

Champaign Nursing Home, Urbana

Intervention Key Words: Automation, Lifting, Motorized Lift, Transfer, Electrical Bed, Motorized Beds, Resident Bed

Industry: Health Care

Risk Factor(s): Awkward postures- Back deviations, Neck and shoulder deviations, Manual handling – Lifting/Carrying

Situation:

The ability of nursing home employees to provide quality resident care is dependant upon maintaining a safe work environment for both parties involved. One area where that has become a growing concern is during patient transfers. Throughout the course of a day many residents need assistance in basic activities, including but not limited to: getting out of bed, going to the restroom, taking a bath and returning to bed along with a variety of tasks that take place in the bed itself. In many cases, lack of proper, modern equipment heightens the risks of Cumulative Trauma Disorders (CTDs) to the employees. At the Champaign Nursing Home, these concerns stem from the fact that beds must be kept in a low position to prevent patient injury in case of a fall. Many of the beds at the home will not rise to assist the care giver in their tasks, or the nurse doesn't take the extra time needed to raise them. This leads to awkward positions, bending and strenuous lifts which result in injuries to the back, shoulders and neck.



Bed at proper level to prevent injury in case of a fall

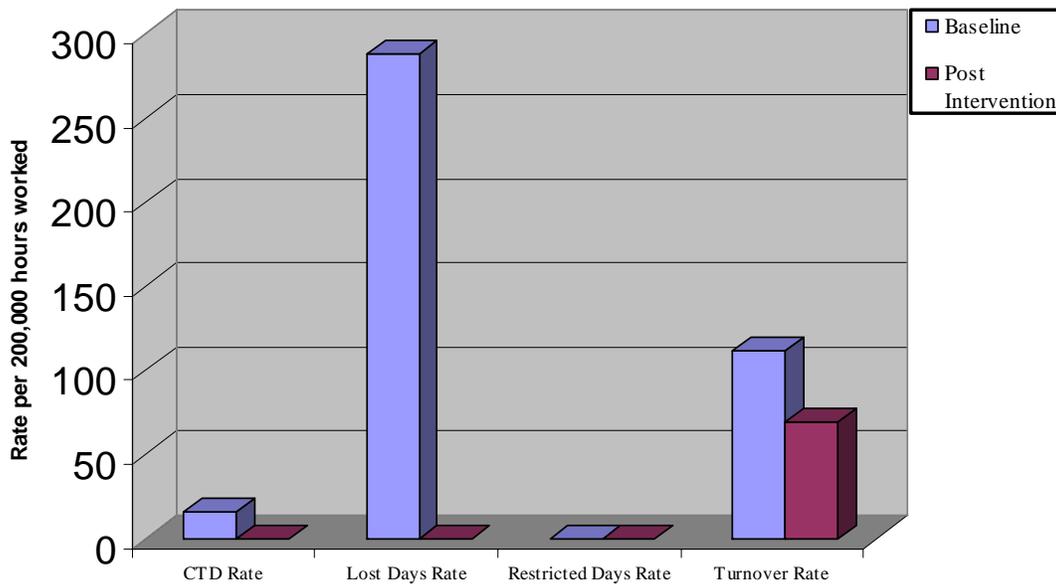
Solution:

The Champaign Nursing Home approached the problem by purchasing 100 electrically operated beds. With the automated beds nurses can quickly lower or raise the patient to a height that is suitable for the situation. This allows the nurses to perform their duties without the necessity of bending over. It also enables other staff members, such as housekeepers, to accomplish their tasks with fewer CTD risks. The total cost of purchasing 100 electrically operated beds was \$141,505. The Champaign Nursing Home received \$32,800 in assistance from the Safety Grant\$ program



Representation of the beds purchased by the Champaign Nursing Home

Results:



- CTD rate (per 200,000 hours worked) was at 16 the year prior to the intervention and decreased 100% over the 2 years following implementation.
- Lost Days rate also decreased 100% following the intervention from a baseline rate of 288.6.
- Restricted Days rate was at 0 the year prior to the intervention and remained at that level for 2 years following.
- Employee Turnover rate decreased from 111.7 to 68.9 following the intervention, a 38% improvement.
- CTD Risk Factor scores, averaged over 6 tasks, decreased 12% following the intervention.