College of Occupational Therapists of Ontario
Ordre des ergothérapeutes de l'Ontario

College Response to the Coroner's Report: Deaths from Bed Entrapment

May 2017

The Office of the Chief Coroner has requested the College implement a recommendation to prevent future deaths and injuries of individuals who may be at risk of bed entrapment. Occupational therapists (OTs) must be aware of the risks and hazards in prescribing bed rails to clients.

At the end of this article, you should:

- *Understand the importance of OT involvement in the prevention of bed entrapment*
- *Reflect on College expectations for OTs who implement this service.*

Case Review

The individual was a 92-year-old man who lived in a retirement home in Ontario. He was admitted to the home in 2012. The individual's medical history included: Diabetes mellitus type II with peripheral neuropathy, hypertension, arthritis of the legs, stroke, congestive heart failure, chronic renal failure, and dyslipidemia. He was an ex-smoker.

It was noted that he used a wheelchair independently through self-propulsion and navigated to the dining room for meals. With the assistance of a Saska pole, the individual could perform transfers and take a few steps. The mattress was also equipped with a portable bedrail, which was installed through an extension from underneath. From 2014 to 2015, the individual had sustained multiple falls, averaging one fall per month. These falls typically occurred when he was transferring without supervision from his wheelchair, losing his balance, or when attempting to bend over. The individual required an assisted living environment after sustaining recurrent falls.

In February 2015, the individual was noted to be sleeping on his right side with a blanket on top at 3 a.m. Three hours later, he was found to be sleeping on his back with the blanket covering up to his chest. At 8 a.m., the individual was found with his face pointed away from the bed. His neck was noted to be compressed between the bed rail and the mattress, with the rest of his body on the floor. The individual was found to be deceased with the cause of death determined as neck compression from bed rail entrapment, with factors including atherosclerotic and hypertensive heart disease.

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Summary of Key Considerations Identified by the Geriatric and Long Term Care Review Committee

1. A risk assessment is necessary and should be documented when implementing the use of bed rails for clients.
2. The use of bed rails should be reassessed on a regular basis.
3. Clear safety standards exist for the implementation and positioning of bed rails.

The Health Workforce Planning and Regulatory Affairs Division of the Ministry of Health and Long-Term Care has directed a second similar case to the College's attention. This case describes a 91-year-old woman who lived in a long-term care home with moderate dementia, identified as being a high risk for falls. The individual had an unwitnessed fall from her bed. Both sides of the bed rails were up and there was a fall mat on the opposite side of the bed from the fall. It was subsequently determined the woman had sustained a fracture of the acetabulum that was inoperable and died four days after. The cause of death was determined to be complications of pelvic fracture due to a fall, with a contributing factor of Alzheimer's dementia. Following the results of this case, the Health Workforce Planning and Regulatory Affairs Division provided the College with an opportunity to respond to the Office of the Coroner's recommendation that, "Geriatric healthcare providers are reminded that there is little evidence to suggest that restraint use reduces the risk of injury and that there is some evidence that restraints may actually increase the risk of deaths, falls, serious injury, pressure sores and hospital length of stay."

Role of the Occupational Therapist

OTs are trained to look at the day-to-day activities clients perform so that treatment is catered to their individual needs. The assessment process begins with an observation of the client's ability to perform activities of daily living, for example, getting dressed, walking, eating while considering environmental factors to provide a holistic perspective. OTs deliver services within a wide range of environments, including hospitals, clinics, communities, and the client's home. The purpose of occupational therapy is to assist individuals in fulfilling their occupational roles, and to overcome any barriers that impose limitations to their quality of life. OTs are trained to identify the most relevant **risk factors** and create a care plan where client goals are incorporated throughout the process. As part of a care plan, OTs may recommend assistive equipment that can be used to minimize injuries, for example, the use of bed rails or alternatives.

Bed entrapment occurs when a patient is caught or entrapped in the spaces between a bed rail, mattress, or other objects. Based on the training, knowledge, and skills of OTs, they are well-positioned to take part in promoting bed safety. Bed rails can be used as an assistive device for clients to transfer with assistance, for bed mobility, or to minimize the risks of unintended rolling or falling out of bed. OTs have the ability to assess the risks and benefits of bed rails in determining whether bed rails would be appropriate for a specific client. OTs can also identify alternative options if they determine bed rails as more of a risk than a benefit.

The Use of Bedrails

According to Health Canada's *Bed Rails in Hospitals, Nursing Homes and Home Health Care* the following benefits and risks of using bed rails in hospitals, nursing homes and home health care:

Benefits	Risks
• Aiding in turning and repositioning within the bed. • Providing a handhold for getting into or out of bed. • Providing a feeling of comfort and security. • Reducing the risk of patients falling out of bed when being transported. • Providing easy access to bed controls and personal care items.	• Strangling, suffocating, bodily injury or death when patients or part of their body are caught between rails or between the bed rails and mattress. • More serious injuries from falls when patients climb over rails. • Skin bruising, cuts, and scrapes. • Inducing agitated behaviour when bed rails are used as a restraint. • Feeling isolated or unnecessarily restricted. • Preventing patients, who are able to get out of bed, from performing routine activities such as going to the bathroom.

OTs are asked to consider several factors when choosing to implement the use of bed rails. To assist OTs contemplating the use of bed rails, tips are provided that refer to relevant College standards for practice or external resources. These considerations are intended to support an OTs clinical decision-making for the safe use of bed rails. OTs are expected to comply with the applicable standards for practice when assessing clients and implementing occupational therapy care plans.

Summary of Considerations

Assessment Process
OTs should consider:

Competency

- Do I have the necessary training, education, and skills for assessing and implementing bed rails or alternatives?

Tip: Refer to the Standards for Occupational Therapy Assessments (Stage 1)

Documentation

- Was the assessment process captured appropriately in the clinical record?
- Was the rationale/decision-making process for the use of bed rails or lack thereof documented?

Tip: Refer to the Standards for Occupational Therapy Assessments (Stages 2-4)

- Does the clinical record include the discussions that took place with the team/client/family?
- If a bed rail care plan is in place, is it documented and accessible by other care providers?

Evidence-Based Research

- Do I have knowledge of the zones of entrapment?
- Is there evidence to support the use of bed rails or alternatives based on the client's condition/status and were other options considered?
- What standards and policies are applicable and available regarding the use of bed rails?
- Are preventative strategies in place to reduce the risks of bed entrapment?

Tips:

1. Recalls and safety alerts are posted on the Government of Canada's website
2. The U.S. Food and Drug Administration website has guidance documents on the provision of bed rails

Client Safety/Risk OTs should consider:
Client Education • Was informed consent obtained from the client or substitute decision maker (SDM)? • Were alternative options discussed with the client or SDM? *Tip:* Refer to the Standards for Consent and the Consent Checklist • Have all aspects of the client's occupational performance been considered in assessing the appropriateness of the use of bed rails? • If bed rails are to be used as restraints, have they altered or limited the client's autonomy? *Tip:* Refer to the RNAO Clinical Best Practice Guidelines Promoting Safety: Alternative Approaches to the Use of Restraints After-Care Delivery • Are the client's functional needs being met, for example, access to fluids/food, call bell, etc.

Collaborative Care OTs should consider:
Staff Education • Are resources for orientation and training available to staff (if applicable)? • What is the process for communicating and sharing care plan updates among stakeholders/the team? Equipment • Is there a process for inspection and maintenance of the bed system for safety? *Tip:* Refer to the Standards for Record Keeping (Standard 10) Stakeholder Involvement • Who else can I consult with to obtain additional information when I need guidance? Examples include: vendors, colleagues, manufacturers, government resources.

Practice Limitations

Given that OTs work in diverse practice settings, it is important for OTs to also consider how any limitation to their practice such as the scope of their specific role or the model for service delivery may impact the safe, effective implementation of use of bed rails.

For example, an OT who is practising in a consultative role who only sees a client once or twice may need to consider whether the appropriate supports are in place to manage the safe, effective use of bed rails. However, this does not preclude the expectation that OTs will comply with professional standards and provide appropriate care for their clients.

This document was created to encourage OTs to consider whether the use of bed rails serves the best interest of the client considering client safety and best available evidence. OTs can use this resource as an opportunity to review alternate options, make changes to the original care plan, or offer the client the choice to refuse the service. OTs are expected to uphold the principle of transparent practice. Open and honest communication about any limitations to practice would be beneficial in the early stages of the client interaction as this information may influence the client's health care choices. For example, the OT may want to discuss the realistic scope of deliverable services that are available to the client including duration, frequency, and intensity of service. Please refer to **Practice Guidelines for Working Within a Climate of Managed Resources.**

Summary

The issue of bed entrapment is a serious concern and OTs should reflect on the potential risks to client safety. A client's safety is not automatically compromised with the implementation of bed rails. Creating a safe bed environment involves a collaborative approach. All stakeholders, including vendors, the health care team and the client/SDM should have a common understanding of the integrated care plan. The process of implementing bed rails should begin with a comprehensive risk assessment that is accompanied by an ongoing process for monitoring change and progress. A care plan should be created with an emphasis on involving the client (and SDM), the client's preference, needs, and overall safety.

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