



## KEY POINT SUMMARY

### OBJECTIVES

The objective of this study was to evaluate the efficacy of a policy to introduce low-low beds for prevention of falls and fall injuries on wards that had not previously accessed low-low beds.

### DESIGN IMPLICATIONS

Many interventions available to prevent falls are being used clinically, such as low-low beds, infrared bed alarms, and nonslip socks.

## Pragmatic, Cluster Randomized Trial of a Policy to Introduce Low-Low Beds to Hospital Wards for the Prevention of Falls and Fall Injuries

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### Key Concepts/Context

Falls by hospitalized older adults are a common and potentially debilitating adverse event. In the United States, Medicare no longer confers incremental payments to hospitals for eight secondary conditions that it perceives as preventable complications of medical care, with falls from bed being one of these. Development of a policy to introduce low-low beds, which reduce the potential for injury if patients fall from the bed, on hospital wards is attractive, given the hypothesized benefits.

### Methods

This was a pragmatic, matched, cluster-randomized trial with wards paired according to rate of falls. Falls and fall injuries in the hospital were measured using a computerized incident reporting system. Intervention and control wards within 18 public hospitals located in Queensland, Australia were observed for a six-month period after implementation of the low-low beds on the intervention wards. Data from a six-month period before this were also collected and included in analyses to ensure comparability between intervention and control group wards.

### Findings

Although the rate of falls in the bedroom declined significantly between the pre- and post-intervention periods on wards that received the low-low beds than in the wards that did not receive the low-low beds, this study found little evidence to support the implementation of a policy to further introduce low-low beds to



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hospital wards for the purpose of preventing falls. Participating sites reported some difficulty in using the low-low beds as instructed (e.g., difficulty moving the beds and not being able to be placed in the Trendelenburg position).

### Limitations

In addition to the drop in falls possibly being attributed to the Hawthorne effect, two reasons why the low-low beds may not have reduced fall-related outcomes to a greater extent were hypothesized. First, the low-low beds could have provided a false sense of security to hospital staff, in that they may have felt less need to regularly check in on high-fall-risk patients. Second, the low-low beds may only be able to prevent a small proportion of the overall number of falls on a ward; thus, even if the beds were allocated to the most appropriate patients and were being used correctly, the number needed to prevent one fall may still have been high.