



## KEY POINT SUMMARY

### OBJECTIVES

This paper looks at the role of carpeted and vinyl floors in relation to the injuries older patients receive when falling in hospital.

### DESIGN IMPLICATIONS

Use of carpet may be more appropriate (safer) in areas with older patients who are more prone to injury. However other concerns such as cleanliness, disinfection, and maintenance should be considered carefully as well.

## Does Flooring Type Affect Risk of Injury in Older In-Patients?

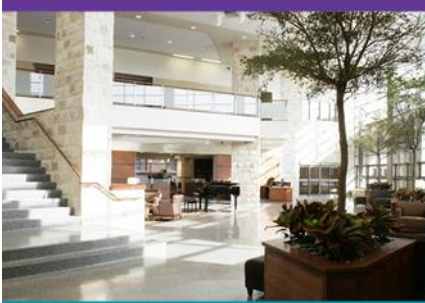
Healey, F.  
*1994 / Nursing Times*  
*Volume 90, Issue 27, Pages 40-41*

### Key Concepts/Context

Falls and injury are of great concern in healthcare institutions, even more so in wards which are likely to have older patients who are at higher fall risk. While falls can be prevented by careful treatment of intrinsic factors (to do with the patients' own health), extrinsic factors in the environment, that could increase the likelihood of falls such as poor lighting, clutter etc. must also be concerned. Of particular relevance is the issue of flooring which is a large investment for the hospital and sets the stage for patients and staff to move upon. Given the growing trend of using carpet in healthcare facilities, this paper, reviewed the evidence on the impact of flooring type and risk of injury in older in-patients.

### Methods

225 accident forms were selected randomly, and retrospectively analyzed, in a care of the elderly unit over four years. The unit consisted of three acute admission wards and five rehabilitation wards (which were floored mainly with vinyl but had carpeted sitting rooms) and one acute admission ward for patients in need of joint assessment (which was carpeted with the exception of two single bedrooms and all toilets). The type of carpeting varied from area to area but all were washable with single (rather than looped) fibers and thin underlays. Injuries were defined as any gaze, bruise, laceration or fracture, or any fall that resulted in the patient complaining of pain (even if there was no visible lesion as evidence). Forms that did not contain enough information, or recorded injuries unrelated to the type of flooring, were excluded- total forms analyzed included 213. These were sorted into two groups: those involving falls on carpet, and those involving falls on vinyl. Incidence of injury for each of these groups was obtained. Data was statistically analyzed.



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## Findings

Older patients who fall on carpet are less likely to be injured than those who fall on vinyl flooring.

## Limitations

In the paper the author clearly identified limitations and discusses the bearing these limitations may have on the results, if any. The author suggests that since this study was retrospective (and arguably did not control for all confounding variables), a more controlled study comparing fall and injury rates should be conducted before applying the results.