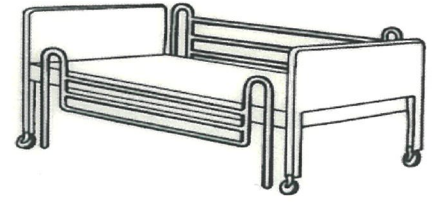




# Bedrails in Acute Hospital Settings

## Safety tool or potential hazard?

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### Introduction

The older a person is, the more likely they are to experience a fall. One common cause of falls in acute hospital settings is falling out of bed while attempting to mobilize. Older adults often present with altered mental states and this increases their risk of a fall. Bedrails were designed as a way to prevent people from falling out of bed. However, some patients see them as a form of restraint, especially when confused. Therefore bedrails may become more of a hazard, as these patients tend to want to escape from them, causing themselves injury. Mental state and mobility are considered the two biggest factors that impact the decision on whether or not to raise bed rails (van Leeuwen et al., 2001). For this reason, I asked the research question: In acute care settings, are bedrails an effective tool in preventing older adults with altered mental states from falling out of bed?

### Why do we use bedrails?

- Nurses state the main reason they raise bedrails is to protect patients from falling when attempting to mobilize unsupervised from their bed. The bedrails act as a deterrent from getting out of bed.
- However, if the nurses feel the patient also has an altered mental state they tend to not raise bedrails, as these patients often felt entrapped by them. This increased their anxiety and agitation, meaning they wanted to escape. If they attempted to do this while bedrails were raised it would increase the chance of serious injury.
- Nurses also raised bedrails by patient request, as it made some patients feel safer.
- Partially raised bedrails can also be used as a mobility aid while in bed.
- (Healey et al., 2009; Shanahan, & Evans, 2009)

### What are the risks of raising bedrails?

- Studies have found that they can increase the rate of falls, especially in confused patients.
- This patient group often felt imprisoned by the bedrails and commonly tried to escape.
- Patients trying to climb over or through the bedrail or trying to squeeze through the space created at the end of the bed often resulted in a fall and increased the chance of serious injury.
- (van Leeuwen et al., 2001)

### Recommendations

- Bedrails increase the height at which a patient will fall from, increasing the chances of serious injury.
- In patients that are thought to be a high falls risk, and are likely to try and escape bedrails, it may be safer to lower the height of the bed and place a mattress on the floor or installing a falls alarm.
- Nurses should continue to offer routine cares, such as toileting, to reduce patient desire to need to leave the bed unsupervised.
- Hospitals should implement clear guidelines that nurses can follow in relation to deciding whether or not to raise bedrails.
- (van Leeuwen et al., 2001; O'Keefe, 2004)

### Conclusions

Bedrails are a useful tool in preventing bed falls in mentally alert patients who have impaired mobility. However, they should not be used in patients who have both impaired mobility and an altered mental state. In these patients nurses should look for alternative methods to prevent falls and reduce the chances of serious injury.

### References

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- O'Keefe, S.T. (2004). Down with bedrails? *Lancet*, 363, 343-344.
- Shanahan, D., & Evans, A. (2009). An audit of bedrail use and implications for practice. *British Journal of Nursing*, 18, 232-237.



Table 1. *PICOT model showing information relating to the research question and rationale as to why it was included.*

	Information relating to question	Rationale
Population	Older adults admitted to acute care settings with an altered mental status.	Older adults represent the highest proportion of patients in most acute care settings. They are also more likely to be suffering from an altered mental status. An altered mental status is one of the main factors that contribute to a fall in an inpatient setting (Tzeng, 2010).
Intervention	Patients that have their bedrails raised in an effort to prevent them falling out of bed.	Nurses also state that the main reason they use bedrails is to protect the patient from falls (Healey, Cronberg, & Oliver, 2009; Shanahan & Evans, 2009).
Control	Patients that do not have bedrails.	It has been suggested that raising bedrails in mentally impaired patients can have the opposite effect and actually increase the risk of falling. These patients tend to see the bedrails as a prison and this increases their desire to escape. As the bedrails present a significant obstacle to overcome, many of these patients end up falling and often in these instances no bedrails are thought to be safer (van Leeuwen et al., 2001).
Outcome	Patients remain safe in their bed, during their acute hospital stay.	Maintaining patient safety should always be a goal of care, including patients considered to have a higher falls risk (Shanahan & Evans, 2009). Nurses need to be able to recognise the most appropriate falls intervention tool to keep patients safe whilst in bed.
Time	Not applicable for this scenario	