Ergonomic evaluation of slide boards used by home care aides to assist client transfers

Sun et al, Ergonomics (2018)

This research paper presents a laboratory study of 16 home care aides performing client transfers from wheelchair to bed and bed to wheelchair using several different types of a particular assistive device known as a slide board (types of slide boards: wood, wood with Tyvek™ cover, Roll-Easy™ and Beasy™). Client transfers were also performed manually as a comparison to the slide boards. The forces experienced by the home care aides were measured during the client transfers. The home care aides also completed a usability survey for each of the slide boards.

Employers and other Stakeholders –

What is the relevance of the research findings?

The results of the study are relevant to home healthcare work because:

- Home care aides perform unassisted manual client transfer during their work
- Manual client transfer is an activity that presents a significant risk of musculoskeletal injury to home care aides due to the forces generated during the transfer
- The use of slide boards reduces forces experienced by aides during client transfer
- Participants in the study found that some slide boards were more effective and easier to use than other slide boards

Intervention Opportunities –

Key points of intervention to reduce the risk of musculoskeletal injury during client transfer:

- Avoid unassisted manual patient transfer by home care aides whenever possible
- Train home care aides to recognize the risk of injury during manual client transfer
- Work with client families to gain acceptance and adoption of assistive slide boards
- Train home care aides to safely use the range of slide boards they may encounter in client homes

Home Care Aides and their Advocates --

This research can help home care aides and their advocates to understand how a type of assistive transfer device known as a slide board can reduce the risk of musculoskeletal injury during client transfer. The paper contains evaluations of specific types of slide boards that may be helpful to clients and home care aides when selecting a slide board.