Inpatient falls are a major issue for hospitals and are associated with mortality, morbidity and financial costs. Falls are particularly prevalent in elderly care environments, where patients have more risk factors for both falls and injury. With an aging society, this is an issue of increasing concern.

This study used a one-year non-blinded cluster randomised trial in eight hospitals in England between April 2010 and August 2011 to evaluate different shock-absorbing flooring materials (intervention = 8.3mm thick Tarkett Omnisports EXCEL, or control = 2mm standard in situ flooring) effect on fall-related injury severity, rates, and adverse events.

The intervention group experienced almost half as many injurious falls (22.9 percent) as the control group (42.4 percent).

As a pilot study there is potential for random error that can limit the generalizability of findings. Further, the study was not blinded, which may lead to a risk of bias.
Design Implications

It is estimated that laying the shock-absorbing flooring in patient bays may reduce the rate of injuries by 42 percent of that experienced by patients without the flooring. To assist with ergonomics in the movement of wheeled equipment, select shock-absorbing flooring that has better push/pull properties.