

Lifting Patients/Residents/Clients in Health Care Washington State 2005

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EXECUTIVE SUMMARY

Overall, Washington State's population is becoming increasingly older and heavier, and therefore, at more risk of having numerous chronic health conditions. As a result, there will be increasing demands on our health care system. Being better prepared to address these changing demographics is now critical. Who will care for us when we cannot fully care for ourselves? Those who do care for us when we cannot, skilled health care workers, on average, are also getting older. Who will replace them? Nursing staff has among the highest back and shoulder injury rates of any occupational group. The incidence and cost of patient lifting-related injuries among health care workers remain high. For example, the incidence rate for compensable back injuries in 2003 among state fund health care employers was 162.5 claims/10,000 FTE compared to 41.4 claims/10,000 FTEs for all other state fund employers. For the self-insured, the compensable back injury claim rate for health care employers was 98.6/10,000 FTEs compared to 64.0/10,000 FTEs for other employers. The conditions that put health care workers at risk also exacerbate recruitment and retention problems for experienced nurses and other health care workers. Some project a 50% shortage by 2020 if things remain the same. Nursing homes are experiencing serious under-funding. Economic concerns, particularly in nursing homes and home care, resulting in non-competitive wages and often no benefits, further exacerbate the cycle of injury and staff turnover. However, some case studies in the literature have shown between a 30-90% reduction in lost time and workers compensation costs via implementing no-lift programs in nursing homes and hospitals.

The Washington State House of Representatives Commerce and Labor Committee requested the Department of Labor and Industries to convene a task force of equal numbers of labor and industry representatives to assess the magnitude of the problem, and the barriers to and successes in improvement in injury rates related to lifting in the health care arena. Sectors of the health care arena to be covered were hospitals, nursing homes, home sector (home care, home health care, hospice) and pre-hospital medical services (emergency medical and ambulance services).

Methods

Department staff extracted workers compensation data for analysis of industry trends in musculoskeletal disorder (especially back and shoulder) incidence, severity and costs. The health care industry task force (with extended industry and labor participation at meetings) agreed to an action plan for securing the requested information, helped to develop data collection instruments and reviewed findings. Task force members assisted in identifying appropriate sites to visit based on their view of "representative" facilities. Department staff (SHARP and WISHA Training & Outreach) visited six hospitals, eight nursing homes, and six home sector sites. Due to time and resource constraints, an attempt was made to identify a limited number of facilities that spanned the spectrum of health care for site visits including large and small, urban and rural, eastern and western Washington, and one hospital in British Columbia. The extent to which these facilities are truly representative of the industry is not known. The small sample size for each of the types of facilities limits the capacity to identify statistically significant differences between facilities. Interviews with management and staff as well as observations of patient handling by staff were conducted. For pre-hospital medical services, interviews were conducted. Data were entered into databases (without site

name identifiers) and summarized to identify common themes. Additionally L&I staff conducted literature and web reviews to identify what other jurisdictions (nationally and internationally) were doing to address these same issues. Findings were shared with the expanded task force who assisted greatly in their interpretation.

Results

Survey and Interview Results

The site visits, surveys and interviews were essential to learn about issues, barriers and successes in addressing patient handling tasks (transfers, repositioning and activities of daily living). However, because of limitations due to time and resources, an industry-wide survey was not done, therefore, the sample size for each sub-sector is very small (8 nursing homes, 5 hospitals, 5 home sector agencies) and may not produce statistically significant results

Hospitals/Nursing Homes

Hospitals and nursing homes are similar in that their services are provided in facilities under their control but dissimilar in a number of patient care and staff issues (e.g., acuity, staffing type and level, financing mechanisms). All facilities visited were extremely generous with their time and knowledge to assist L&I staff in understanding both barriers and successes. The biggest barriers to attracting and retaining staff reported by the nursing homes included wages and benefits and the heavy physical work. For hospitals, the challenge stemmed from the aging of current registered nurses and the inadequate numbers being trained to meet future demands. All hospital and nursing home sites visited have made some attempts to reduce the physical load on staff related to manual handling of patients and residents. Those further along reported improvements in lost-time injury rates and costs.

Findings include:

- There was no uniform understanding of what “no-lift” meant in either hospitals or nursing homes. It was understood by workers and management in both nursing homes and hospitals that while mechanical handling devices (sit-stand floor lifts, total floor lifts, ceiling lifts) were essential, they were not sufficient by themselves.
- Management recognized that without management commitment/advocacy and employee involvement (including mentoring), adequate and repeated training, consistent policies, and incident investigations, the likelihood of sustaining an effective no-lift program would be difficult. However, rarely were there consistent actions taken, either positive reinforcement or consequences when policies were not followed unless a patient was injured. There were several exceptions.
- More than 80% of nursing home assistants felt using mechanical equipment would reduce the chance they would be injured but 50-60% felt it would require more co-worker help and take more time.
- In both hospitals and nursing homes, all recognized the increasing challenge presented by more obese (body mass index [BMI] > 30) and bariatric (BMI>40) patients/residents. Some nursing homes did not have the capacity to admit bariatric residents.

- An unanticipated result of implementing no-lift programs in some nursing homes has been to transfer the risk elsewhere. For example, if a patient falls on the floor, emergency medical services (EMS) may be called to lift the patient.
- All hospitals and nursing homes had at least some mechanical patient handling devices. All nursing homes visited had used Washington Health Care Association's \$1,000 reimbursements for floor lifts. Manual crank lifting devices were being phased out. Sit-stand device usage has increased in nursing homes over the previous five years.
- The majority of hospitals had some ceiling lifts and they were quite excited about them. Hospitals saw the advantages of ceiling lifts as being space saving, more frequently used because of easy availability, smoother movement for patients, and reducing staff turnover. In the British Columbia hospital and one Washington State hospital, the no-lift program, including ceiling lifts, was integrated with the overall hospital musculoskeletal injury prevention and early return-to-work programs. In both cases, they have shown impressive returns on investment. In another Washington hospital that has recently implemented ceiling lifts in some units and a lift team, early results in terms of injury and cost reduction are very promising.
- There were no ceiling lifts identified in any nursing homes, however the nursing homes were aware of ceiling lifts, and were aware that British Columbia had a program for helping nursing homes and hospitals to install ceiling lifts. Nursing homes were concerned that their buildings may not be able to accommodate ceiling lifts without structural improvement.
- The most physically demanding part of using both ceiling and floor lifts is positioning the sling under the patient, which requires awkward postures and forceful exertions to turn patients of limited mobility and strength. There is increasing recognition of the need for multiple slings per patient so the slings can be left in place. For repositioning or moving from bed to stretcher, some sites advocated using slip sheets or air mats that reduce friction. Most nursing homes cited old facility structure and therefore finances as a barrier to installing ceiling lifts.
- Several facilities had gone beyond patient/resident handling in their efforts to reduce lifting and postural hazards by including housekeeping, laundry, and kitchen and pharmacy areas.

Home Sector (Home Health Care, Home Care, Hospice Care)

When referring to home health, home care, and hospice as a group, they will be collectively referred to as home sector. In the healthcare continuum they provide services to individuals in their homes. These individuals do not need to be hospitalized. They are essentially homebound and not able to get services on an outpatient basis. Hospice care in Washington State is delivered in the home, although hospice services can also be facility-based. Home health and hospice services include nursing, physical and occupational therapy, speech, social work and home health aide (or similar) services. Home care provides services such as housekeeping, meal preparation, assistance with bathing or dressing, toileting, transfers, etc. The duration of home health and hospice services per individual is generally much shorter and temporary in nature than those receiving home care services. All of the home sector employers were located in western Washington—two from rural areas and four from urban areas. As nursing

home care becomes more expensive, there is a greater attempt to keep those who need some degree of long term care at home.

Findings include:

- Home sector care has unique challenges in that the home is often not structured for ease of client assisted transfers. Although some clients are in need of some services for a long time, for others it is more temporary, making investment in structural changes unlikely.
- Home sector workers often work alone.
- Insurance rarely covers transfer devices.
- One administrator stated that they had a written safety and health policy for the prevention of musculoskeletal injuries
- Employees were more likely to see the benefit of equipment use than the agency administrators.
- In at least one home visit, a ceiling lift (paid for by the family) was installed. When asked what kind of equipment would be useful in the home environment, the combined administrator/employee responses included powered lifts rather than manual lifts, stair lifts, sliding sheets, pull up straps for getting up in bed, sit-stand devices.
- The usefulness of some of the so called “luxury” items (e.g. sit-stand assist devices, mechanical total body lifts) is that they might be the very thing that enables family members to continue assisting the homebound individual and allow them to remain at home.

Pre-Hospital Medical Services (Paramedic, Ambulance Service, Firefighter/Emergency Medical Technician)

Pre-hospital medical services include paramedic services, emergency medical technician/firefighter (EMT) services and ambulance services. These services are provided by professionals in municipalities, but crews may be made up entirely of volunteers in rural areas. Interviewees reported that lifting of patients during medical calls was typically much more frequently performed than firefighting activities. Interviewees reported that they felt these activities were either likely or very likely to cause serious injury at some point in a career. They were most concerned with back and shoulder injuries, particularly in the following situations:

Findings include:

- Manual handling of medical equipment (e.g., 35-pound cardiac monitor), as well as non-medical equipment like fire hoses, contribute to the overall physical load
- Concern exists about the legitimacy of nursing home calls for help lifting residents who have fallen
- There is no control over the facilities where they pick up patients
- The greatest physical loads in manual handling come from:
 - Lifting in tight spaces (between bed and wall, next to toilet, out from bathtub)
 - Lifting of bariatric patients
 - Automobile extrications
 - Lifting from floor
 - Lifting and carrying down stairwells
 - Lifting patient and gurney weight together, especially outdoors

- Some ambulance companies have developed a bariatric-specific transport unit, with a ramp and winch system for pulling gurneys into a wider-than-typical bay.
- One ambulance company took the additional step of modifying the vehicle's suspension so that it can be pneumatically lowered to make loading easier.
- Difficulty in securing funding to purchase some of the newer patient transport equipment that reduces physical load for workers and injury for the patients

Government Involvement

The high cost of manual handling injuries to patients and staff has been recognized around the world. In the European Union, Australia and New Zealand, manual handling regulations include the health care sector. No-lift policies and programs, including ceiling lifts have been widely implemented. In Canada, a number of the provinces have manual handling regulations which affect health care. British Columbia and Ontario, most notably, coordinated efforts and financing by Ministries of Health, Workers Compensation Boards, health sector employer associations and unions have lead to large scale efforts to implement no-lift polices and programs, first in nursing homes, followed by hospitals and then other sub-sectors. Both British Columbia and Ontario have made a major commitment to the installation of ceiling lifts.

In the US, federal OSHA has issued nursing home guidelines on resident handling. No state has passed legislation prohibiting manual lifting. In Ohio, the legislature passed legislation to enable the workers' compensation board to issue long-term no-interest loans to nursing homes for equipment purchases in implementing no-lift environments, and has reported good returns on investment. In New York, legislative action has resulted in a two-year demonstration project to determine best practices in no-lift environments for all health care sectors. The Texas legislature passed legislation (SB1525), effective January 1, 2006, affecting both hospitals and nursing homes, requiring a safe patient handling and movement policy to "identify, assess, and develop strategies to control risk of injury to patients and nurses associated with lifting, transferring, repositioning, or movement of a patient," and protection for nurses refusing to perform high risk lifts. This legislation was supported by both industry and labor, recognizing the improvements in injury reduction would also result in improved recruitment and retention of staff. "No-lift" legislation has been or is in the process of being introduced in California, Massachusetts and New Jersey.

Conclusions

- Manual handling of patients has been recognized as hazardous for both caregivers and patients. The changing demographics of the state (older, heavier, more co-morbidity) will increase the hazards for health care workers
- The hazards of manual handling of patients can be reduced by a programmatic approach that includes
 - a) Policies for risk assessment and control,
 - b) Having adequate types and quantities of equipment and staffing,
 - c) Ongoing patient handling training,
 - d) Management commitment and staff involvement,
 - e) Incident investigation, follow-up and communication
- The literature review of no-lift programs have shown reduced injuries to patients and staff, reduced lost time, reduced costs, and reduced staff turnover.

Sustainability of such a program depends on management and employee stability (decreased turnover).

- Nurse educators in United States' schools of nursing are still teaching outdated manual patient handling and lifting techniques. Nursing schools need to train staff on using equipment
- All hospitals and nursing homes visited recognized the importance of implementing no-lift programs on reducing staff and patient injuries and were working to do so.
- Employer and employee associations have worked together effectively in other jurisdictions to implement "no-lift" type programs, often with government support.
- One of the barriers is lack of funding to purchase mechanical lifting equipment. Other countries are providing funding for the purchase of equipment.
- Legislative and executive branches of government in other jurisdictions have used regulatory and financial incentives to assist in the adoption of no manual lift environments in health care
- Home and pre-hospital medical services sectors present some unique but not insurmountable challenges to minimizing or eliminating lifting and manual handling