

Medical University of South Carolina Improves Efficiency and Staff Engagement with ZOOM®

Situation

The Medical University of South Carolina has earned a reputation for providing excellence in patient care, teaching and research. As the sole Level I Trauma Center in Charleston, MUSC admits an estimated 46,000 patients annually through the Emergency Department. According to MUSC clinical staff, this dynamic and fast-paced department needed products that would help safely and efficiently improve patient throughput. “The patient volume in our ED is growing exponentially and a significant portion of our patients are bariatric,” said Clinical Nurse Specialist for Emergency Services Laura Gallagher, MSN, APRN, CEN. “We needed products that would promote efficiency and prevent injury. The Stryker Zoom stretcher was an investment in our future.”

In a facility that performs approximately 20,000 transports annually (to six separate buildings, which include carpeted surfaces and steep inclines), MUSC considered the Zoom stretcher an integral component to a safe environment for patients and staff. With plans in place to expand the 23-bed ED to 43 beds, MUSC staff set out to 1) validate their annual patient transport time savings with the six Zoom stretchers they currently have in use; 2) project the amount of annual patient transport time savings that would result if they standardized on Zoom stretchers; and 3) evaluate staff satisfaction with the Zoom stretchers.

Rationale

As an industry leader for more than 60 years in patient handling equipment, Stryker Medical recognized that lack of efficiencies in patient transport is a major concern. Acknowledging this need, Stryker was first to market with a motorized stretcher. Launched in 2003, the Zoom stretcher helps ease pushing and turning effort for the caregiver.

Methodology

Stryker engineers designed the Zoom mobility option consisting of load cell technology that allows the stretcher to completely mimic the use of “normal” non-powered stretchers with one key difference – the significant reduction in the amount of effort to start, cruise and stop the stretcher on any surface or incline with up to a 700-pound patient load.

MUSC staff collected data on their daily transports over two weeks in order to analyze the time associated with transporting patients on their Stryker Big Wheel® stretcher compared with their Stryker Zoom stretcher. They compounded this data to project annual transport time for each product.

Results

According to MUSC records, the facility spends approximately 1,444 total hours transporting patients using both Big Wheel and Zoom stretchers. By adding six Zoom stretchers to their fleet, MUSC has realized an annual savings of 95 hours, producing a 6 percent reduction in time of transports. By converting their entire fleet to Zoom stretchers, MUSC predicts that the annual savings would grow to 452 hours, resulting in a 29 percent reduction in total annual transport time.

Conclusion

The Zoom stretchers currently in use at MUSC proved to be an investment that allows the ED to reduce transport time. If the ED standardized on Zoom stretchers, MUSC staff projected an additional five fold reduction in total transport time. MUSC also acknowledged that most of the ED staff prefers using Zoom stretchers. Survey results revealed that 84 percent of the twenty-five respondents felt that the Zoom stretcher made a difference in their job satisfaction. “I have had two back injuries and six back surgeries in the past and transporting patients can add a lot of additional strain to my back,” said Mike Norris, Lead ED Tech. “I always prefer to use the Zoom stretcher for patient transport since it is easy to maneuver, rolls nicely over the carpeted surfaces and is energy-saving.”

