



## KEY POINT SUMMARY

### OBJECTIVES

To compare the effectiveness of training and equipment to reduce musculoskeletal injuries, increase comfort, and reduce physical demands on staff performing patient lifts and transfers at a large acute care hospital.

### DESIGN IMPLICATIONS

To effectively improve comfort with patient handling, decreased staff fatigue, and decreased physical demands, mechanical and other assistive patient-handling equipment must be readily available.

## A Randomized Controlled Trial to Prevent Patient Lift and Transfer Injuries of Health Care Workers

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### Key Concepts/Context

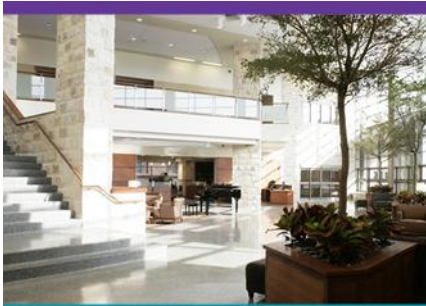
Back injury to nursing staff during patient-handling tasks is a major issue in healthcare. The value of mechanical assistive devices in reducing injuries to these workers is unclear.

### Methods

This three-armed randomized controlled trial consisted of a “control arm,” a “safe lifting” arm, and a “no strenuous lifting” arm. A medical, surgical, and rehabilitation ward each were randomly assigned to each arm. Both intervention arms received intensive training in back care, patient assessment, and handling techniques. Hence, the “safe lifting” arm used improved patient-handling techniques using manual equipment, whereas the “no strenuous lifting” arm aimed to eliminate manual patient handling through use of additional mechanical and other assistive equipment.

### Findings

Frequency of manual patient-handling tasks was significantly decreased on the “no strenuous lifting” arm. Self-perceived work fatigue, back and shoulder pain, safety, and frequency and intensity of physical discomfort associated with patient-handling tasks were improved on both intervention arms, with staff on the mechanical equipment arm showing improvements. Musculoskeletal injury rates were not significantly altered.



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## Limitations

Authors identified no limitations of the study.