

Patient Transport Comparative Study: Caregivers Prefer Zoom® Stretcher

Situation

In an article examining ergonomics in the hospital setting, the American Nurses Association reported that “about 12 percent of nurses leave the profession annually due to back injuries, and greater than 52 percent of nurses complain of chronic back pain.” Given the present shortage of nurses, these statistics and the impact this situation has on the future of health care are causing concern.

As a result, hospitals are focusing on the hazards that put caregivers in jeopardy of incurring work-related injuries, and are looking for ways to not only help protect their employees, but also make them more efficient. Patient transport is one such area that poses a high level of risk. Due to dwindling staff numbers and an increasing average patient weight, the daily transport and transfer of patients has become more time intensive and physically demanding.

Rationale

At St. Alexius Medical Center in Hoffman Estates, Illinois, the patient transport staff had been experiencing a number of on-the-job strains and injuries. Among those reported were two workers’ compensation claims that totaled \$217,000.

The St. Alexius day surgery department had established a protocol of transporting patients in teams of two to help reduce the opportunity for overexertion. In an effort to improve efficiency, St. Alexius decided to conduct a comparative transportation study. The day surgery department chose to evaluate Zoom, a motorized stretcher developed by Stryker, against its existing method of transport (two transporters using a standard stretcher).

The Zoom was purported to be more efficient, less strenuous to maneuver and capable of one-person transport. The motorized drive system, activated by hand controls, propels the stretcher in place of the operator’s energy and exertion.

Methodology

Gary Anderson, director of clinical research for Alexian Brothers Hospital Network, developed and administered the transportation investigation, which spanned six weeks and included 177 events. He collected data through pre- and post-transport self-assessment questionnaires. Quantitative data tracked the weight of the patient, total transport time and overall satisfaction of the transporter, while qualitative feedback was gathered through brief interviews and evaluation forms. Study points focused on the subjective feelings of each transporter relative to the two types of stretchers, as well as specific to each transport experience. The specifics of each transport (size of patient, number of transporters, type of stretcher, length of transport) were intentionally random, to be consistent with the day-to-day transport needs of the department.

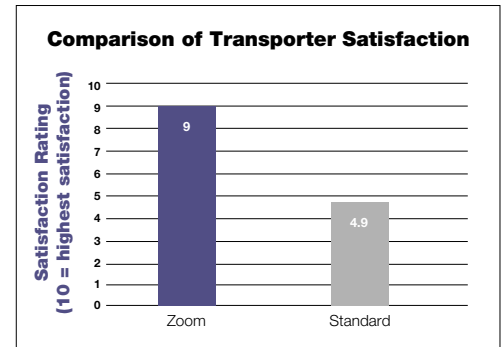
Results

The Zoom stretcher was found to reduce transport time by 30 percent, and the motorized functionality significantly reduced strain on operators. “The motorized feature of the stretcher clearly improved the transport process and offered a substantial reduction in potential injury to transport staff,” stated Gary Anderson. The results indicated that study participants were twice as satisfied transporting with a Zoom stretcher versus a standard stretcher. Moreover, the transporters preferred to work alone versus transporting with a partner when using a Zoom stretcher. The study revealed that transporting alone actually took less time than working in pairs.

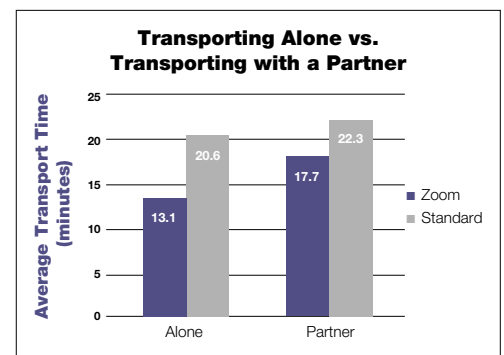
Conclusion

The St. Alexius evaluation revealed that Zoom helps reduce the physical exertion of patient transport, and therefore can help lessen the incidence of job-related strains and injuries. In addition, Zoom helps address the current nursing shortage by employing more efficient use of time and personnel.

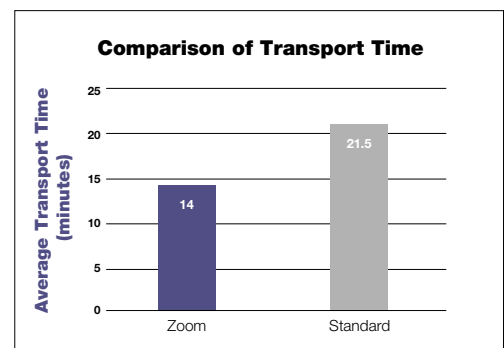
Medical



St. Alexius patient transporters were twice as satisfied when using a Zoom motorized stretcher vs. a standard transport stretcher.



St. Alexius patient transporters preferred single-operator transports, finding it to be the most efficient.



St. Alexius patient transporters determined Zoom motorized stretcher significantly reduced transport time.