cognitive functioning of the user, particularly if carers are not in close proximity,
- a history of falls, and/or
- the device cannot be safely installed in the environment

Bed Rails

Despite their widespread use in a range of setting, research evidence concludes that bed rails do not actually prevent falling out of bed and have in fact been found to be hazardous in some environments, as well as raising ethical and accountability issues in terms of limiting choice, control and free movement (Hanger et al, 1999; Grasso et al, 2001; Rollins, 2006). Hazards include restraint, entrapment, serious injury and death (O Keeffe, 2013; Rollins, 2006). Capezuti et al (2007) report that siderail use is often not actually empirically driven but tends to be related to historical factors and socialisation amongst staff and economic factors within care services (e.g. influencing levels of monitoring).

Thus, the available evidence points to the fact that bedrails do not necessarily prevent falls out of bed, and in fact the evidence tends to indicate that they may pose an increased risk of more severe falls in certain circumstances.

If bed rails are used, the following steps should take place:

- Bed rails should only be used after all other measures have been tried
- Comprehensive assessment of the person and environment – including the bed, piece of equipment and mattress used (O Keeffe, 2013; Haugh et al, 2014)
- Comprehensive documentation
- Communication with all parties (client, staff, carers etc)
- Education to all parties (client, staff, carers etc) (O Keeffe, 2013; O Flatharta et al 2014)
- Assessment of risk of falls
- Bed rail use should be recorded and monitored
- The equipment requires close monitoring and old stock should be regularly replaced/upgraded.

And the following points should be carefully considered:

- Local/national guidelines regarding use of restraint
- Bed rails are not suitable for use with people who are confused (O Keeffe, 2013)
- Objective standards should be developed (O Keeffe, 2013)

It is worth noting that the integrated rails of electric profiling beds may reduce risk of entrapment (Haugh et al, 2014)

Recommendations:

Bed Sticks/Poles

Occupational Therapy Australia recommends that occupational therapists are the most suitably qualified health professionals to recommend/prescribe bed sticks/poles.

Bed sticks/poles are an item of assistive technology which carry a known and serious risk, and as a result occupational therapists are encouraged to comprehensively consider alternative options when bed mobility and transfers are an issue.

Bed sticks/poles should be considered a last line intervention, and all other avenues should be exhausted prior to their recommendation.

A full and comprehensive risk assessment should be completed by an occupational therapist before provision of a bed stick/pole. The risk assessment should include functional, physical, cognitive, and environmental factors, and be fully documented.

Occupational therapist training explicitly includes consideration of these factors. Occupational therapists are a cornerstone of community and aged care multidisciplinary teams and are well-situated to attend to environmental aspects of bed stick provision and maintenance.

Clients, their families/significant others and service providers should be educated as the significant danger posed by bed stick use.

Occupational therapists should be involved in:

- Assessing functional needs of the client;
- Considering potential alternatives to bed stick/pole provision
- Assessing suitability for a bed stick/pole;
- Risk assessment consistent with the principles and process outlined above;
- Installing, supervising, or reviewing the installation of bed sticks/poles where used;
- Education and training the client in use of the bed stick/pole where used;
- Ensuring that an appropriate monitoring and maintenance system is in place (including education of the client or support persons).

Bed Rails

Based on the evidence, Occupational Therapy Australia recommends that occupational therapists limit their recommendations for side/bed rail use (Capezuti et al, 2007) as there are limited demonstrated benefits and some potential harm associated with their use. However, the permanently attached rails of electric profiling beds may reduce risk of entrapment (Haugh et al, 2014)

As with bed sticks/poles, attention should be paid to reason for need and alternative options comprehensively sought prior to recommendation.

If recommended by an occupational therapist, comprehensive assessment of the person and environment should take place, including falls risk and the risk of restraint, comprehensive documentation should be completed, and all parties involved should be thoroughly communicated with and involved in the process as much as possible. Education to all parties should be completed and documented, and a process set in place for ongoing monitoring of the use of the device, and servicing and replacing of the equipment.

In General:

It is worth noting that the Manual Handling plan for a client remains the responsibility of the service provider. Occupational therapists should make use of their clinical and professional supervision in order to ensure all options are considered and best practice maintained. It should be noted that the circumstances and abilities of a person using a bed stick/pole may change over time – months or years later – and support persons and carers should be alert to the need for review or removal of a bed stick, pole or rail.

Significance of this Statement to Society

In order to ensure the safety of users of bed sticks/poles and rails, Occupational Therapy Australia recommends the following steps are followed:
Occupational therapists act in accordance with the position and principles outlined above;
Service providers consider occupational therapists as the most suitably qualified health professional for bed stick prescription;
Individual services ensure that where relevant, appropriate systems are in place to document and mitigate bed stick risk. This should be tailored to each service's needs, but will typically involve any, or a combination of, e.g., health professional education resources, workplace instructions and procedures, assessment procedures, documentation guidelines and client education resources; University training of occupational therapists should include bed risk assessment processes and/or orientation of students to Occupational Therapy Australia's practice guidance.

Challenges and Strategies

It is the responsibility of occupational therapists to be aware of safety considerations relevant to their practice. To promote this awareness, Occupational Therapy Australia will make this statement available to members on their website (until such time that it may be superseded) and advertise the statement through their communication channels.

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