OBJECTIVES
The objective of this study was to determine the effects of introduction of a bedrail policy and an educational program on patient falls and fall-related injuries.

An Analysis of Falls in the Hospital: Can We Do Without Bedrails?

Hanger, H. C., Ball, M. C., Wood, L. A.
1999 | Journal of the American Geriatrics Society
Volume 47, Issue 5, Pages 529-531

Key Concepts/Context
Falls and injuries from falls are common in older patients in institutions, evoking a common response of using restraints, such as bedrails or cot sides, to further prevent harm. However, there is no compelling evidence that restraints reduce the risk of falls and/or injuries.

Methods
Data on patient fall rates were collected prospectively for all patients admitted during the 1994 calendar year to any one of the five assessments, treatment, and rehabilitation wards for older people at Princess Margaret Hospital, Christchurch, New Zealand. Each ward has 25-30 inpatient beds (total of 135 beds for the service).

Findings
There was a significant reduction in the number of beds with bedrails attached after the policy introduction, but the fall rate did not change significantly. Serious injuries were significantly less frequent after the bedrail policy was introduced, with fewer head injuries. There was no significant change in the number of staff injuries in the two periods, with fewer back strains after compared with before the intervention.

Limitations
The reduction in falls may be attributed to the Hawthorne effect.
Design Implications

Use alternatives to bedrails for agitated older patients, including use of quiet single rooms, familiar staff, nightlights; alleviate the need to get out of bed through regular toileting regimens and mattresses on the floor.