Lift Teams—A one-year study: Another success story in an acute-care hospital

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Abstract

A one-year study was undertaken in a San Diego, CA, acute-care tertiary hospital to test the viability of using lift teams to reduce workers’ compensation claims due to lifting patients. The hospital has an approximate daily patient census of 350 with 2000 employees.

Injuries during the study period were reduced from 22 lost-time injuries to six. Days lost were reduced from 744 to zero, and workers’ compensation costs were reduced from $224,000 (broad costs, considered only compensation and medical) in the prior year to $14,000 during the study year.

Key words: assistive devices, health care workers, injuries, lift team, patient transfers, risk management, workers’ compensation

Introduction

Five peer-reviewed studies show that lift teams can reduce the number of injuries, numbers of lost workdays, and greatly reduce workers’ compensation costs to health care workers due to lifting patients in a health care setting. Lift teams follow the risk-management model of putting risk where it can be controlled, in trained professional teams, rather than in a whole population of workers. The lift teams are required to use mechanical lifting devices for all total body transfers, which removes the high compressive forces on the lumbar spine (L5/ S1) that result from manual lifting.

Program benefits

- Improved attitude and morale—especially since expansion of lift team.
- Increased safety awareness among employees.
- 110+ daily patient contacts after expansion—lifting and transporting.

According to Owen, 98 percent of patient transfers are being done manually, despite the fact that each of the nine most common manual lifts exceeded the guidelines from the National Institute for Occupational Safety and Health (NIOSH) of weight limits of 3400 newtons of force. Health care workers continue to be among the highest risk group for back injury, according to the Bureau of Labor Statistics (BLS), having a combined total of over 36,000 lost workday claims in 1998.

Discussion

The hospital has an average daily patient census of 359, and 2000 employees. A multidisciplinary team was organized over a six-month period to develop the lift team and create parameters of implementation. A policy and procedure were developed that mandated nursing to use the lift team during its shift, and, for off-shifts, nursing had to use mechanical lifting equipment to generate a “no manual lift” policy. The job description of the lift team mandated that the team had to use mechanical lifting equipment for every total body lift of a patient. A mechanical lift inventory was completed prior to implementation, and the hospital discovered that it had very few mechanical lifts in the facility. A

Figure 1. Mechanical Vertical Lift. Photo courtesy of Wy’East Medical, Clackamas, Oregon.
budget of $160,000 was allocated to purchase mechanical equipment. The equipment inventory purchased was as follows (see Figures 1 and 2):

- two total-lift lateral transfer stretchers per floor; and
- one vertical lift per floor.

One lift team, consisting of two team members, was hired for one period of study. Hours covered by the lift team were from 7:30 a.m. to 4:00 p.m. The team was hired under the classification of lift team technicians, and they are paid $8.75 per hour. During the first year of the study, the team averaged 33 lifts per shift with an average response time of three to five minutes.

Results

The average annual cost of patient-handling injuries for the 1996-1998 (pre-study) period was $242,000. In the 1999-2000 (post-study) period, injury cost was reduced to $14,470, a reduction of 94 percent (see Figure 3). The average annual number of lost workdays (LWD) due to patient-handling injuries was 788 in the 1996-1998 period. In other words, some 39.4 percent of employees lost at least one workday a year to a patient-handling-related injury. The annual LWD due to patient handling in the 1999-2000 period was zero (see Figure 4). The average annual number of patient-handling injuries in 1996-1998 was 22 before implementation of the lift team. In 1999-2000, there were six such injuries after implementation, a 72.7 percent reduction (see Figure 5).

Conclusion

The lift teams have accomplished a statistically significant reduction in workers' compensation claims and injuries (i.e., frequency), a lowered lost-workday rate to mathematical zero (i.e., severity), and the economic
reduction in claims costs were calculated in hard costs (i.e., medical and compensation) to be $244,000. When soft cost factors are added—and one must calculate soft costs, as there are at least a dozen citations in the peer-reviewed literature that explain soft cost analysis—the economic savings are between approximately $500,000 (factor of 2X) to almost one million (factor of 4X) per year. The intangible benefits are improved morale and awareness of safety among the employees.

Author's note
All mechanical equipment purchased for this study was manufactured by Wy East Medical, Clackamas, Oregon.

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References