

# Sioux Valley Hospital Improves Efficiency with Zoom®

## Situation

Sioux Valley Hospital, the largest medical center in the Sioux Falls, South Dakota, region, acknowledges safe and efficient patient transport as a summit priority. Recognizing the increase in patient volume, the facility was in need of additional space and more efficient transport equipment. In June 2006, Sioux Valley opened an additional tower to house a new surgical center. According to Sioux Valley clinical staff, this new development, home to the PACU, has provided an immense benefit by the large volume of patients it can accommodate. However, one challenge remained: frequent and long transports with a rising bariatric population.

The need for efficient and extremely mobile stretchers was essential to address this challenge. Proven performance and satisfaction with the Stryker Zoom motorized stretcher prompted the PACU to invest in 23 additional Zoom stretchers to add to the six they already owned. Sioux Valley clinical staff sought to validate this investment by comparing standard fifth wheel stretchers to Zoom stretchers in the PACU relative to the time and number of people needed per transport.

## 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 a 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.

Sioux Valley clinical staff collected data on their daily transports over two weeks in order to analyze the time and number of people needed to transport patients on their standard fifth wheel stretchers compared with their Stryker Zoom stretchers. They compounded this data to project annual transport time for each product, including the number of Advanced Aides needed per transport.

## Results

According to Sioux Valley records, the PACU executes an estimated 13,000 annual patient transports using both standard and Zoom stretchers, which equates to approximately 6,500 total hours spent transporting patients. 62 percent of transports could be performed with one Aide using the Zoom stretcher compared to only 17 percent of transports which could be performed with one Aide using a standard fifth wheel stretcher. Sioux Valley concluded that they were spending 6,467 hours in transport time annually by using a blended fleet consisting of 18 standard fifth wheel stretchers and 29 Zoom stretchers compared to the 8,393 hours they would spend using just fifth wheel stretchers. This equates to approximately 1,900 hours Sioux Valley projects to save in transport time with the implementation of their Zoom stretchers.

## Conclusion

Sioux Valley’s investment in 29 Zoom stretchers amounted to a growth in efficiency. By reducing the number of Aides needed to transport with the Zoom stretcher, Sioux Valley was able to decrease the amount of total hours spent on patient transports.

