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

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Prepared by Department of Labor and Industries Staff with Lifting in Health Care Task Force Input

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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 use 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 handing 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

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INTRODUCTION

In April 2005, the Washington State House of Representatives Commerce and Labor Committee requested the Washington State Department of Labor and Industries convene a committee over the interim to examine issues related to safe patient handling in the health care environment (Appendix 1). This investigation was to include hospitals, nursing homes, home health care and emergency medical services in Washington State. This investigation was to examine:

- Current lifting programs and policies, the challenges they face, how they work, and how they are funded
- How to best utilize the current research in this area
- The culture of employee/employer safety necessary to achieve and sustain a successful program

Michael Wood, then Acting Assistant Director of WISHA and Barbara Silverstein, Research Director of the Safety and Health Assessment and Research for Prevention (SHARP) Program developed an action plan to fulfill this request. The action plan called for contacting labor and management representatives from a limited number of hospitals, nursing homes, home health care and emergency medical services to organize meetings to discuss industry needs from their perspective. With the assistance of these stakeholders, a limited number of "representative" facilities with model programs and those that have special needs and difficulties in implementing and/or sustaining no-lift environments were identified. Following visits to those identified facilities, findings would be discussed and recommendations developed with the stakeholders. In addition, successes in implementing no-lift environments in other states or countries would be identified.

A Health Care Lifting Task Force was created from members of professional associations and unions, representing the hospital, nursing home, home health/hospice care, home care, hospice and emergency medical service industries. Participation on this Task Force was open to all in these industries. The role of the Health Care Lifting Task Force was to utilize their combined expertise and knowledge to provide insight and feedback. The responsibilities of the Task Force were:

- Identify facilities to visit,
- Identify key issues to examine,
- Provide suggestions of questions to include in survey instruments and
- Review and assist in the interpretation of the results of completed surveys

Within the Task Force, a Formal Committee was formed, which consisted of equal representation of labor and business from all of the industries. Members of the Formal Committee were chosen by L&I from nominations given by the Task Force members. The charge of the Formal Committee was to review the final. Tables 1 and 2 list the members of the Task Force and the Formal Committee, respectively.

Table 1. Health Care Lifting Task Force Membership, 2005

Amber Carter	Association of Washington Businesses
John Donaghy	SEIU 1199NW
Erik Erickson	Washington State Home Care Coalition
Maggie Flanagan	Washington State Nurses Association
Tami Green	State House Representative 2820
Anne Koepsell	Washington State Hospice and Palliative Care Organization
Jackie Myers	Home Care Quality Authority
Sharon Ness	UFCW 141
Anne Tan Piazza	Washington State Nurses Association
Marilyn Savage	UFCW 141
Lauri St. Ours	Washington Health Care Association
John Dziedzic	Senate Labor Commerce Research and Development
Jonathan Eames	Washington Home Care Coalition
Diana Hitchings	Washington Health Care Association
Beverly Simmons	Association of Washington Business and Washington Hospital Services Workers Compensation Program
Brenda Suiter	Washington State Hospital Association
Jane Wood	Home Care Quality Authority
Audrey Woodin	Adult Family Homes

Table 2. Formal Committee Members of the Health Care Lifting Task Force

Amber Carter, Association of Washington Businesses (October 24th- November 2, 2005)
John Donaghy, SEIU 1199 NW
Jonathan Eames, Washington Home Care Association
Maggie Flanagan, Washington State Nurses Association
Anne Koepsell, Washington State Hospice and Palliative Care Organization
Sharon Ness, UFCW 141
Anne Tan-Piazza, Washington State Nurses Association
Beverly Simmons, Association of Washington Business and the Washington Hospital Services, Workers Compensation Program (replaced Amber Carter, November 2, 2005 - onwards)
Brenda Suiter, Washington State Hospital Association

LITERATURE REVIEW

The Current Situation

The literature shows that no-patient lifting programs reduce injuries and workers compensation costs in health care settings. Back injuries experienced by healthcare workers from patient manual handling and lifting tasks are costly for staff and employers, both by personal measures (e.g., pain, lowered morale, use of sick leave, loss of experienced staff, loss of skills specific to a work unit) and economic measures (e.g. costs of treatment, costs of staff replacement, training for new staff, costs of injury

investigation, administrative costs, insurance premiums) (Occupational Safety & Health Service in New Zealand (OSHS), 1993). In addition, the delayed reporting of occupational back pain by nursing staff often results in the denial of claims for rehabilitation and compensation (Edlich; Winters; Hudson; Britt, and Long 2004). Consequently, it is difficult to estimate the true cost of these injuries. Likewise, it is difficult to calculate the true return on investment that can be expected when manual lifting hazards are controlled and these injuries are prevented. Nevertheless, research has shown that investment in equipment for safe patient handling can result in cost savings. (See Appendix 2 for a listing of cost-benefit examples). (Nelson; Owen; Lloyd; Fragala; Matz; Amato; Bowers; Moss-Cureton; Ramsey, and Lentz 2003) reported that six hospitals in Tampa, FL who invested $750,000 in safe patient handling equipment experienced a decrease in workers' compensation costs of $800,000 one year after the program began, and anticipated cost savings of more than $5 million in the following nine years (their equipment has a reported life expectancy of 10 years).

Most workplaces recognize these risks and have implemented some type of program to reduce exposure and, therefore, control the hazards. The hierarchy of risk control suggests that employers take the following steps, as appropriate, to reduce exposure:

Step 1: Elimination (this is the optimal solution)
Step 2: Substitution
Step 3: Engineering Controls
Step 4: Administrative procedures
Step 5: Personal protective equipment (this is the last resort)

For any one hazard, a multitude of steps and risk controls may be required in order to ensure injury reduction. In the case of patient handling as a necessary job task for healthcare workers, elimination and substitution really are not viable options. It is not sufficient, however, to regard the situational risk of moving patients as an inevitable consequence of working in the healthcare field ((Passfield; Marshall, and Adams 2003)). Engineering controls, on the other hand, are definitely a feasible option for reducing this risk of injury for these workers. Engineering controls may include but are not limited to ceiling lifts, slip sheets, lateral transfer boards, hover mats, and walkers, and each of these has been evaluated for effectiveness at reducing exposure risk. The fourth step in the hierarchy of risk control is administrative procedures. Examples of administrative controls could include training in lifting techniques or changes in work processes (e.g., schedule changes to expand the time frame for which lifting activities across patients will occur, reducing the number of lifts performed per hour, increasing the number of lifters required for any one patient, use of gait belts). Finally, personal protective equipment includes the use of items such as back belts; it is important to note, however, that these devices have been consistently shown to be ineffective at reducing back injuries from patient handling.

This report will begin with a review of the research on patient handling, followed by an examination of the literature and various international initiatives on "no-lift" policies, a brief description of relevant administrative and special considerations for a no-lift or safe patient handling policy and end with the results of our examination.

Manual handling can be broadly defined as the lifting, lowering, pushing, pulling, carrying, manipulating, and restraining of an object; in a healthcare facility, this involves the lifting, transferring, and positioning of patients, clients, and residents (OSHS, 1993).

A laboratory study, supported by Washington State Department of Labor and Industries (Marras; Davis; Kirking, and Bertsche 1999),conducted a comprehensive analysis of low-back disorder risk and spinal loading during the transferring and repositioning of patients using different techniques. The researchers examined 3 different transfer techniques (i.e., one-person hug, two-person hook and toss, and two-person gait belt) and 4 different repositioning techniques (i.e., the manual one-person hook, manual two-person hook, manual two-person with draw sheet, and manual two-person lifting under the thigh and shoulders). They concluded that there is significant risk when transferring patients regardless of the number of people. Additionally, they found that the technique with the highest back disorder risk and spinal loads is the single hook method, while the technique with the lowest disorder risk and spinal loads is the draw sheet method, despite the risk and load for this method still being quite high. Therefore, the researchers conclude that patient handling is a very risky job in terms of the hazards faced. Additionally, because the patient in this study was a 'best' case scenario (e.g., co-operative, small/average size, able to use upper body), the reality for health care workers, particularly those in nursing homes, is much more severe; to have an impact on lower back disorders for these workers, the researchers suggest that access to mechanical lift assist devices as part of a no-lift policy are necessary.

Neither the use of back belts nor the reliance on only body mechanics/lifting technique training have been shown to be effective in reducing nursing staff injuries related to manual handling of patients, residents or clients in the health care sector (NIOSH, 1994 - Patient Safety Center of Inquiry, 2001). This is because manual patient handling tasks are simply and unavoidably beyond the capabilities of the general workforce. Moreover, the body mechanics and lifting techniques taught in these education and training programs are based on research that is not generalizable to the demographics of health care workers nor the health care context in which their work is performed (Patient Safety Center of Inquiry, 2001, p. 6 – VHA and DOD). The Royal College of Nursing (RNC) in England identified some of the many factors which predispose nursing staff to back injury: lifting patients; working in awkward, unstable or crouched positions, including bending forward, sideways, or twisting the body; lifting loads at arm length; lifting with a starting (or finishing) position near the floor, overhead or at arms length; lifting an uneven load with the weight mainly on one side; and handling an uncooperative or falling patient (Royal College of Nursing). Therefore, it becomes the responsibility of the employer to provide safe alternatives for getting the job done. The role of government is to assist in assuring that safe alternatives are used.

Although it can be tempting to conclude that staff in good physical condition would be less likely to get injured, this is not the case. In fact, these employees are exposed to risk at a greater level since the staff is four times more likely to ask their physically fit coworkers for help when lifting patients. Outdated manual patient handling and lifting techniques such as the "hook and toss" method, demonstrated to be unsafe for both nurse and patient and banned in many European countries, Australia, and Canada, are still used by 98% of nurses, perhaps because 83% of nurse educators in United States' schools of nursing are still teaching it ((Owen and Fragala 1999) – as cited by (Nelson and Baptiste 2004)). Although many teachers of nursing may agree that education on lifting techniques is ineffective at preventing injuries for these graduates, faculty continue to do so since they need to cover the material that is on the National Council Licensure Examination (NCLEX) and the use of proper body mechanics remains testable material (Trossman 2004). This demonstrates the importance of targeting interventions so that

they reach and are accepted by stakeholders across the entire system (from upper management within organizations to faculty employed at educational institutions).

(Hignett 2003) performed a systematic literature review of studies on lifting in healthcare published between 1960 and 2001. Her review of 63 relevant papers uncovered that controversial manual lifting techniques NOT recommended from the research include: the orthodox lift, drag lift, shoulder lift, through arm lift, three or more person lift, two poles and canvas lift, and front-assisted with one caregiver lift (e.g., pivot lift, bear hug, rocking lift). The studies revealed that recommended lifting techniques include the use of slip sheets or lateral transfer boards for patients lying down and a mechanical hoist for non-weight bearing patients and those able to bear weight, and walking belts. Hignett (2003) found moderate evidence both for multifactor and single (equipment or lift teams) factor interventions, noting that the evidence for lift teams was sparse. Similar to the conclusions made by NIOSH researchers in 1994, Hignett (2003) indicated that there is strong evidence showing that interventions predominantly based on technique training have no impact on work practices or injury rates. Therefore, and based on a systematic review of the literature, (Hignett 2003) advocates that multifactor interventions that are based on a risk assessment program, which include provisions and guidelines for equipment, education, policies and procedures, additional risk assessment, patient assessment, work environment redesign, and changed work organization/practices, will be the most successful in impacting nurses' musculoskeletal injury rates.

"No-Lift" Policy as an Alternative

(Nelson and Baptiste 2004) suggest that the concept of a "no-lift" policy is a "pledge from administrators that proper equipment, adequately maintained and in sufficient numbers, will be available to care providers to reduce the risks associated with manual patient handling" (p. 7). Along these lines, proper infrastructure must be in place before a no-lift policy can be successfully implemented. This includes management commitment and support at all levels, availability of patient handling equipment, a program for equipment maintenance, employee training, and establishment of a positive safety climate, where all employees share a collective attitude regarding the importance of safety in their work environment.

Research supports no-lift policies as being effective for reducing injuries. For example, (Passfield and others 2003) conducted a study at one hospital wherein they examined workers' compensation claims for patient handling over a four-year period. Midway through that time a no-lift policy was implemented in the hospital. The program consisted of the following elements:

- Approval of the policy by the hospital executive
- A three-hour basic training program, including adequate equipment provision, written procedures on equipment use and an equipment maintenance program
- Written patient assessment sheets
- An ongoing audit program

The post-intervention claims rate significantly dropped from an average of 1.595 claims per month to 0.991 claims per month. Additionally, the percentage of claims that were for back-related injuries resulting from manual handling of patients dropped from 64% of all claims pre-intervention to 50% of all claims post-intervention.

Similarly, (Yassi; Cooper; Tate; Gerlach; Muir; Trottier, and Massey 2001) conducted a randomized controlled trial study to compare the effectiveness of training and equipment to reduce musculoskeletal injuries and the physical demands on staff in a large acute care hospital in Manitoba, Canada. The researchers designed the study with three groups: a control group where no intervention occurred, a "safe lifting" group whose intervention focused on training of safe patient handling techniques and use of manual equipment (e.g., transfer belts and slide devices), and a "no strenuous lift" group whose intervention focused on elimination or reduction of manual patient handling by transferring the load to a mechanical device. The distinction between the two experimental groups was that the safe lifting group focused on *reducing* the biomechanical load associated with patient handling whereas the no strenuous lift group focused on *transferring* the physical load from the caregiver to a mechanical device. Although they did not see a reduction in the number of injuries over the study period, they did find a difference in the distribution of body area affected by injury across the three groups. Compared with the control and safe lifting group, the no strenuous lift group reported a smaller proportion of injuries to the back and trunk following the intervention. The researchers note that backache and fatigue are not necessarily related to a specific injury incident but rather accumulate over time before becoming problematic; because of this, backaches and related fatigue often go unreported. Therefore, the researchers caution against concluding that the lack of a significant decrease in the injury rates is indicative of a failure of the intervention. In addition to a reduction in the proportion of injuries affecting the back and trunk, the work units with accessible mechanical equipment did report decreased fatigue, improved comfort with patient-handling tasks, and increased perceptions of safety among the staff.

(Owen; Keene, and Olson 2002) found that in an experimental hospital where a work improvement program was implemented (e.g., access to a battery-operated lift, a battery-operated stand up lift, a walking belt with handles, a friction-reducing sheet, and a toileting device), nurses' perceived stress ratings were lower and patients reported feeling more secure and comfortable during handling tasks, as compared to the control hospital. Moreover, five years after the program was implemented back and shoulder injuries, lost workdays, and restricted workdays all continued to decrease, whereas the levels of those same indicators remained stable at the control hospital. Similarly, (Garg 1999) studied seven nursing homes and one hospital where a "zero lift" program was implemented. This program included the replacement of manual lifting and transferring of patients with modern, battery operated, portable hoists and other patient transfer assistive devices. The eight facilities experienced a decrease of 32% in all injuries, 62% in all lost workdays, 6% in all restricted workdays, and 55% in total workers' compensation costs following the implementation of the zero lift program.

A pre-post intervention study (Nelson; Matz; Chen; Siddharthan; Lloyd, and Fragala 2005) evaluated the impact of a multifaceted no-lift program on injury rates, staff satisfaction and cost (in 19 nursing home and 4 spinal cord injury high risk units) in 7 facilities. Program elements included 1) ergonomic assessment protocol, 2) patient handling assessment criteria and decision algorithms, 3) peer leader role "back injury resource nurses", 4) state-of-the-art equipment, 5) after action reviews, and 6) no-lift policy. There were significant decreases in injury rates and modified duty days. Although there was an 18% decrease in lost workdays it was not statistically significant. Other significant results include decrease in unsafe handling acts (self-reported), and

increase in job satisfaction regarding professional status and task requirements. Nursing staff ranked program elements they believed to be extremely important:

- Equipment (96%)
- No-lift policy (68%)
- Peer leader education program (66%)
- Ergonomic assessment protocol (59%)
- Patient handling assessment criteria (55%)
- Action reviews (41%)

Interest and support by both management and staff remained very high throughout the study (1.5 years). Patient acceptance was moderate at the beginning but increased to very high by the end of the program. Initial capital investment recovery would be 3.75 years based on $200,000 annual cost savings in workers compensation. The authors believed that the increase in job satisfaction scales will lead to a positive impact on nurse recruitment and retention.

The Safety & Health Assessment & Research for Prevention (SHARP) program within Washington State's Department of Labor & Industries conducted a four-year industry wide research study of nursing homes interested in adopting a no- lift policy. Some hospitals received $1,000 rebates for purchasing equipment, some received a one-time workers compensation premium discount of 15%, and all received training materials on establishing a no-lift policy. Although the premium insurance discounts were effective at jumpstarting the industry towards no-lift, they were not enough to sustain its momentum during difficult financial times for the industry. The researchers conclude that health policy and economic barriers in the industry must also be considered and incorporated into a no-lift policy or initiative in order for it to be effective at preventing injury.

Government Legislative and Executive Branch Efforts to Reduce Health Care Lifting Injuries

Given this and other supporting evidence, some states have already initiated or adopted legislation aimed at safe patient handling: Texas, Massachusetts, Ohio, New York, California, as well as Washington State. Legislative language can be found in Appendix 3. For example, Texas passed the first state legislation (SB 1525, effective January 1, 2006; http://www.capital.state.tx.us/tlo/79R/billtext/SB1525F.HTM) requiring hospitals and nursing homes to create policies aimed at controlling the risk of injuries to nurses and patients when patients are lifted, transferred, repositioned, or moved. The policy includes:

- a process for analysis of risk,
- education of nurses in assessment and control of risks during patient handling,
- evaluation of alternative ways to reduce risk including equipment and environment,
- restriction, to the extent feasible with existing equipment and aids, of manual patient handling or movement of all or most of a patient's weight to emergency, life threatening or otherwise exceptional circumstances,
- collaboration with and annual report to nurse staffing committee,
- procedures for nurses to refuse patient handling that nurse believes will expose a patient or nurse to unacceptable risk of injury,
- annual progress report to the governing body or quality assurance committee

- in developing plans for new or remodeling structures where patient handling occurs, consider feasibility of incorporating patient handling equipment or physical space and constructions design needed to incorporate that requirement at a later date.

Massachusetts has a similar piece of legislation (HB 2662) in process. This bill requires all health care facilities to implement a "safe patient handling policy" for all work shifts by requiring lift teams and/or the use of lifting devices and equipment to be available. The policy also calls for the protection for all employees from reprimand for refusing to lift or move a patient when adequate support and/or equipment is not readily accessible.

In Ohio, recent legislation (HB 67) was passed that requires the Administrator of Workers' Compensation to use funds from the Long-Term Care Loan Fund to make loans without interest to nursing home employers to pay for equipment and training that support a no manual lift policy ((Nursing world 2005)). A bill was passed in New York in the summer of 2005 (AO7641) that authorizes a two-year study to establish safe patient handling programs throughout the state and also includes some specifications for safe handling. The end goal of this study is to identify a "best practice" for all healthcare facilities in the state of New York.

In California, legislation for a no-lift policy did pass both the House and Senate but was then vetoed by the Governor. Despite this, another bill (SB 363) has been introduced in California. This bill requires general acute care hospitals to adopt a back injury prevention plan as part of their injury and illness prevention programs and to implement a zero lift policy. Similar to Massachusetts, this bill also calls for the protection of employees who have not been trained or who do not have access to necessary lifting equipment from being disciplined for refusing to manually lift a patient. They define the zero lift policy as "a policy of replacing manual lifting and transferring of patients with powered patient transfer devices, lifting devices, or lift teams" (p. 1) ((Assembly Committee on Labor and Employment 2005)). Moreover, the bill states that the members of the lift teams should receive specialized training in patient handling and shall use the appropriate mechanical equipment for lifting patients, unless specifically contraindicated for the patients' medical needs.

Federal OSHA has issued guidelines with flow charts for resident lifting and repositioning for the US Nursing Home industry. (http://www.osha.gov/ergonomics/guidelines/nursinghome/final_nh_guidelines.html). Despite state and federal efforts to date, the United States still falls far behind other countries in implementing safe handling legislation or support. For example, recognizing patient handling as the leading cause of injuries for Ontario's healthcare workforce, the Government of Ontario announced a commitment to invest $60 million (CDN) in the 2004-05 budget year for the purchase and installation of patient lifting equipment. This investment will result in over 11,000 new ceiling lifts throughout Ontario's healthcare facilities and will also provide for the training of personnel on how to use the equipment. Moreover, the Ministry of Health and Long Term Care together with the Institute of Work and Health will collaborate on a research program that evaluates the effects of this investment, including an examination of musculoskeletal injuries, caregiver workload, the quality of training, and the cost benefit analysis of the initial investment (Institute for Work & Health, "Ontario Patient Lift Evaluation Study," OPLES).

In British Columbia, the Occupational Health and Safety Agency for Healthcare in BC (OHSAH) was conceived in early 1998 in an accord between management and union representatives. The Accord resulted in the creation of OHSAH, an agency with the goal of reducing workplace injuries and illness in healthcare workers and returning injured workers back to the job quickly and safely. (http://healthcare.healthandsafetycentre.org/s/ceilingliftresources.asp) OHSAH, the Workers Compensation Board, Ministry of Health, health sector employers association and health care unions launched an initiative to reduce manual handling injuries for workers and patients first in nursing homes and then hospitals. Funding for this research came from the Workers Compensation Board, employers' trust fund and the Ministry of Health in various forms including no interest loans. For example, the Ministry of Health provided $15 million for lifting devices and adjustable beds to improve working conditions and reduce injuries.

The Manual Handling Operations Regulations put forth in 1992 in the United Kingdom (UK) holds that employers shall, so far as is "reasonably practicable," put in place standards and equipment to avoid the need for employees to engage in any manual lifting which may result in injury (Royal College of Nursing). According to this standard, "reasonably practicable" is determined by the employer weighing the risk of injury against the cost or effort to introduce changes. The UK further advocates for nurses to avoid manual handling of patients in all but exceptional or life threatening circumstances ((Passfield and others 2003)). This is the same manual handling regulation as that of the European Union.

In conjunction with the Australian National Manual Handling Standard, which includes manual handling of patients (www.nohsc.gov.au/PDF/Standards/ **manualhandling**_standardNOHSC1001_1990.pdf), *WorkCover Queensland Act of 1996* requires an employer to "make a genuine and reasonable attempt…to guard the worker against injury arising out of events that were reasonably readily foreseeable" (Section 312(1) (a); p. 10, Patient Handling Guidelines: For Safer Patient Handling). In addition, the Queensland government has adopted a special advisory standard for work, called the *Code of Practice for Manual Handling – The Handling of People 2000,* that involves the manual handling of people. Although it is left to each District to develop their own specific policy, the standard must include plans for risk assessment, staff education, equipment and maintenance, evaluation of the program, and compliance monitoring and action for non-compliance.

Similarly, the Occupational Safety and Health Service (OSHS) within the New Zealand Department of Labor requires employers to conduct a systematic analysis of work-related hazards. Although training and education on how to lift are important elements of the overall safety program, they suggest that an effective systematic analysis must include the identification and assessment of hazards as well as the control of risks. Therefore, the training and education piece of the safety program is to be supplemented by the use of ergonomics, and these three steps of identification, assessment, and control of hazards, form a process to reduce the burden of manual lifting and handling for healthcare workers altogether ((Occupational Safety and Health Service (OSHS) 1993)).

Ceiling Lifts

One way administrators manage a “no-lift” or safe patient handling policy is to install ceiling lifts throughout the nursing home or hospital. Some researchers in the United States have been advocating for the American Institute of Architects to adopt new guidelines for the design and construction of hospitals and health care facilities. These guidelines call for standards in new construction or renovated facilities, recommending all adult patient rooms where manual lifting is likely to occur be equipped with ceiling-mounted tracks that can accommodate mechanical full body sling lifting devices. Moreover, the guidelines suggest that the location of these tracks shall be arranged in such a manner to allow patient movement from the bed into a toilet room, to a chair, or onto a stretcher and these rooms should be provided with either fixed or detachable mechanical lifting units.

This call for ceiling tracks in all new or renovated facilities is based on research demonstrating the positive effects ceiling lifts have on staff workload, workers’ compensation claims, and the discomfort staff experience in the areas of the back/neck, shoulders/arms, and wrists/hands associated with patient handling (e.g., (Engst; Chhokar; Miller; Tate, and Yassi 2005); (OHSAH); (Villeneuve 1998)). For example, (Engst and others 2005) tested the effectiveness of ceiling lifts in a hospital work unit in Vancouver, British Columbia and found that staff preferred these overhead ceiling lifts over manual handling and floor lifts when lifting or transferring residents, but not for repositioning. Survey questionnaires revealed a significant reduction in the perceived risk of injury and discomfort to the neck, shoulders, back, arms, and hands of the care staff following the intervention. Finally, while the workers’ compensation costs increased 68% for the comparison unit, these associated costs decreased 68% for the intervention unit.

(Villeneuve 1998) compared the overall performance of the ceiling lift against the traditional floor lift in terms of level of satisfaction for nurses, patients, and management. Questionnaires and interviews revealed that nursing staff felt that ceiling lifts were more stable, easier to use, and eliminated required effort. Likewise, the patients preferred the ceiling lifts because they were more comfortable, helped facilitate the work of the nursing staff, and in some cases, gave the patients more independence because they could operate the controls themselves. A major benefit of the ceiling lift from management’s perspective was that for most patient transfers, the lift required only one staff member rather than two.

The Occupational Health and Safety Association for Healthcare (OHSAH) in British Columbia reported that three years following the introduction of a “no-lift” policy and installation of ceiling lifts at one hospital, there was a total reduction in compensation costs of 40%, with a full 82% reduction in claims cost, 83% reduction in lost hours, and 67% reduction in time loss claims associated with lift/transfer injuries. Similar to the findings of (Engst and others 2005) described earlier, OHSAH did not see a significant reduction in claims and time loss related to the repositioning of patients, primarily because repositioning slings were found to be unsuitable for many cases. However, realizing the problems associated with the repositioning slings, the hospital began using repositioning draw sheets instead of the ceiling lifts for repositioning activities, and the injuries/claims associated with repositioning of patients all but disappeared (with just one minimal claim following the introduction of the draw sheets).

This project began with a one-time capital equipment expenditure of $345,000. Three years prior to the intervention, patient handling work-related musculoskeletal disorder

(WMSD) direct costs were $353,000, compared with the patient handling WMSD direct costs in the three years following the intervention of $197,000, for a total savings of $156,000. Therefore, the researchers conclude that the payback period for the initial investment of ceiling lifts is 6.5 years if focusing only the direct costs of WMSD injuries but is less than 4 years if considering the indirect costs as well. Similar results were seen for a study that was done by OHSAH at a long-term care facility as well as at an intermediate care facility. In fact, based on an abundance of research and statistics showing that nursing assistants (NACs) employed in nursing homes have the highest back injury rates from patient handling, the no-lift policy in British Columbia targeted this group as the highest priority for their no-lift policy and the installation of ceiling lifts.

Similarly, (Collins; Wolf; Bell, and Evanoff 2004) targeted nursing home workers (*N* = 1728) in their study of a "best practices" WMSD prevention program. Specifically, they examined a program designed to establish safe patient handling in six nursing homes over a six-year study period. Elements of the best practices program included use of mechanical lifts and repositioning aids, a no-lift policy, and employee training on lift device usage. The researchers found a significant reduction in resident handling injury incidence, workers' compensation costs, and lost workday injuries after the intervention. Moreover, based on an annual savings of $55,000 in workers' compensation costs, the initial investment of $158,000 for lifting equipment and worker training was recovered in less than three years. These findings were consistent for full and part time nurses, in all age groups, with all lengths of experience, and in a variety of study sites.

Despite evidence that mechanical devices such as ceiling lifts are a good alternative to manual handling, there are some barriers to the use and/or implementation of these (as cited in (Nelson and Baptiste 2004) – full list of references offered):

- Possible patient aversion to the equipment
- Unstable equipment or operationally difficult to use (floor lifts)
- Storage issues or equipment is located in an inconvenient place (floor lifts)
- Poor maintenance and cleaning of equipment (need to have back-up batteries stored for use when recharging others-floor lifts primarily)
- Time constraints (particularly finding floor lifts)
- Inadequate number of available lifts (The recommended coverage for a unit is equal to the proportion of totally dependent patients: If a typical medical-surgical unit has 40% dependent patients, then 16 beds would need ceiling lifts, which would require installing 4 of them, one in each 4-bed room)
- Lack of training on floors with high turnover levels
- Incompatible equipment purchased (need sufficient numbers of slings available and in sufficient varieties to cover required activities: bathing, weighing, toilet)
- Weight limitations
- Have to establish the structural integrity of the ceiling where a lift may be installed, which may require substantial remodeling

One way to overcome training issues regarding patient lifting devices, such as nurses not feeling comfortable with the use of them, difficulty with transfer of learning from training, or high turnover units which result in a constant pool of workers who are not trained, is the use of unit-based peer safety leaders ((Nelson and Baptiste 2004)). These peer safety leaders are nursing staff members who receive specialized training and then return to the work unit to share the knowledge and skills they learned with their coworkers, introduce new technology or practices, conduct ongoing hazard evaluations,

assure competency of staff in the use of equipment, and sustain the overall program. These peer safety leaders have also been called Back Injury Resource Nurses (BIRNS), Ergo Rangers, and Ergo Coaches and are recommended for each high-risk unit in a hospital where a no-lift policy has been instituted. Just as educated and motivated supervisors are viewed as the key to safety compliance in traditional organizations, BIRNS are viewed as a central component to the successful implementation of work improvement in healthcare facilities (Patient Safety Center of Inquiry 2001). A concept similar to this is currently being tested by the Washington Hospital Service's Workers Compensation Program. "Patient Handling Specialists", which may be nurses, physical therapists or occupational therapists, are trained to evaluate the patient, the equipment and slings available and to help manage patient transfers using the resources available.

Despite the increasing number of studies supporting the effectiveness of ceiling lifts in preventing injuries, a common myth concerning their use is that they eliminate all risk associated with manual lifting. The fallacy in this summation concerns the notion that the risk associated with manual lifting involves only vertical lifting of the patient. Manual lifting, however, also includes the pushing and maneuvering of patients from side to side (i.e., lateral movement of the patient). Because the care provider must first roll the patient in order to position a sling from a mechanical lift around the patient, risk to the care provider does still exist. Nevertheless, most injuries in nursing do result from cumulative exposures so minimizing risks in key tasks will still result in significant benefits ((Patient Safety Center of Inquiry 2001))

In summation, ceiling lifts have been shown to be an efficient, effective, and cost saving alternative to manual patient handling and a viable complement to a "no-lift" policy. Some of the barriers of ceiling lifts include the need for alternative controls for repositioning of patients (e.g., slip sheets) and the obvious costs associated with the purchase and installation of the lifts. Despite the strong evidence that these lifts are a good investment and certainly result in cost savings in the long run, institutions may may not be able to come up with the initial dollars needed to remodel, purchase, install, and maintain this equipment due to lack of reimbursement or grant funds.

Administrative Considerations

In order for work improvement solutions, such as lifting devices, to be most effective, administrative solutions must be considered as well. These solutions generally involve considerations for the way work is organized, rather than just physical changes to the work environment or specific tasks. For example, employers might examine policies concerning employee scheduling, job rotation, and the creation of lifting teams as they relate to the tasks of moving patients. One study found that rescheduling activities to minimize times of high concentration involving lifting tasks for patient care providers was beneficial for both the care provider and the patient ((Patient Safety Center of Inquiry 2001)). The problems mainly revolved around the short time periods allotted for the transporting of patients to scheduled meals and activities, particularly in nursing homes. The care providers were highly stressed and rushed during these transport times, placing themselves and the patients at increased risk from lifting tasks. Implementing lifting devices did not alone resolve the risk associated with the rush and stress experienced during these time periods. Only after meetings with all parties involved (e.g., management, employees, the contracted company responsible for providing meals, and those responsible for organizing activities) did it become obvious that to

reduce this exposure risk, there would need to be a complete restructuring of the way the activities were organized. With all operational groups on board, the work was rescheduled so that the number of required patient transfers occurred over a larger period of the workday rather than in small time frames throughout the workday, allowing for better consistent use of the lifting equipment.

Thus, in order to achieve success when implementing an injury prevention program, there must be buy-in at all levels of the organization. One important consideration then, is the employees. Staff must not only be adequately trained on how to use the new equipment, but must also be involved in any necessary reorganization of work processes and in the determination and selection of which equipment is most suitable for their needs. This is considered as a participatory approach to workplace improvements. Quebec, for example requires that hospitals and healthcare centers have a director of nursing care who is a nurse and that every institution with greater than five nurses have a council of nurses responsible to the board of directors (Baumann; Brien-Pallas; Armstrong-Stassen; Blythe; Bourbonnais; Cameron; Doran; Kerr; Hall; Zina; Butt, and Ryan 2001). Edlich et al (Edlich and others 2004) add that in order to have a successful safe patient handling policy, the organization must engage in activities that demonstrate support for such a policy. In addition to investing in the appropriate assistive equipment and ensuring it is readily available and adequately supplied, policies related to the elimination of manual patient lifting must not be punitive if they are going to instill voluntary change in employees. Rather, staff should be educated about and encouraged to use the new policy without instilling a fear in them for reporting injuries.

(Davis; Badii, and Yassi 2004) reported the results of the PEARS (Prevention and Early Active Return to Work Safely) program implemented at Vancouver General Hospital (VGH) in Vancouver, British Columbia, Canada. This program consists of three components: primary prevention (building on the work of a Musculoskeletal Injury Program team), early intervention (prompt follow-up of injured workers, targeted workplace modifications, and clinical treatment when required), and extensive evaluation (p. 1254). Compared to the time period prior to the implementation of the PEARS program, VGH experienced reduced return-to-work times after the PEARS program was in place. Specifically, the total time loss during the first year of the program was 1,355 days, compared to 2,501 days in the time periods before the implementation. The associated cost savings in compensation payments following the PEARS program was estimated to range from between $143,796 and $306,474. There was no difference in the return-to-work times for registered nurses working at the comparison hospital where the PEARS program had not been implemented. This intervention demonstrates the importance of considering management and administrative initiatives when implementing a safe patient handling policy.

Special Considerations

1. Situations where the number of lifts/day is low to moderate in volume, such as medical/surgical units, lifting teams may offer a viable approach (Patient Safety Center of Inquiry 2001).

2. Situations when the patient's weight exceeds the capacity of the lifting device and/or the design of the hospital equipment. For example, beds are often too narrow, and the chairs usually have arms. Standard activities such as repositioning the patient

can become increasingly complex and unsafe (both for patient and caregiver) when the equipment does not meet the patient's needs. Standard lifting devices can accommodate 350-400lbs; more substantial lifts can accommodate 600lbs; and bariatric lifts can accommodate up to 1000lbs (Patient Safety Center of Inquiry 2001). When considering the allocation of resources, some lifts, such as the bariatric ones, may be better to lease rather than purchase. A good rule of thumb is to determine if the costs of periodic leasing of a product over a four-year time period exceed the purchasing price of the product. If the answer to this is yes, then purchasing the equipment will be a better use of resources. These issues, nonetheless, are important to consider when implementing a no-lift or safe patient handling policy, as resources will need to be allocated for the handling of these situations.

3. Consider the patient's medical condition. Sometimes transfer chairs that convert into stretchers may be more suitable than a mechanical lift for patient transfers (Patient Safety Center of Inquiry 2001).

4. Home sector workers are often required to carry out tasks in constricted and cramped quarters, where obstacles and housekeeping in the home may create significant hazards. These workers are left completing their tasks without the benefit of facility design and mechanical equipment to allow them to perform their work in a safe and healthy manner. Given these special circumstances, it is no surprise that the most frequent injuries sustained by home care and hospice workers are WMSDs. Among the barriers described above, there are many other issues that need to be addressed for a "no-lift" policy to be relevant in this context – The issues identified below are a combination of ideas from published literature (Taylor 2001) and our discussions with the WA Healthcare Lifting Task Force:

    a. Who will own the ceiling track lift system? Portable lift device?
    b. What does the client do with the system once it is no longer needed?
    c. How do we overcome a client's outright refusal to have equipment installed in their home?
    d. What do we do in situations when the equipment will not fit in the home/quarters? (e.g., small stick-built and manufactured homes)
    e. Where will the funds come from to purchase the equipment? (insurance, foundations)
    f. What are the liabilities that are involved? Who determines building structural integrity? Who bears this cost?
    g. Portable vs. fixed units? Who determines the process?
    h. Prioritizing long-term care vs. palliative care and the resulting impacts? Who decides?

5. EMTs and ambulance workers also face critical risks associated with patient handling. Not only are they responsible for all pre-hospital care, but they also are used as a resource for nursing homes and private homes when caregivers need help with patients. Therefore, the hazards for these workers include general lifting of patients who have fallen in a nursing home where there are insufficient lifting devices, lifting of patients who are in need of medical attention, and the lifting and handling of patients in order to transport them to the hospital (e.g., in and out of the ambulance truck, lateral transfers on the hospital beds). Given the constraints of the work context (e.g., the ambulance), there are limits to the kinds of hazard controls

that can be implemented. One company in Arizona redesigned an ambulance to have air bag suspension so the back of the ambulance could drop 6-8 inches, reducing the distance between the ground and vehicle (Weiss; Perham, and Forrest 2003). Additionally, they store a ramp underneath the sub floor cover and use a winch system that can smoothly move the gurney into and out of the vehicle. Although these solutions were designed with the bariatric patient in mind, they nonetheless demonstrate the special considerations needed for EMTs and ambulance workers.

In summary:

- Manual handling of patients has been recognized as hazardous for both caregivers and patients for a long time. The changing demographics of the state (older, heavier, more co-morbidity) will increase the hazards for health care workers
- These hazards can be reduced by a programmatic approach that includes
  a) policies for risk assessment and control,
  b) having adequate types and amounts of equipment and staffing,
  c) ongoing patient handling training,
  d) management commitment and staff involvement,
  e) incident investigation, follow-up and communication

- Studies have demonstrated 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).
- Employer and employee associations have worked together effectively in other jurisdictions to implement “no-lift” type programs, often with government support.
- Legislative and executive branches of government in other jurisdictions have used regulation and financial incentives to assist in the successful adoption of no manual lift environments in health care)
- Home and pre-hospital medical services sectors present some unique but not insurmountable challenges to achieving “no-lift” environments

WASHINGTON STATE WORKERS COMPENSATION CLAIMS FOR HEALTH CARE WORKERS

Methods

Compensable claims and employer hours data were extracted from 1997-2003 for each health care risk class. Lost workdays was only available for state fund claims and from 1997 forward. Compensable claims data for the self-insured is only available after the claim is closed. Thus we limited the analysis to 1997-2003 No cost or lost time data is available for the self insured claims. Incidence rates (# of new cases per 10,000 FTEs) and severity rates (# of lost days per 10,000 FTEs) allow us to compare risk classes of different sizes and over time.

Results

The incidence and cost of patient lifting-related injuries among health care workers remain high (Appendix 4). For example, the incidence rate for state fund compensable

back injuries in 2003 was 162.5 claims per 10,000 FTE. For state fund facilities in that same year, the workers compensation cost for compensable back claims was $7,253,368 for 376 claims. For state fund nursing homes (risk class 6108), the incurred costs of work-related musculoskeletal disorder (WMSD) compensable claims in 2003 was 64% of the incurred costs for all compensable claims. Costs increased 11% between 1997 and 2003. For state fund hospitals (risk class 6105) incurred costs from WMSD compensable claims was 88% of incurred costs for all compensable claims in 2003.

In general, for workers' compensation self-insured nursing homes, the claims rate for all compensable claims increased by 15.4% between 1997 and 2003 but decreased 3.3% for WMSD compensable claims, decreased 13.5% for back WMSD compensable claims and increased 41.6% for WMSDs in the shoulder. Comparatively, in workers' compensation state-funded nursing homes, the claims and severity rates decreased between 1997 and 2003 for all compensable claims (24.3% decrease in claims rate, 43.1% decrease in severity rate), for WMSD compensable claims (28.4% decrease in claims rate, 43.8% decrease in severity rate), and for back WMSD compensable claims (26.7% decrease in claims rate, 37.4% decrease in severity rate). There was a 33.8% decrease in the claims rate and a 43.8% decrease in severity rate for shoulder WSMDs.

In the ten state-fund hospitals, rates appear to be increasing. For all compensable claims, there was a 50.3% increase in the claims rate between 1997 and 2003 and a 26.9% increase in the severity rate. Incurred costs increased 375.4%. There was a dramatic increase in rates for WMSD compensable claims: 2848% increase in incurred costs, 152.6% increase in claims rate and 913.5% increase in severity rate. While an increase in the number and costs of claims could be explained by an increase in the number of state fund hospitals, the incidence and severity rates are per 10,000 FTEs. The increase in rate could only be explained by the addition of more hospitals if these hospitals had a greater number of claims per 10,000 FTEs than the other hospitals in the state fund. The incidence rate for back injuries doubled between 2002 and 2003 for the state fund hospitals. In self-insured hospitals, the incidence rate decreased during the same period; a 15.1% decrease in all compensable claims rate and a 22.5% decrease for compensable WMSD claims rate.

The rates and costs in home health (risk class 6110), home care (risk class 6510) and ambulance (risk class 1405) were more volatile between 1997 and 2003. In state-fund home health agencies, while the compensable claims rate decreased 3% between 1997 and 2003, the claims rate for WMSD compensable claims increased 18.4%. In 2003, WMSD incurred compensable costs was 75.6% of the incurred costs for all compensable claims. In home care, WMSD compensable claims rate decreased 6.3% and the severity rate decreased 34.2%.

SITE VISITS

Methods

For the success of this report, it was important to obtain as representative a sample of health care facilities in Washington State as possible. To achieve this, facilities participating in this project were to be dispersed between eastern and western Washington, between urban and rural communities and between large and small

facilities. Based on these criteria and given the limited time and resources available, the goal was to visit at least 8 hospitals, 8 nursing homes, 4 home health/home care agencies and 4 pre-hospital medical providers. However, it should be noted that although a thorough and detailed examination was completed, the sample size for each sub-sector is very small and may not be sufficient to produce statistically significant results. However, qualitative and anecdotal information is often useful in telling the story of barriers and successes in different sub-sectors. Stakeholders from each sub-sector identified sites they believed to be representative of their sector taking into account geographic location, size, and degree of no-lift implementation.

Site visits and interviews to hospitals, nursing homes, home sector and pre-hospital medical services occurred between August and October 2005. Site visits, surveys and interviews were an essential part to learning about the issues, barriers and successes in addressing patient handing tasks and were completed in nursing homes, hospitals and home sector. However, because of time constraints, data collection for pre-hospital medical services was achieved through telephone interviews. No site visits to facilities or ride-alongs were conducted.

The intent of the site visits was to document patient handling activities first-hand and gain access to management and staff at the facilities. The site visits consisted of three main activities:

- Interviewing administration (i.e. the DNS or administrator) regarding patient/resident handling issues and policies and complete a survey
- Talking with staff, whose duties include patient/resident handling and have several complete a brief survey
- Observing patient handling activities to obtain an understanding of the challenges and concerns

The surveys completed by administration and staff consisted of both closed and open-ended questions (see Appendices 3-6). In hospitals and nursing homes, the administrative survey was sent prior to the visit in order to give respondents time to fill in the survey. Administrative surveys collected data in regards to staffing, facility size/capacity, administrator employment history, policies and procedures for the prevention of musculoskeletal injuries, their beliefs in regards to injuries caused by patient handling and the use of patient handling equipment. Questions related to patient/staff ratios were deleted from the hospital surveys at the request of the Washington State Hospital Association. During the site visit, the administrative survey was reviewed with the respondent by a researcher. In addition to reviewing responses, the interview provided the administration the opportunity to share additional information. Observations of patient handling served two purposes 1) to document the details of the patient handling activity (e.g. type of equipment used, if applicable, the acuity of the patient, the transfer method) , and 2) to verify the information provided by the administrators and staff in their surveys. A survey was also completed by a member of the safety committee. This was to gain information in regards to the involvement of the safety committee in reducing patient handling injuries.

Staff surveys were distributed at the time of the site visit to staff on the units where observations took place. This was a convenience sample of staff present who had the time to complete the short surveys during the site visit. These surveys gathered information regarding employment history, physically demanding tasks, their perceptions on the use of patient handling equipment and their knowledge of policies relating to

preventing patient handling injuries. In addition, the employee survey contained questions similar to those included in the administrative survey. This would allow the comparison between administration and employees and identify disconnects and similarities between the two.

Site Visits: Hospitals and Nursing Homes

a) Employers
Site visits to hospitals and nursing homes in Washington State occurred between July and October 2005. Five Washington hospitals and 8 nursing homes/long term care units were visited. Two long-term care units were part of a hospital. One hospital in British Columbia was also visited.

b) Scope
Site visits took between 2-3 hours. Two to three researchers were present at each site visit. One researcher met with the management and/or administration of the facility to review the administration survey (Appendix 5 and 6) and interviewed a safety committee member. One or two researchers observed the activities in the facilities, documenting patient/resident handling activities, safety issues and completing a department observation form (Appendix 5 and 6). In hospitals, department observations forms were filled out for each unit visited.

Site Visits: Home Care Sector

a) Employers
All of the home sector employers were located in western Washington—two from rural areas and four from urban areas. [Note: although one hospice employer was based in an urban area, two observational visits took place in rural areas.] Other than having fewer agencies to provide home sector services to clients, it is believed that the home "working environment" for the caregiver employees would generally be similar between urban and rural areas as well as between eastern and western Washington.

b) Scope
The task force project plan included administrator and employee surveys/interviews, safety committee surveys, and observations of employee visits at patient/client homes (Appendix 7). Site visits lasted approximately 1-2 hours and involved bathing, dressing, transfers (chair, toilet, tub, and shower), bed mobility, and ambulation activities. Observations primarily involved home health aides who went by various job titles (NAC, home health aide, or health maintenance aide). Two home health visits involved a nurse. All of the observed home care workers were also trained as NACs. Employer policies required them to be NACs but it is not mandated by any other rules. Surveys were distributed to other employees to obtain additional input since the time and number of visits was limited. Employee surveys were given to nurses, a physical therapist, NACs, and home health aides to get perspectives from a range of workers who perform patient/client handling tasks in the home.

As a result of time constraints, site visits to each sub-sector was small. Site visits involving two home health agencies, two home care providers, and two hospices were conducted between October 2005 and November 2005. The services provided by these employers were performed in patient/client homes with the exception of some hospice

visit sites. Hospice worker observations took place in a facility based hospice, an adult family home, and a patient's home.

For each home sector type, the observer went along with an employee for two patient/client visits in order to be able to see a few more interactions. However, for one home care employer, the second visit could not be used for observations because the client was asleep and would not be out of bed again for several hours.

Interviews: Pre-hospital medical services

a) Employer
Pre-hospital medical services include Emergency Medical Technician (EMT) services Paramedic and Ambulance Services. These services are provided by professional EMT/Firefighters in municipalities, but crews may be made up entirely of volunteers in rural areas.

b) Scope
Phone interviews were conducted with ten agencies providing pre-hospital medical services. Those interviewed included 2 paramedics, 2 ambulance directors, a volunteer EMT, an EMT, an Advanced Life Support coordinator, an EMS chief, a fire chief and a Washington State Department of Health employee from the Emergency and Trauma Service division. Interviewees were from both urban and rural, medium and large sized municipalities and after an explanation of the objectives of the study, a phone survey was administered (Appendix 8). Following completion of the survey, participants were asked for any additional input. Each interview took between 15 and 25 minutes.

RESULTS

A. HOSPITALS

1. Facilities and Staffing

Five Washington hospitals were visited between August and October 2005. Two hospitals were characterized as small (10-50 beds), 2 were large hospitals (greater than 150 beds) and one was of medium size (51-150 beds). The hospitals were located across Washington State, three in Western Washington and two in Eastern Washington. Three hospitals were located in rural areas. Of the five hospitals, 2 also provided home health services, 2 provided hospice care, 4 had clinics associated with the hospital and three also had nursing homes. In addition, one hospital had a satellite hospital for pediatrics. In November, a 300-plus bed hospital in British Columbia was visited to learn about how they had implemented a no-lift program as part of their overall musculoskeletal injury prevention program and combined it with their early return-to-work intervention program. Similar mechanisms exist throughout the different health districts of British Columbia. This site visit is described at the end of the Hospital section.

Six units or wards were singled out for observations because of the greater likelihood of patient handling. These units were orthopedics, radiology/imaging, emergency room, intensive care, bariatrics and rehabilitation. Three hospitals had orthopedic units (average number of beds=26), 3 had rehabilitation units (average number of beds=8) and 4 had intensive care units (average number of beds=12). All five hospitals had emergency care units (average number of beds=14) and radiology departments. None of the hospitals visited had a unit specifically for bariatrics. Other units or wards that existed in the hospitals included obstetrics, geropsychology and pediatrics. For the smaller hospitals, there was little or no distinction between these units. Other professions in the hospitals that regularly handled patients included respiratory therapists, physical therapists, occupational therapists, transporters and operating room technicians.

2. Management Survey Results

[Note: Selected side-by-side comparison information between employer and employee surveys can be found in Appendix 12]

Six administrative interviews were completed (one hospital had two administrators complete the surveys). Those participating in the administrative interviews were an experienced group, being in their current position for an average of 7 years (range 0.7-13 years), being at their current hospital for an average of 13 years (range 7-23 years) and working in the industry for an average of 26 years (range 7-32 years).

Obstacles to Reducing Injuries Related to Patient Handling

When asked about the biggest obstacles to reducing injuries related to patient handling, the respondents' concerns fell into common themes. The following list shows the common themes expressed by respondents:

1. Physical Plant
    - Equipment size
    - Facility design
    - Lack of lift equipment
    - Room size
    - Storage space
2. Financial
    - Costly equipment
    - The initial cost of the program
    - The need for reimbursement or grants
    - Updating old equipment
3. Training
    - Competing demands
    - Consistent training
    - New equipment
    - Redefine training program
    - Room size
    - Staff habits
    - Staff numbers
4. Staffing
    - Aging workforce
    - No time for training
    - Perceived increase in time
    - Staff perceptions and habits
5. Equipment
    - Easy access
    - Equipment design
    - More equipment
    - Storage space

[Appendix 9 contains examples of comments for the themes described above]

Successes in Implementing a No-Lift Environment

When asked to name successes in implementing a no-lift environment, administrators described the acquisition of ceiling lifts, the decrease in injuries and workers compensation costs as successful indicators in their programs. In addition, receiving grant money from the previous L&I grant program to purchase equipment was important in implementing a no-lift environment. Below is a list common themes:

1. Physical Plant
    - Ceiling lifts
2. Policy and Regulations
    - No-lift policy
3. Financial
    - Decreased injuries and claims
    - Funds approved for ceiling lifts
    - Received grant/rebate
4. Staff
    - Employee morale improved
    - Using equipment
5. Training
    - One-on-one training
    - Physical Therapy/Rehabilitation trains
    - Lift reviews
    - Team training
6. Equipment
    - Ceiling lifts

[Appendix 10 contains examples of comments for the themes described above]

The hospitals visited have shown innovation and imagination in their problem solving for reducing patient handling injuries. In one hospital, sonographers are saving their arms by using tennis elbow bands with the sonograph cord threaded through to eliminate the torque of the cord.

One innovation seen in only one hospital was the existence of a lift team program. The program consists of two teams of two, who work 8 hours a day (10:30 a.m. – 7:00 p.m.),

seven days a week. Training involved two months of training with physical therapists and rotating through every department in the hospital using every machine. The lift team program was promoted through informational flyers and during in-services. The team will respond within two minutes and now do in-services on the use of the equipment. At the time of the site visit, the team averaged between 15 and 16 lifts per day.

Barriers to Implementing a No-Lift Environment

Administrators were asked to list the barriers to implementing a no-lift program in their facility. Common themes of the comments included availability, size and storage space regarding equipment barriers, staff perceptions in regards to staff barriers, cost of equipment and lack of funds in regards to financial barriers and room size and facility layout for physical plant barriers. The following lists describe the common themes of these barriers:

1. Financial
   - Costly equipment
   - Costly program
   - Lack of funds
   - Updating Equipment
2. Physical Plant
   - Facility design
   - Lack of equipment
   - Equipment size
   - Room size
3. Training
   - Not enough training
   - Competing demands
   - Need designated training staff
4. Staff
   - Staff perceptions and habits
   - Recruitment
   - Time to do the task

[Appendix 11 contains examples of comments for the themes described above]

Job Activities

When asked "What are three tasks that are most physically demanding for the direct care staff, or place them in awkward or fixed positions, the answers followed several common themes. The most common theme was repositioning in bed, followed by transfers (Figure 1).

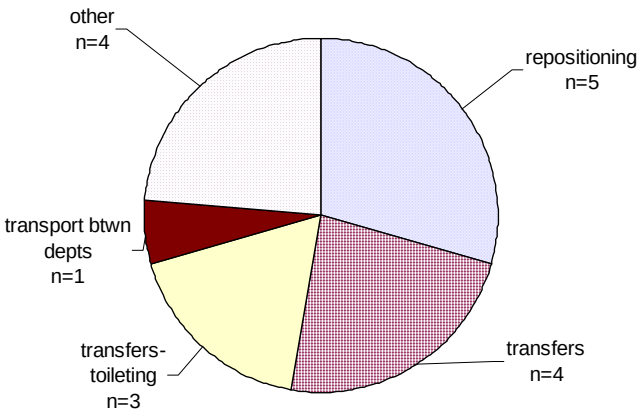


Figure 1. Physically Demanding Tasks Described by Management/Administration

The majority of respondents from the administration survey believed that the most physically demanding tasks were likely to result in long-term illness or serious injury (Figure 2).

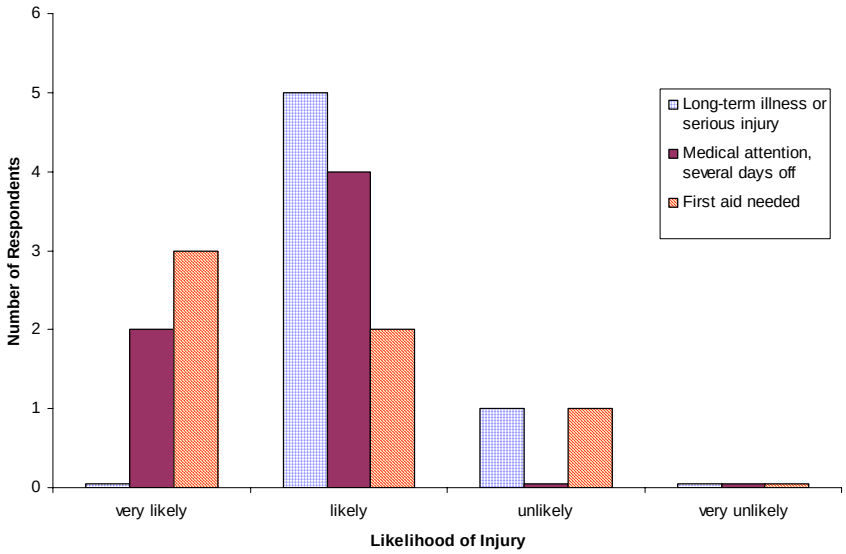


Figure 2. Management Perception of the Likelihood Those Most Physically Demanding Tasks Will Result in Injury, Hospital Survey

Policies and Procedures

While all the administrative respondents indicated that their hospitals have committees to prevent injuries from patient handling, five of six indicated that no-lift programs had been implemented. Respondents were asked to rate themselves on how well they had implemented the components of the no-lift program (Figure 3). All administrative respondents believed that most of the no-lift program components had good implementation or less but at least there was some degree of implementation in all the components. With respect to enforcement, one hospital is not willing to have a disciplinary policy yet until they have enough equipment in place. One hospital has integrated safety and wellness, which has functioned to develop an "employer of choice" model. This model aids in the recruitment and retention of staff. This program has also won a multi-site President's award.

In one hospital's experience, their first attempt at implementing a no-lift environment was a failure for several reasons. They had hurried to implement the programs and had tried to do it without a serious commitment, which included insufficient designated funds and poor training. For the second attempt, the hospital designed a new program, with more commitment and more money dedicated. There have been no patient-related injuries since the implementation of the no-lift environment.

The majority of the respondents were unaware of the Department of Labor and Industries' program to provide funds for "job modifications" for workers with open injury claims. Only one respondent had heard of the "job mod program" but their experience has not been positive. They have applied for job modification funds twice. The first

application was denied. It has been almost half a year since the second request and they have yet to be given a decision.

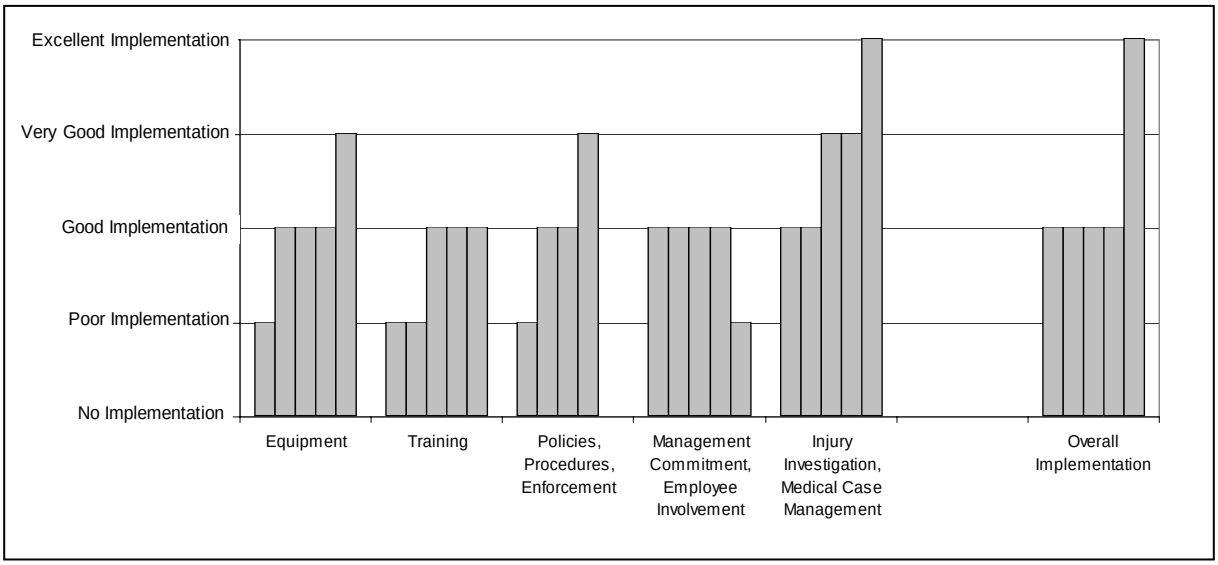


Figure 3. Management Respondents' Assessment of Progress in Implementing Components of a No-Lift Program, Hospital Survey (n=5)

Four respondents indicated that the no-lift policy included a patient assessment plan to determine the appropriate patient handling. Mobility status, physical therapy/occupation therapy assessments, functional ability assessment and fall risk assessments were noted as components of the assessment plan. Most often it was the nurses that were identified as the person who updates or makes changes to the patient assessment plan. Physical therapists and occupational therapists were also identified. However, there is the lack of a formal procedure or a lack of a policy for updating these assessment plans. The frequency of updating the patient assessment plan varied between hospitals. Descriptions of the frequency included:

- "Whenever necessary"
- "As needed"
- "Irregular"
- "Every week for acute care patients"
- "Daily basis"
- "Staff not great about updating care plans"

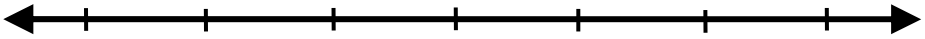
Administrative respondents were asked how patient transfer needs were communicated between staff. All reported that scheduled verbal reports were utilized. Respondents also indicated care plans (5 of 6 respondents), something written in the room (half of the respondents) and flow sheets (2 of 6 respondents) as other means of communication. One hospital also communicates transfer needs during the walking rounds at shift change. All of the hospitals used multiple methods of communication. All but one respondent (who didn't know) indicated that nursing assistants participate in shift reports.

Equipment

Administrative respondents were asked how much money has been spent over the past three years to lease, purchase and repair patient handling equipment. Of those hospitals that spent money, substantially more was spent on purchasing equipment (an average of $210,000, range $30,000-$400,000) than leasing equipment (an average of $1,833, range $1,500-$2,000). Little or no money was spent on repair (range 0-$100) since repairs were more often completed internally. All respondents felt that the patient handling equipment was being used, when appropriate. Four of six did not believe the current number of handling equipment was adequate to meet the demands of patient handling, one felt they had enough equipment and two did not know.

In general, the administration's impressions of using mechanical transfer equipment were favorable. None found it hard or worthless to use the equipment, and most found it extremely beneficial, valuable and wise to use (Table 3).

Table 3. Management Impressions on Using Mechanical Transfer Equipment



description	extremely	very	somewhat	neither	somewhat	very	extremely	description
	NUMBER OF RESPONSES							
HARD	0	0	0	3	1	1	1	**EASY**
WORTHLESS	0	0	0	0	0	1	5	**VALUABLE**
HARMFUL	0	1	1	0	0	0	4	**BENEFICIAL**
FOOLISH	0	0	1	0	0	0	5	**WISE**

In attempting to identify potential barriers to using mechanical transfer equipment, administrators were asked to rate the likely effect of using such equipment on a scale (Table 4). Administrators felt it was likely that using the mechanical transfer equipment would take more time; however, there was no agreement if it would require help from co-workers. None of the administrators felt that use of the mechanical transfer equipment was more harmful for the staff and the patients.

Table 4. Perceived Likely Effect of Using Mechanical Transfer Equipment by Management Respondents

Effect	VERY UNLIKELY	UNLIKELY	SOMEWHAT UNLIKELY	SOMEWHAT LIKELY	LIKELY	VERY LIKELY
	number of responses					
Take more time to do	0	1	0	4	1	0
Decrease the chance the staf will get hurt at work	0	0	0	0	1	6
Require more help from co-workers	0	1	2	2	1	0
Be uncomfortable for the patients	0	3	1	2	0	0
Injure patients	1	4	1	0	0	0
Be refused by patient or family member	0	4	0	1	1	0

Training

All the hospitals visited had a staff training coordinator and these positions were fairly stable. In the past three years, 3 hospitals have had the same coordinator while 1 hospital has had 2 coordinators. The duties of the training coordinators included new employee orientation/training, needs assessment for training, staff education and

equipment training. All the respondents indicated that their hospitals provide training on how to reduce the risk of injuries from patient lifting and, with the exception of one respondent refresher training in patient handling is held annually, which requires demonstrated competencies. The one exception's response was: "Don't think there is a standard time frame".

Hospital staffing needs were not included in this report.

3. Employee Survey Results

[Note: Selected side-by-side comparison information between employer and employee surveys can be found in Appendix 12]

Twelve (12) questionnaires were completed by staff in the five hospitals visited. One respondent was an EMT/NAC, another was an ER Technician and a third was a Radiology Technician. Table 5 describes the work experience of the respondents by job title.

Table 5. Work Experience of Hospital Staff Respondents

Job Title	Number of Respondents	Avg years in position (range)	Avg years at hospital (range)
RN	3	8 (7-10)	6 (3.5-8)
LPN	1	6	6
CNA	5	7 (0.3-16)	3 (0.3-6)
Other	3	5 (1-10)	5 (1-10)

Most of the employees' patients (average 52%, range 2-80%) required partial assistance when transferred. On average 29% of patients required total assistance when transferring (range 0-80%) and on average 51% required repositioning assistance (range 2-100%). Seventy-five percent (75%) of the employee respondents indicated that it was very likely and 17% indicated it was likely that they would take the same job, if they were looking for one. Only one (1) respondent said it was somewhat unlikely that he would take the same job again.

Employees were asked "What are three tasks you find most physically demanding, or place you in awkward or fixed positions". Similar to the management responses, employees found transfers and repositioning to be the two most physically demanding tasks. Figure 4 summarizes the answers given.

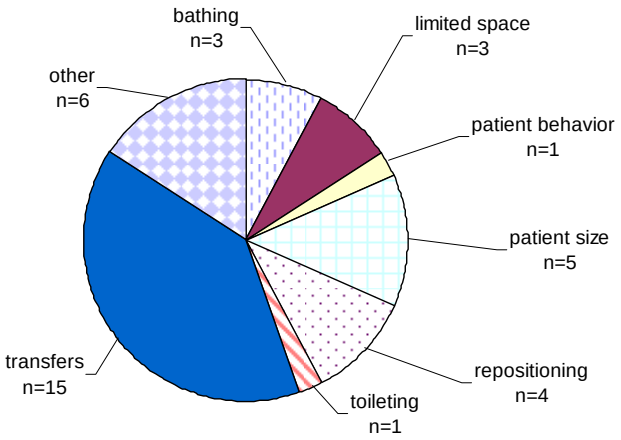


Figure 4. Employees' Physically Demanding Tasks or Activities

Most employee respondents indicated that long-term illness or serious injury (50%) or medical attention and several days off (50%) would likely be a result from the most physically demanding tasks (Figure 5).

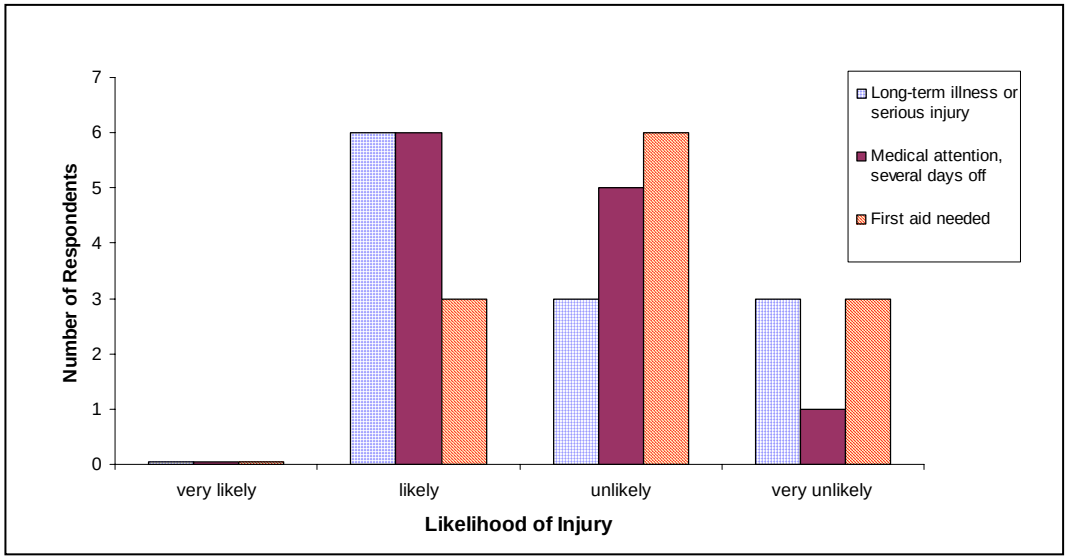


Figure 5. Employees' Perceptions of the Likelihood of Injury as a Result of the Most Physically Demanding Tasks

At the same time, two-thirds of the respondents (67%) acknowledged the presence of a committee working to prevent patient handling injuries. However, the remainder did not know if a committee existed. One-third of the employee respondents believed there was a no-lift program in their hospitals while six (6) indicated an absence of such a program and two (2) did not know. Respondents were asked to rate how well their hospitals had implemented the components of the no-lift program on a scale of no implementation to excellent implementation [1] (Figure 6). All the respondents believe each component of a no-lift program has been implemented to some degree (ranges of responses did not

[1] See Appendix 14 for key elements for each "no-lift+ program component

include zero). Management commitment and employee involvement scored slightly lower than other components.

Most employee respondents (75%) felt there was enough staff available to assist in patient handling and that they (83%) used the patient handling equipment, when needed. The majority (67%) also felt that the current number of patient handling equipment was adequate to meet the demands.

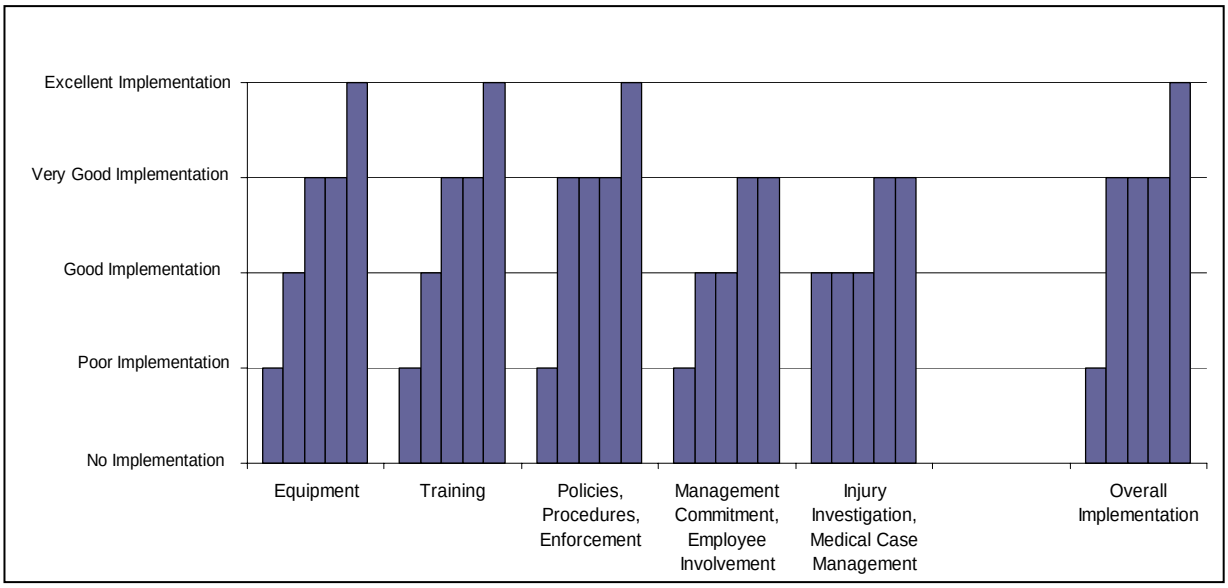


Figure 6. Hospital Employees' Assessment of Progress in Implementing Components of a No-Lift Program (n=5)

One possible barrier to using mechanical transfer equipment is the employees' perceptions of the equipment. The majority of the employee perceptions were positive for using mechanical transfer equipment. No employee respondents found the equipment extremely hard, worthless, harmful or foolish (Table 6).

Table 6. Employee Perceptions on Using Mechanical Transfer Equipment, Hospital Survey (n=12)

	extremely	very	somewhat	neither	somewhat	very	extremely	
description	NUMBER OF RESPONSES							description
HARD	0	0	3	1	4	2	2	**EASY**
WORTHLESS	0	0	0	1	2	4	5	**VALUABLE**
HARMFUL	0	0	1	2	2	3	4	**BENEFICIAL**
FOOLISH	0	0	0	1	2	2	7	**WISE**

Employee respondents were asked to rate the likely effect of using mechanical transfer equipment to several factors. This would help to identify potential barriers by employees to using such equipment. Most thought it was somewhat likely to very likely that it would take more time to use the equipment (Table 7). All believed that it was very unlikely to somewhat unlikely that using lift equipment would injure patients. Additionally, all

respondents believed that it was somewhat likely to very likely that using the equipment would decrease the chance of getting injured on the job.

Table 7. Perceived Likely Effect of Using Mechanical Transfer Equipment by Employee Respondents (n=12)

Effect	VERY UNLIKELY	UNLIKELY	SOMEWHAT UNLIKELY	SOMEWHAT LIKELY	LIKELY	VERY LIKELY
	number of responses					
Take more time to do	0	3	1	1	4	3
Decrease the chance the staff will get hurt at work	0	0	0	1	4	7
Require more help from co-workers	1	3	2	4	2	0
Be uncomfortable for the patients	1	0	4	5	2	0
Injure patients	4	2	5	0	0	0
Be refused by patient or family member	1	7	4	0	0	0

Figure 7 describes employee respondent the likes and dislikes regarding patient handling equipment. Employees liked the ease of use of the equipment the most (28% of respondents), followed by the availability of the equipment (19%), patient safety and comfort and staff safety and comfort, both 13% of the respondents. Conversely, difficulty in finding the equipment when needed was one the more common dislikes about the handling equipment. Also frequently noted was the insufficient capacity for bariatric patients and lack of equipment maintenance.

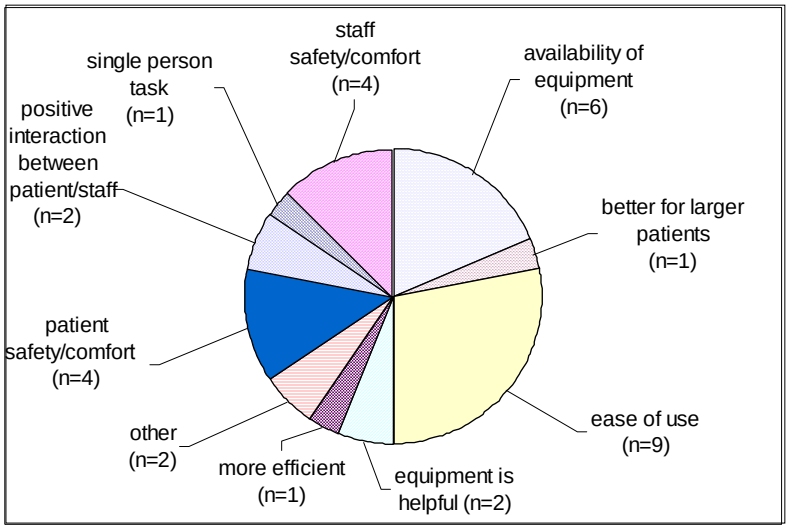


Fig 7a) Likes of the Patient Handling Equipment (n=32)

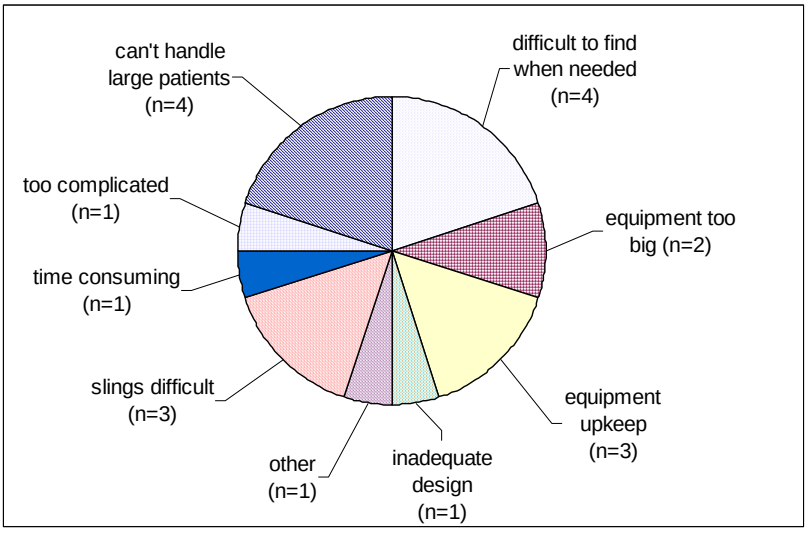


Fig 7b) Dislikes of Patient Handling Equipment (n=20)

Figure 7. Likes and Dislikes about Patient Handling Equipment at the Hospital, Employee Survey

In general, employees were positive about the use of patient handling equipment. They agreed that they received supervisory support for following policies, knew how to use the equipment and explain it to patients, and know the transfer status of each patient with respect to using the equipment. There was uncertainty in regards to being able to find the equipment, when needed. Approximately 17% were unsure if they could find the equipment, when needed (Figure 8).

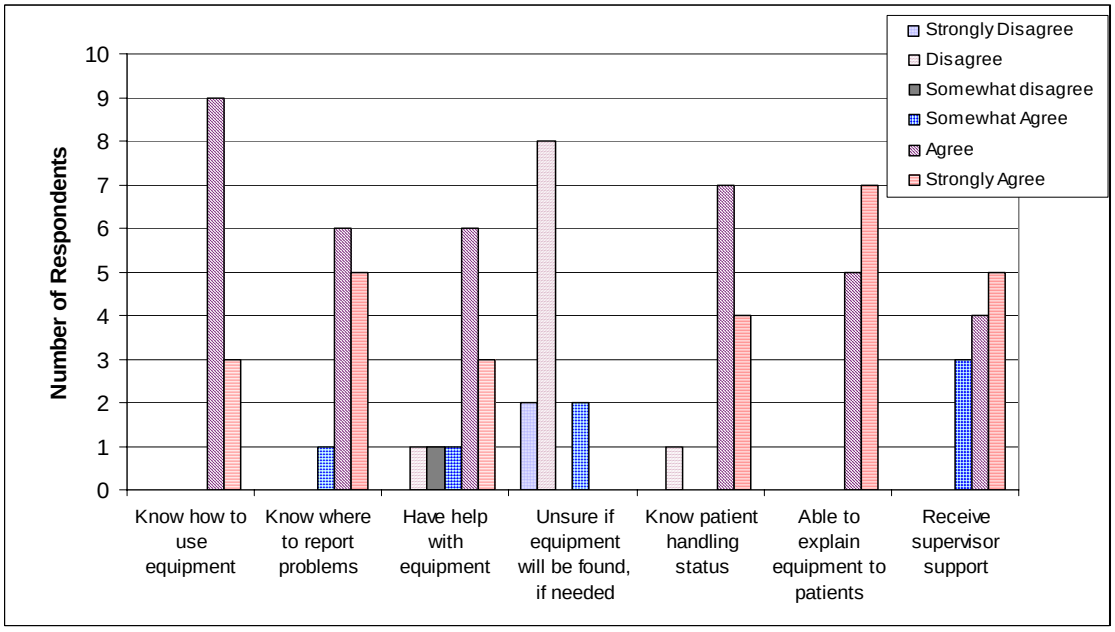


Figure 8. Employees' Beliefs about Patient Handling Equipment Use, Hospital Employee Survey (n=12)

To better understand the communication process, respondents were asked how patient transfer needs were communicated between staff. The most commonly reported methods of communication informal verbal reports (8 of 12 respondents), followed by care plans (7 of 12 respondents), patient charts (6 of 12 respondents) and flow sheets (5 of 12 respondents). One hospital will also ask the patient or family member about transfer needs. All of the employees indicated that multiple methods of communication are used.

In addition to understanding how transfer needs are communicated, it is equally important to understand how frequently employees check for changing patient handling needs. The following is a list of answers to the question of how often a survey respondent checks if patient handling needs have changed:

- Ask nurse
- Ask the patient
- Beginning of shift and nurse will tell you if there are changes
- Before transporting each patient
- Daily
- Every transfer
- Each shift
- Never
- When reported

4. General Facility Observations

Observations were made in a total of 18 hospital units.

General Environment

Most hospital units were clean and free of trip hazards and obstructed doorways (Table 8). Unfortunately, of those units with bathrooms in the rooms, very few were large enough to accommodate lift equipment

Table 8. General Safety Environment of the Observed Hospital Units (n=18)

Safety/Hazard	
Trip Hazard	Present in 6 units
Obstructed Doorways	Clear and free of obstructions in 16 units
Hallway Mirrors at Walkway intersections	Present in 1 unit
Visible spills on floor	Observed in one 1 unit
Floor surface	Tile/linoleum/laminate in 10 units Carpeting/tile/ in 2 units
Door Width	All doors wide enough for equipment 10 units (5 observations missing)
Use of equipment in bathrooms	Equipment used in 1 unit
Enough room in bathrooms for equipment	2 units had large enough bathrooms for equipment

Patient Handling Equipment

Every hospital unit visited had some kind of patient handling equipment. Almost all the units used gait belts, total lifts and slide sheets. Gait belts were not used in the emergency department and radiology. Ceiling lifts were seen in eight units. One hospital obtained a ceiling lift by winning an essay contest conducted by the industry association. One unit had a manual lift device but this was donated by a patient's family. Hover mats and lift teams were observed in 3 units and 5 units, respectively, however, all of these units were in one hospital. Table 9 describes the prevalence of patient handling equipment.

Table 9. Number of Hospital Units Possessing Patient Handling Equipment (total units=18)

Type of Handling Equipment	**Number of Units**
Ceiling Lifts	8
Total Lifts	11
Sit-stand devices	9
Manual lift devices	1
Hover Mats	3
Lift Teams	5
Commercial Slide Sheets	13
Gait Belts	13

Of the units that used gait belts, all direct care staff in 10 units used them. Direct care staff included nurses, licensed practitioner nurses (LPNs) and NACs. In departments where gait belts were used, 7 units had a mandatory use policy and 6 units gait belt use was voluntary. Eleven units used gaits belts to move patients from bed to chair. Three units always used gait belts to move patients, 2 units almost always, 4 units sometimes and 1 unit rarely. Walking belts were seen in two units. One unit used the walking belts sometimes and one used the belts almost always. A reason commonly given for not using gait belts or walking belts was the presence and utilization of the mechanical lifts instead.

Role of Safety Committee

One member of the safety committee was interviewed at each hospital visited. The jobs of these members included lead housekeeper, maintenance manager, Director of Employee Health Services, housekeeper/laundry manager and environmental services. Two interviewees were the chair of the safety committee. The average time spent on the committee was 4.7 years (range 1-10). All the members interviewed reported that resident handling injuries are discussed in safety committee meetings. One hospital investigates within 24-48 hours. The committees all discuss issues relating to lifting, transferring and moving residents. They discuss future in-services. One committee established weight limits: 25 lbs for housekeeping, 35 lbs for maintenance and 70 lbs for patient handling. Recommendations that the safety committees have made included equipment fairs, implementation of a no-lift program, safety "walk-abouts" or rounds and the acquisition of patient handling equipment.

5. British Columbia General Hospital Visit, November 2005.

The key informants were the safety advisor for the district health authority and unit managers for the neurological and orthopedic units of the hospital as well as nursing staff on the units.

- Implementation of their no-lift program occurred in conjunction with the provincial regulation on musculoskeletal injury prevention and an early return-to work initiative.
- Rather than being punitive for those not using the ceiling lifts, they used a peer champion approach. The peer champion receives 16 hours of training (program fundamentals, manual handling, demonstration and practice). They have found this approach to be very successful in diminishing resistance to change.
- They did not see huge benefits in the first three years although there were some reductions in sick leave and injury statistics. The key indicators in the first few years were reduced work loads which eventually led to reduced injuries.
- The health authority concentrated on nursing homes first because of the higher injury rate, and is now concentrating on hospitals. In both areas, ceiling lifts have been installed because they solved more problems than they created (no storage issues, easier to handle patients, patients more comfortable).
- Established criteria for when to install ceiling lifts, what kind, what configuration.
- It is critical to work with good vendors who will help identify ways to overcome structural and financial barriers to implementation. Cannot mix ceiling lift manufacturers because equipment is not interchangeable.
- They were able to leverage volume needed by the whole district authority to obtain greatly reduced costs from the vendor.
- Getting more slings per patient was strongly advocated. They started with 3 and went to 5 because of various use problems and the need to reduce the number of times slings were placed on patient because of high demands on the physical load for nurses and discomfort for patients. This also eliminated any infection control problems. (Figure 9)
- There are different types of ceiling lift slings (walking, repositioning, transferring, etc) that come in different sizes. Neurological ward staff suggested that they get patients up more, they have less skin tears and contractures than before the use of ceiling lifts. One floor lift is in backup in case a patient falls out in the hallway. Because they have 5 slings per patient, they have no infection control problems.
- Their strategy was to start with ceiling lifts in highest need areas and then others will demand them.
- One motor can be used with a “spider” ceiling track configuration in a 4 bed room with access to the bathroom

Spider track

Sling storage in room

Figure 9. Patient Handling Equipment in British Columbia Hospital

6. Additional Washington State Hospitals Activities

According to the Washington Hospital Services Workers Compensation Trust Executive Director, a Patient Handling Specialist (PHS) program was implemented in 32 of their hospitals to facilitate implementation of zero-lift programs. The 10 most important roles and responsibilities are:

1. Be an in-house expert on patient transfer
2. Assure that the Zero Lift Program is being implemented and working effectively
3. Assure that manual lifting is replaced by mechanical lifts
4. Be on-call for any department that receives a complex patient or has questions about transfer safety
5. Assure that all mechanical equipment is functioning optimally
6. Assure that all slings are appropriate for style and size
7. Assist the facility in equipment selection
8. Be the principle trainer on all program elements
9. Help facilitate communication between care-givers, patients and family
10. Convene the Zero Lift Committee quarterly to evaluate the program.

Training for approximately 40 PHS for the 32 facilities in this system that have adopted Zero Lift took place in October 2005, which certified them for the first level of training. An advanced course is planned for spring 2006. While it is too early to evaluate the impact of this program, it is similar to that of the BIRN program mentioned in the literature review.

B. NURSING HOMES

1. Facilities and Staffing

Five large urban and three small (two rural) nursing homes were visited to identify successes and barriers in implementing a no-lift environment. They were equally distributed between eastern and western Washington. The site visits included a site walkthrough, interviews with administrators or directors of nursing services and safety committee members, observations of staff, and questionnaires completed by staff.

The trend over the past five years has been to move toward specialized Alzheimer's centers rather than separate units in nursing homes; half of the visited nursing homes had dementia beds. Five were authorized as Medicare beds but most of these were not filled with Medicare patients. A number of these nursing homes have seen an increase in younger residents with multiple sclerosis, cerebral palsy or brain damage resulting from vehicle crashes. Of concern to all nursing homes was the increase demand of bariatric residents, with some nursing homes not having the bed, space or equipment to handle them. For patient care, in addition to nursing staff, five facilities had therapists or contract therapists, and at least one had a part-time psychiatrist. All had close to the number of registered nurses and licensed practitioner nurses they desired, while several were having some difficulty obtaining the number of certified nursing assistants they wanted.

An issue for the nursing homes was the serious decrease in funding reimbursement rates. According to one facility, in 1995 they were paid $0.93 for every dollar spent and now are paid $0.82 for every dollar spent.

2. Administrative Survey Results

[Note: Selected side-by-side comparison information between employer and employee surveys can be found in Appendix 15]

Those completing the administrative interview included administrators, Directors of Nursing Service, Director of Quality Management and Resident Care Coordinator. Table 10 describes their experience and a general description of the facilities. All facilities had quite stable management, having the same administrator in the previous three years. Two facilities had changes in directors of nursing services. Six facilities were just about filled to capacity while two had approximately 10 vacancies.

Table 10. Description of Administrative Respondents and their Facilities.

Administrators' average years in the industry	21.9 years (range 12-34 years)
Administrators' average years at current facility	9.3 years (range 0.5-34 years)
Administrators' average years in current position	8.8 years (range 0.3-32 years)
Age of facilities	5-40 years
Average number of beds	80 beds (range 14-139)

Attracting and retaining resident care staff

Respondents were queried about the biggest challenges in attracting and retaining resident care staff. Responses included:

- Wages and benefits.
  Every respondent reported low wages and often non-existent benefits to be a major challenge. With low financial re-imbursement from the state and Medicare (some estimated 80 cents for $1.00 spent), Since most of the nursing homes have their own certification courses, once a nursing assistant receives certification and experience, the certified nursing assistant (NAC) may go to work in a hospital where the pay is better and work is less demanding.
- Competition for Workers Elsewhere.
  It is extremely difficult for Nursing Homes to be competitive for low wage workers. Their wages are equivalent to fast food restaurants, Wal-Mart and Home Depot and do not require a nursing certificate, and some nursing homes are unable to pay for any benefits. They view the work of NACs as much harder than in fast food and retail.
- Heavy job demands.
  Both physical and emotional demands were identified as challenges. The emotional demands are often difficult for new, young NACs in particular. Some expressed the concern that new workers are not as physically fit as their elders due to changes in the physical education requirements at school, etc. They are concerned that this may make them more vulnerable to injury.
- Rural location.
  One of the administrators indicated that many low wage workers go elsewhere.
- Temporary Residents.
  Recruitments and military transfers mean the NAC goes with spouse

Improvements to Recruiting and Retaining Staff

Some of the most important improvements identified to recruit and retain qualified staff included:

- Better pay
- The ability to pay benefits, especially health care benefits. More and more NACs are seeking employment with health insurance. The cost of health and dental insurance is becoming increasingly expensive. NACs rarely can afford co-payments and therefore tend not to participate. Several facilities have staff vote on what options they would like to have, given the increasing difficulty in obtaining low cost health care benefits.
- A no-lift program with better designed lifting equipment. Current floor lifts themselves are heavy.
- Better clinical support and oversight
- An employee morale program
- Commitment of managers
- The need for more staff development coordination
- Treating NACs as an important, integral part of resident care
- Accommodating staff schedule
- The need to provide recognition awards, educational opportunities
- The need to minimize hierarchy, improve work environment

Obstacles to Reducing Injuries Related to Resident Handling

When asked about the biggest obstacles to reducing injuries related to resident handling, the respondents had a number of concerns that fell into common themes:

1. Physical plant
   Room size
   Storage space
2. Policy
   Change in use of medications]
   Policy of the use of side rails
3. Staff
   Following policy
   Lack of training
   Proper use of equipment
   Staff asking for help
   Staff turnover
   Staffing levels
4. Equipment
   Equipment design
   Storage space
5. Training
   Consistent training
   Too many to train
6. Residents
   - Changing acuity of residents
   - Residents living longer

[Appendix 13 contains explanations and examples of comments for the themes described above]

Despite the obstacles described by administrators, one nursing home indicated that implementing no-lift was not a financial problem because you save money if you get enough of the right equipment and training.

Policies and Procedures

Five facilities had specific written policies for the prevention of musculoskeletal disorders (4 of the large and 1 of the small facilities). Three large and one small facility reported having a “no-lift” policy. All large facilities reported having policies on total lift and sit-to-stand lifting equipment, whereas only two of the small facilities had policies. None of the facilities had ceiling lifts or lift teams. All had resident handling requirements in the care plan, 75% used the care sheet, 50% had something in the room and 63% used a verbal report, 75% included NACs in shift report.

Resources

Although four of the eight homes indicated they knew about L&I’s job modification funds, none had utilized them. They seemed to be unfamiliar with utilizing these funds to obtain equipment such as lifting devices to return injured workers or keep them at work.

Difficult tasks

When asked “ What are three tasks that are most physically demanding for the resident care staff, or place them in awkward or fixed positions?”

- 100% indicated transferring residents from the bed (particularly low beds required by DSHS for residents who are at risk for falls from bed)
- 4 indicated repositioning in bed
- 3 indicated bathing the resident
- 3 indicated preventing a fall
- 2 indicated constant bending and stooping, particularly when cleaning the resident in the bathroom

- 2 indicated transferring combative residents
- 1 each indicated transferring obese residents, gait training, transfers from chair to car

Respondents were asked how likely they thought these tasks would result in injury (Figure 10).

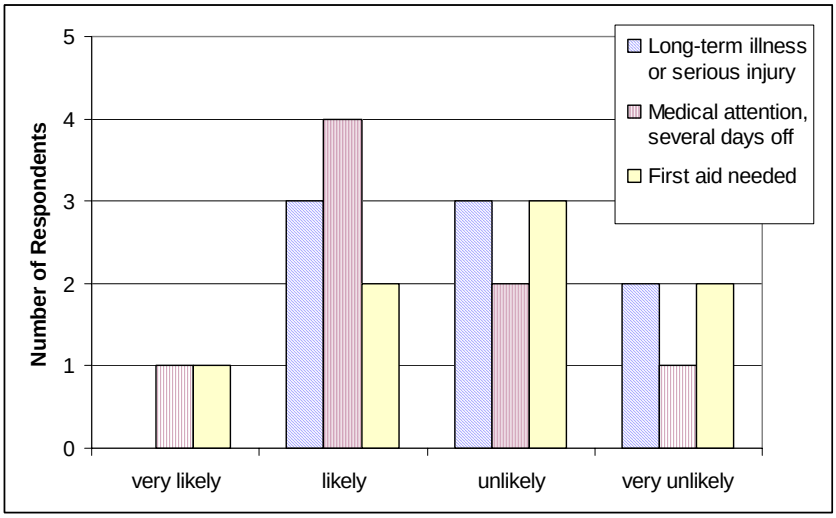


Figure 10. Administrators' Perceptions of the Likelihood of Injury as a Result of the Most Physically Demanding Tasks, Nursing Homes (n=8)

Equipment

All nursing homes had taken advantage of Washington Health Care Association's (WHCA) $1,000 rebate to secure lifting equipment. All had at least one total lift and one sit-to-stand device, most had at least one of each for each unit. The use of sit-stand devices has increased enormously throughout the industry since the Washington State Labor and Industries/Washington Health Care Association "ZeroLift" initiative in 1998-2002 (Silverstein et al, 2003). None of the nursing homes had ceiling lifts although all knew about them. Most knew about their use in British Columbia where they have been supported by the provincial government and demonstrated to reduce injuries (Engst, 2005) and costs.

None of the nursing homes leased resident handling equipment in the past three years. However, on average, they spent $2,728 on purchasing equipment in 2004 (range $0-7,000) and $346 on maintenance of resident handling equipment ($0-$800). In all cases, either the administrator or director of nursing services was involved in choosing what kinds and how many resident handling devices were purchased. Safety committees were involved in three facilities. All respondents believed the equipment was being used when appropriate and seven of the eight felt that they had enough equipment.

In general, management staff believed that using the mechanical transfer equipment was very easy to extremely easy to use, with one respondent believing it was somewhat easy to use (Table 11). They felt it was somewhat valuable and a wise investment.

Table 11. Administrators' Perceptions on Using Mechanical Transfer Equipment, Nursing Homes (n=8)

description	extremely	very	somewhat	neither	somewhat	very	extremely	description
	NUMBER OF RESPONSES							
HARD	0	0	1	0	1	5	1	**EASY**
WORTHLESS	0	0	0	0	0	3	5	**VALUABLE**
HARMFUL	0	0	0	1	0	0	7	**BENEFICIAL**
FOOLISH	0	0	0	0	0	2	6	**WISE**

In attempting to identify potential barriers and benefits to using the equipment, we asked administrative respondents to rate the likely effect of using the equipment (Table 12). The most frequently perceived barrier was taking more time followed by requiring more coworker help. All believed use of the equipment would reduce likelihood of staff injury. Other barriers included room size and lack of storage space

Table 12. Perceived Likely Effect of Using Mechanical Transfer Equipment by Administrative Respondents (n=8)

Effect	VERY UNLIKELY	UNLIKELY	SOMEWHAT UNLIKELY	SOMEWHAT LIKELY	LIKELY	VERY LIKELY
	number of responses					
Take more time to do	0	2	2	4	0	0
Decrease the chance the staff will get hurt at work	0	0	0	0	3	6
Require more help from co-workers	0	3	1	1	2	1
Be uncomfortable for the residents	2	1	2	3	0	0
Injure residents	5	0	0	2	0	0
Be refused by resident or family member	4	1	0	2	0	0

Training

All eight facilities had staff development or training coordinators with only two of them having any turnover in the previous three years. All of the coordinators have multiple human resources responsibilities including training. Most provide in-service training on resident handling at least yearly and as needed based on incidents, or new equipment. Two facilities provide training twice per year and as needed. Most training is hands-on practice; videos may be used in addition. While previous training in resident handling is desirable it is not an important aspect in hiring decisions.

Of the eight nursing homes, six indicated that they had some components of a no-lift program.[2] Administration respondents were asked to rate themselves on the how well they had implemented the components of no-lift program, from no implementation to excellent implementation. As can be seen from Figure 11, implementation of policies, procedures and enforcement appears to be the most difficult. One respondent indicated that she needed a good model to follow.

[2] See Appendix 14 for key elements for each "no-lift+ program component

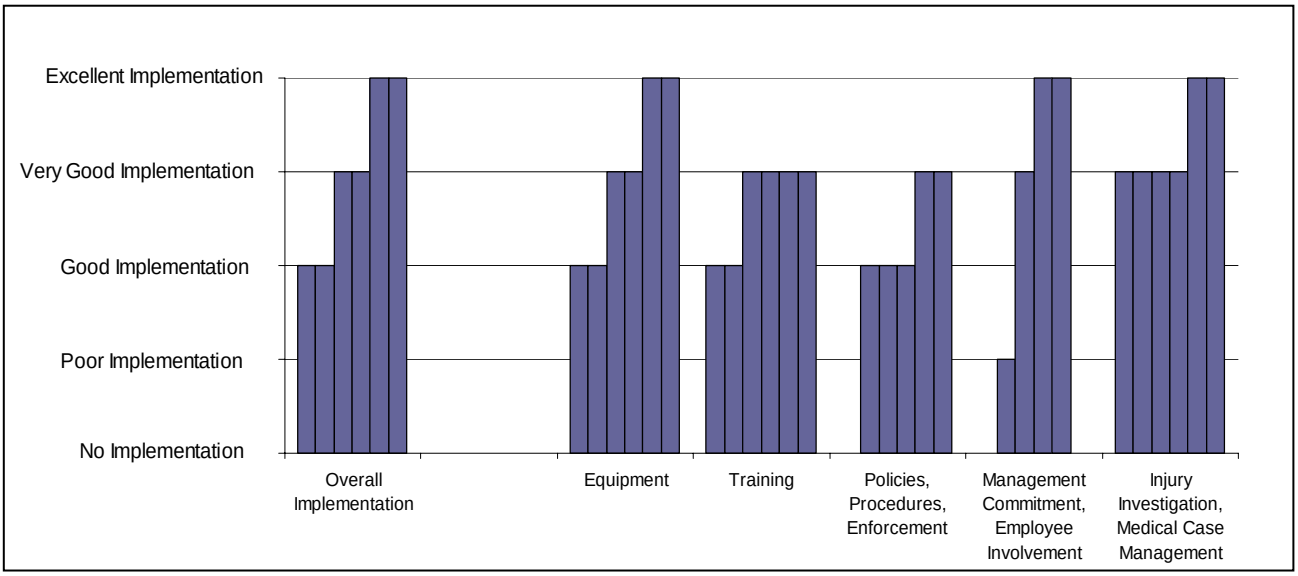


Figure 11. Administrators' Assessment of the Implementation of the Components of a No-Lift Program, Nursing Homes (n=8)

3. Employee Survey Results

[Note: Selected side-by-side comparison information between employer and employee surveys can be found in Appendix 15]

Twenty-two respondents (18 NACs) from the 8 facilities (average of 3 per facility, range 1-4) completed the employee survey. On average, they had been working in their positions for 9 years (range 0.1-22 years) and had been working at the current facilities for 5 years (range 0.1-18 years). The average reported portion of residents that required partial assistance was 54% (n=22, range 9%-100%), residents requiring total assistance during transferring was 54% (n=22, range 10%-100%) and residents requiring repositioning in bed was 41% (n=21, range 1%-100%).

Difficult Tasks

The most difficult tasks identified by staff included:

- Transferring residents from low beds
- Repositioning in bed
- Transferring combative residents
- Handling obese residents
- Awkward postures while transferring, dressing, repositioning
- Toileting
- Working short staffed
- Limited space to maneuver wheelchairs
- Equipment failure
- Lack of team work
- Being a man working with female NACs who ask for assistance lifting the heavy residents
- Dressing residents
- Transferring when a resident faints or looses his/her balance
- Lifting objects

Half of the respondents believed these difficult tasks would result in injury resulting in medical care or some lost time. And 32% (n=22) believed performing these tasks would very likely or likely result in the NAC having a serious injury resulting in long term lost time (Figure 12)

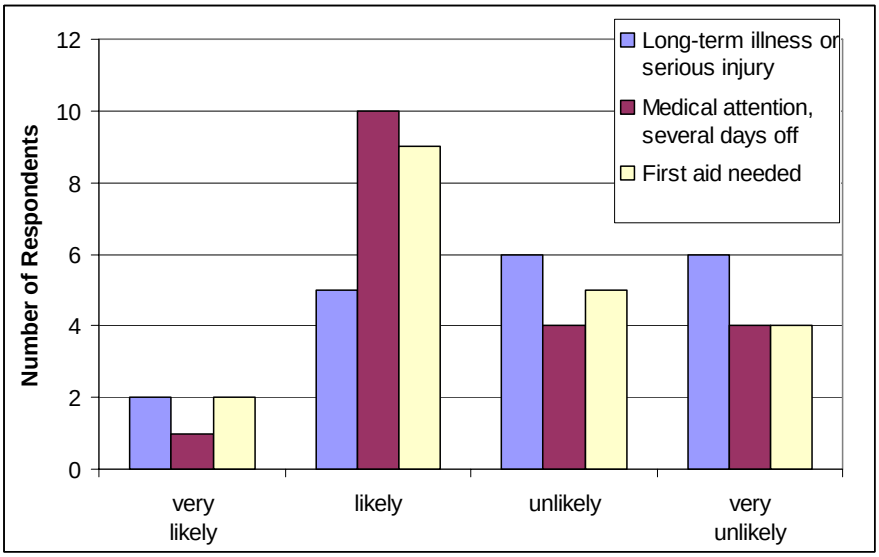


Figure 12. Employees' Perceptions of the Likelihood of Injury as a Result of the Most Physically Demanding Tasks, Nursing Homes (n=22)

Employee respondents indicated most frequently that having more staff and more equipment would make the job easier (mentioned by every respondent). Other things that would make the job easier included:

- "Having enough equipment available"
- "Better communication"
- More people willing to help"
- "More time to be with residents"
- "Bigger rooms for using lifts"
- "More room for storing lifts"
- "Changing access to resident bathroom"
- "Adjustable height shower chair"
- "Slippery Slide"
- "More continuing education"
- "Bigger bathrooms"
- "Reduce clutter in the rooms"

Equipment

When queried about the use of mechanical lifting devices, all but one respondent indicated liking the lifts. Most had positive impressions of using the equipment including it being easy, valuable, beneficial, and wise (Table 13). The primary reason for liking the equipment was that it was both safe for the residents and for the staff. Additionally, some indicated they were more likely to get residents up if equipment was readily available;

that residents felt more secure, and they were essential for large residents. Mention was made of the use of sit-stand devices in helping with toileting and getting residents up. Note that the equipment has become better over time; the use is more efficient and easier as well.

More than half reported that the current number of handling equipment was adequate to meet the demands, and 86% felt that there was enough staff available to assist in resident handling (Figure 13). Equipment needs included more sit-stand devices, more total lifts with scales, and more gait belts.

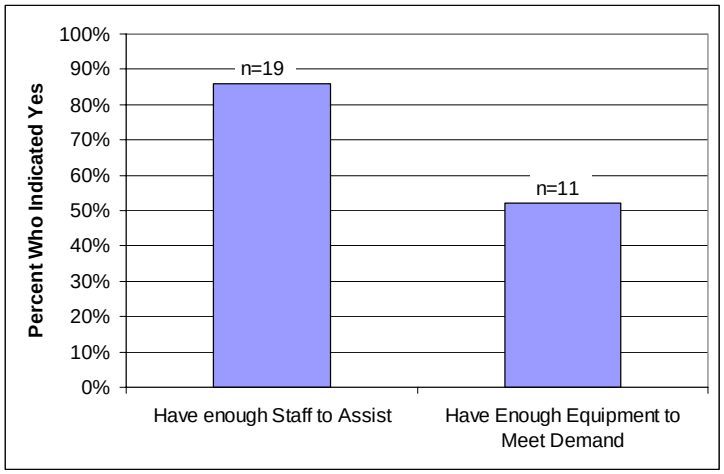


Figure 13. Adequate Staff and Equipment for Resident Handling, Nursing Home Employee Survey (n=22)

Responses regarding the ease and utility of using mechanical equipment varied considerably. While the majority felt that using mechanical equipment was either very or extremely easy, valuable and beneficial, there were four who felt the equipment was somewhat hard to use (Table 13).

Table 13. Employees' Perceptions on Using Mechanical Transfer Equipment, Nursing Homes (n=22)

	extremely	very	somewhat	neither	somewhat	very	extremely	
description	NUMBER OF RESPONSES							description
HARD	0	0	4	0	1	9	3	**EASY**
WORTHLESS	0	0	1	0	2	6	11	**VALUABLE**
HARMFUL	0	0	1	1	2	7	9	**BENEFICIAL**
FOOLISH	0	0	1	1	2	6	10	**WISE**

Actual use of resident handling equipment depends on availability, ease of use, and caregiver beliefs about the consequences of using the equipment. As can be seen in Table 14, respondents were conflicted. More than 80% believed that using the equipment would reduce the chances of injuring themselves or their residents but more than 50% believed using the equipment would take more time and require more co-worker help.

Table 14. Perceived Likely Effect of Using Mechanical Transfer Equipment by Employee Respondents (n=22)

Effect	VERY UNLIKELY	UNLIKELY	SOMEWHAT UNLIKELY	SOMEWHAT LIKELY	LIKELY	VERY LIKELY
	number of responses					
Take more time to do	2	4	2	1	5	7
Decrease the chance the staff will get hurt at work	1	1	1	1	6	11
Require more help from co-workers	2	1	3	4	5	6
Be uncomfortable for the residents	2	4	6	5	3	1
Injure residents	7	5	1	2	2	1
Be refused by resident or family member	0	2	9	5	1	1

In addition, the other problems identified with the mechanical handling equipment were:

- Finding it
- It takes longer
- Staff not recharging batteries
- Don't have big enough slings
- Need for more padding on sit-stand devices
- Preventive maintenance not routinely done
- Don't have enough equipment
- Need more slings (for each resident)
- If resident grabs hook, can get a skin tear

For the most part, employees felt they knew how to use the equipment, explain what they were doing to the resident, and to whom to report equipment problems. They were somewhat less sure about knowing current resident handling status, having help available when needed and supervisor support. Only about 40% felt they could find the equipment when they needed it (Figure 14).

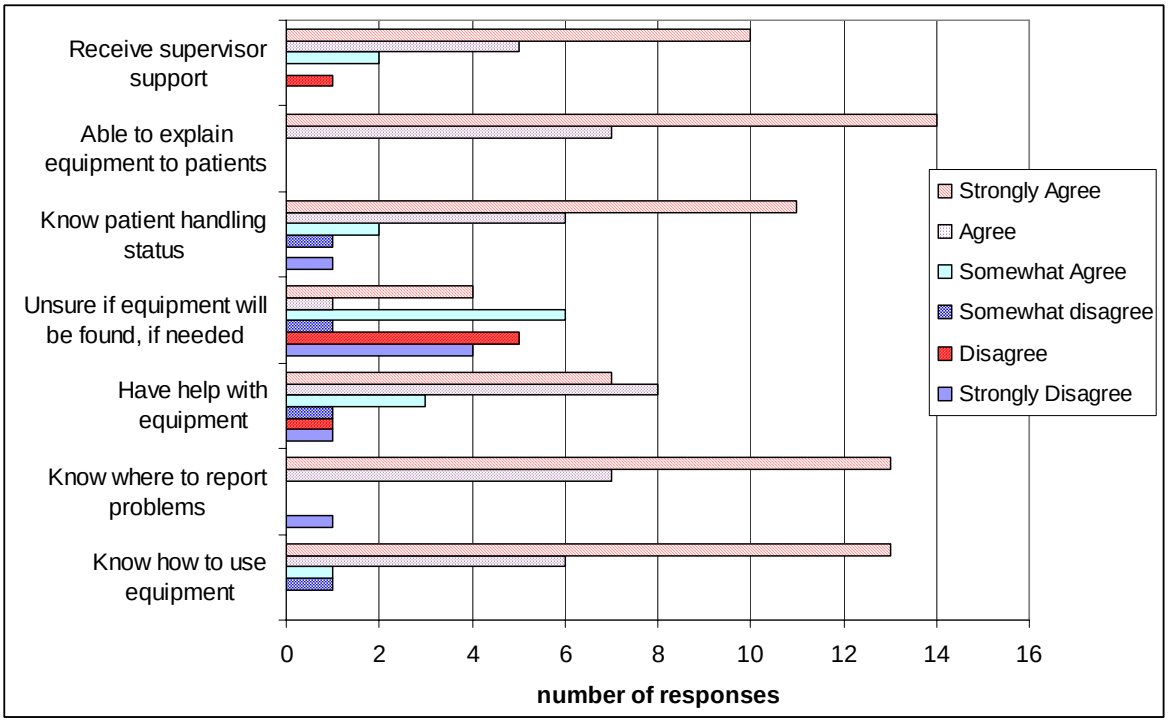


Figure 14. Beliefs about Resident Handling Equipment Use, Nursing Home Employee Survey (n=21)

Training

All but one NAC received their training at a nursing home. One therapist respondent received her training at a college. Most had received their resident handling training within the previous year and had to demonstrate transfer techniques within the past year. However, at one facility, the NAC had training 2.5 years ago and no demonstrations since then.

Staffing

In general, respondents seemed satisfied with their place of employment. The vast majority indicated that they would take the same job again (Figure 15) and planned to stay at the facility for at least another year (Figure 16). The majority (80%) indicated that there was enough staff available for resident handling tasks.

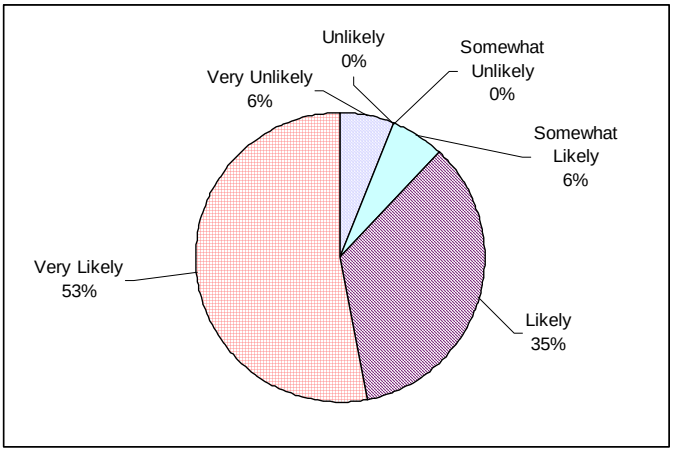


Figure 15. Likelihood of Working at the Same Facility Next Year, Nursing Home Employee Survey (n=22)

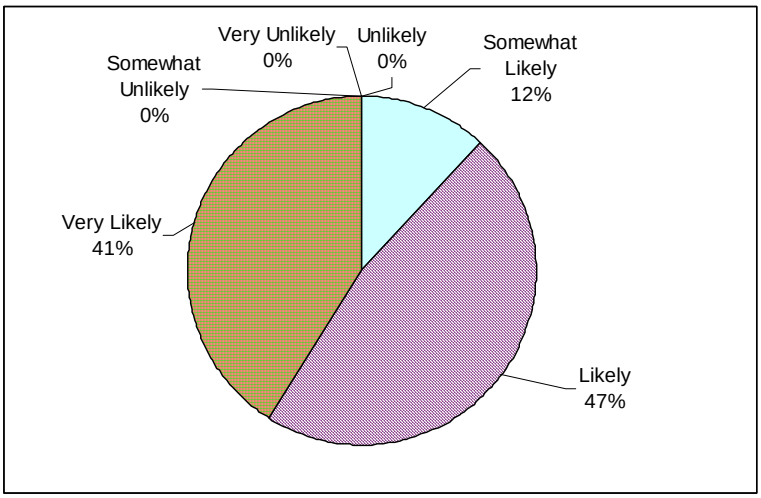


Figure 16. Likelihood of Taking The Same Job Again, Nursing Home Employee Survey (n=22)

Policies and Programs

Sixteen respondents indicated that there was a health and safety committee at the facility and 13 of those reported that the committee was working to prevent resident handling injuries. Sixteen also indicated that there were resident handling policies. Thirteen indicated specific consequences for not following the policy, ranging from counseling and warnings to firing for repeat violations of the policy. Resident handling requirements are communicated via care plans in all facilities. Additional means are via scheduled or unscheduled verbal reports or resident charts (reported by 10 of 22 respondents), care sheets (14 of 22 respondents), and some sort of notice in the resident room (11 of 22 respondents). Primarily, this information is checked every shift. Seven respondents indicated that there has been a no-lift policy implemented in their facility.

Overall No-lift program elements assessment

Eight respondents provided assessments of the degree to which they work in a no-lift facility, ranging from no implementation to excellent Implementation (Figure 17). Overall assessment is quite comparable between employees and the employer respondents. However, the employer thought there was a much lower level of management commitment/employee involvement than the employee respondents. Employees also tended to rate equipment and injury investigation lower than the employer.

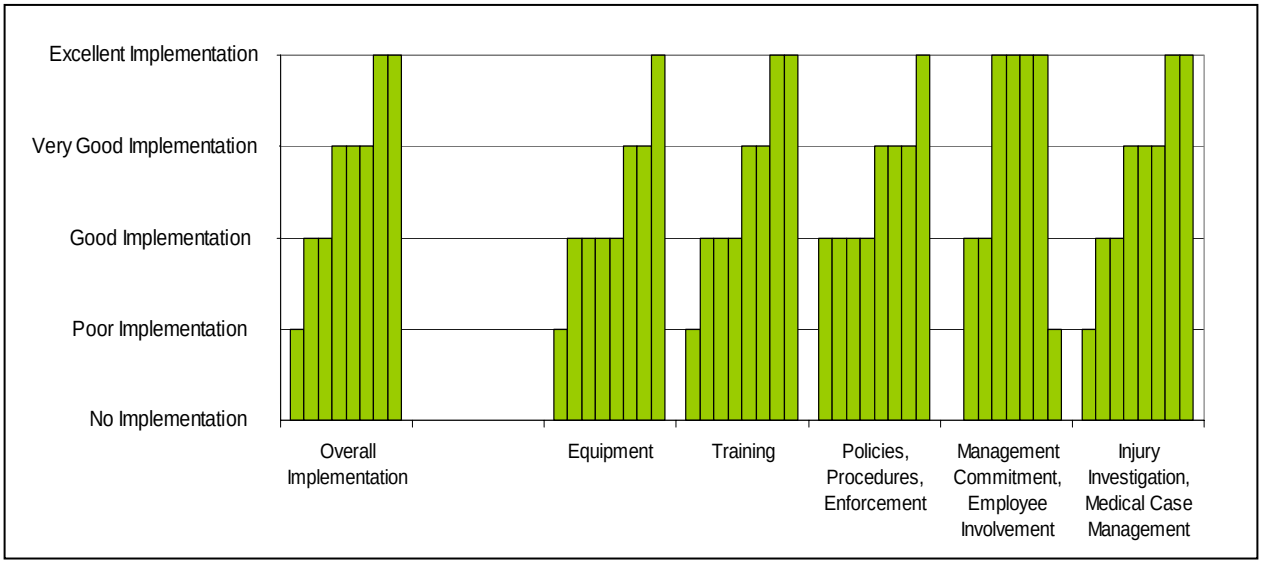


Figure 17. Employees' Assessment of the Implementation of the Components of a No-Lift Program, Nursing Homes (n=8)

4. GENERAL DEPARTMENT OSERVATIONS

Research staff conducted observations of at least one unit at each of 8 facilities.

General Environment

In general, all the nursing homes were clean and free of trip hazards and spills on the floor (Table 15). All the facilities had doors that were clear and wide enough to accommodate lift equipment.

Table 15. General Safety Environment of the Nursing Homes

Safety/Hazard	
Trip Hazard	None observed
Obstructed Doorways	All clear and free of obstructions
Hallway Mirrors at Walkway intersections	Present in one facility
Visible spills on floor	Observed in one facility
Floor surface	Carpeting in hallways of 3 facilities, tile/linoleum in 7 facilities
Door Width	All doors wide enough for equipment in all facilities
Use of equipment in bathrooms	Equipment used in four facilities
Enough room in bathrooms for equipment	Six facilities had large enough bathrooms for equipment (Figure 18)

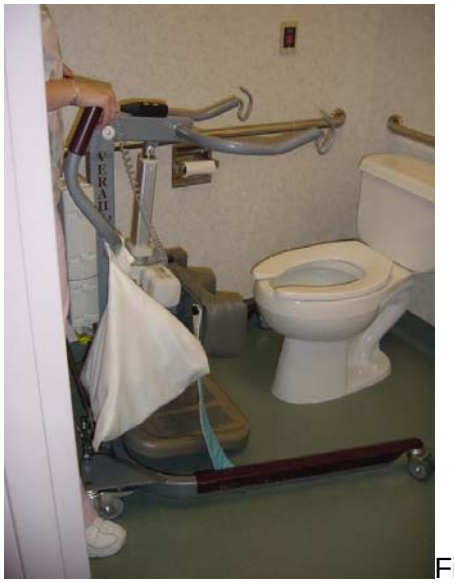


Figure 18. Handling Equipment in Nursing Home Bathroom

Transferring Residents

- No ceiling lifts were present in any of the visited facilities
- Every unit had at least one total lift, several had three total lifts, several had scales incorporated in the lifts
- Problems with the lifts were primarily related to the batteries in two units.
- All units but one had at least one sit-stand device. No difficulties were identified with these devices
- Hand crank lifting devices were observed on two units. In general, these appear to be phasing out of most nursing homes.
- In one facility, pump beds were observed that allow the bed to go from a low to high position. This is still rare in most nursing homes due to financial constraints
- Gait belts were observed being used by NACs in all facilities. Every facility had a mandatory gait belt policy. These were observed in use in almost every transfer.
- Use of walking belts with handles was rarely observed
- Slipsheets for repositioning or transferring from bed to stretcher were available in two facilities. In one facility, staff didn't like the handles.
- All but one unit had low beds for residents at risk of falling. In five units, these were somewhat height adjustable.
- Staff indicated having refresher training in lifting at least yearly
- In one facility, the type of lift to be used was marked on the door
- One facility was concerned about lifting hazards for non-nursing staff as well. This facility obtained small, light containers on wheels for trash and dirty laundry. PVC carts with big wheels were also obtained to facilitate rolling clean laundry. In the kitchen, large cooking pots had dump handles to reduce manual lifting of pots (see Figure 19). This relatively new facility also had five fully electric beds that go from the floor to bed height.

Figure 19. Equipment for handling lift hazards of non-nursing staff in nursing homes.

A number of different transfers were observed in the eight facilities, 13 were bed-chair transfers, 2 were low bed to chair, 5 were toilet/commode transfers, 1 was bed-bed, and 1 was sit-stand.,3 were chair-chair. Electric lifts were used in 16 instances, sit-stands and total lifts were almost equally used. In general, these transfers appeared relatively smooth. Additional assistive devices included gait belts (8) and turn discs (1). The manual transfers primarily involved under arm hook or bucket lift transfers. The majority of transfers were one- or two-person, manual assist with "hugging" the caregiver was observed on several occasions during manual transfers. In three instances of manual transfers, the resident was not completely cooperative. Bariatric residents were observed being transferred on two occasions, 1 manually from a low bed and 1 with a total lift. On four occasions, the observer estimated maximum exertion was used by caregivers during manual transfers and in two of the total lift transfers. One of those transfers was moving from bed to bed by having four caregivers lift the mattress from one bed to the other.

Eighteen assisted ambulations were observed, occasionally by PTAs and therapists.. Gait belts were used in most instances, but also sit-stands or walking holding on to wheelchairs were used. Residents were alert and cooperative.

Role of Safety Committee

At least one member of the safety committee was interviewed in six facilities, including resident care manager, staff coordinator, laundry manager, physical therapy assistant, and housekeeping manager. Time on the committee ranged between 2-7 years. Four indicated that discussion of staff injuries take place and all indicated resident handling issues were topics in the safety committee. Five indicated involvement with obtaining equipment and resident handling training activities.

C. HOME CARE, HOME HEALTH CARE, HOSPICE CARE

1. Facilities and Staffing

[Note: Selected side-by-side comparison information between employer and employee surveys can be found in Appendix 16]

Six home sector agencies were visited, ranging in size from 60 to 210 employees (Table 16).

Table 16. Description of Home Sector Agencies Visited

Home sector type	Number of surveys	Number of employees
Home Health/Hospice	3	130, 180, 210
Home Care	2	130, 210
Hospice (facility)	1	60

2. Administrative Survey Results

Six administrator surveys were completed and incorporated in the data presented in this report. Two administrators served as administrators for home health and home care services in their agencies. Four different administrators completed the surveys.

One hospice administrator survey was not returned before the writing of this report. However, an administrator survey and some employee surveys from an additional home health agency are included, even though home visits from that agency were not done. All the administrators interviewed were experienced, with an average of 11 years in their current position, 17 years at their current agency and 21 years experience in the industry (Table 17)

Table 17. Work Experience of Home Sector Administrators

Sector type	Title	Years of experience		
		Years in Current Position	Years at Current Agency	Years in Industry
home health/ home care	Director Supportive Services	8	21	21
home health/ home care	Home Health Director	5	5	11
home health/home care	Director of Clinical Operations and Services	19	25	25
hospice	Hospice Director	13	15	25

All agencies have had the same administrators or directors for the last three years except for the hospice, which has had 3 in the last three years.

Job Activities

Administrators were asked to list the most physically demanding tasks for the direct care staff. The tasks described were:

- Toilet transfers (includes commode)
- Transfers in/out of bed
- Moving (relatively) immobile patients such as those with MS, ALS, cord compression
- Bathing patient/client in tub or with bed baths and the associated awkward postures
- Lifting patients/clients
- Coping with environmental limitations
- Lifting patients/clients from floor after a fall
- Dressing patients/clients
- Working with patients/clients on low beds (includes catheter placement)
- Dressing patients/clients

Overall, administrators believed that caregivers were likely or very likely to incur long-term illness or serious injuries as a result of performing their work (Figure 20). All of the administrators believed it was very likely that caregivers would need to see a doctor or be off from work for a few days as a result of injuries occurring on the job (Figure 20).

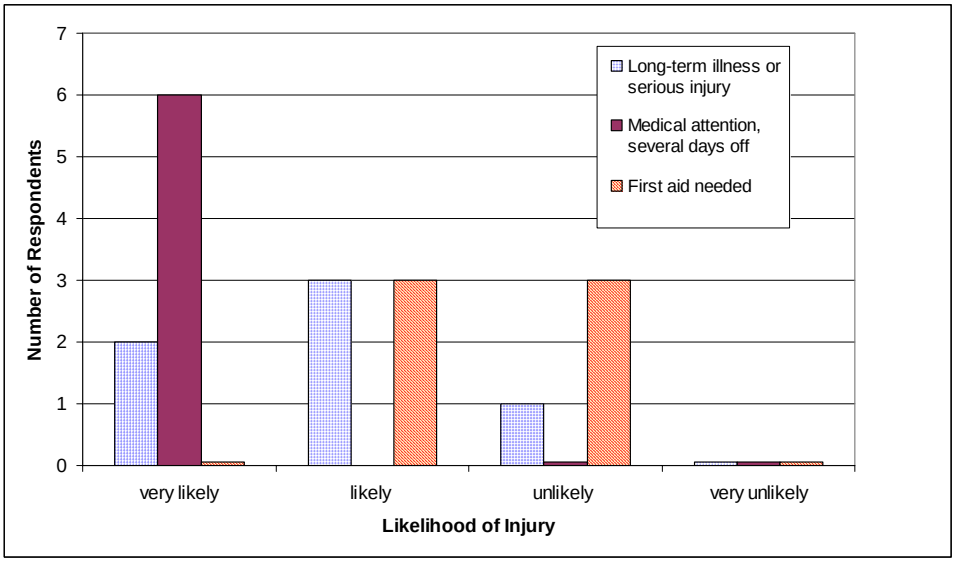


Figure 20. Administrators' Perceptions of the Likelihood of Injury as a Result of the Most Physically Demanding Tasks, Home Sector (n=6)

Equipment

In the home sector, patient/client handling equipment presents a unique issue. Administrators were asked to describe the equipment they provide to caregivers to take

to patient/client homes to assist with patient/client handling. In all agencies, gait belts and/or transfer belts were made available. In one agency, back belts were also provided. Only in the hospice facility were powered total lifts and transfer boards available.

The acquisition of needed transfer equipment is difficult. Transfer equipment is not covered by insurance in the home care sector and insurance will only provide limited types of equipment in the home health/hospice sector. However, more administrators believed it was somewhat to very likely that the patient/client already had their own equipment in the home to assist with transfers (Figure 21). Administrators were also asked what actions can be taken if recommended equipment is not affordable to the patient/client, not covered by insurance or not wanted in the home. Most depend on community services to find the means for acquiring the equipment (Table 18).

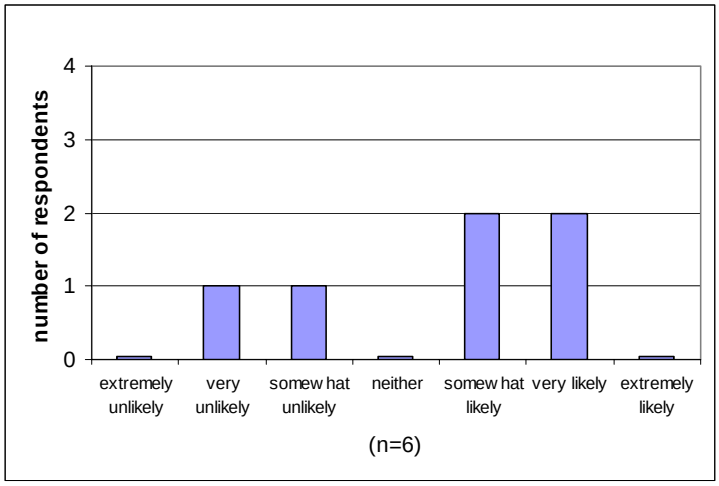


Figure 21. Likelihood That Patient/Clients Already Has Transfer Equipment at Home, Administrator Home Sector Survey (n=6)

Table 18. Actions Taken to Obtain Recommended Equipment, Not Covered by Insurance, Administrator Home Sector Survey

What is done when recommended equipment is not affordable to patient/client, not covered by insurance, or not wanted in the home:
• Strongly suggest (to patient/client/and family), otherwise we are unable to do anything • Look for any alternatives that are safe. Other than that, nothing…we are not a DME • Limit service - meaning we may still provide bathing/personal care but not move or transfer the patient • Discuss necessity with family, explain (caregiver's) refusal to lift • Report needs to social worker or case manager

Employees ordering lift equipment was not a common thing according to administrators. Employees were reported to order equipment never to sometimes (Figure 22)

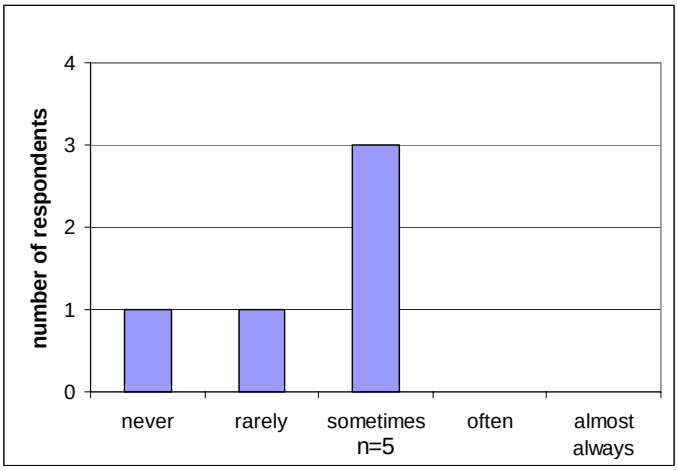


Figure 22. Frequency of Home Sector Employees Ordering Lift Equipment, Home Sector Administrative Survey (n=5)

Administrators' impressions of using mechanical lift equipment were mixed (Table 19). There was no consensus of whether using the equipment was easy or hard. Administrator responses were neutral on whether using the mechanical transfer equipment was valuable, useful or beneficial.

Table 19. Administrators' Perceptions on Using Mechanical Transfer Equipment, Home Sector (n=6)

USING MECHANICAL TRANSFER EQUIPMENT IN THE HOME IS…

description	extremely	very	somewhat	neither	somewhat	very	extremely	description
	NUMBER OF RESPONSES							
HARD	1	0	3	0	2	0	0	**EASY**
WORTHLESS	1	0	0	2	0	0	3	**VALUABLE**
USELESS	1	0	0	2	0	2	1	**USEFUL**
HARMFUL	0	0	0	3	0	2	1	**BENEFICIAL**
FOOLISH	1	0	0	2	0	2	1	**WISE**

Administrators were not entirely convinced that the use of mechanical lifts would reduce the chance of employee injury (Table 20). All employers believed to some degree, that their use required assist from others.

Table 20. Perceived Likely Effect of Using Mechanical Transfer Equipment by Employee Respondents (n=6)

USING MECHANICAL TRANSFER EQUIPMENT WILL…	very unlikely	unlikely	somewhat unlikely	somewhat likely	likely	very likely
	NUMBER OF RESPONSES					
Take more time	0	0	0	3	0	3
Be uncomfortable for patients/clients	0	1	3	2	0	0
Decrease the chance of employee injury	0	0	1	2	0	3
Require help from others	0	0	0	5	0	1

Training

Only one combined home health/home care agency indicated it has a staff development coordinator. However, all six agencies indicate that they provide training to direct care staff on how to reduce the risk of musculoskeletal injuries due to patient/client handling activities. Additionally, all the agencies provide patient handling training once per year. Four of six respondents reported that the training requires demonstrated competencies. One home care agency also does training within 120 days of hire. Another home health/home care agency's policy is that home health aides complete a skills demonstration as part of the hiring process.

Policies and Procedures

Only one of the six administrators stated that they had a written safety and health policy for the prevention of musculoskeletal injuries although one home health/home care agency has a policy that the "location" manager is responsible for implementing ongoing in-services of back safety training program. None of the agencies had a no-lift policy. Most administrators believe it would not be reasonable or would be difficult to institute a "no-lift" policy in home sector services. It would need to address the uniqueness of home environments and the quandary regarding patients/clients not able to be independent without transfer equipment yet not qualifying for getting mechanical lifts (insurance issue). Also, the patients/clients whom they serve are not all independent in transfers/mobility. One home health/home care administrator indicated that they are expected to provide assistance by their contracts and referral sources.

For the most part, skilled staff (nurses or therapists) determine the transfer or mobility status of the patients/clients. In the case of one home care service provider, this information is provided to staff by a DSHS Home & Community Services social worker or a county case manager.

Successes in Implementing a No-Lift Environment

- not providing tub baths without tub benches
- first home health aide visit must be made in conjunction with a nurse or therapist
- home health aides attend weekly team conferences regarding patients and are encouraged to bring up risk issues
- when appropriate equipment and/or conditions are not met, supervisors are empowered to place limitations on care provision

Obstacles and Challenges to Reducing Patient/Client-Handling Related Injuries

The biggest perceived obstacles/challenges to reducing injuries related to patient/client handling included:

- "Unique physical environment in homes"
- "Lack of patient/family compliance with recommendations"
- "Requirements for reimbursement of durable medical equipment (DME)"
- "Declining strength and ability of patients/clients due to aging, MS [multiple sclerosis], ALS [amyotrophic lateral sclerosis], etc.
- "Staff not always taking ownership for assessing and predicting risk"
- "Staff not always taking the time to use proper body mechanics"
- "Staff not always assessing the patient's/client's status before each transfer or lift"
- "Staff not always asserting themselves by refusing to perform unsafe lifts"

Barriers to Using Equipment in a No-Lift Environment

Perceived roadblocks for patients/clients getting needed equipment:

1. Financial
   - "Not affordable for patient/client to purchase"
   - "Not covered by insurance"
2. Physical Plant
   - "Home not set up for using equipment"
3. Equipment
   - "Delivery time of equipment not workable"
4. Staff
   - "Responsible person not able to get equipment if equipment is not delivered"
5. Policies
   - "Not feasible due to current regulations and insurance reimbursement"

The person responsible for purchasing or leasing equipment for employees is generally a manager or supervisor, sometimes consulting with physical therapists. None of the administrators were aware of any portable lift devices that employees could take from house to house. It would also be problematic as an infection control issue.

3. Employee Survey Results

Twelve home-visiting employees completed surveys. Hospice care and adult home care employees were considered facility based for this project, although most hospice care delivered in this state is home-based. Facility based employees at home health and home care agencies were not included in responses regarding home visits. Table 21 describes the work experience of the employees surveyed.

Table 21. Work Experience of Employee Respondents, Home Sector Survey

Job Title	Number Surveyed	Years of Experience
Home health aide/ NAC/ home maintenance aide	7	(5) had 10-15 yrs (2) had 2 or less yrs
Registered nurse Licensed practical nurse	1 2	4.5 yrs 10 yrs and 2 yrs
Physical therapist	1	5 yrs

Typical caseloads

The majority of patients/clients were non-weight bearing (requiring total assistance and bed repositioning), Figure 23.

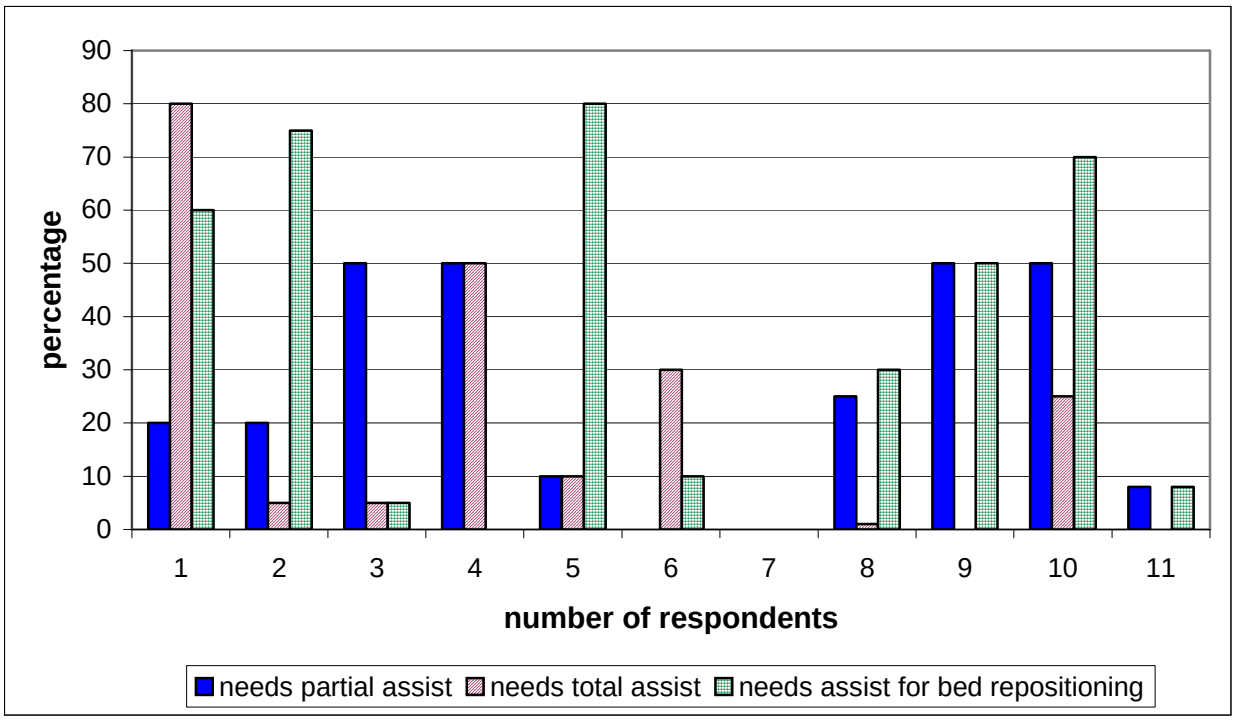


Figure 23. Types and Percentage of Caseload Requiring Physical Assistance (n=11)

Typically caregivers see their patients/clients 2-3 times per week, although there are variations of once per week, or even 5 times per week (Figure 24).

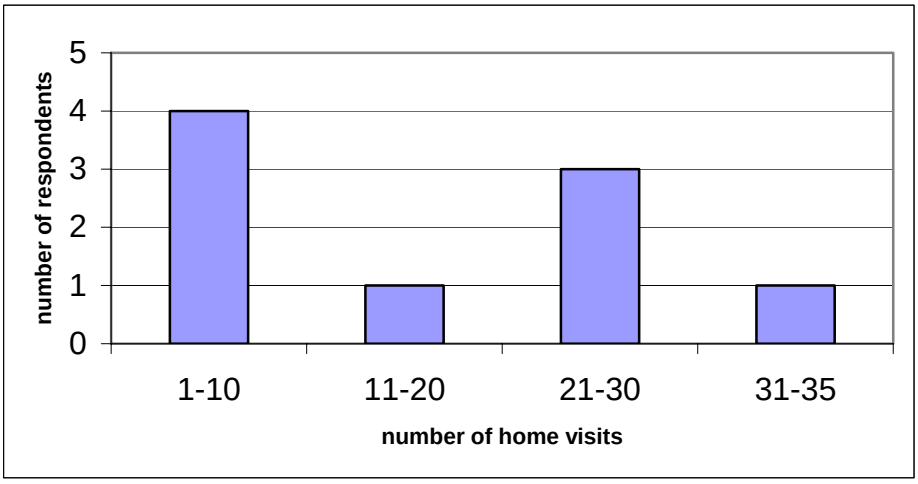


Figure 24. Typical Number of Home Visits per Week per Employee (n=9)

Job Activities

Perceived hardest tasks related to patient/client care:

- lifting
- bathing and associated awkward bending over tubs or beds (bed bath)
- repositioning patient/client on the bed
- assisting patient/client with toileting
- transfers (including to/from tub)
- stooping
- bending over bed while changing catheter
- kneeling on floor
- dressing changes
- putting TED's support hose on patients/clients
- carrying equipment/supplies (includes bag, scale, etc. and carrying them up/down stairs)
- rolling a "rigid" patient/client in bed
- standing for long periods of time
- sitting for long periods of time
- driving (back)
- phone use (neck)
- stress dealing with some family members of patient/client

Caregivers responded quite differently from their employers in regards to the physical consequences of performing the most difficult job activities. Caregivers believed they were unlikely (or even very unlikely) to incur long-term illness or serious injuries as a result of performing their work. Most of them also did not believe they would need to see a doctor or be off from work for a few days (Figure 25). When asked if they had been injured while moving a patient/client, four of ten respondents said yes while one respondent reported being injured moving a patient but not on the job (she was injured while caring for a parent).

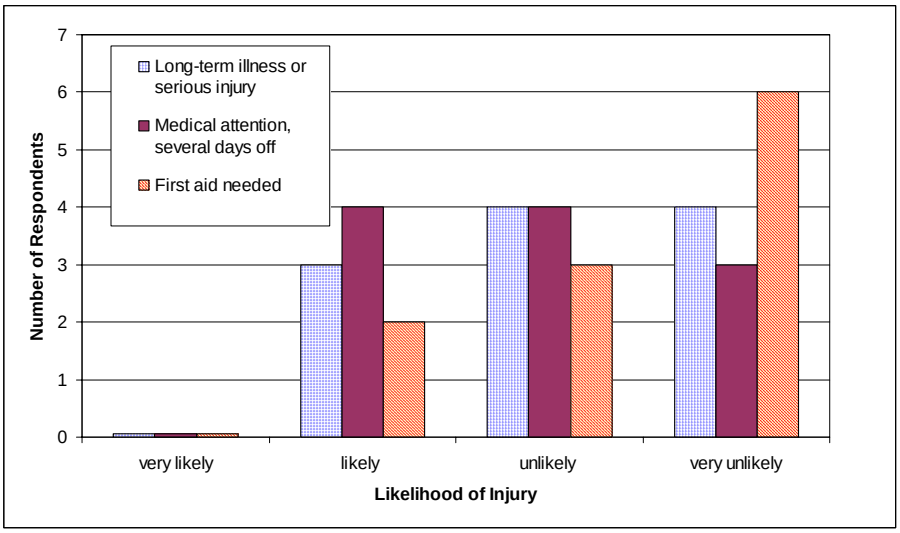


Figure 25. Employees' Perceptions of the Likelihood of Injury as a Result of the Most Physically Demanding Tasks, Home Sector (n=11)

Things home-visiting employees believe would make their job easier are:

- "Better accessible showers"
- "A helper"
- "More hand rails"
- "More equipment available to lower income patients/clients"
- "Walk-in bathing facilities"
- "More mechanical lift devices in homes when indicated, including powered lifts"
- "Higher beds"
- "Manual lifts that get people out of chairs"
- "Luggage carts"
- "Pillow for knees"
- "No lifting"
- "Assistance from others"
- "Good transfer mechanics"

Facility-based employees indicated the following would make their job easier:

- "Gait belts in every room"
- "Showers in every room"
- "More lift equipment and ample lift equipment to service each wing"
- "Slide boards"

Employees were asked, "What do you do if you need help with a patient/client to transfer or reposition?

- 9 of 11 responded they would ask for help if someone was available (mostly from a family member or co-worker (if facility based), or an call emergency number)
- 2 responded: find correct equipment (one worked in a facility)
- 1 responded, modify technique
- for one worker's caseload, the patients did not need physical assist

Equipment

Similar to administrators, employees reported that gait belts were provided to them to help with patient/client handling. It was also mentioned that in the hospice facility, powered total lifts and beds were available. Employees overwhelmingly thought it was very likely that the patient/client would already have the transfer equipment in the home, if it was needed (Figure 26). Caregivers may or may not directly attempt to acquire recommended equipment (Table 22), but do use a variety of methods.

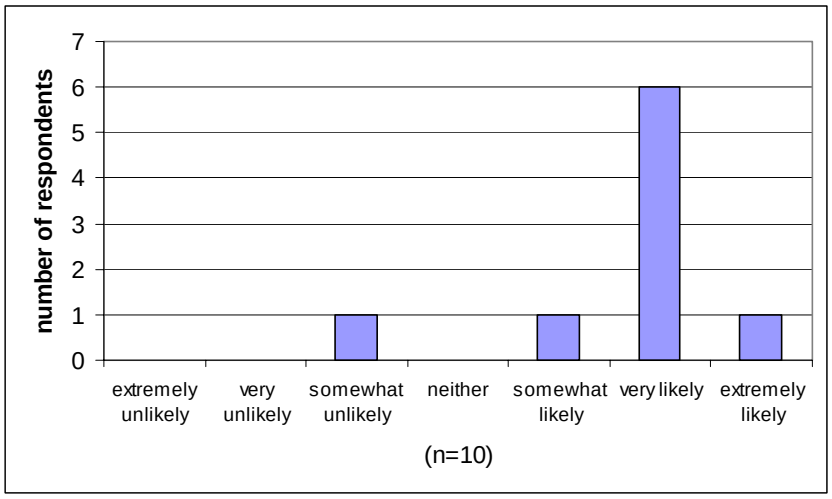


Figure 26. Likelihood That Patient/Clients Already Has Transfer Equipment at Home, Employee Home Sector Survey (n=10)

Table 22. Employee Actions Taken to Obtain Recommended Equipment, Not Covered by Insurance

What is done when recommended equipment is not affordable to patient/client, not covered by insurance, or not wanted in the home:
• Social worker coordinates with community services. Home health can't use donated equipment • Make referral to OT or PT • I recommend they call The Donor Closet 206-718-0426 (HELPING HANDS) • Talk with family or supervisor • Donor closet sells cheap, used equipment • Ask Bridge ministries equipment department, or my church has equipment to loan • Call nurse or DME. Talk to nurse about options • Often our nurse manager will find a way to provide the equipment if they can't afford it. We haven't had any refusals of equipment by my clients but if they refused it would be up to the nurse manager to decide if the client were safe without the equipment

Unlike the administrators, employees reported that they almost never order lift equipment (Figure 27). Generally it is the nurses and therapist who order the equipment. Most of the employee respondents to this survey were non-professional staff. This coincides with the actions described by employees to obtain equipment when needed (Table 23).

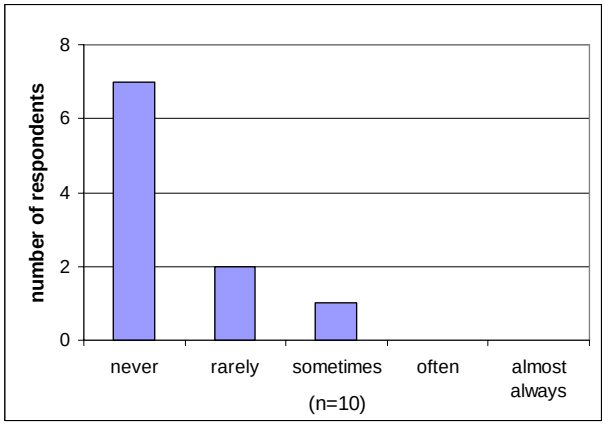


Figure 27. Frequency of Home Sector Employees' Ordering Lift Equipment, Home Sector Employee Survey (n=10)

Overall, employees favor using mechanical lift devices with their patients and believe they are valuable, useful, beneficial, and wise to use (Table 23). Some believe they may be somewhat hard to use. The spread of responses from employers were not as favorable in terms of their usefulness, value, benefit, and wisdom.

Table 23. Employees' Perceptions on Using Mechanical Transfer Equipment, Home Sector (n=9)

USING MECHANICAL TRANSFER EQUIPMENT IN THE HOME IS…

description	extremely	very	somewhat	neither	somewhat	very	extremely	description
	NUMBER OF RESPONSES							
HARD	0	0	3	0	1	3	2	**EASY**
WORTHLESS	0	0	0	0	1	4	4	**VALUABLE**
USELESS	0	0	0	0	1	4	4	**USEFUL**
HARMFUL	0	0	0	0	1	4	4	**BENEFICIAL**
FOOLISH	0	0	0	0	1	4	4	**WISE**

About half of the employees believe it will take more time to use mechanical lift devices (compared to manual transfers). Most employees believe the patient/client will be comfortable, using it will decrease the likelihood of getting injured, and they would be able to use the equipment without assist from others (Table 24).

Table 24. Perceived Likely Effect of Using Mechanical Transfer Equipment by Employee Respondents (n=6)

USING MECHANICAL TRANSFER EQUIPMENT WILL…

	very unlikely	unlikely	somewhat unlikely	somewhat likely	likely	very likely
	NUMBER OF RESPONSES					
Take more time	0	4	0	2	3	1
Be uncomfortable for patients/clients	1	4	3	1	1	0
Decrease the chance of employee injury	0	0	0	1	2	7
Require help from others	3	3	2	0	2	0

Training

Administrator respondents reported that patient handling training was provided once per year. Overall, employee responses agreed. Nine of eleven respondents reported that they had received patient handling training within the last year. One respondent reported that the last training had occurred two years ago. Another respondent reported training given at hiring and with periodic in-services. Despite reporting patient handling training in the past year, demonstration of transfer/repositioning skills as part of the training exercise was varied greatly. When asked when the last demonstration of transfer/repositioning skills was, the eleven employees responded as follows:

- 3 responded within 2005
- 2 responded within 2004
- 2 responded between 6 and 10 years
- 1 responded "not recently"
- 2 responded "unknown"
- 1 responded "never

4. Observations from Visits in Different Homes

Homes are very unique in style, size, and layout. Unlike hospitals or nursing homes, homes are not usually built with disability issues in mind. The floor plans and space around furniture varies from home to home. Some of the homes visited for this project included quite accessible sites that had ample room for wheelchair use. Two of homes had ramps to the front doors, and a few had modified bathrooms with roll-in showers. Some homes visited had manual hydraulic lifts and one had a ceiling lift. Mostly, individuals living in these homes had been disabled for many years. These home modifications are not likely to be representative of the full range of homes that home sector workers encounter, especially for those clients/patients who are newly homebound.

One home was built with the disabled client's needs in mind including double-wide doorways. This client was disabled prior to the family purchasing the house. Over time, her strength and abilities decreased. Eventually the bathroom was completely remodeled to include a roll in shower. She had lots of special equipment in the home including: a manual hydraulic lift device, a shower wheelchair, an electric wheelchair, a hospital bed, an over-the-bed hospital tables, and many hand-held reachers. Only the hospital bed, wheelchair, and Hoyer™ lift were covered by her VA benefits. The bathroom modification costs were completely out-of-pocket expenses.

Caregivers provided varying levels of physical assist to their patients/clients. The range observed during the visits ranged from a lot of assistance (perceived as maximal assist by the observer) to barely any (perceived as only needing supervision or cues). A typical bath visit for a more able bodied person who could walk consisted of multiple sit-stand maneuvers during the course of a single visit due to the need to don/remove clothing, get into the tub, stand to wash as well as dry peri area, and stand up or down from a chair or the toilet. The worker often assumed awkward postures while assisting patients/clients while showering them in the tub. It was much easier for worker and patient/client when homes were equipped with roll-in or walk-in style showers. When individuals needed more physical assist for mobility, bath visits seemed to be quite demanding and fatiguing for the worker.

One caregiver, lifted her patient (patient did not assist) 4-5 times during the course of the bath visit. The lifts were from: chair to wheelchair, wheelchair to shower chair, shower chair to wheelchair, and wheelchair to bed. The caregiver was not aware that there was a manual hydraulic lift device in the home available for use.

Many of the homes visited had small bathrooms that would not accommodate a total lift device (manual or battery powered) but did accommodate walkers, albeit with some degree of difficulty. Sometimes it required quite a bit of maneuvering and sequencing to be able to open or close the door while assisting the patient/client. It was common to see grab bars installed on the bathroom wall and in the tub area, tub/shower seats, and raised toilet seats in the homes. Bathroom rugs, even with rubber backing still presented as potential trip hazards due to the uneven surfaces, especially when there were multiple rugs.

Common job tasks for caregivers (in home and institutions)

- Assist with transfers
- Assist with bed repositioning
- Assist with bathing/dressing/toileting

5. Equipment for homebound residents

[Relevant resources and equipment websites are available from SHARP, upon request]

Over the last ten years there has been a lot of research and attention advocating the use of mechanical lifts and sit-stand devices in hospitals and nursing homes. Their use and availability in these settings is becoming more prevalent. This is not the case for home sector services. The range of handling equipment used in homes is far less than what is available in hospitals or nursing homes. More than likely it comes down to insurance not covering these types of items, the items being too costly to purchase, or these types of devices not being available on a rental basis. [See section on **Lifting equipment, costs, and insurance coverage** for more discussion on this issue.]

Caregivers and administrators surveyed reported a desire for equipment that was simple to use and effective. New devices or equipment that works well in the home environment as described by respondents included:

- Powered lifts rather than manual hydraulic lifts
- Stair lifts
- Sliding sheets
- Pull up straps for getting up in bed
- Sit-stand devices

Patients who are seen by home health/hospice professionals are usually assessed for mobility status and equipment needs. Physical therapists, occupational therapists, and nurses may recommend different types of equipment so that the patient can be function safely in the home. These professionals have more clear knowledge of the patient's specific needs because they assess the patient in his/her own home. If *durable medical equipment* (DME) is ordered for home use, these caregivers are the ones who usually arrange for it. The same types of health professionals from inpatient hospitals may recommend these items before the patient goes home as part of discharge planning.

Doctors might also make their own equipment recommendations as a result of a recent doctor's appointment or may make referral for a home health/hospice therapist to evaluate the need. If an individual is not already connected to the healthcare system, he/she is less likely to be aware of equipment options.

A doctor of physical medicine, Heikki Uustal, MD, suggests that it is not likely for internists (or primary physicians) to keep up with the ins and outs of prescribing DME on their own. They should instead rely on other professionals to determine what DME a patient needs. ((Shaw 2005))

Common items recommended for home use	
Walker	Tub rail or grab bars
Cane	Tub stool/chair/bench
Crutches	Portable commode
Wheelchair	Raised toilet seat
Bathroom safety rail or grab bar	Gait belt
Hospital bed	Sliding board or related devices

New equipment continues to enter the market. Appendix 17 lists patient handling equipment that would be applicable in the home environment. If the healthcare professional is not abreast of the latest equipment available, he/she is likely to keep suggesting the same familiar equipment. This holds true for therapists, nurses, as well as doctors. The traditional "hoyer" lift may be one of these old faithful items that people continue to order despite the availability of more suitable new devices.

It would be wise to assign at least one healthcare worker per facility/agency to stay abreast of lift equipment on an annual basis. Good resources for doing this include vendor booths at healthcare conferences and periodic review of websites such as the Safe Patient Handling and Movement Technology Resource Guide (see: http://www.patientsafetycenter.com/TechResGuide/TechResourceGuide.htm). Disseminating this information to other staff members on a scheduled basis is also recommended via in-services, safety committee meetings, safety meetings, etc.

The usefulness of some of these so called "luxury" items 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. For example, a sit-stand assist device enables a person who can bear some weight, to stand and transfer or to stand and have their clothing adjusted for toileting without undue physical risk to the caregiver. (Without the device the caregiver lifts and supports the person once in standing or is often put in precarious positions while trying to adjust clothing.)

Most sit-stand (also called stand assist) devices are battery powered. The general cost ranges from $3000 - $3700. A related manual device for less impaired individuals who can mostly stand up or can pull themselves up to stand, is less expensive but still is not covered by insurance. These manual sit-stand devices are more maneuverable, especially in tight spaces like home

bathrooms and allow caregivers to assist with clothing adjustment without simultaneously trying to keep the person's balance.

In British Columbia, there has been an effort to develop and get an affordable ceiling lift out on the market for under $2000 CDN (approximately $1675 US). It is a simpler device than current commercial models that are battery operated. It is manually operated and uses a drive chain pulley mechanism with a portable ceiling track. Thus far it has been tested as a prototype with home health aides and in patients' homes on a limited basis. (Heacock; Paris-Seeley; Tokuno; Frederking; Keane; Mattie; Kanigan, and Watzke 2004) To date, the developers of this product are in the patent process and are working with potential partners to make it commercially available.

Recognizing that the cost of home services and equipment that allows individuals to stay at home compared to the cost of nursing home care is far less expensive, it behooves insurers to broaden their vision and allow coverage of such items. Some private insurers are beginning to accept such claims although it is rare. Overall the industry practice appears to be very slow to change.

6. Overview of the Obstacles to Implementing a No-lift Policy for Home Sector Workers

Workers are exposed to similar risks like those encountered by nursing assistants (NACs) in a nursing home or other direct care workers in a hospital environment because they perform some common job tasks. However, home sector workers have more obstacles and barriers to contend with due to working in highly variable non-institutional settings. (Galinsky; Waters, and Malit 2001)

<u>Obstacles and barriers related to the home as the work environment</u>

a. Physical Surroundings

- Homes are private residences of which employers and outsiders have little, if any control.
- Patients/clients/families often want their homes to still "look like homes" rather than like an institution.
- Homes are rarely designed to be accessible for physically challenged people. Frequently the physical layout is limiting so that there is not enough room for additional equipment like a wheelchair or a mechanical lift device. The layout of the home may not permit the caregiver to be in the good position to assist the patient/client with transfers (especially to the toilet or tub/shower). The size or location of furniture, doors, or walls may make it difficult to maneuver around the room.

b. Staff

- Home sector workers most often work alone. They do not have ready access to someone else who can assist with patient/client handling. At times home health/hospice workers may coordinate to jointly see a patient but this is not very frequent.

c. Equipment

- Handling equipment obstacles:
  - No handling equipment available
  - Non-adjustable beds
  - May not be room for handling equipment
  - May not be wanted by the patient/client or family
  - May not be affordable especially if not covered by insurance
- Cumbersome and not practical for home sector worker to take into the home and remove it on each visit. Since the patient/client would still need and benefit from the device when the home sector worker is not present, it is more practical for the device to be owned or leased by the patient/client. If equipment were to be regularly transported from house to house, it also would be very problematic to sanitize equipment between visits.
- The demand for the equipment is far greater than the duration of the home visit. Home sector workers are not the only people helping with patient/client handling activities. Family members are likely to perform some of these tasks and are exposed to the same lifting/repositioning hazards. Home sector workers generally are in the home for a few hours during the week, whereas the patient/client still has mobility and transfer needs during the rest of the week.]

Lifting equipment, costs, and insurance coverage:

Lift devices are occasionally requested for home use. Historically, the only type that is widely available for home use is the hydraulic manual patient lift or crank lift (commonly referred to as "Hoyer™" lift). Medicare will only cover this type of device, and only under specific circumstances. A hydraulic patient lift with sling or seat is covered if it is medically necessary and if the transfer between bed and a chair, wheelchair or commode requires the assistance of more than one person; and the patient would be confined to a bed without the use of a lift. (See www.medicare.gov website)

Most other insurers follow suit and use the same Medicare guidelines. The following items are generally excluded from coverage for purchase as well as on a rental basis for home use: battery powered mechanical lift devices such as total lifts and sit-stand devices, and ceiling lifts. The commonly stated rationale is that they are not medically necessary and are considered to be luxury or convenience items. (Facilities may be able to rent some of these items.)

C. PRE-HOSPITAL MEDICAL CARE (Emergency Medical Service/Ambulance)

1. Job Activities

Lifting Tasks

A number of interviewees worked as both Emergency Medical Technicians (EMTs)/Paramedics and Firefighters, so they have lifting tasks related to fighting fires as well as to pre-hospital medical care. The following were tasks that were commonly reported to be particularly physically demanding:

- Lifting and advancing a charged fire hose, especially moving up stairs
- Lifting and carrying firefighting equipment, protective gear
- Ventilating a roof (especially steep pitch) using chainsaws, ladders, etc.
- Lifting and carrying medical kits and equipment (e.g., 35-pound cardiac monitor)
- Lifting and moving patients, especially –
  - 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
  - Transferring patient from bed to gurney in field
  - Transferring patient from gurney to bed/stretcher at hospital

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.

Calls to Nursing Homes

A few EMTs/Paramedics mentioned having to respond to calls from nursing homes to lift residents who had fallen. They felt that these were unnecessary lifts and a service that they would prefer to stop providing. However, one fire chief believes that his crews are being called out to do a medical evaluation as well as a lift, and that it is part of the service that should be provided to taxpayers, which includes nursing homes. The chief also stated that these lifts are a relatively small percentage of all lifts (about 500/year out of 19,500 EMS calls/year).

2. Facilities

EMS and ambulance crews have no control over the facilities where they pick up patients, which can be nursing homes, private homes, public spaces, outdoors, or motor vehicles. Transport units also have no control over emergency room facilities where they transfer patients to hospital care. They do, however, have control over their rigs, which are essentially a mobile facility for them. The following are some recommendations to consider for EMS and transport units:

- When purchasing new vehicles, look for models that allow equipment to be placed in a convenient location for lifting, preferably between knee and shoulder height with no

obstructions to lifting close to the body. If possible, modify existing vehicles to place equipment in this location.

- A number of ambulance companies have reported developing 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.

3. Equipment

[Relevant resources and equipment websites are available from SHARP, upon request]

The following pieces of equipment are commonly available to help lift and move patients:

- Gurneys/stretchers
- Backboards
- Tarps with handles (large for bariatric patients; "soft seat" for lifting from seated position in tight spaces)
- "Clams" or 2-piece stretchers that are easier to get under patients
- Slide boards and other simple lateral transfer devices

In addition, larger municipal fire departments mentioned the following:

- Stair chairs, some with treads to reduce the effort and control the rate of descent when going downstairs
- Rescue baskets
- Hook and hoist on ladder trucks

Also mentioned were gurneys with built in lift assist devices, which are relatively new and not widely used. One reason may be that they are heavier than standard gurneys, which adds to the effort to use them in all other conditions. Also available is a descent control system for taking gurneys down flights of stairs, which has treads similar to the stair chairs, but can be used when patients have to be moved while lying down.

A couple of interviewees expressed a desire for some sort of lifting device to assist them in the field, especially to help lift patients out of awkward locations. Mobile lifting devices commonly used in hospitals and nursing homes are not appropriate for EMS use, due to their weight, the space that they take up, and the design of their wheels. Portable lifting devices are available for home care and other situations where a mobile lift is needed, but again storage space on the rigs is an issue, and the time required to set these units up may make them infeasible in an emergent situation. These types of lifts certainly would have limited use.

Devices (essentially a multi-layer air mattress and portable air supply) may be useful for lifting patients from the floor in the field.

In addition to lifting patients, crews must also lift and carry medical kits and devices, such as defibrillators. EMS personnel who are also firefighters must carry fire hoses, axes, chainsaws, protective gear, 'jaws of life', and other equipment as well. The following are some strategies in use for reducing the risk of injury from this other type of lifting:

- Locate equipment in a good location for lifting, as discussed in the Facilities section,

- When replacing equipment, look for lighter, more compact models.
- Catalog medical kits to ensure that only necessary types and amounts of supplies are carried in order to keep weight down.
- Use more streamlined, briefcase-style cases for medical kits rather than bulky 'tackle boxes' that are difficult to lift and carry close to the body.

Most of the equipment mentioned here can be found by searching under the Emergency Services industry category in the Ergonomics Ideas Bank: www.ergoideas.lni.wa.gov.

4. Training

All interviewees reported receiving some form of training on lifting techniques and the use of equipment during certification training. One large municipal fire department reported on-going training arranged by the city's risk management department. Smaller municipal fire departments and volunteer departments may be less likely to receive on-going training. More than one interviewee stated that the quality of the lifting techniques training varied greatly by presenter. These interviewees also questioned the usefulness of lifting techniques training given the reality of the lifting situations they face in the field. Interviewees did feel that training on proper conditioning did have value, though, and one even suggested that volunteer EMTs be provided with gym memberships. In addition to current training, interviewees thought that additional training should include:

- Periodic reminders to work safely, not become part of the emergency (i.e., get injured themselves)
- Training on new techniques (best practices) and updates on available equipment
- Employee involvement in coming up with new equipment (e.g., lifting tarp) and new techniques (e.g., ladder raises, rescues)

5. Policies

Most of the interviewees report some written lifting policies at their departments, although management seemed more aware of the actual content of the policies than staff did. Policies cover issues such as use of lifting techniques and equipment. Crews are for the most part allowed to determine how many people are required to perform a lift in the field (when extra staff is available to help out). Additional policies that may be useful include:

- Having more people at initial scene to help with lifting (4 crew members per call instead of 2 or 3)
- Responding to calls at nursing homes and similar facilities only when medical evaluation is required

6. Barriers to Making Improvements

Interviewees for the most part were quick to point out barriers to making improvements. These include:

- Increasing weight of patients
- Lack of control over conditions where lifting occurs (tight spaces, sometimes outdoors)
- Weight of some equipment makes it non-transportable

- Uneven ground, stairs, other conditions prevent use of most wheeled equipment
- Limited space on vehicles for equipment that will be used infrequently
- Time required to provide training on many different pieces of equipment
- Time critical nature of emergency calls
- Focus is on patient well-being rather than care giver well-being
- Cost-benefit of equipment hard to demonstrate
- Funding when levy votes do not pass

All interviewees reported that the crew members and administration were open to change if it meant protecting the health and safety of the staff.

CONCLUSIONS

1. 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

Among the small numbers of employers and employees contacted in all health care sectors (hospitals, nursing homes, home care, home health, hospital, hospice and pre-medical services),all recognized the risk of injury from manual patient handling and all have been attempting to reduce that risk through the introduction of equipment that is appropriate for their industry. However, the presence of the equipment alone is not enough to eliminate the risk. The equipment must be used appropriately. Direct patient care staff in the health care industry must balance several, often conflicting, factors including the needs of the patients, the empathy the staff feels for the patient, the demands of the job and the need for the staff to protect themselves from injury.

2. 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

All hospitals and nursing homes visited recognized the importance of no-lift programs for reducing staff and patient injuries and were working to so implement such programs. It was found that among the hospitals and nursing homes, the definition of a no-lift environment varied. While all facilities had implemented components to a no-lift environment to some degree, some did not consider themselves a no-lift facility because some manual lifting still occurred. Although these facilities had established definitive repercussions for failure to follow patient care plans when the patient was at risk, those facilities with patient handling policies rarely administered any repercussions when the patient handling plans were not followed.

3. 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 programs depend on management and employee stability (decreased turnover).

All the hospitals and nursing homes visited have some sort of patient handling equipment. The research and development has been more extensive in hospitals and nursing homes and accordingly, they have more choices. This, however, does not negate the importance or priority for solutions in the home sector and pre-hospital medical services. In nursing homes, equipment is almost exclusively mechanical floor lifts and gait belts, while in hospitals, there was greater variety (slide sheets, gait belts, total lifts, sit-stand devices, and ceiling lifts). Very little patient handling equipment was seen in the home sector. The equipment seen was privately owned. Aides did not carry handling equipment with them for two reasons, 1) nothing portable was readily available, and 2) the sharing of equipment among patient might create an infection control issue.

4. Home and pre-hospital medical services sectors present some unique but not insurmountable challenges to minimizing or eliminating lifting and manual handling

Patient handling equipment is slowly being introduced to pre-hospital medical services, mainly as a result of the increasing size of patients. However, widespread introduction may prove difficult because of the restrictive nature of sources of funding. In addition, state and federal regulations, local policies and jurisdictions must all be considered when developing patient handling solutions for pre-hospital medical services.

5. 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 mechanical patient handling equipment

6. Employer and employee associations have worked together effectively in other jurisdictions to implement "no-lift" type programs, often with government support.

7. One of the barriers to implementing no-lift programs in Washington State has been the lack of funding to purchase mechanical lifting equipment. Other countries are providing funding for the purchase of equipment.

8. 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

REFERENCES

1. Aiken, L. H.; Havens, D. S., and Sloane, D. M. The Magnet Nursing Services Recognition Program: A comparison of two groups of magnet hospitals. American Journal of Nursing. 2000 Mar; 100(3):26-36.

2. Assembly Committee on Labor and Employment. Hospitals: Lift Teams [Web Page]. 2005 Jul 6; Accessed 2005 Nov 23. Available at: http://info.sen.ca.gov/pub/bill/sen/sb_0351-0400/sb_363_cfa_20050705_124944_asm_comm.html.

3. Baumann, A.; Brien-Pallas, L. O.; Armstrong-Stassen, M.; Blythe, J.; Bourbonnais, R.; Cameron, S.; Doran, D. I.; Kerr, M.; Hall, L. M.; Zina, M. V.; Butt, M., and Ryan, L. Commitment and Care: The benefits of a healthy workplace for nurses, their patients and the system. Canadian Health Services Research Resources; 2001.

4. Collins, J. W.; Wolf, L.; Bell, J., and Evanoff, B. An evaluation of a "best practices" musculoskeletal injury prevention program in nursing homes. Inj Prev. 2004 Aug; 10(4):206-11.

5. Davis, P. M.; Badii, M., and Yassi, A. Preventing disability from occupational musculoskeletal injuries in an urban, acute and tertiary care hospital: results from a prevention and early active return-to-work safely program. J Occup Environ Med. 2004 Dec; 46(12):1253-62.

6. Edlich, R. F.; Winters, K. L.; Hudson, M. A.; Britt, L. D., and Long, W. B. Prevention of disabling back injuries in nurses by the use of mechanical patient lift systems. J Long Term Eff Med Implants. 2004; 14(6):521-33.

7. Engst, C.; Chhokar, R.; Miller, A.; Tate, R., and Yassi, A. Effectiveness of overhead lifting devices in reducing the risk of injury to care staff in extended care facilities. Ergonomics. 2005 Feb; 48(2):187-99.

8. Galinsky, T.; Waters, T., and Malit, B. Overexertion injuries in home health care workers and the need for ergonomics. Home Health Care Serv Q. 2001; 20(3):57-73.

9. Garg, A. Long-term effectiveness of "zero-lift program" in seven nursing homes and one hospital. Wisconsin; 1999 Aug 16; U60/CCU512089-02.

10. Havens, D. S. Comparing nursing infrastructure and outcomes: ANCC magnet and nonmagnet CNEs reports. Nursing Economics. 2001; 19(6):258-266.

11. Heacock, H.; Paris-Seeley, N.; Tokuno, C.; Frederking, S.; Keane, B.; Mattie, J.;

Kanigan, R., and Watzke, J. Development and evaluation of an affordable lift device to reduce musculo-skeletal injuries among home support workers. Appl Ergon. 2004 Jul; 35(4):393-9.

12. Hignett, S. Intervention strategies to reduce musculoskeletal injuries associated with handling patients: a systematic review. Occup Environ Med. 2003 Sep; 60(9):E6.

13. Marras, W. S.; Davis, K. G.; Kirking, B. C., and Bertsche, P. K. A comprehensive analysis of low-back disorder risk and spinal loading during the transferring and repositioning of patients using different techniques. Ergonomics. 1999; 42(7):904-926.

14. Nelson, A. and Baptiste, A. S. Evidence-based practices for safe patient handling and movement. Online J Issues Nurs. 2004; 9(3):118-141.

15. Nelson, A.; Matz, M.; Chen, F.; Siddharthan, K.; Lloyd, J., and Fragala, G. Development and evaluation of a multifaceted ergonomics program to prevent injuries associated with patient handling tasks. Elsevier.

16. Nelson, A.; Owen, B.; Lloyd, J. D.; Fragala, G.; Matz, M. W.; Amato, M.; Bowers, J.; Moss-Cureton, S.; Ramsey, G., and Lentz, K. Safe patient handling and movement. Am J Nurs. 2003 Mar; 103(3):32-43; quiz 44.

17. Nursing world. 2005 legislation: Safe patient movement and handling [Web Page]. 2005; Accessed 2005 Nov 8. Available at: rc.

18. Occupational Safety and Health Service (OSHS). Back in Care: Preventing musculoskeletal injuries in staff in hospitals and residential care facilities. Wellington, New Zealand: Occupational Safety and Health Service, Department of Labour ; 1993 Jun.

19. OHSAH. The ceiling lift project at st. joseph's general hospital: follow-up evaluation august 2002 [Web Page]. Available at: rc.

20. Owen, B. D. and Fragala, G. Reducing perceived physical stress while transferring residents. AAOHN Journal. 1999; 47(7):316-323.

21. Owen, B. D.; Keene, K., and Olson, S. An ergonomic approach to reducing back/shoulder stress in hospital nursing personnel: a five year follow up. Int J Nurs Stud. 2002 Mar; 39(3):295-302.

22. Passfield, J.; Marshall, E., and Adams, R. "No lift" patient handling policy implementation and staff injury rates in a public hospital. Journal of Occupational Health Safety -- Aust NZ. 2003; 19(1):73-85.

23. Patient Safety Center of Inquiry. Patient Care Ergonomics Resource Guide: Safe Patient Handling and Movement. Veterans Health Administration and Department of Defense; 2001 Oct.

24. Royal College of Nursing. Introducing a safer patient handling policy.

25. Shaw, G. Prescribing DME? Tips to help keep patients safe. ACP Observer. 2005.

26. Taylor, C. Okanagan similkameen health region ceiling track lift strategy report; 2001 Jul 21.

27. Trossman, S. Protecting the next generation: ANA, nursing partners work to educate students on safe patient handling techniques. Am Nurse. 2004 Sep-2004 Oct 31; 36(5):1, 7-9.

28. Villeneuve, J. The ceiling lift: An efficient way to prevent injuries to nursing staff. Journal of Healthcare Safety. 1998; 19-23.

29. Weiss, J.; Perham, D., and Forrest, J. Build your own bariatric unit: Southwest Ambulance creates a better way to transport obese patients. JEMS. 2003 Dec; 28(12):36-45.

30. Yassi, A.; Cooper, J. E.; Tate, R. B.; Gerlach, S.; Muir, M.; Trottier, J., and Massey, K. A randomized controlled trial to prevent patient lift and transfer injuries of health care workers. Spine. 2001 Aug 15; 26(16):1739-46.

APPENDIX ONE:

WASHINGTON STATE HOUSE OF REPRESENTATIVE COMMERCE AND LABOR COMMITTEE REQUEST

STATE REPRESENTATIVE
29th DISTRICT
STEVE CONWAY

State of
Washington
House of
Representatives

COMMERCE & LABOR
CHAIR
FINANCE
HEALTH CARE

Date April 6, 2005

Mr. Gary Weeks
Director
Washington State
Department of Labor and Industries
PO Box 44000
Olympia, WA 98504-4000

Dear Director Weeks:

During this legislative session the Labor and Commerce Committee considered House Bill 1672, which would have required Washington State hospitals to establish "no manual lift" programs. The committee heard compelling testimony about musculoskeletal injuries to patients and nurses due to lifting patients, which underscores the importance of alternatives to manual lifting of patients. It also heard testimony from hospitals about the initially high costs of purchasing lifting equipment and the infrastructure needed to develop and maintain these systems. Most hospitals and nursing homes are dealing with low reimbursement levels, and higher and higher levels of bad debt that make the resources necessary to fund the type of program contemplated by the bill difficult to achieve. However, many are moving to voluntarily implement patient lifting programs at a steady pace. Rather than move the bill out of the committee, members determined that further study of lifting programs and costs is necessary.

Committee members would like the Department of Labor and Industries to convene a task force over the interim to examine current lifting programs and policies, the challenges they face, how they work, and how they are funded. We also hope the task force will examine how to best utilize the current research in this area, and the culture of employee/employer safety necessary to achieve and sustain a successful program. We ask that the task force not just consider these things with respect to hospitals. The task force should also consider other industries and settings where musculoskeletal injuries in patient lifting and handling, for a variety of tasks, is a risk inherent in the work. Examples include nursing homes, home health, and emergency medical services as well as rural, urban settings, and private and governmental facilities.

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The committee recommends task force members be appointed through the professional associations/unions representing the affected industries and workers. We request the task force be equal in its representation of industries and workers and that it be chaired by the department. Finally, we respectfully request a report back from the department by December 15, 2005.

Best regards,

Representative Steve Conway, Chair, House Labor and Commerce Committee

Cc: House Labor and Commerce Members
Robert Malooly, Assistant Director for Insurance Services
Michael Wood, Acting WISHA Director
Judy Schurke, Deputy

STATE OF WASHINGTON

DEPARTMENT OF LABOR AND INDUSTRIES

PO Box 44000 • Olympia, Washington 98504-4000

April 21, 2005

The Honorable Steve Conway, Chair
Commerce & Labor Committee
Washington State House of Representatives
P.O. Box 40600
Olympia, WA 98504-0600

Dear Chairman Conway:

I am writing in response to your request that the Department of Labor and Industries (L&I) study the issues related to safe patient handling in health care environments raised by House Bill 1672, considered by the committee during the 2005 legislative session. You asked L&I to develop a task force that would report back to the committee with our findings by December 15, 2005.

As Michael Wood, Acting Assistant Director for WISHA Services, acknowledged to your committee during discussions of the bill, L&I is aware of safe patient handling practices that can and have been used to enhance the safety of both patients and staff. I have asked Mr. Wood to work with Barbara Silverstein, L&I's research director, in developing an action plan that will enable us to fulfill your request. They will be in contact with you and your staff over the coming weeks about the next steps.

If you have any questions, please feel free to contact me at (360) 902-4214.

Sincerely,

Judy Schurke

Judy Schurke
Acting Director

cc: Gary Weeks, Director
Robert Malooly, Assistant Director
For Insurance Services
Barbara Silverstein, Research Director
Christine Swanson, Legislative Liaison

APPENDIX TWO:

HEALTHCARE COST BENEFIT ANALYSIS EXAMPLIES

Cost-Benefit Examples in Healthcare

Source	Workplace	Interventions	Costs	Measurements	Savings
http://www.doli.state.mn.us/fourthmeetingminutes.html	Ag-Gwah-Ching Nursing Home	Program, employee involvement, management responsibilities, lift equipment, chairs, workstations, training, safety teams		Lost workday injury rate 11.3 down to 4.5, 60% decrease in workers' compensation costs	
Provider – American Health Care Association, February 2001, A Look At No-Manual-Lift Programs, Betty Z. Bogue; as reported on: http://www.doli.state.mn.us/secondtmeetingminutes.html and http://w3.rn.com/news_features.asp?articleID=10820 and http://www.getalift.com/about.htm	106 (103) nursing facilities	Zero-lift programs with mechanical lift assists		97% reduction in injuries Bogue reports that a study she conducted involving 103 nursing homes following her protocol showed the homes maintained a 90 percent reduction in lift-transfer injuries and had a 49 percent reduction in overall workers' compensation costs. Also, lift/transfer only: 93% reduction in costs, 95% reduction in injuries, 39% cost reduction, 19% injury reduction overall.	
http://w3.rn.com/news_features.asp?articleID=10820 according to a 1996 report in *Community Nurse*	United Kingdom healthcare	They implemented a "no-lift" policy in 1993. Nurses in the United Kingdom use sling lifts, stand-assist lifts, lateral transfer equipment and other devices to lift patients.		84 percent reduction in lost work hours and a 98 percent drop in absenteeism due to lifting and handling	
http://www.doli.state.mn.us/fifthmeetingminutes.html	Care Providers, nursing homes	Low lift program, with mechanical lift assists (18)		14% reduction in time loss claims, 33% reduction in all claims over 3 years, 73% reduction in time loss costs, 51% reduction in all claims costs	

GAO report, 1997. *WORKER PROTECTION: Private Sector Ergonomics Programs Yield Positive Results.* GAO/HEHS-97-163 GAO, United States. General Accounting Office. Washington, D.C.	SOCHS Nursing homes 775 workers	Program, hired safety coordinator, staff and employee involvement, ergo task force, purchasing and design, carts, patient lifts, workstations, chairs, laundry bins, smaller laundry bags, mats, training, policies, medical management	$60,000 for 14 lifts	Average cost per WMSD $2,500 up to $3,000 (-20%) in 3 years (due to one time loss claim). Incidence rate 14.7 down to 12.3 (16%). Lost workdays down 35 per 100 FTEs, restricted workdays up 45 per 100 FTEs. Improved efficiency, morale, reduced turnover and absenteeism.	Workers' comp costs $111,000 down to $72,000 in 3 years (35%).
Ohio BWC grant program https://www.ohiobwc.com/employer/forms/publications/nlbwc/SafeHygPubs1.asp?txtCID=19018488	27 Extended care facilities	Floor lifts Average risk factor score for patient lifting tasks 70 down to 30.5 (56%). (Over avg. 298 day follow up)		The CTD incidence rate 21.3 per 200,000 hours down to 11.9 per 200,000 hours (44%). ROI for the floor lifts is 2.5 months; Days lost 127.2 per 200,000 hours down to 79.0 per 200,000 hours (38%); Restricted days 96.6 per 200,000 hours down to 87.0 per 200,000 hours (10%); Turnover 98.5 per 200,000 hours down to 74.1 per 200,000 hours (25%);	
Ohio BWC grant program https://www.ohiobwc.com/employer/forms/publications/nlbwc/SafeHygPubs1.asp?txtCID=19018488	11 Extended care facilities	Ceiling lifts Average risk factor score 36 down to 21 (42%). Over avg. 143 days follow up)		Incidence rate and lost days incidence rate increased. Restricted days 81.3 per 200,000 hours down to 77.2 per 200,000 hours (5%); turnover rate 159.7 per 200,000 hours down to 155.2 per 200,000 hours (3%);	
Ohio BWC grant program	1 extended care facility	Geri-chairs The average risk factor score for patient lifting tasks was 56 before using		Restricted days due to CTDs 7.2 per 200,000 hours down to 0 per 200,000 hours (100%);	

		the geri-chairs and was seven after the chairs were in use — an 87-percent improvement.		Payback 1.4 months; Days lost 14.4 per 200,000 hours worked to 0 (100%); Restricted days 35.5 per 200,000 hours down to 0 (100%); turnover 168 per 200,000 hours down to 68.9 (59%).	
Ohio BWC grant program	8 Extended care facilities	Hi-Lo beds The average risk factor score for patient lifting tasks was 31.6 before using the hi-lo beds and was 21.4 after the beds were in use — a 10-percent improvement.		CTD incidence rate 21.1 CTDs per 200,000 hours down to 15.0 (29%); Payback period 8.5 months; Days lost 72.7 per 200,000 hours down to 20.1(72%); Restricted days due to CTDs 53.1 per 200,000 hours down to 36.7 (31%); turnover 71.9 per 200,000 hours down to 65.2 (9%);	
Ohio BWC grant program	1 extended care facility	Bathing systems The average risk factor score for patient lifting tasks was 31.6 before using the hi-lo beds and was 21.4 after the beds were in use — a 10-percent improvement.		CTD incidence rate 39.3 CTDs per 200,000 hours down to 0 (100%); Payback 0.7 months; Days lost due to CTDs remained at zero; Restricted days due to CTDs 368 per 200,000 hours down to 0 (100%); turnover 185 per 200,000 hours down to 0 (100%);	
Ohio BWC grant program	69 healthcare facilities	Various equipment		Incidence rate 18.5 per 200,000 hours down to 11.6 per 200,000 hours (37%); days lost 95.8 per 200,000 hours down to 58.8 per 200,000 hours (39%); restricted days 79.5 per 200,000 hours down to 58.8	

				per 200,000 hours (26%); turnover 96.8 per 200,000 hours down to 80.9 per 200,000 hours (16%). 299 day period.	
Ohio BWC grant program	Champaign County Nursing Home	32 electric beds. Arjo patient lift	$59,000.	16 CTDs per 200,000 hours down to 0 CTDs at 7 months after the intervention. Lost days rate 289 per 200,000 hours down to 0 lost days at seven months after.	
Ohio BWC grant program	Calvary Manor nursing home	Zero lift system; by purchasing 20 Ultra Care electric beds, an Apollo Bath System and the two lift-n-weigh assists. Patient handling risk factor scores decreased from 35 to 28.	$13,053.	In 18 months, CTD incidence rates fell from 22 to 14 incidents per 200,000 hours worked. Restricted-days rate decreased from 121 to 44 days per 200,000 hours worked. Turnover rate went from 55 percent to 32 percent.	
Ohio BWC grant program	Wood County Nursing Home	Six lifts to assist in the transfer of residents.	$25,347.30 .	CTD rate fell from 29.6 CTDs per 200,000 hours down to 15.5 CTDs per 200,000 hours one year after the intervention. Turnover decreased from 58 percent before the intervention to 35 percent after.	
http://www.osha.gov/SLTC/ergonomics/citizens.html	Citizens Memorial Healthcare	All jobs evaluated, training, employee involvement, workstation adjustments, lift assist equipment		66 percent decrease in injuries	
Garg, A. and Owen, B. D. Reducing back stress to nursing personnel: an ergonomic intervention in a nursing home. Ergonomics.	Nursing 57 employees			LBP down 43% over 3.5 yrs	

1992; 35(11):1353-1375.					
Garg, 1997. Reducing safety and ergonomic hazards with a zero-lift program. Long Term Care. 1997; Nov./Dec.():26-27.	Hospital			Lost workdays down 79%, back injuries down 78%, costs down 90%.	
Garg, A. Long-term effectiveness of "zero-lift program" in seven nursing homes and one hospital. Wisconsin; 1999 Aug 16; U60/CCU512089-02.	Hospital, 754 employees			Lost workdays down 62%, back injuries down 32%, costs down 55%.	
Ergonomic Success Stories, OSHA, November 1996. From Hospital Employee health (1995). Back program cuts comp costs, injuries, lost days. July 1995, 92-93	Hospital	Redesigned work process: Mechanical lifting equipment, slide boards, and patient transfer belts.		149 back injuries down to 85 (43%); nearly 1,000 lost days down to 426 lost days (57%); lost-time injuries reduced to 49 (down 35%); more than 4,000 restricted-duty days down to 1,851 (54%).	The average workers' comp cost per case was $2,207, for a total of $328,843 in 1993, down to $187,595 (43%) in 1994.
Ergonomic Success Stories, OSHA, November 1996. From Garg, A. & Owen, B. (Univ. of Wisconsin), Reducing back stress to nursing personnel: An ergonomic intervention in a nursing home.	Nursing home	Redesigned work process: Selection of patient transferring devices designed to produce less physical stress. Devices include walking belts and hoists. Mean compressive force on the L5/S1 disc 4751N down to 1964N, mean hand force to		Incidence rate for back injuries was 83 per 200,000 work hours down to 47 per 200,000 work hours.	

		make a transfer 321N down to 122N, strength requirements 41% female pop, capable up to 83%.			
Ergonomic Success Stories, OSHA, November 1996. From Brigham, C.J. (1994). Ergonomic intervention. The 4th National Symposium and Trade exhibition on Health Care Safety and the Environment. February 13-16, 1994, Florida.	Hospital, perioperative setting	Redesigned work process: At least 4 people to transfer patient. Longer roller boards.		25% reduction in back injuries during the 18 months after intervention.	
Ergonomic Success Stories, OSHA, November 1996. From Charney, W., Zimmerman, K., & Walara, E. (1991). The lifting team: A design method to reduce lost time injury in nursing. *AAOHN Journal*, 39(5)231-234.	Hospital	Redesigned work process: Lifting teams for 95% of all patient transfers. The lifting teams, incorporates the latest body mechanics; uses transfer belts; mechanical lifting devices; and incorporates work/lift coordination. A team of two per shift had no problem with the average of 30 lifts per day.		Back injuries $229,500 per year, average cost of $9,000 per injury. Baseline rate of injury prior was 32 cases per 420 nurses in a two-year period. Back injuries among health care workers reduced 94% first year; 100% second year.	$135,000 per year saved in compensation costs; $70,000 a year increase in nursing productivity.
Ergonomic Success Stories, OSHA, November 1996. From Gauf, M. (1995) Giving health-care workers a helping, mechanical hand. In M. Gauf (Ed.), *Ergonomics That Work* (pp.73-77). Haverford, Penn.: CTD News.	Healthcare – hospital nursing	Ergonomics program in nursing and laundry. Redesigned work process: Worker-assisting devices to move patients from bed to bed, and from sitting position.		94 injuries, 7,716 lost-time hrs on nursing units in 1988-1989. Incidence of back injuries in nursing wards 1988-1993 fell 39%; lost-time hrs dropped 83%.	$500,000 in workers' compensation

Ergonomic Success Stories, OSHA, November 1996. From Gauf, M. (1995). Giving health-care workers a helping, mechanical hand. In M. Gauf (Ed.), *Ergonomics That Work* (pp73-77). Haverford, PA: CTD News	Healthcare laundry	Redesigned work process: Regularly scheduled maintenance program for equipment.		Injuries 1993-1994 decreased from 55 to 16 lost-time hrs reduced from 1481 to 284.	in 1993, and $553,000 in 1994, total of $1.8 mil in 5 yrs.
Ergonomic Success Stories, OSHA, November 1996. From Brevillier Nursing Home Correspondence.	Nursing home	Redesigned work process: Lifting devices. Heavy lifting reduced by 80-85%.		Claims related to sprains and strains 12 down to 1 over three years. Total cost of claims $19,000 down to $118.00.	
Ergonomic Success Stories, OSHA, November 1996. From Don Estabrook, Safety Mgr, d'Youville Pavilion, Maine.	Nursing home	Medi-Man and Medi-Maid lifts		Workers' compensation reduced 50%; Improved morale, low turnover in CNA staff	
Ergonomic Success Stories, OSHA, November 1996. From Wyatt, R., C. Booth, R. Poirier, 1995, Reducing Employee Back Injuries in Skilled Nursing Facilities, Proceedings of the Institute of Industrial Engineers, 1995.	Nursing home	Suitable number of lifts, lifts that fit the patient		Incidence rates reduced approx 50%; greater job satisfaction	Benefit/cost were 3.04, 3.47, 3.25, 2.10 and 0.5
Ergonomic Success Stories, OSHA, November 1996. From Brigham, C.J. (1994). Ergonomic intervention. The 4th National Symposium and Trade exhibition on Health Care Safety and the Environment. February 13-16,	Hospital	Redesigned work process: AIR PAL (Patient Air Lift) devices.	Total cost of the AIR PAL devices was under $22,000.	Indemnity cases dropped from 5.7 to 2.5 in the two years. The indemnity case cost $273,380 down to $73,380.	$200,000 over 2 years

1994, Florida.					
http://www.eorm.com/ezine/pp7/ergo_healthcare.asp	Healthcare North Carolina	"No lift" policy		One year 60 cases down to seven; costs of $350,000 down to $8,200.	
http://www.eorm.com/ezine/pp7/ergo_healthcare.asp	Long-term care facility	Prevention program using mechanical lifting devices.		Back injuries were reduced 74% over a three-year period	
http://www.eorm.com/ezine/pp7/ergo_healthcare.asp	Ledgewood Manor, a skilled/intermediate care facility in Windham, Maine	Installation of fixed ceiling lifts		Six months Workers' Compensation costs reduced by 60%. At 20 months, zero (0) back injuries related to patient transfers reported and Workers' Comp costs decreased 97%.	
OSHA Final Ergonomics Standard, November 2000	Nursing Home	No single person lift policy, mechanical lift equipment.		Lost workdays reduced 80%	
Nyran, P. I. Cost effectiveness of core-group training. Advances in Industrial Ergonomics and Safety III. 1991	Hospital			MSDs down 66%, costs down 75%.	
Laflin, K. and Aja, D. Health care concerns related to lifting: an inside look at intervention strategies. The American Journal of Occupational Therapy. 1995; 49(1):63-72.	Hospital				
Bernacki, E. J.; Guidera, J.	Hospitals,			UECTDs down 80% over 7	

A.; Schaefer, J. A.; Lavin, R. A., and Tsai, S. P. An ergonomics programs designed to reduce the incidence of upper extremity work related musculoskeletal disorders. Journal of Occupational and Environmental Medicine. 1999; 41(12):1032-1041.	18,000 employees			years.	
Evanoff, B. A.; Bohr, P. C., and Wolf, L. D. Effects of a participatory ergonomics team among hospital orderlies. American Journal of Industrial Medicine. 1999; 35():358- 365.	Hospital, 105 employees			MSDs down 50%, lost workdays down 83%, costs down 41% over two years.	
McGrail Jr., M. P.; Tsai, S. P., and Bernacki, E. J. A comprehensive initiative to manage the incidence and cost of occupational injury and illness. Report of a outcomes analysis . Journal of Occupational and Environmental Medicine. 1995; 37(11):1263-1268.	Hospital, 13,895 employees			MSDs down 18% over 2 years.	
Rosald, et al, and Spiegel et al, (2002) AAOHN 50(3), pgs. 120-127 and 128…	Hospital	Implemented ceiling lifts in patient rooms, did not reach into bathrooms, not usable for repositioning. Estimated	$344,323	58% decline in lift/transfer injuries, cost benefit 1:6, internal rate of return 17.9%. Costs of injury	$872,372 projected over 12 years.

		benefits over 12-year period.		reduced 69% ($65,997 down to $20,731 per 100,000 hours). Payback 1.3 years (all factoring in indirect costs of 2x direct costs).	

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APPENDIX THREE:

HEALTHCARE LEGISLATIVE BILLS FROM OTHER STATES

Texas Bill

S.B. No. 1525

AN ACT

relating to safe patient handling and movement practices of nurses in hospitals and nursing homes.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Subtitle B, Title 4, Health and Safety Code, is amended by adding Chapter 256 to read as follows:

CHAPTER 256. SAFE PATIENT HANDLING AND MOVEMENT PRACTICES

Sec. 256.001. DEFINITIONS. In this chapter:

(1) "Hospital" means a general or special hospital, as defined by Section 241.003, a private mental hospital licensed under Chapter 577, or another hospital that is maintained or operated by the state.

(2) "Nursing home" means an institution licensed under Chapter 242.

Sec. 256.002. REQUIRED SAFE PATIENT HANDLING AND MOVEMENT POLICY. (a) The governing body of a hospital or the quality assurance committee of a nursing home shall adopt and ensure implementation of a policy to identify, assess, and develop strategies to control risk of injury to patients and nurses associated with the lifting, transferring, repositioning, or movement of a patient.

(b) The policy shall establish a process that, at a minimum, includes:

(1) analysis of the risk of injury to both patients and

nurses posed by the patient handling needs of the patient populations served by the hospital or nursing home and the physical environment in which patient handling and movement occurs;

(2) education of nurses in the identification, assessment, and control of risks of injury to patients and nurses during patient handling;

(3) evaluation of alternative ways to reduce risks associated with patient handling, including evaluation of equipment and the environment;

(4) restriction, to the extent feasible with existing equipment and aids, of manual patient handling or movement of all or most of a patient's weight to emergency, life-threatening, or otherwise exceptional circumstances;

(5) collaboration with and annual report to the nurse staffing committee;

(6) procedures for nurses to refuse to perform or be involved in patient handling or movement that the nurse believes in good faith will expose a patient or a nurse to an unacceptable risk of injury;

(7) submission of an annual report to the governing body or the quality assurance committee on activities related to the identification, assessment, and development of strategies to control risk of injury to patients and nurses associated with the lifting, transferring, repositioning, or movement of a patient; and

(8) in developing architectural plans for constructing or remodeling a hospital or nursing home or a unit of a hospital or nursing home in which patient handling and movement

occurs, consideration of the feasibility of incorporating patient handling equipment or the physical space and construction design needed to incorporate that equipment at a later date.

SECTION 2. This Act takes effect January 1, 2006.

President of the Senate

Speaker of the House

I hereby certify that S.B. No. 1525 passed the Senate on April 20, 2005, by the following vote: Yeas 30, Nays 1; and that the Senate concurred in House amendment on May 27, 2005, by the following vote: Yeas 29, Nays 0.

Secretary of the Senate

I hereby certify that S.B. No. 1525 passed the House, with amendment, on May 25, 2005, by a non-record vote.

Chief Clerk of the House

Approved:

Date

Governor

California Bill

SENATE BILL No. 363

Introduced by Senator Perata

February 17, 2005

An act to add Section 6403.5 to the Labor Code, relating to health facilities.

LEGISLATIVE COUNSEL'S DIGEST

SB 363, as introduced, Perata. Hospitals: lift teams.

Existing law regulates the operation of health facilities, including hospitals.

Existing law, the California Occupational Safety and Health Act of 1973, establishes certain safety and other responsibilities of employers and employees, including, but not limited to, the requirement that no employer shall fail or neglect to provide safety devices or safeguards reasonably necessary to render the employment safe. Willful or repeated violations are a crime.

This bill would require each general acute care hospital, except rural general acute hospitals, to establish a health care worker back injury prevention plan. This bill would require each hospital to conduct a needs assessment that utilizes a lifting and transferring process identifying patients needing lift teams, lifting devices, and lifting equipment.

This bill would require hospitals to implement a "zero lift policy" for all shifts, to utilize lift teams, lifting devices, and lifting equipment, and to train health care workers on the appropriate use of lifting devices and equipment. This bill would require lift team members to receive specialized training and to demonstrate proficiency in safe techniques for lifting or transferring patients and while using lifting or transferring devices and equipment.

This bill would provide that a health care worker who refuses to lift a patient would not be disciplined, unless the worker had been trained

on appropriate patient and equipment lifting procedures and has appropriate, functional lifting devices and equipment available to perform the requested lift. By changing the definition of a crime, this bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

The people of the State of California do enact as follows:

SECTION 1. Section 6403.5 is added to the Labor Code, to read:

6403.5. (a) As part of their injury and illness prevention programs required by this chapter, all general acute care hospitals as defined in subdivision (a) of Section 1250 of the Health and Safety Code shall adopt a health care worker back injury prevention plan. As part of their plan, each hospital shall conduct a needs assessment in relation to patient lifts. As part of the needs assessment, each hospital subject to this section shall develop a lifting and transferring process that identifies the patients that require the appropriate use of lift teams and lifting devices and equipment. For purposes of this section, a "lifting and transferring process" shall mean a system whereby patients are identified based on the potential risk of injury to the health care worker in the event the worker would need to lift or transfer that patient.

(b) Hospitals shall implement a "zero lift policy" for all shifts for patients identified pursuant to subdivision (a) as requiring lift teams and the use of lifting devices and equipment. Each general acute care hospital subject to this section shall, as appropriate and consistent with the needs assessment developed pursuant to subdivision (a), utilize lift teams and lifting devices and equipment. For purposes of this section, "zero lift policy" means replacing manual lifting and transferring of patients with powered patient transfer devices, lifting devices, or lift teams as

defined in subdivision (d), consistent with the needs assessment developed pursuant to subdivision (a). Each general acute care hospital subject to this section shall provide training to health care workers on the appropriate use of the lifting devices and equipment. Training for these health care workers shall include body mechanics and the use of lifting devices to safely handle patients.

(c) Lift team members shall be given specialized training and shall demonstrate proficiency in safe techniques for lifting or transferring patients and the appropriate use of lifting or transferring devices and equipment. Lift teams shall utilize lifting devices and equipment when assisting health care workers throughout the hospital to lift patients unless specifically contraindicated for the patient's condition or medical status.

(d) For purposes of this section, "lift team" means hospital employees specially trained to handle patient lifts and transfers. Nothing in this section precludes lift team members from performing other duties as assigned during their shift.

(e) A health care worker who refuses to lift a patient due to concerns about worker and patient safety and the lack of trained lift team personnel or equipment may not, based upon the refusal, be the subject of disciplinary action by the hospital or any of its managers or employees.

(f) Notwithstanding subdivision (e), the hospital, its managers or employees may discipline a health care worker who refuses to lift a patient if the health care worker has been trained on appropriate patient and equipment lifting procedures, and has appropriate, functional lifting devices and equipment available to perform the requested lift.

(g) This section shall not apply to hospitals licensed by the State Department of Health Services as rural general acute care hospitals as defined in subdivision (a) of Section 1250 of the Health and Safety Code.

(h) It is not the intent of this section to prescribe a particular process for acute care facilities subject to this section.

SEC. 2. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the

penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

O

PETITION -- HOUSE

CHIEF SPONSOR:

Representative Callahan of Sutton

To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled.

The undersigned legislators and/or citizens respectfully petition for the passage of the accompanying bill or resolve.

PETITIONERS: LEGISLATOR/CITIZEN
DISTRICT/FULL MAILING ADDRESS

Jennifer M. Callahan
18th Worcester District

The Commonwealth of Massachusetts

_____

IN THE YEAR TWO THOUSAND FIVE

AN ACT RELATING TO SAFE PATIENT HANDLING IN CERTAIN HEALTH FACILITIES.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

Chapter 111 of the General Laws is hereby amended by adding the following section:—

Section ____. (a) As used in this section, the following words, shall, unless the context clearly requires otherwise, have the following meanings:—

"Acute-care hospital", any hospital licensed pursuant to sections 51 and 52 of chapter 111 of the general laws, the teaching hospital of the university of massachusetts medical school, which contains a majority of medical-surgical, pediatric, obstetric, and maternity beds, as defined by the department.

“Department”, the department of public health.

"Health care facility”, any acute care hospital as defined in section (a), any licensed private, public or state-owned and operated general acute care rehabilitation hospital or unit, any licensed private, public or state-owned and operated general acute care psychiatric hospital or unit, any nursing home as defined in section 71 of chapter 111 of the general laws, and any long term care facility as defined in section 71 of chapter 111 of the general laws.

"Hospital", any institution, however named, whether conducted for charity or for profit, which is advertised, announced, established or maintained for the purpose of caring for persons admitted thereto for diagnosis, medical, surgical or restorative treatment which is rendered within said institution.

"Lift team", health care facility employees specially trained to handle patient lifts and transfers. Lift team members are not precluded from performing other duties as assigned during their shift.

"Lifting and transferring process", a system whereby patients and situations are identified based on the potential risk of injury to the patient and/or health care worker in the event the worker would need to lift, transfer or move that patient.

“Long term care facility”, any institution, however named, whether conducted for charity or profit, which is advertised, announced or maintained for the express or implied purpose of caring for four or more persons admitted thereto for the purpose of nursing or convalescent care, as defined in section 71 of chapter 111 of the general laws.

“Needs assessment”, an evaluation of lift and transfer needs, resources and capabilities with recommendations on procedures to be followed and resources available to lift or transfer patients safely.

“Nursing home”, any institution, however named, whether conducted for charity or profit, which is advertised, announced or maintained for the express or implied purpose of caring for four or more persons admitted thereto for the purpose of nursing or convalescent care, as defined in section 71 of chapter 111 of the general laws.

“Patient", an individual who receives health services from an individual employed by a hospital, health care facility, or long term care facility.

"Resident", an individual who resides in a long term care facility licensed under section 71 of chapter 111 of the general laws.

"Safe patient handling policy”, the replacement of manual lifting and transferring of patients with powered patient transfer devices, lifting devices, or lift teams, consistent with the needs assessment.

(b) Each health care facility, as defined in paragraph (a), shall develop and implement a health care worker back injury prevention plan so that manual lifting of patients be minimized in all cases and eliminated when feasible. As part of their plan, each health care facility shall conduct a needs assessment in relation to patient lifts and transfers. As part of the needs assessment, each health care facility subject to this section shall develop a lifting and transferring process that identifies the patients and situations that require the appropriate use of lift teams and or lifting devices and equipment. The health care facility shall develop a process for systematically addressing ergonomics in their facilities and incorporate this process into an overall program to recognize occupational health and safety hazards and prevent injuries.

(c) All health care facilities as defined in subdivision (a) shall implement a "safe patient handling policy" for all shifts for patients and situations identified pursuant to subdivision (b) by requiring lift teams and or the use of lifting devices and equipment. Each health care facility subject to this section shall, as appropriate and consistent with the needs assessment developed pursuant to subdivision (c), utilize lift teams and lifting devices and equipment. Each health care facility subject to this section shall provide ongoing training to health care workers on the appropriate use of the lifting devices and equipment. Ongoing training for these health care workers shall include body mechanics and the use of lifting devices to safely handle patients.

(d) Health care workers and lift team members shall be given specialized training and shall demonstrate proficiency in safe techniques for lifting or transferring patients and the appropriate use of lifting or transferring devices and equipment. Lift teams shall utilize lifting devices and

equipment when assisting health care workers throughout the health care facility to lift patients unless specifically contra-indicated for a patient's condition or medical status.

(e) A health care worker who refuses to lift a patient due to concerns about worker and patient safety and the lack of trained lift team personnel or equipment may not, based upon the refusal, be the subject of disciplinary action by the hospital or any of its managers or employees.

Bill Text - S04929

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See Bill Summary

S T A T E O F N E W Y O R K

4929--A

2005-2006 Regular Sessions

I N S E N A T E

April 18, 2005

Introduced by Sens. MAZIARZ, GOLDEN, RATH, LEIBELL, MARCELLINO, MORAHAN, PADAVAN, SALAND, SEWARD, SPANO, TRUNZO, WRIGHT -- read twice and ordered printed, and when printed to be committed to the Committee on Health -- committee discharged, bill amended, ordered reprinted as amended and recommitted to said committee

AN ACT establishing a safe patient handling demonstration program and providing for the repeal of such provisions upon expiration thereof

THE PEOPLE OF THE STATE OF NEW YORK, REPRESENTED IN SENATE AND ASSEMBLY, DO ENACT AS FOLLOWS:

Section 1. (a) Legislative intent. The legislature hereby finds and declares that it is in the public interest to establish a two-year demonstration program in which participating, covered healthcare providers shall implement a safe patient handling program, and monitor, evaluate and report their findings.

The demonstration program shall serve to collect evidence-based data in New York state, reflecting incidence of employee and patient injuries resulting from patient handling and the use of manual and technology-based techniques. The findings shall be used to describe successful strategies for improving the health and safety of New York`s healthcare workforce and patients during patient handling.

(b) Definitions. For purposes of this act:

(1) the term "covered healthcare provider" means any general hospital, nursing home, or long-term care facility, or home health agency licensed by the state;

(2) the term "healthcare worker" means any individual (including any registered nurse) who is employed by, or under contract with, a covered healthcare facility;

(3) the term "manual patient handling" means patient handling using a healthcare worker`s body strength without the use of patient handling equipment or aids;

(4) the term "patient handling" means the lifting, transferring, repositioning, or moving of a patient; and

(5) the term "patient handling equipment and aids" means mechanical equipment and other technological aids or devices used in patient handling.

(c) Funding, applications; reporting. Any covered health care provider seeking to participate in the demonstration program shall:

(1) file an application in such manner and such time as the department of health specifies; and

(2) agree to report to the department of health the results of such findings, as well as such information as may be necessary to document the use of funds for this demonstration program by the organization.

(d) Establishment of safe patient handling programs by covered healthcare providers approved to participate in the demonstration program. (1) Each covered healthcare provider who is approved to participate in the demonstration program shall:

(A) establish a safe patient handling program, including the targeting of selected patient populations or areas of the organization, to reduce the risk of injury to both patients and healthcare workers;

(B) work to create an organizational culture and practice that strives to avoid manual patient handling, to the greatest extent practicable, as a part of the demonstration program;

(C) maintain a detailed written description of the demonstration program and its operational aspects; and

(D) provide a copy of such written description to the department of health and make such description available to the provider`s health and safety committee, healthcare workers of the provider are participating in the demonstration or to the designated representative of such workers.

(2) A covered health care provider approved to participate in the demonstration program shall include the following in its safe patient handling program:

(A) a risk identification and assessment plan that analyzes the risk of injury to both patients and healthcare workers posed by the patient`s handling needs and the physical environment in which the patient handling occurs; and identifies types of patients, patient handling activities and settings with respect to which there is a significant risk of injury to patients or healthcare workers during patient handling; and

(B) a risk exposure control plan that, to the extent consistent with patient safety and well-being, minimizes manual patient handling of all or most of a patient`s weight to emergency or life-threatening circumstances, prioritizes needs evaluates alternative ways for the provider to minimize the risks identified in the plan including, but not limited to, evaluation of the appropriateness and effectiveness of commercially available patient handling equipment and aids.

(3) A covered health care provider approved to participate in the demonstration program shall have a risk exposure control plan that shall identify engineering controls, such as changes in patient handling methods and procedures, patient handling equipment and aids and the physical environment in which patient handling occurs, that are most likely to minimize such risks. The risk exposure control plan shall, for any patient handling equipment and aids incorporated in the plan, specify how prompt access to, and availability of, such equipment and aids shall

be ensured and how and where such equipment and aids shall be maintained and stored.

(4) Every patient safe handling program conducted by a covered health care provider approved for participation in the demonstration program shall include a plan for training healthcare workers who perform, or are otherwise involved in, patient handling, in the identification, assessment, and control of risks of patient handling for both patients and such workers, as well as in the application of ergonomics and proper body mechanics. Such training shall be provided in a manner that is linguistically and educationally appropriate for such workers and takes into account worker and patient environment; conducted upon commencement of the safe patient handling program and periodically thereafter to include training for individuals beginning work after commencement of such program; and provided directly to such workers by individuals with appropriate training and experience in safe patient handling or if such training is provided primarily through written, audio, or video instruction, providing access to such individuals to respond to questions or otherwise supplement such instruction. Such training shall not be limited solely to video, audio written instruction and shall include actual demonstration and return demonstration.

(5) Every safe patient handling program conducted by a covered health care provider approved for participation in the demonstration program shall include a documentation and reporting plan that:

(A) ensures that the covered healthcare provider (i) maintains adequate documentation of each aspect of the development, implementation, and revision of the safe patient handling program and its components, and

(ii) makes such documentation available, upon request, to the department of health and to the participating provider`s health and safety or quality assurance committee, whichever is responsible for oversight of the participating provider`s safe patient handling program;

(B) requires the provider to: (i) inform healthcare workers of the mechanism for reporting injuries occurring during patient handling, and

(ii) record in a patient handling injury log, with respect to each injury occurring during patient handling, the date and time of the incident, the location of the incident, a description of the incident, the type of injury involved, whether the injury was to the patient or a healthcare worker, the type and brand of patient handing equipment or aids, if any, in use during the patient handling, and the last date training was provided to employees,

(iii) make such log available, upon request, to the department of health and the participating provider`s health and safety or quality assurance committee, whichever is responsible for oversight of the participating provider`s safe patient handling program; and

(iv) protect from disclosure individually identifiable health information in the log about any individual, whether a patient or a healthcare worker, who is injured during patient handling; and

(C) ensures that such provider complies with all applicable federal and state reporting requirements with respect to injuries occurring during patient handling.

(6) Every safe patient handling program shall include a process for evaluating the appropriateness and effectiveness of each of the plans required by this act based on actual experience with injuries during patient handling and revising such plans as necessary to reduce further the risk of injury during patient handling.

(e) The activities enumerated in subdivision (d) of this section shall

be undertaken pursuant to section 2805-j of the public health law by a covered health care provider approved to participate in the demon-

stration program and shall be deemed activities such program described in such section and any and all information created, analyzed, collected or otherwise attributable to such activities shall be subject to provisions of section 2805-m of the public health law and section 6527 of the education law.

(f) Participating provider oversight committee. (1) Each participating provider shall ensure that the health and safety or quality assurance committee which is responsible for oversight of the safe patient handling program shall advise the provider on all aspects of the development, implementation, and periodic revision of the provider`s safe patient handling demonstration program, including the evaluation of patient handling equipment and aids and the identification of appropriate engineering controls.

(2) For purposes of the safe patient handling demonstration program, each participating provider shall ensure that the health and safety or quality assurance committee which is responsible for oversight of the safe patient handling program shall include regular input throughout the demonstration program from healthcare workers who provide direct patient care to patients of the provider or are otherwise involved in patient handling of such patients and represent healthcare workers from a range of settings and patient handling risk exposure circumstances, with at least one-half of participating healthcare workers being direct care registered nurses.

(3) The participating provider health and safety or quality assurance committee which is responsible for oversight of the safe patient handling program shall include individuals with expertise and experience that is relevant to the operation of a safe patient handling program, such as risk management, healthcare management, purchasing, and occupational safety and health.

(4) The participating provider health and safety or quality assurance committee which is responsible for oversight of the safe patient handling program shall maintain records to document its deliberations, and other aspects of its involvement in the development, implementation, and periodic revision of such provider`s safe patient handling demonstration program.

S 2. Nothing herein shall be deemed to impair the ability of any health care provider not participating in the demonstration program established by this act from engaging in any act, purchasing any equipment or declining to do so as allowed by any applicable law, rule or regulation.

S 3. This act shall take effect immediately and shall expire and be deemed repealed 2 years after such date.

OHIO legislation that establishes a loan program for nursing homes implementing no manual lifting programs

(Amended House Bill Number 67)

AN ACT

To amend sections 121.08, 4121.12, 4121.121, 4121.37, 4123.511, 4167.02, 4167.06, 4167.07, 4167.08, 4167.09, 4167.10, 4167.11, 4167.12, 4167.14, 4167.15, 4167.16, 4167.17, 4167.19, and 4167.27, to enact section 4121.48, and to repeal section 4167.18 of the Revised Code to transfer the Public Employees Risk Reduction Program and the Occupational Safety and Health Act On-site Consultation Program from the Department of Commerce to the Bureau of Workers' Compensation, to make appropriations for the Bureau of Workers' Compensation for the biennium beginning July 1, 2005, and ending June 30, 2007, and to provide authorization and conditions for the operation of the Bureau's programs.

Be it enacted by the General Assembly of the State of Ohio:

Sec. 4121.48. (A) The bureau of workers' compensation shall operate a long-term care loan fund program. The administrator of workers' compensation may adopt rules, employ personnel, and do all things necessary for that purpose.

(B) The administrator shall use the long-term care loan fund program to make loans without interest to employers that are nursing homes for the purpose of allowing those employers to purchase, improve, install, or erect sit-to-stand floor lifts, ceiling lifts, other lifts, and fast electric beds, and to pay for the education and training of personnel, in order to implement a facility policy of no manual lifting of residents by employees.

The administrator, with the advice and consent of the workers' compensation oversight commission, may adopt rules establishing criteria for loan eligibility, maximum loan amounts, loan periods, default penalties, and any other terms the administrator considers necessary for a loan.

(C) There is hereby created in the state treasury the long-term care loan fund. The fund shall consist of money the administrator, with the advice and consent of the oversight

commission, requests the director of budget and management to transfer from the safety and hygiene fund created in section 4121.37 of the Revised Code. The fund shall be used solely for purposes identified in this section. All investment earnings of the fund shall be credited to the fund. All money the administrator receives for payment of a default penalty assessed or for repayment of any loan made pursuant to this section shall be credited to the safety and hygiene fund created under section 4121.37 of the Revised Code.

(D) As used in this section, "nursing home" has the same meaning as in section 3721.01 of the Revised Code.

APPENDIX FOUR:

WASHINGTON STATE WORKERS' COMPENSATIONS TABLES AND FIGURES

Table 1. Workers' Compensation State Fund Claims Data, 1994-2003: Nursing Homes, Risk Class 6108

		ALL COMPENSABLE CLAIMS					WMSD COMPENSABLE CLAIMS				
Year	Claims Hours	Number of Claims	Time Loss Days	Incurred Costs (dollars)	Claims Rate (claims/10,000 FTEs	Severity Rate (time loss/10,000 FTEs	Number of Claims	Time Loss Days	Incurred Costs (dollars)	Claims Rate (claims/10,000 FTEs	Severity Rate (time loss/10,000 FTEs
1994	17,952,668	1323		15,453,116	1,473.9		894		10,418,591	996.0	
1995	35,297,947	1188		11,460,050	673.1		798		7,901,033	452.2	
1996	34,663,224	1053		10,990,212	607.6		676		7,610,658	390.0	
1997	34,073,655	944	146,673	13,469,948	554.1	86,091.7	627	96,401	8,610,469	368.0	56,583.9
1998	32,583,065	841	113,657	11,657,279	516.2	69,764.5	558	74,368	7,353,611	342.5	45,648.3
1999	32,797,809	768	107,464	12,551,686	468.3	65,531.2	485	73,733	7,674,785	295.8	44,962.1
2000	33,521,858	751	107,043	12,424,009	448.1	63,864.6	478	72,701	7,908,492	285.2	43,375.3
2001	33,715,835	743	103,680	12,759,934	440.7	61,502.3	465	70,843	8,474,665	275.8	42,023.6
2002	33,865,849	703	89,956	11,723,414	415.2	53,124.9	465	64,345	8,220,538	274.6	37,999.9
2003	33,838,694	710	82,946	12,435,271	419.6	49,024.4	446	53,822	7,952,772	263.6	31,810.9

		BACK WMSD COMPENSABLE CLAIMS					SHOULDER WMSD COMPENSABLE CLAIMS				
Year	Claims Hours	Number of Claims	Time Loss Days	Incurred Costs (dollars)	Claims Rate (claims/10,000 FTEs	Severity Rate (time loss/10,000 FTEs	Number of Claims	Time Loss Days	Incurred Costs (dollars)	Claims Rate (claims/10,000 FTEs	Severity Rate (time loss/10,000 FTEs
1994	17,952,668	604		6,565,233	672.9		85		1,206,439	94.7	
1995	35,297,947	503		4,665,326	285.0		100		1,337,778	56.7	
1996	34,663,224	429		4,632,689	247.5		62		751,350	35.8	
1997	34,073,655	394	49,823	4,549,816	231.3	29,244.3	67	10,751	1,062,038	39.3	6,310.4
1998	32,583,065	342	43,841	4,104,736	209.9	26,910.3	60	9,280	867,243	36.8	5,696.2
1999	32,797,809	286	40,438	4,284,190	174.4	24,659.0	53	7,849	772,010	32.3	4,786.3
2000	33,521,858	283	42,319	4,550,512	168.8	25,248.6	50	7,153	1,006,595	29.8	4,267.7
2001	33,715,835	290	44,327	5,080,874	172.0	26,294.5	58	11,017	1,641,630	34.4	6,535.2
2002	33,865,849	278	35,738	4,862,941	164.2	21,105.6	65	9,633	1,156,426	38.4	5,688.9
2003	33,838,694	287	30,983	5,174,297	169.6	18,312.2	44	7,893	1,021,759	26.0	4,665.1

Table 2. Workers' Compensation Self-Insured Claims Data, 1994-2003: Nursing Homes, Risk Class 6108

Year	Claims Hours	ALL COMPENSABLE CLAIMS		COMPENSABLE WMSD CLAIMS		COMPENSABLE WMSD BACK CLAIMS		COMPENSABLE WMSD SHOULDER CLAIMS	
		Number of Claims	Claims Rate (claims/10,000 FTEs	Number of Claims	Claims Rate (claims/10,000 FTEs	Number of Claims	Claims Rate (claims/10,000 FTEs	Number of Claims	Claims Rate (claims/10,000 FTEs
1994	12,178,500	334	548.51	216	354.72	131	215.13	21	34.49
1995	12,544,574	282	449.60	165	263.06	102	162.62	16	25.51
1996	16,647,680	354	425.28	214	257.09	140	168.19	22	26.43
1997	23,277,538	317	272.37	190	163.25	131	112.55	14	12.03
1998	12,258,326	323	526.99	209	340.99	122	199.05	26	42.42
1999	9,358,496	232	495.81	154	329.11	100	213.71	15	32.06
2000	8,552,488	174	406.90	96	224.50	57	133.29	14	32.74
2001	8,251,275	178	431.45	112	271.47	67	162.40	17	41.21
2002	10,095,681	172	340.74	96	190.18	55	108.96	13	25.75
2003	8,215,458	129	314.04	65	158.24	40	97.38	7	17.04

Table 3. Workers' Compensation State Fund Claims Data, 1994-2003: Hospitals, Risk Class 6105

		ALL COMPENSABLE CLAIMS					WMSD COMPENSABLE CLAIMS				
Year	Claims Hours	Number of Claims	Time Loss Days	Incurred Costs (dollars)	Claims Rate (claims/10,000 FTEs	Severity Rate (time loss/10,000 FTEs	Number of Claims	Time Loss Days	Incurred Costs (dollars)	Claims Rate (claims/10,000 FTEs	Severity Rate (time loss/10,000 FTEs
1994	1,268,344	35		709,599	551.9		17		222,548	268.1	
1995	2,928,254	27		515,513	184.4		12		149,643	82.0	
1996	2,877,578	32		656,634	222.4		17		557,522	118.2	
1997	2,724,057	29	2,960	312,854	212.9	21,732.3	11	326	44,158	80.8	2,393.5
1998	2,705,202	36	6,482	760,522	266.2	47,922.5	20	3,574	472,694	147.9	26,423.2
1999	2,704,502	36	6,396	772,527	266.2	47,298.9	21	4,128	468,674	155.3	30,526.9
2000	2,587,839	39	6,643	759,198	301.4	51,340.1	21	2,319	229,018	162.3	17,922.3
2001	2,375,459	32	4,352	718,231	269.4	36,641.3	16	1,459	293,120	134.7	12,283.9
2002	2,567,880	34	6,345	930,017	264.8	49,418.2	20	3,821	586,907	155.8	29,760.0
2003	4,312,616	69	5,946	1,487,299	320.0	27,574.9	44	5,231	1,301,101	204.1	24,259.1

		BACK WMSD COMPENSABLE CLAIMS					SHOULDER WMSD COMPENSABLE CLAIMS				
Year	Claims Hours	Number of Claims	Time Loss Days	Incurred Costs (dollars)	Claims Rate (claims/10,000 FTEs	Severity Rate (time loss/10,000 FTEs	Number of Claims	Time Loss Days	Incurred Costs (dollars)	Claims Rate (claims/10,000 FTEs	Severity Rate (time loss/10,000 FTEs
1994	1,268,344	9		163,430	141.9		3		36,744	47.3	
1995	2,928,254	2		1,078	13.7		1		5,354	6.8	
1996	2,877,578	11		473,927	76.5		2		68,732	13.9	
1997	2,724,057	5	139	15,940	36.7	1,020.5	2	65	3,932	14.7	477.2
1998	2,705,202	11	1,577	219,948	81.3	11,659.0	3	208	16,349	22.2	1,537.8
1999	2,704,502	11	877	70,401	81.3	6,485.5	2	196	30,281	14.8	1,449.4
2000	2,587,839	13	1,953	181,374	100.5	15,093.7	3	135	27,160	23.2	1,043.3
2001	2,375,459	12	1,048	180,409	101.0	8,823.6	1	2	240	8.4	16.8
2002	2,567,880	8	373	19,161	62.3	2,905.1	3	1,725	281,563	23.4	13,435.2
2003	4,312,616	28	3,684	1,031,515	129.9	17,084.8	5	185	41,051	23.2	857.9

Table 4. Workers' Compensation Self-Insured Claims Data, 1994-2003: Hospitals, Risk Class 6105

Year	Claims Hours	ALL COMPENSABLE CLAIMS		COMPENSABLE WMSD CLAIMS		COMPENSABLE WMSD BACK CLAIMS		COMPENSABLE WMSD SHOULDER CLAIMS	
		Number of Claims	Claims Rate (claims/10,000 FTEs	Number of Claims	Claims Rate (claims/10,000 FTEs	Number of Claims	Claims Rate (claims/10,000 FTEs	Number of Claims	Claims Rate (claims/10,000 FTEs
1994	87,621,111	1,792	409.03	1069	244.01	656	149.74	122	27.85
1995	131,921,684	1805	273.65	1130	171.31	633	95.97	131	19.86
1996	96,294,476	1755	364.51	1053	218.70	604	125.45	105	21.81
1997	90,664,114	1797	396.41	1118	246.62	599	132.14	148	32.65
1998	106,751,088	1912	358.22	1138	213.21	605	113.35	150	28.10
1999	112,683,933	1944	345.04	1153	204.64	605	107.38	153	27.16
2000	113,096,002	2078	367.48	1254	221.76	653	115.48	158	27.94
2001	116,891,517	2040	349.04	1200	205.32	593	101.46	173	29.60
2002	115,802,268	2118	365.80	1178	203.45	585	101.03	163	28.15
2003	116,834,430	1967	336.72	1116	191.04	554	94.84	174	29.79

Table 5. Workers' Compensation State Fund Claims Data, 1994-2003: Home Health, Risk Class 6110

		ALL COMPENSABLE CLAIMS					WMSD COMPENSABLE CLAIMS				
Year	Claims Hours	Number of Claims	Time Loss Days	Incurred Costs (dollars)	Claims Rate (claims/10,000 FTEs	Severity Rate (time loss/10,000 FTEs	Number of Claims	Time Loss Days	Incurred Costs (dollars)	Claims Rate (claims/10,000 FTEs	Severity Rate (time loss/10,000 FTEs
1994	2,921,364	139		1,775,930	951.6		92		1,383,927	629.8	
1995	6,200,091	115		2,021,609	371.0		73		1,319,756	235.5	
1996	5,513,145	121		1,747,636	439.0		75		702,220	272.1	
1997	5,427,768	121	27,203	2,333,906	445.9	100,236.4	71	20,651	1,678,786	261.6	76,093.9
1998	5,036,427	113	16,717	1,646,877	448.7	66,384.4	75	11,683	1,052,166	297.8	46,394.0
1999	5,119,990	125	21,315	1,920,867	488.3	83,261.9	74	13,095	1,152,474	289.1	51,152.4
2000	4,587,113	105	20,159	2,328,806	457.8	87,894.1	52	12,786	1,533,675	226.7	55,747.5
2001	4,824,429	114	26,015	3,030,906	472.6	107,847.0	68	17,683	1,778,575	281.9	73,306.1
2002	4,660,125	121	26,539	3,411,875	519.3	113,898.2	72	15,390	2,014,303	309.0	66,049.7
2003	4,714,659	102	16,237	2,137,661	432.7	68,878.8	73	12,412	1,616,594	309.7	52,652.8

		BACK WMSD COMPENSABLE CLAIMS					SHOULDER WMSD COMPENSABLE CLAIMS				
Year	Claims Hours	Number of Claims	Time Loss Days	Incurred Costs (dollars)	Claims Rate (claims/10,000 FTEs	Severity Rate (time loss/10,000 FTEs	Total Number	Number of Claims	Incurred Costs (dollars)	Incidence Rate (claims/10,000 FTEs	Claims Rate (claims/10,000 FTEs
1994	2,921,364	57		616,747	390.2		9		181,935	61.6	
1995	6,200,091	51		805,857	164.5		6		71,705	19.4	
1996	5,513,145	48		446,629	174.1		8		95,223	29.0	
1997	5,427,768	37	7,597	723,648	136.3	27,993.1	7	657	76,610	25.8	2,420.9
1998	5,036,427	39	7,014	706,402	154.9	27,853.1	10	1,004	96,159	39.7	3,987.0
1999	5,119,990	44	8,323	714,176	171.9	32,511.8	4	223	35,611	15.6	871.1
2000	4,587,113	30	7,179	916,356	130.8	31,300.7	6	343	78,094	26.2	1,495.5
2001	4,824,429	41	9,036	1,024,319	170.0	37,459.4	7	1,260	148,082	29.0	5,223.4
2002	4,660,125	44	4,861	559,657	188.8	20,862.1	6	1,703	365,616	25.8	7,308.8
2003	4,714,659	40	5,932	732,265	169.7	25,164.1	8	924	114,855	33.9	3,919.7

Table 6. Workers' Compensation Self-Insured Claims Data, 1994-2003: Home Health, Risk Class 6110

Year	Claims Hours	ALL COMPENSABLE CLAIMS		COMPENSABLE WMSD CLAIMS		COMPENSABLE WMSD BACK CLAIMS		COMPENSABLE WMSD SHOULDER CLAIMS	
		Number of Claims	Claims Rate (claims/10,000 FTEs	Number of Claims	Claims Rate (claims/10,000 FTEs	Number of Claims	Claims Rate (claims/10,000 FTEs	Number of Claims	Claims Rate (claims/10,000 FTEs
1994									
1995	146,528	1	136.49	0	-	0	-	0	-
1996	1,266,475	3	47.38	1	15.79	0	-	0	-
1997	1,759,752	6	68.19	2	22.73	1	11.37	0	-
1998	237,007	2	168.77	2	168.77	2	168.77	0	-
1999	229,383	3	261.57	3	261.57	2	174.38	0	-
2000	265,190	2	150.84	2	150.84	2	150.84	0	-
2001	279,233	1	71.62	1	71.62	0	-	1	71.62
2002	316,848	1	63.12	1	63.12	0	-	0	-
2003	365,344	4	218.97	2	109.49	1	54.74	0	-

Table 7. Workers' Compensation State Fund Claims Data, 1994-2003: Home Care Workers, Risk Class 6510

Year	Claims Hours	ALL COMPENSABLE CLAIMS					WMSD COMPENSABLE CLAIMS				
		Number of Claims	Time Loss Days	Incurred Costs (dollars)	Claims Rate (claims/10,000 FTEs)	Severity Rate (time loss/10,000 FTEs)	Number of Claims	Time Loss Days	Incurred Costs (dollars)	Claims Rate (claims/10,000 FTEs)	Severity Rate (time loss/10,000 FTEs)
1994	760,595	23	0	602,719	604.8	0	15	0	441,585	394.4	0.0
1995	1,618,443	13	0	450,096	160.6	0	5	0	297,633	61.8	0.0
1996	1,808,883	22	0	1,274,156	243.2	0	8	0	641,611	88.5	0.0
1997	1,997,020	20	5,410	371,416	200.3	54,180.7	13	4,105	271,395	130.2	41,111.3
1998	2,055,636	17	7,379	872,014	165.4	71,792.9	9	5,340	650,635	87.6	51,954.7
1999	2,134,738	29	12,651	1,503,889	271.7	118,525.1	16	6,532	767,954	149.9	61,197.2
2000	2,245,379	24	9,448	1,229,764	213.8	84,155.1	13	4,718	705,937	115.8	42,024.1
2001	2,391,998	23	9,619	1,462,759	192.3	80,426.5	12	7,696	1,301,877	100.3	64,347.9
2002	2,487,924	24	8,505	1,265,351	192.9	68,370.3	12	5,601	722,741	96.5	45,025.5
2003	2,458,678	21	4,288	633,382	170.8	34,880.5	15	3,323	460,684	122.0	27,030.8

Year	Claims Hours	BACK WMSD COMPENSABLE CLAIMS					SHOULDER WMSD COMPENSABLE CLAIMS				
		Number of Claims	Time Loss Days	Incurred Costs (dollars)	Claims Rate (claims/10,000 FTEs)	Severity Rate (time loss/10,000 FTEs)	Number of Claims	Time Loss Days	Incurred Costs (dollars)	Claims Rate (claims/10,000 FTEs)	Severity Rate (time loss/10,000 FTEs)
1994	760,595	11	0	99,774	289.2	0.0	0	0	0	0.0	0.0
1995	1,618,443	1	0	123,956	12.4	0.0	0	0	0	0.0	0.0
1996	1,808,883	4	0	207,153	44.2	0.0	2	0	33,896	22.1	0.0
1997	1,997,020	7	2,715	164,374	70.1	27,190.5	1	330	24,402	10.0	3,304.9
1998	2,055,636	4	5,045	635,530	38.9	49,084.6	1	16	1,032	9.7	155.7
1999	2,134,738	5	2,591	389,116	46.8	24,274.6	2	914	111,169	18.7	8,563.1
2000	2,245,379	6	861	106,569	53.4	7,669.1	0	0	0	0.0	0.0
2001	2,391,998	2	1,035	62,549	16.7	8,653.9	1	1,410	627,605	8.4	11,789.3
2002	2,487,924	6	2,640	255,336	48.2	21,222.5	1	0	16,787	8.0	0.0
2003	2,458,678	5	789	104,547	40.7	6,418.1	3	614	120,559	24.4	4,994.6

Table 8. Workers' Compensation State Fund Claims Data, 1994-2003: Ambulance Workers, Risk Class 1405

		ALL COMPENSABLE CLAIMS					WMSD CLAIMS				
Year	Claims Hours	Number of Claims	Time Loss Days	Incurred Costs (dollars)	Claims Rate (claims/ 10,000 FTEs)	Severity Rate (time loss/ 10,000 FTEs)	Number of Claims	Time Loss Days	Incurred Costs (dollars)	Claims Rate (claims/ 10,000 FTEs)	Severity Rate (time loss/ 10,000 FTEs)
1994	379,441	18		57,187	948.8		11		30,427	579.8	
1995	714,841	8		20,964	223.8		5		17,672	139.9	
1996	794,638	23		357,716	578.9		9		116,299	226.5	
1997	764,610	26	2,222	324,028	680.1	58,121.1	15	1,650	149,864	392.4	43,159.3
1998	793,135	11	242	37,212	277.4	6,102.4	6	119	17,628	151.3	3,000.8
1999	827,238	24	5,405	477,433	580.2	130,675.8	9	2,476	190,109	217.6	59,861.9
2000	827,005	21	1,472	178,889	507.9	35,598.3	11	1,062	129,002	266.0	25,683.0
2001	788,206	24	1,256	150,893	609.0	31,869.8	17	1,001	101,633	431.4	25,399.5
2002	828,976	44	7,801	1,020,820	1,061.6	188,208.1	30	3,654	481,131	723.8	88,157.0
2003	940,667	43	3,713	500,977	914.2	78,944.0	22	2,215	291,657	467.8	47,094.2

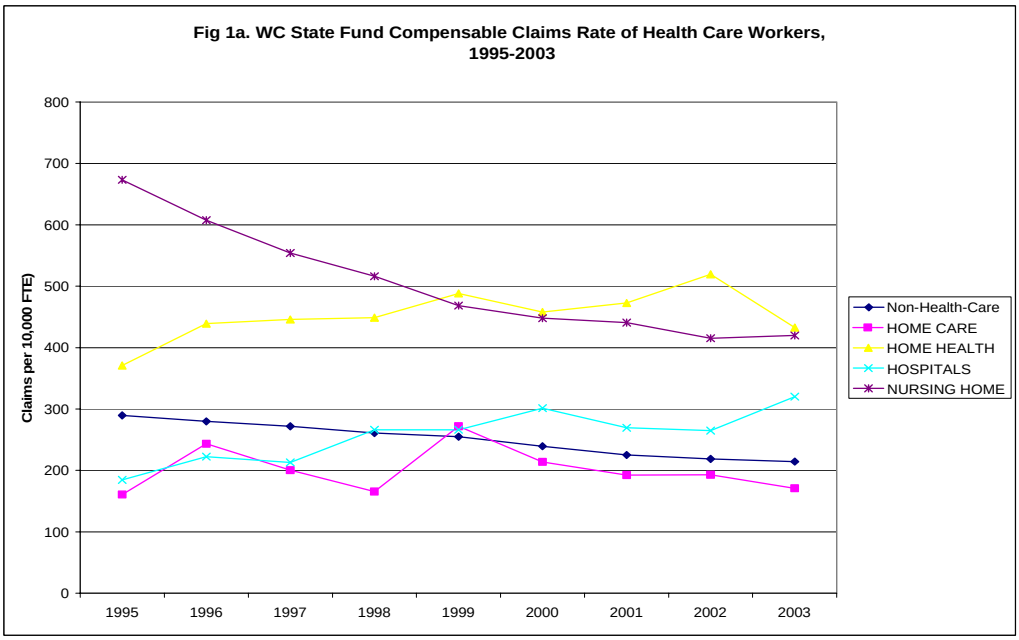
		BACK WMSD CLAIMS					SHOULDER WMSD CLAIMS				
Year	Claims Hours	Number of Claims	Time Loss Days	Incurred Costs (dollars)	Claims Rate (claims/ 10,000 FTEs)	Severity Rate (time loss/ 10,000 FTEs)	Number of Claims	Time Loss Days	Incurred Costs (dollars)	Claims Rate (claims/ 10,000 FTEs)	Severity Rate (time loss/ 10,000 FTEs)
1994	379,441	11		30,427	579.8		0		0	0.0	
1995	714,841	4		5,343	111.9		0		0	0.0	
1996	794,638	4		42,110	100.7		1		18,120	25.2	
1997	764,610	12	400	60,795	313.9	10,462.9	1	65	10,017	26.2	1,700.2
1998	793,135	5	32	3,379	126.1	806.9	0	0	0	0.0	0.0
1999	827,238	7	1,953	151,360	169.2	47,217.4	2	523	38,750	48.4	12,644.5
2000	827,005	8	743	65,449	193.5	17,968.5	1	294	56,624	24.2	7,110.0
2001	788,206	13	837	64,907	329.9	21,238.1	3	163	36,314	76.1	4,136.0
2002	828,976	24	2,043	255,071	579.0	49,289.7	1	6	733	24.1	144.8
2003	940,667	16	1,271	210,744	340.2	27,023.4	3	314	27,661	63.8	6,676.1

Table 9. Workers' Compensation Self-Insured Claims Data, 1994-2003: Ambulance Workers, Risk Class 1405

Year	Claims Hours	ALL COMPENSABLE CLAIMS		COMPENSABLE WMSD CLAIMS		COMPENSABLE WMSD BACK CLAIMS		COMPENSABLE WMSD SHOULDER CLAIMS	
		Number of Claims	Claims Rate (claims/10,000 FTEs	Number of Claims	Claims Rate (claims/10,000 FTEs	Number of Claims	Claims Rate (claims/10,000 FTEs	Number of Claims	Claims Rate (claims/10,000 FTEs
1994	755,913	34	899.57	17	449.79	13	343.95	1	26.46
1995	648,698	59	1,819.03	41	1,264.07	30	924.93	2	61.66
1996	384,632	88	4,575.80	56	2,911.87	35	1,819.92	7	363.98
1997	623,392	61	1,957.04	40	1,283.30	28	898.31	7	224.58
1998	1,194,222	69	1,155.56	47	787.12	34	569.41	4	66.99
1999	1,251,984	79	1,262.00	48	766.78	36	575.09	1	15.97
2000	1,263,306	103	1,630.64	59	934.06	43	680.75	2	31.66
2001	965,016	119	2,466.28	67	1,388.58	49	1,015.53	2	41.45
2002	▤▤▤	66		30		17		2	
2003	1,252,483	95	1,516.99	53	846.32	30	479.05	10	159.68

▤▤▤ Claims hours were not reported for this period

Figure 1. Washington State Workers Compensation State Fund Compensable Claims Rates for Health Care Workers,(claims per 10,000 FTE)



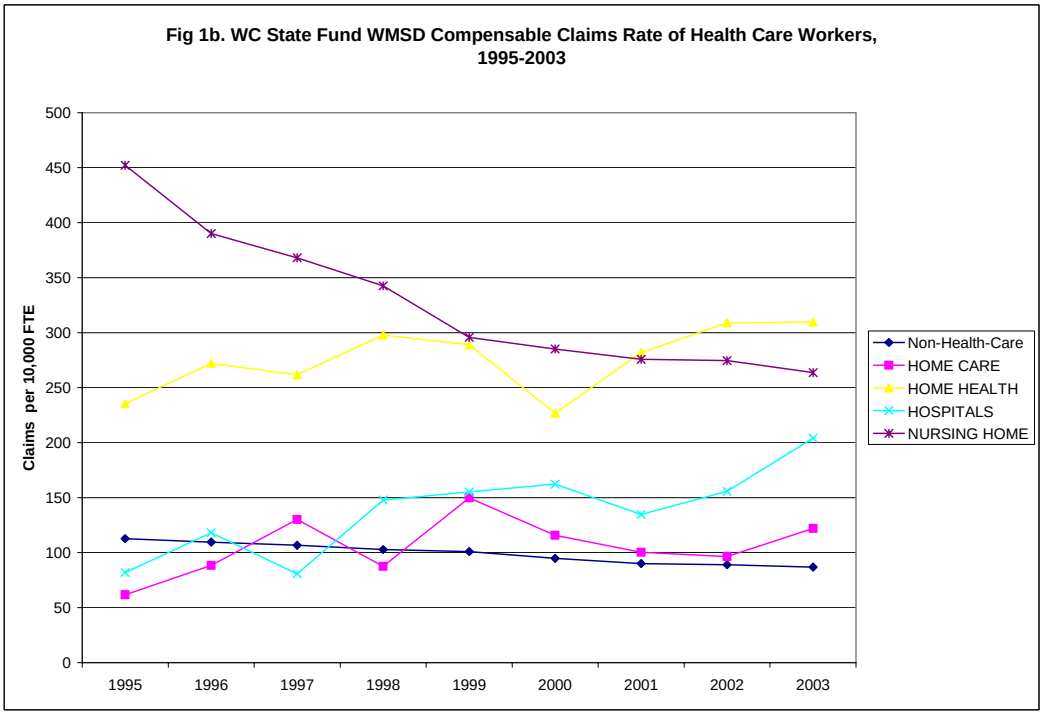


Fig 1c. WC State Fund Back WMSD Compensable Claims Rate of Health Care Workers, 1995-2003

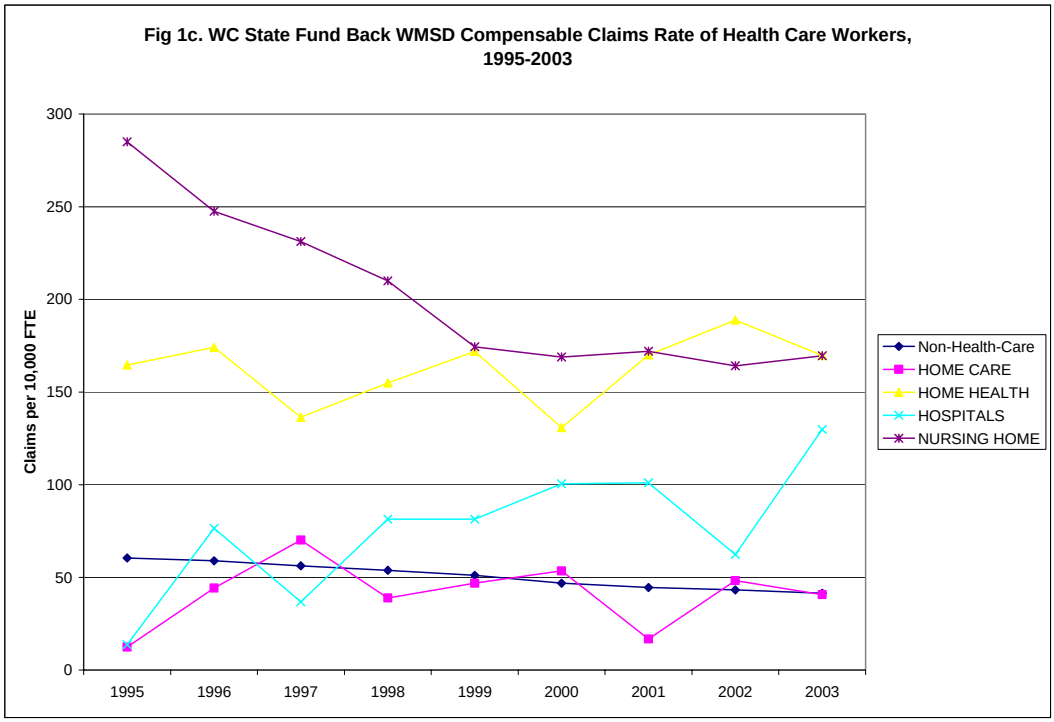


Fig 1d. WC State Fund Shoulder WMSD Compensable Claims Rates of Health Care Workers, 1995-2003

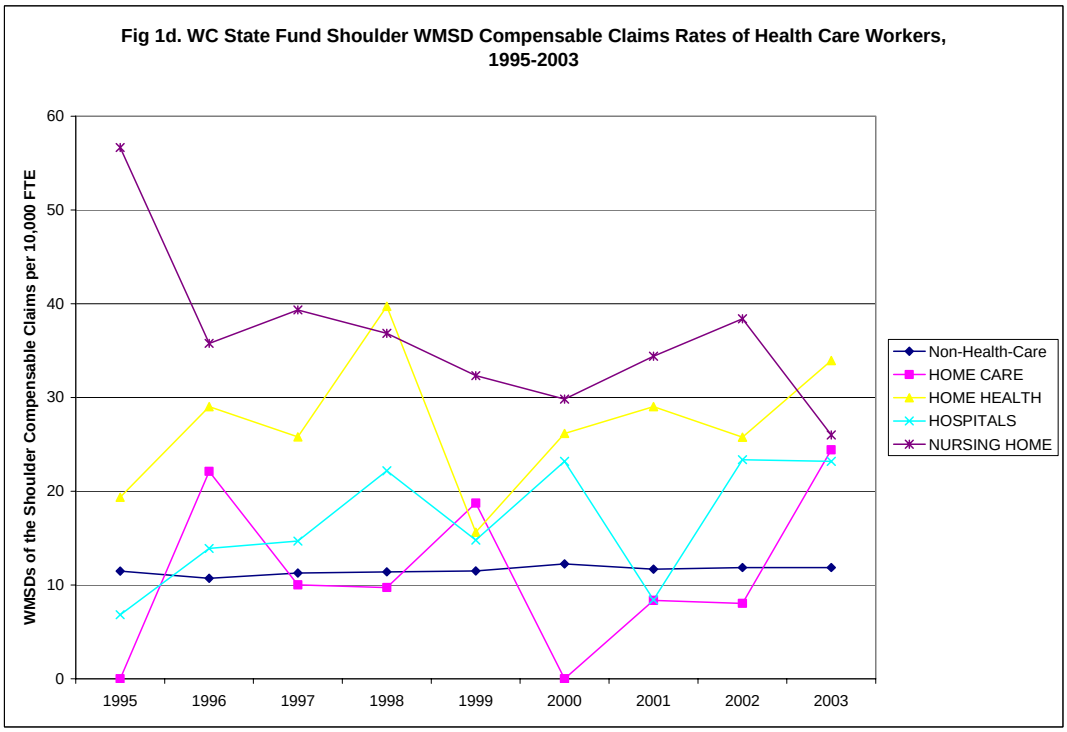
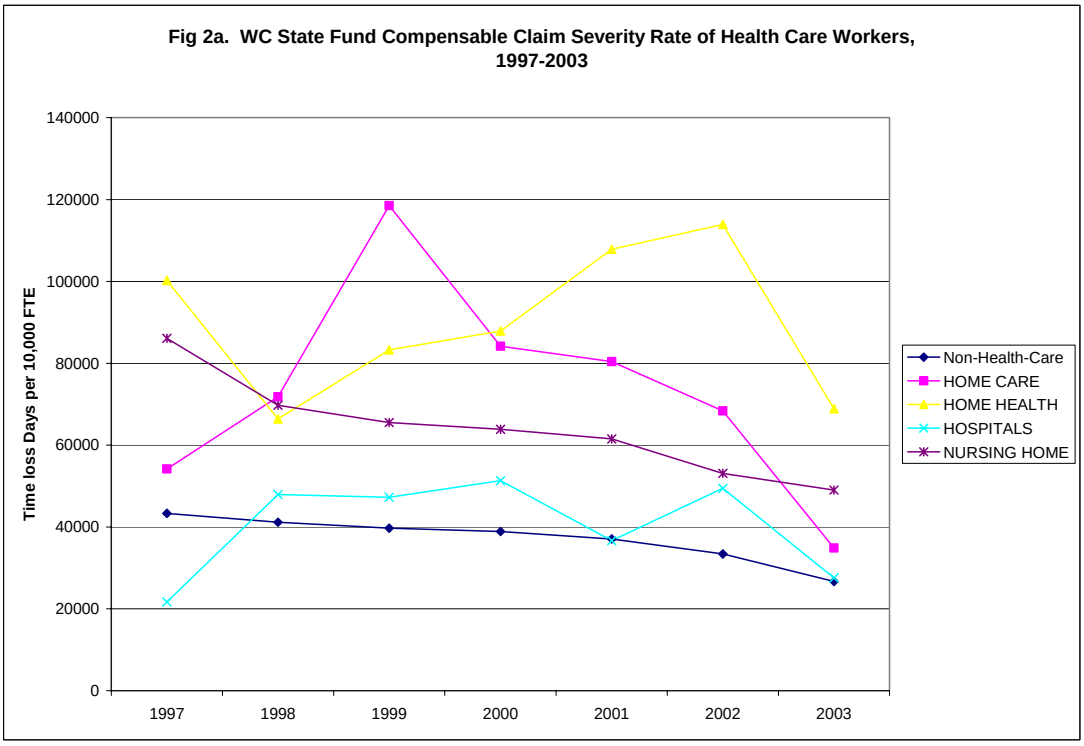


Figure 2. Washington State Workers Compensation State Fund Compensable Severity Rates for Health Care Workers (time loss per 10,000 FTE)



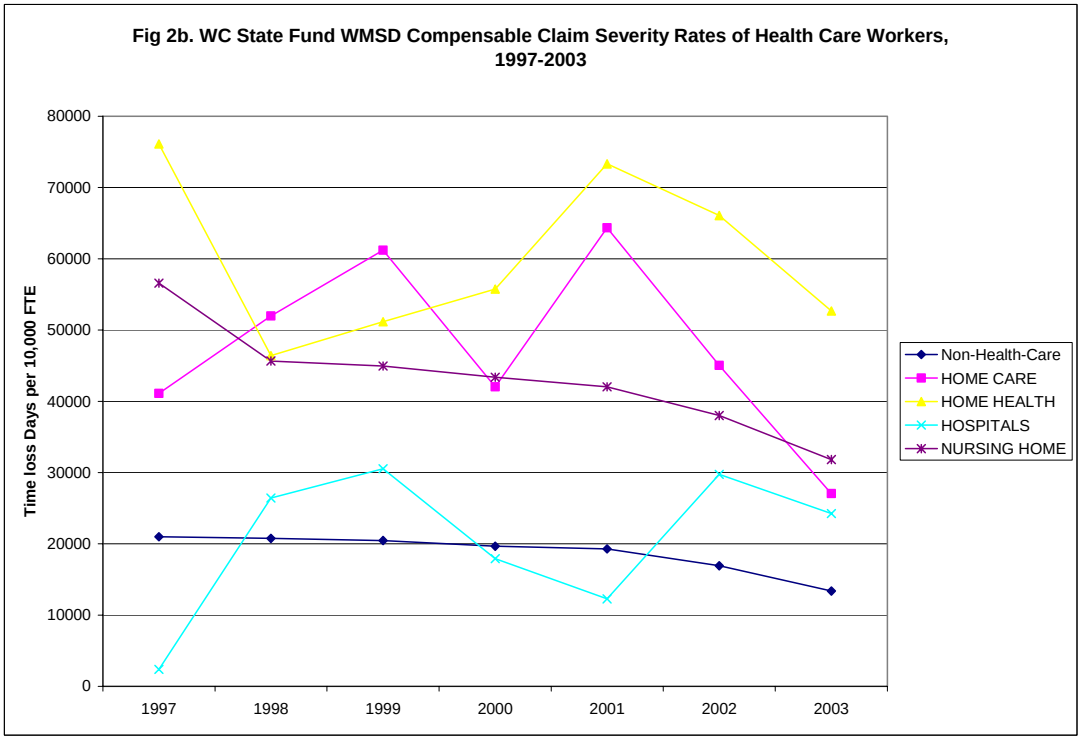


Fig 2c. WC State Fund Back WMSD Compensable Claim Severity Rates of Health Care Workers, 1997-2003

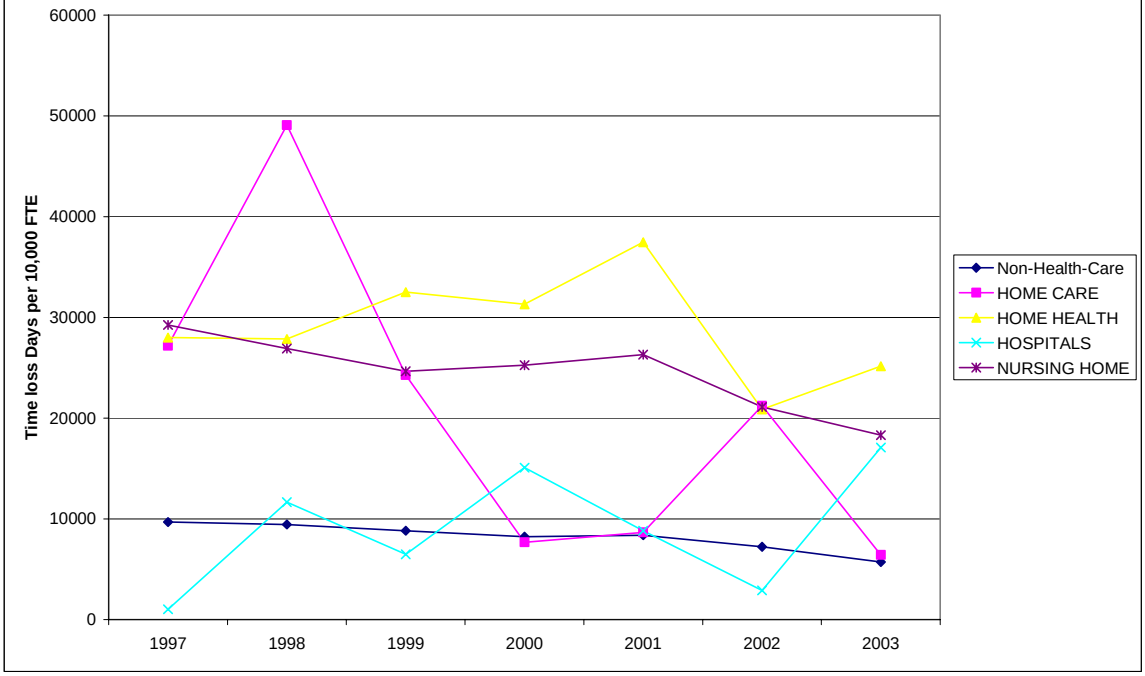


Fig 2d. WC State Fund Shoulder WMSD Compensable Claim Severity Rates of Health Care Workers, 1997-2003

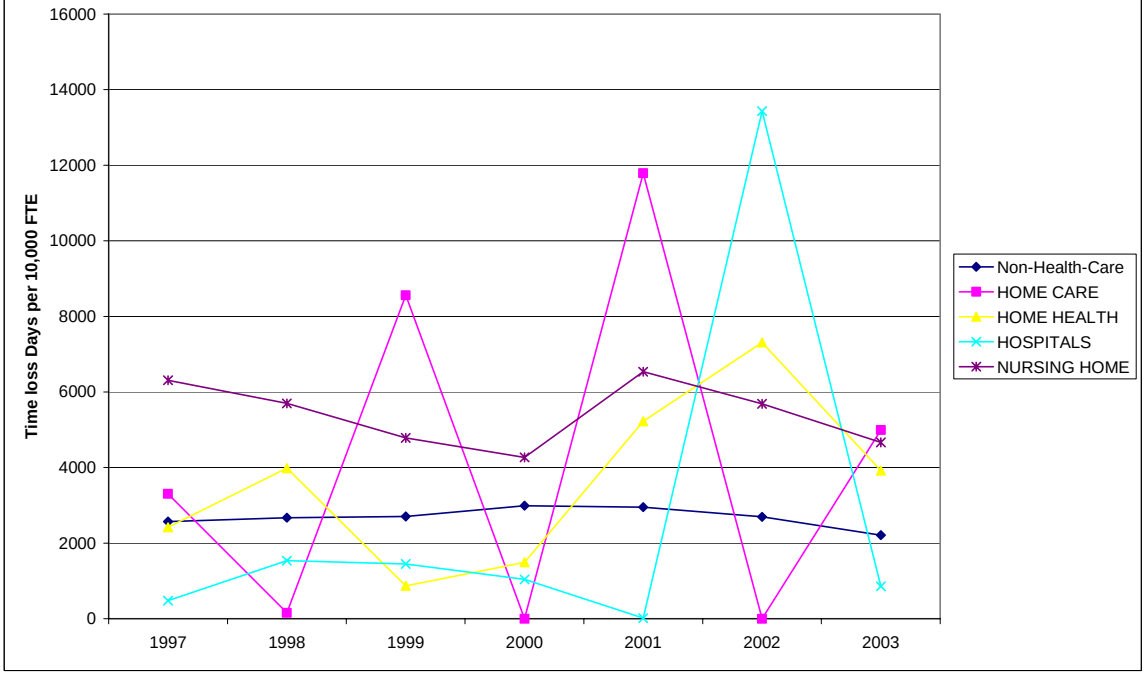
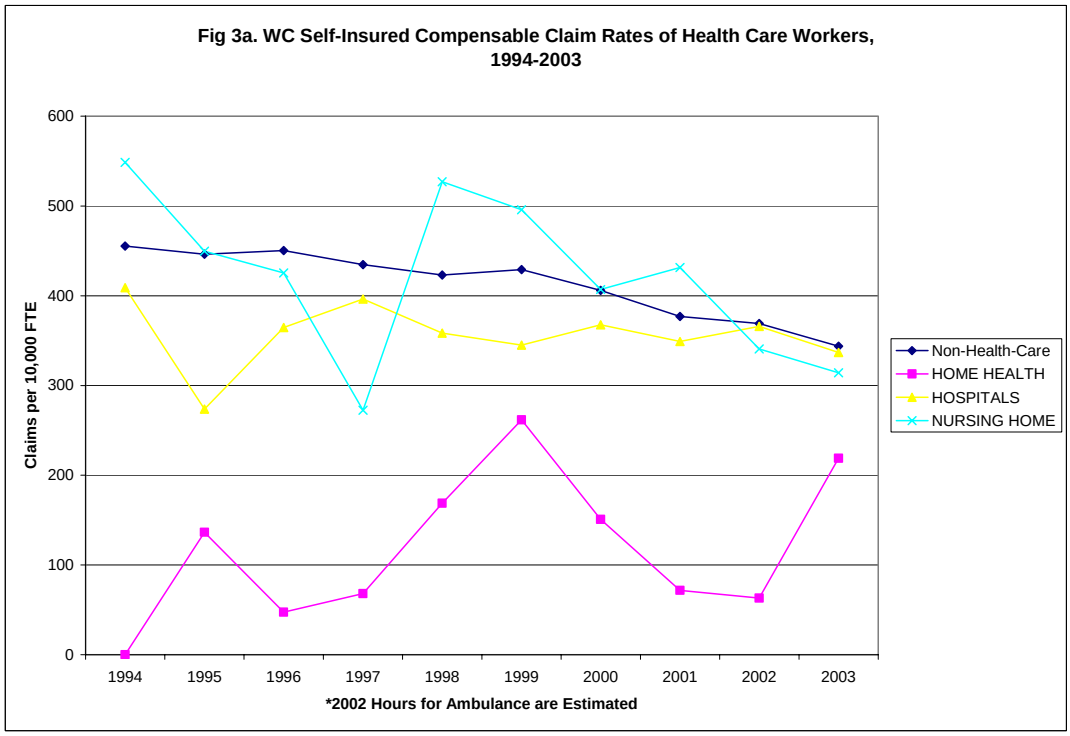
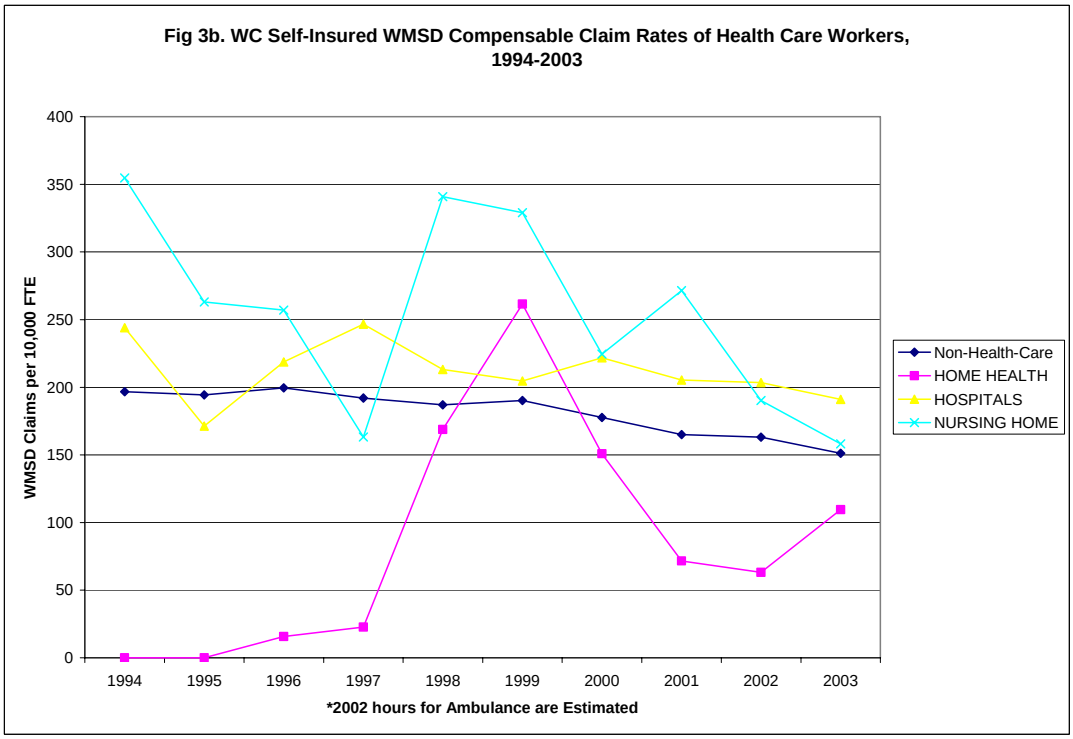


Figure 3. Washington State Workers Compensation Self-Insured Compensable Claims Rates for Health Care Workers (claims per 10,000 FTE)





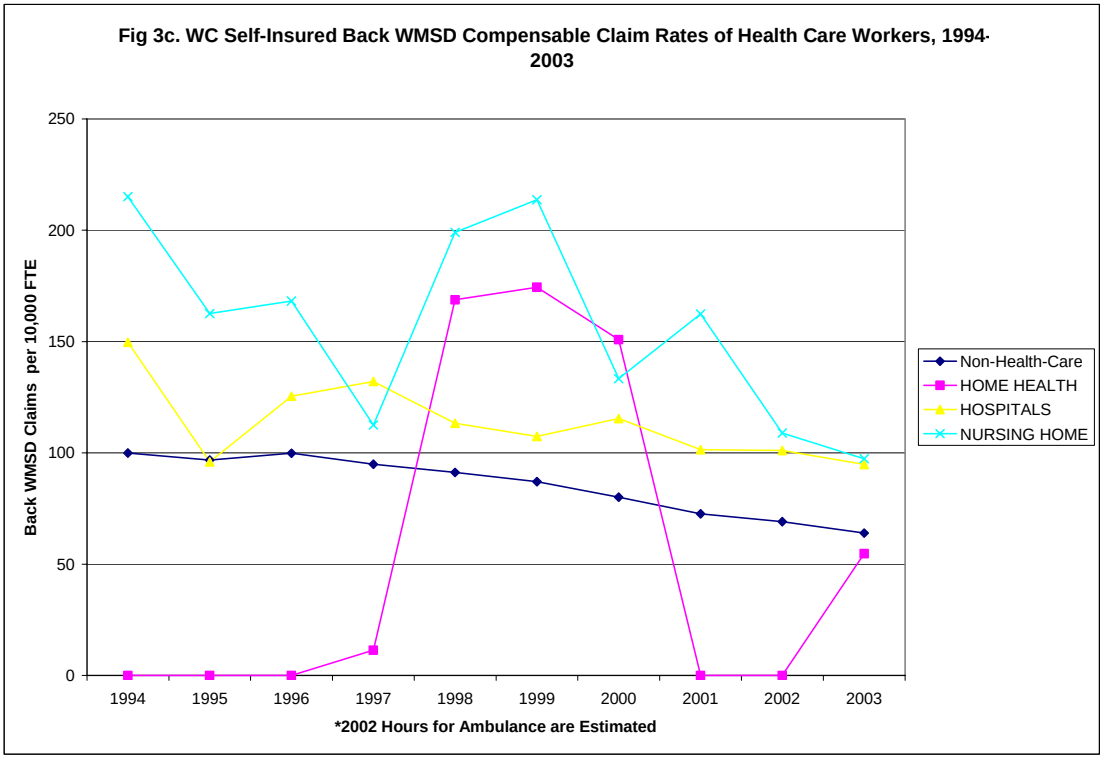


Fig 3c. WC Self-Insured Back WMSD Compensable Claim Rates of Health Care Workers, 1994-2003
Back WMSD Claims per 10,000 FTE
250
200
150
100
50
0
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
*2002 Hours for Ambulance are Estimated
Non-Health-Care
HOME HEALTH
HOSPITALS
NURSING HOME

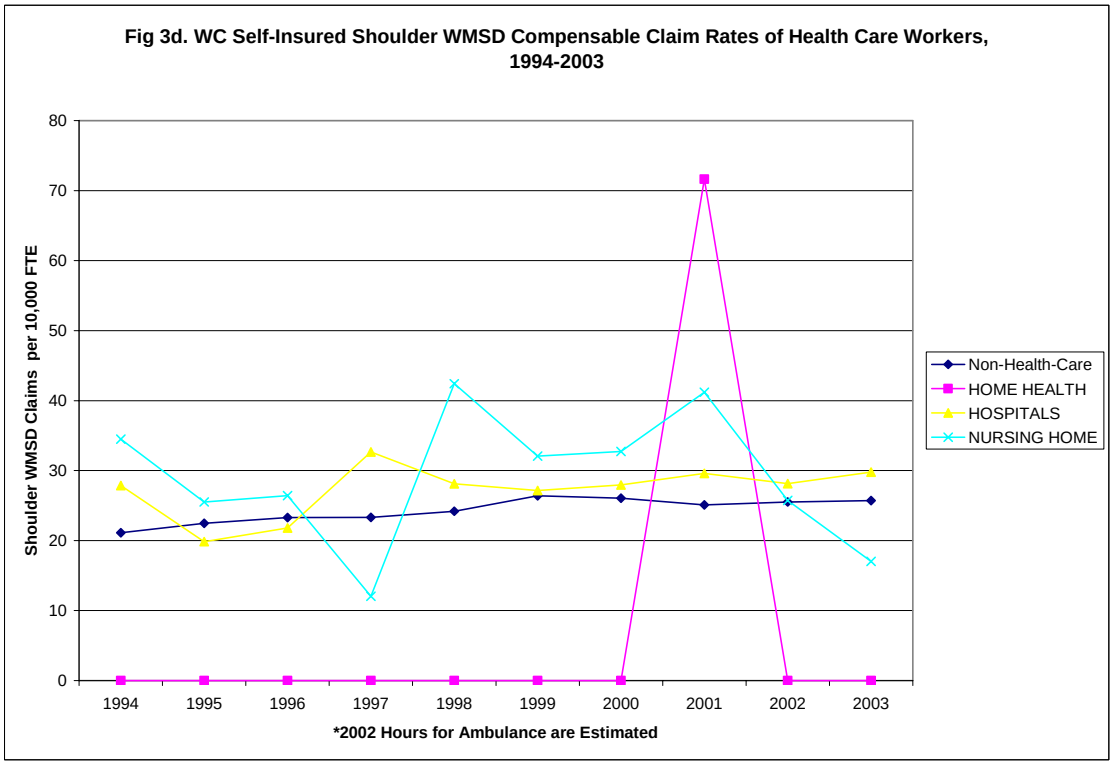
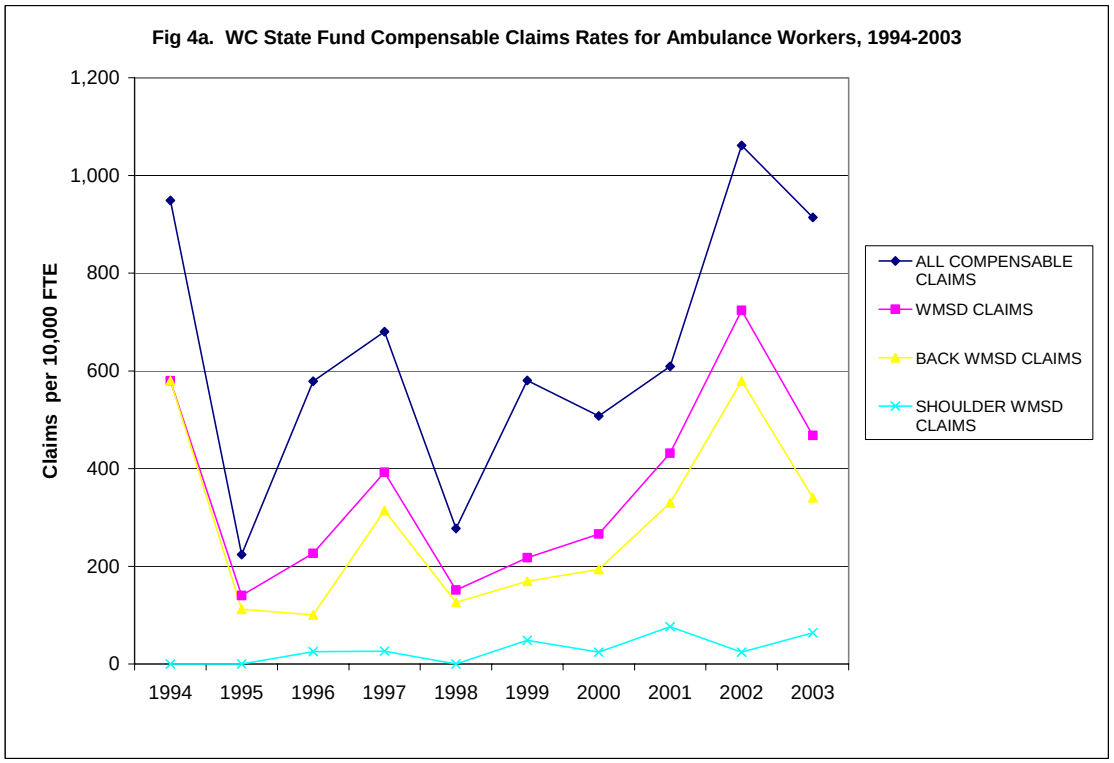


Fig 3d. WC Self-Insured Shoulder WMSD Compensable Claim Rates of Health Care Workers, 1994-2003
Shoulder WMSD Claims per 10,000 FTE
80
70
60
50
40
30
20
10
0
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
*2002 Hours for Ambulance are Estimated
Non-Health-Care
HOME HEALTH
HOSPITALS
NURSING HOME

Figure 4. Washington State Workers Compensation Compensable Claims Rates for Ambulance Workers, 1994-2003



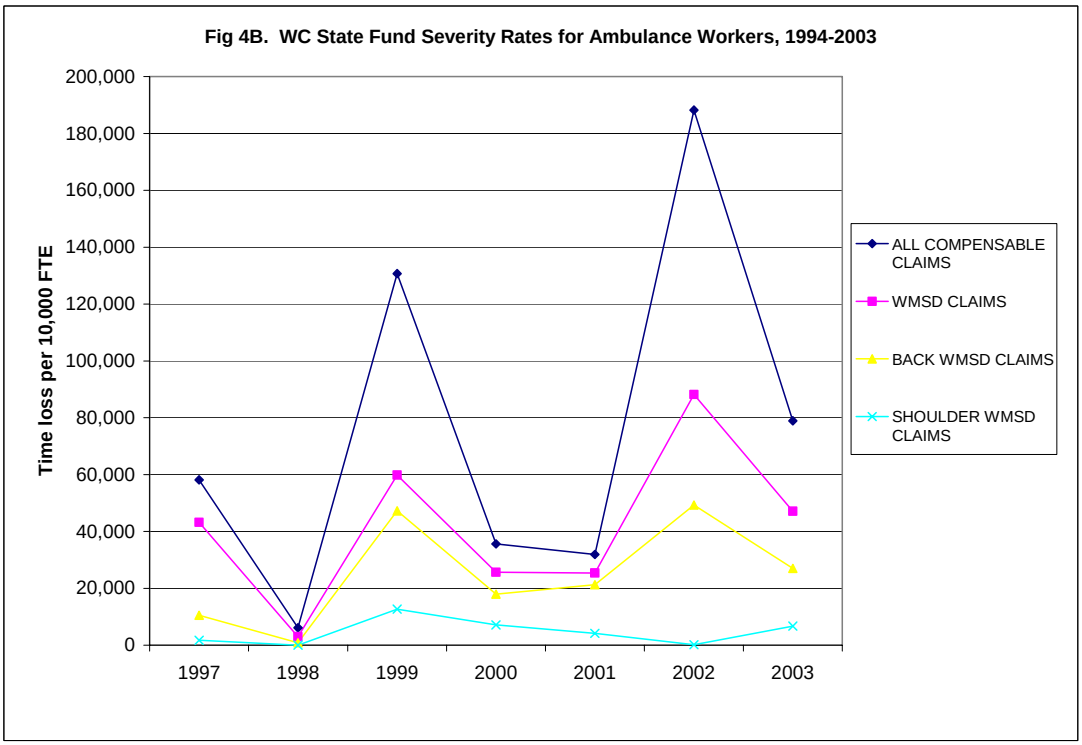
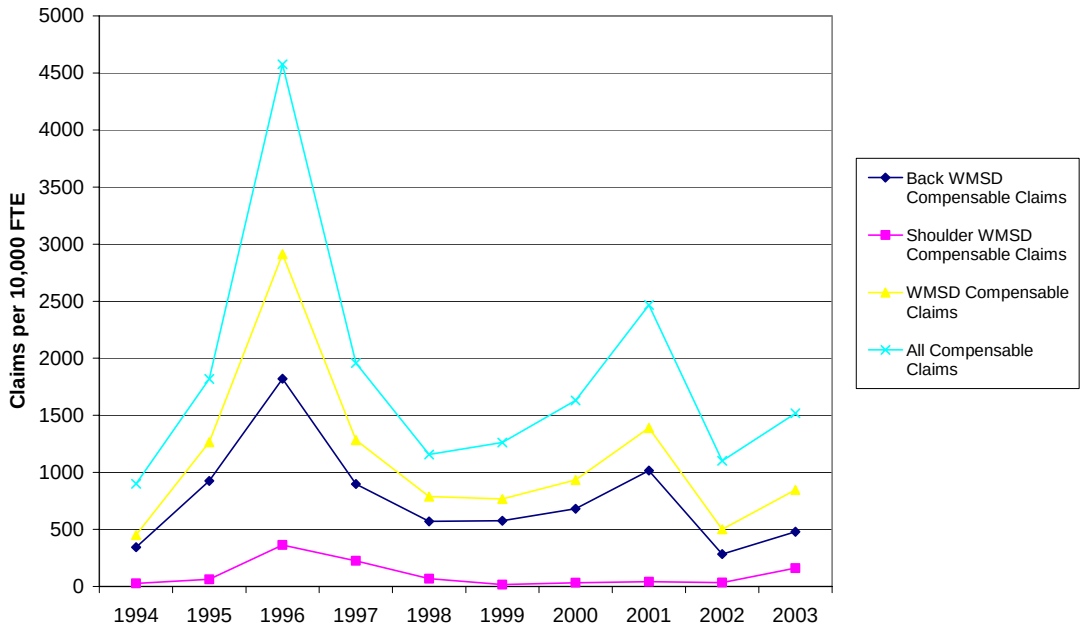


Fig 4c. WC Self-Insured Compensable Claims Rates for Ambulance Workers, 1994-2003



APPENDIX FIVE:

DATA COLLECTION FORMS, HOSPITALS

SAFETY COMMITTEE INTERVIEW _____ ***ID #:*** _____

Job Title: _____

Date: _____

How long have you been in this position?

How long have you been at this facility?

How long have you been on the committee?

What is your role (job) on the committee?

Does the committee discuss injuries that have happened to employees as a result of resident handling?

Does the committee discuss things about lifting, transferring, and moving residents?

What are some of the ideas that safety committee has recommended to prevention injuries from resident handling?

THANK YOU!!

Health Care Lifting Task Force EMPLOYEE QUESTIONNAIRE (Hospital)

Facility Description: H / NH E / W L / S Unit_____

Date ____/____/____ Interviewer:_____

1. What is your current position or title? ☐ RN ☐ LPN ☐ NAC ☐ Other _____

2. How long have you been in this position? _____years

3. How long have you been at this facility? _____years

4. On average, what percentage of patients you care for require:

   a) partial assistance when transferring _____%

   b) total assistance when transferring _____%

   c) repositioning in bed _____%

5. What are three tasks you find most physically demanding, or place you in awkward or fixed positions?

   a)_____

   b)_____

   c)_____

6. How likely are the three tasks above likely to cause:

	Very likely: Could happen anytime	Likely: Could happen sometime	Unlikely: Could happen but very rarely	Very Unlikely: Could happen but probably never will
Long term illness or serious injury	1	2	3	4
Medical attention, several days off work	1	2	3	4
First aid needed	1	2	3	4

7. For the tasks listed in Question 5, what are the 3 things that would make your job easier?

   a)_____

   b)_____

   c)_____

8. If you were looking for a job now, how likely is it that you would decide to take this job again?

⬭	⬭	⬭	⬭	⬭	⬭
Very Unlikely	Unlikely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

9. When was the last training you had on handling patients?

   _____

10. When was the last time you had to demonstrate patient transfers and repositioning as part of a training exercise?

    _____

11. Is there usually enough staff available to assist in patient transfers?

    ☐ Yes ☐ No

12. a) Do you use patient handling equipment whenever needed?

    ☐ Yes ☐ No

    b) Is the current number of patient handling equipment adequate to meet the demands of patient handling?

    ☐ Yes ☐ No

    c) If no, what other equipment is needed?

13. In general, do you think that using mechanical transfer equipment to move patients is:

	Extremely	Very	Somewhat	Neither	Somewhat	Very	Extremely	
a) Hard	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Easy
b) Worthless	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Valuable
c) Harmful	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Beneficial
d) Foolish	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Wise

14. How likely or unlikely is it that using mechanical transfer equipment to move patients will:

	Very Unlikely	Unlikely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely
a) Take more time to do.	⬭	⬭	⬭	⬭	⬭	⬭
b) Be uncomfortable for the patients.	⬭	⬭	⬭	⬭	⬭	⬭
c) Decrease the chance I will hurt myself at work.	⬭	⬭	⬭	⬭	⬭	⬭
d) Require more help from my co-workers.	⬭	⬭	⬭	⬭	⬭	⬭
e) Injure patients	⬭	⬭	⬭	⬭	⬭	⬭
f) Be refused by the patient or family member	⬭	⬭	⬭	⬭	⬭	⬭

15. How much do you agree or disagree with each of the statements listed below?

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree
a) I am sure I know how to use the mechanical transfer equipment in the right way.	⬭	⬭	⬭	⬭	⬭	⬭
b) I know who to tell if the equipment is not working.	⬭	⬭	⬭	⬭	⬭	⬭
c) There is usually someone to help with the equipment when needed.	⬭	⬭	⬭	⬭	⬭	⬭
d) I am not sure I will be able to find the equipment when I need it.	⬭	⬭	⬭	⬭	⬭	⬭
e) I will know the current transfer status of each patient with respect to using the equipment.	⬭	⬭	⬭	⬭	⬭	⬭
f) I will be able to explain to the patients what I am doing when I use lifts to move them.	⬭	⬭	⬭	⬭	⬭	⬭
g) I receive support from my supervisor for following policies.	⬭	⬭	⬭	⬭	⬭	⬭

16. List three things that you **LIKE** the most about the patient handling equipment you currently have in your facility.

a)_____

b)_____

c)_____

17. List three things that you **DISLIKE** the most about the patient handling equipment you currently have in your facility.
    a)_____

    b)_____

    c)_____

18. Is there a committee or group working to prevent patient handling injuries?
    ☐ Yes ☐ No ☐ Don't know

19. How are the transfer needs of patients communicated to those providing care?
    ☐ Care Plan ☐ Flow sheet/care sheet ☐ Something in room
    ☐ Verbal report (scheduled) ☐ Verbal report (informal) ☐ Patient chart
    ☐ Other _____

20. How often do you check if the patient handling needs have changed (i.e. check the care plan)?

    _____

21. What happens if you don't follow the care plan/patient assessment when patient handling?

22. Has this facility implemented a "no-lift" policy?
    ☐ Yes ☐ No
    b) If yes, when was the policy implemented? _____
    c) If no, are there plans to implement such a policy? When? _____

IF NO, YOU HAVE FINISHED THE QUESTIONNAIRE.
THANK YOU VERY MUCH FOR YOUR PARTICIPATION!!!!

IF YES, PLEASE FINISH THE REST OF THE QUESTIONNAIRE

23. The five (5) main components of a fully implemented **no-lift program** and the key elements that define each component are listed below. Rate on each scale how well you believe *your facility* has implemented each component based on the key elements listed.

a) **1ST Main Component: EQUIPMENT**:

Key Elements:				
• Adequate number of equipment to suit patient population and staff • Have adequate number of repositioning devices • Equipment is easily accessible to staff who need to use it				
How well has your facility implemented this component?				
No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

b) **2ND Main Component: TRAINING**

Key Elements:				
• Training on equipment is developed and integrated into overall training and staff development plan • Training on equipment is part of orientation AND regular on-going sessions • ALL nursing staff know how to use the equipment • Strategies for managing difficult patients are offered				
How well has your facility implemented this component?				
No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

c) **3RD Main Component: POLICIES, PROCEDURES AND ENFORCEMENT**

Key Elements:				
• Have policies and procedures for patient handling, including expected used of equipment • Assessment of patient function takes into account availability of equipment • All employees are aware of the policies • A system is in place for correction and coaching; progressive discipline as appropriate				
How well has your facility implemented this component?				
No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

d) **4TH Main Component**: **MANAGEMENT COMMITMENT AND EMPLOYEE INVOLVEMENT**

Key Elements:
• Funds have been allocated in the budget for a no-lift program • Management and employees understand and supports the concept of no-lift • Someone is accountable for the no-lift program • Employees are involved in the design of the no-lift program and help select equipment
How well has your facility implemented this component?

No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

e) **5TH Main Component: INJURY INVESTIGATION AND MEDICAL CASE MANAGEMENT**

Key Elements:
• Accidents are investigated to better understand how they occurred • The facility is active with medical case management of injured workers • Third party administrators (TPAs) and physicians know about the equipment available at the facility • Alternative "light" duty work is available
How well has your facility implemented this component?

No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

24. Finally, **consider your facility as a whole** with respect to the implementation of an overall no-lift program.

No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

THANK YOU VERY MUCH FOR YOUR PARTICIPATION!!!!

Health Care Lifting Task Force Observation Sheet: Hospitals, Nursing Homes, Hospice

Date____/____/____

Facility Description: H / NH / HP E / W L / S U / R
Unit_____

Observer_____**Shift**: ___AM ___PM ___Nights

Number of beds on unit: _____

1. a) For this shift, are you fully staffed? ☐ Yes ☐ No
   b) If no, how many staff are you short?

   RNs_____ LPNs_____ NACs_____

   Other _____

   Other _____

Obstructions that can affect handling patients/residents

2. Are there tripping hazards present in walkways (loose tile, loose carpet, objects)?
   ☐ Yes ☐ No

3. Are doorways free and clear?
   ☐ Yes ☐ No

4. Are there visible spills on the floor?
   ☐ Yes ☐ No

5. Are there hallway mirrors mounted at walkway intersections?
   ☐ Yes ☐ No

6. Are there any ladders or step stools present that create obstructions for patient handling?
   ☐ Yes ☐ No

7. What is the floor surface?
   ☐ Carpeting ☐ Tile/Linoleum ☐ Both _____ (describe)

8. Are doorways wide enough for equipment?
   ☐ Yes ☐ No

9. Bathrooms:
   a) Is handling equipment used in the bathrooms?
   ☐ Yes ☐ No

List equipment:

_____ _____

_____ _____

_____ _____

b) If yes, is there enough room for handling equipment and staff to work unhampered?

☐ Yes ☐ No

Transferring Patients/Residents

10. Are there ceiling lifts in the rooms?

a) ☐ Yes ☐ No

b) If yes, ☐ In a few rooms ☐ In many rooms ☐ In all rooms

c) How long have they been in use _____

d) Describe any difficulties observed with the equipment?

11. Are there electric whole body floor lifts on the unit?

a) ☐ Yes ☐ No b) If yes, how many? _____

c) How long have they been in use?_____

d) Describe any difficulties observed with the equipment?

12. Are there electric sit-stand lifts on the unit?
    a) ☐ Yes ☐ No b) If yes, how many? _____

    c) How long have they been in use?_____

    d) Describe any difficulties observed with the equipment?

13. Are manual/ hand crank lifts used on the unit?
    a) ☐ Yes ☐ No b) If yes, how many? _____

    c) How long have they been in use?_____

    d) Describe any difficulties observed with the equipment?

14. Are gait belts used?
    a) ☐ Yes ☐ No

    b) If yes,
    ☐ By RNs ☐ By LPNs ☐ By NACs

15. Is the use of gait belts:
    ☐ Mandatory ☐ Voluntary ☐ Prohibited

16. Are walking belts with handles used?
    ☐ Never ☐ Rarely ☐ Sometimes ☐ Almost Always ☐ Always

17. Are gait belts used to move patients from bed to chair, etc?
    ☐ Never ☐ Rarely ☐ Sometimes ☐ Almost Always ☐ Always

18. Are **commercial** repositioning slip-sheets used?
    a) ☐ Yes ☐ No b) If yes, how many? _____

c) How long have they been in use?_____

d) Describe any difficulties observed with the equipment?

19. Are “hover mats” used for moving patient to stretcher?

a) ☐ Yes ☐ No b) If yes, how many? _____

c) How long have they been in use?_____

d) Describe any difficulties observed with the equipment?

20. Are lift teams used to transfer patients?

a) ☐ Yes ☐ No b) If yes, how many? _____

c) How long have they been in use?_____

d) How often are lift team used to transfer patients?

☐ Never ☐ Rarely ☐ Sometimes ☐ Almost Always ☐ Always

e) Describe any difficulties observed with the lift teams?

21. Are there low beds (close to floor)? ☐ Yes ☐ No

a) How many are being used now? _____

22. Are there electric height-adjustable beds?

☐ None ☐ Some ☐ All

23. When were staff last trained on patient transfers?_____
    RNs _____
    LPNs _____
    NACs _____

24. How often are patient transfer trainings given?

25. Staff Comments/Concerns

26. Other relevant observations

Health Care Lifting Task Force MANAGEMENT STAFF INTERVIEW: Hospitals

Facility Description: E / W L / S Unit_____

Date / / Interviewer:_____

GENERAL INFORMATION

1. What is your current position/title? _____
2. How long have you held this position? _____years
3. How long have you worked in this facility? _____years
4. How long have you worked in this industry? _____years
5. In the past three (3) years, how many *Administrators* have worked at your facility? _____
6. In the past three (3) years, how many *Directors of Nursing Services* have worked at your facility? _____

FACILITY AND STAFFING

7. Does your hospital provide the following services?
   Check all that apply:

☐ Ambulance	☐ Hospice Care
☐ Home Health	☐ Clinics
☐ Assisted Living	☐ Other _____
☐ Nursing Home	☐ Other _____

8. **As of this week**, what is the size of the following units?

Unit	Have unit? Y/N	Number of Beds	Number of Patients
Orthopedics			
ER			
Rehabilitation			
ICU			
Radiology			
Bariatrics			
Other: please specify			
Other: please specify			

9. a) Other than RNs, LPNs and NACs, what other staff routinely handles patients?
   b) How many are there of each type of staff?

a) Staff Type	**Staff Type**	**Staff Type**
_____	_____	_____
_____	_____	_____

POLICIES AND PROCEDURES

10. Is there a committee or group working to prevent patient handling injuries?
    ☐ Yes ☐ No ☐ Don't know

11. a) Has this facility implemented a "no-lift" policy?
    ☐ Yes ☐ No ☐ Don't Know
    b) If yes, when was the policy implemented? _____
    c) If no, are there plans to implement such a policy? When? _____

12. a) Does the no-lift policy include a patient assessment/care plan to determine the appropriate patient handling? ☐ Yes ☐ No

b) What is included in the patient assessment/care plan related to patient handling?

_____
_____
_____
_____

c) How often is the patient assessment/care plan updated?

d) Who updates or make changes to the patient assessment/care plan?

_____

e) Are there consequences if the patient assessment/care plan is not updated in a timely manner? ☐ Yes ☐ No

What are the consequences?

f) How are the transfer needs of patients communicated to those providing care?

☐ Care Plan ☐ Flow sheet/care sheet ☐ Something in room
☐ Verbal report (scheduled) ☐ Verbal report (informal) ☐ Patient chart
☐ Other _____

g) In regards to patient handling, how is the patient assessment/care plan enforced

13. Do nursing assistants participate in shift report?

☐ Yes ☐ No ☐ Don't know

14. a) Are you aware that Labor & Industries may provide funds for "job modifications" for workers with open injury claims? ☐ Yes ☐ No

b) If yes, have you ever used this process to obtain funds for patient handling job modifications? ☐ Yes ☐ No

c) If yes, what kind of modification(s) was obtained?

d) If yes, how would you describe the experience of securing job modification funds?

JOB ACTIVITIES

15. What are three tasks you perceive as the most physically demanding for the direct care staff, or place them in awkward or fixed positions?

a)_____

b)_____

c)_____

16. As you perceive it, how likely are the three tasks above likely to cause:

	Very likely: Could happen anytime	Likely: Could happen sometime	Unlikely: Could happen but very rarely	Very Unlikely: Could happen but probably never will
Long term illness or serious injury	1	2	3	4
Medical attention, several days off work	1	2	3	4
First aid needed	1	2	3	4

EQUIPMENT

17. Approximately, how much did you spend in the last three years (3) leasing equipment for patient handling?

☐ N/A ☐ $_____

18. Approximately, how much did you spend in the last three (3) years purchasing equipment for patient handling?

☐ N/A ☐ $_____

19. Approximately, how much did you spend in the last three (3) years on the maintenance of equipment for patient handling?

☐ N/A ☐ $_____

20. Who is involved in patient lifting purchase decisions?
(e.g. safety committee, front line nursing staff, materials management)

21. a) Is the current patient handling equipment being used, when appropriate?

☐ Yes ☐ No

b) Is the current number of patient handling equipment adequate to meet the demands of patient handling?

☐ Yes ☐ No

22. In general, do you think that using mechanical transfer equipment to move patients is:

	Extremely	Very	Somewhat	Neither	Somewhat	Very	Extremely	
a) Hard	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Easy
b) Worthless	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Valuable
c) Harmful	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Beneficial
d) Foolish	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Wise

23. How likely or unlikely is it that using mechanical transfer equipment to move residents will:

	Very Unlikely	Unlikely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely
a) Take more time to do.	⬭	⬭	⬭	⬭	⬭	⬭
b) Be uncomfortable for the patients.	⬭	⬭	⬭	⬭	⬭	⬭
c) Decrease the chance that staff will get hurt at work.	⬭	⬭	⬭	⬭	⬭	⬭
d) Require more help from coworkers.	⬭	⬭	⬭	⬭	⬭	⬭
e) Injure patients	⬭	⬭	⬭	⬭	⬭	⬭
f) Be refused by the patient or family member	⬭	⬭	⬭	⬭	⬭	⬭

TRAINING

24. a) Do you have someone whose job it is to train staff? ☐ Yes ☐ No

b) If yes, how many have you had in the past three (3) years? _____

c) If yes, what is the training coordinator's role/responsibilities?

25. Does your facility provide training to direct patient care staff on how to reduce the risk of lifting injuries from patient handling?

☐ Yes ☐ No

26. a) How frequently is direct care staff required to have refresher training in patient transfers? _____

b) Does the training require demonstrated competencies?

☐ Yes ☐ No

27. What would you say are the biggest obstacles to reducing injuries related to patient handling?

Physical plant issues:

Policy/regulation issues:

Financial issues:

Training issues:

Staff-related issues:

Equipment-related issues:

IF YOUR FACILITY HAS NO "NO-LIFT" PROGRAM, PLEASE PROCEED TO QUESTION 30

IF YOUR FACILITY HAS IMPLEMENTED A "NO-LIFT" PROGRAM, PLEASE CONTINUE.

---

28. The five (5) main components of a fully implemented **no lift program** and the key elements that define each component are listed below. Rate on each scale how well you believe *your facility* has implemented each component based on the key elements listed.

a) **1ST Component: EQUIPMENT**:

Key Elements:
• Adequate number of equipment to suit resident/patient population and staff • Have adequate number of repositioning devices • Equipment is easily accessible to staff who need to use it

How well has your facility implemented this component?

No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

b) **2ND Component: TRAINING**

Key Elements:
• Training on equipment is developed and integrated into overall training and staff development plan • Training on equipment is part of orientation AND regular on-going sessions • ALL nursing staff know how to use the equipment • Strategies for managing difficult residents are offered

How well has your facility implemented this component?

No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

c) **3RD Component: POLICIES, PROCEDURES AND ENFORCEMENT**

Key Elements:
• Have policies and procedures for resident/patient handling, including expected used of equipment • Assessment of resident function takes into account availability of equipment • All employees are aware of the policies • A system is in place for correction and coaching; progressive discipline as appropriate

How well has your facility implemented this component?

No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

d) **4TH Component**: **MANAGEMENT COMMITMENT AND EMPLOYEE INVOLVEMENT**

Key Elements:
• Funds have been allocated in the budget for a no-lift program • Management and employees understand and supports the concept of no-lift • Someone is accountable for the no-lift program • Employees are involved in the design of the no-lift program and help select equipment

How well has your facility implemented this component?

No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

e) **5TH Component: INJURY INVESTIGATION AND MEDICAL CASE MANAGEMENT**

Key Elements:
• Accidents are investigated to better understand how they occurred • The facility is active with medical case management of injured workers • Third party administrators (TPAs) and physicians know about the equipment available at the facility • Alternative "light" duty work is available

How well has your facility implemented this component?

No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

29. Finally, **consider your facility as a whole** with respect to the implementation of an overall no-lift program.

No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

30. What are some of the barriers to implementing a no-lift environment in your facility?

Physical plant issues:
Policy/regulation issues:
Financial issues:
Training issues:
Staff-related issues:
Equipment-related issues:

31. What are some of your successes in implementing a no-lift environment, if applicable?

Physical plant issues:
Policy/regulation issues:

Financial issues:
Training issues:
Staff-related issues:
Equipment-related issues:

THANK YOU VERY MUCH
FOR YOUR PARTICIPATION

APPENDIX SIX:

DATA COLLECTION FORMS, NURSING HOMES

SAFETY COMMITTEE INTERVIEW _____ ***ID #:*** _____

Job Title: _____

Date: _____

How long have you been in this position?

How long have you been at this facility?

How long have you been on the committee?

What is your role (job) on the committee?

Does the committee discuss injuries that have happened to employees as a result of resident handling?

Does the committee discuss things about lifting, transferring, and moving residents?

What are some of the ideas that safety committee has recommended to prevention injuries from resident handling?

THANK YOU!!

Health Care Lifting Task Force EMPLOYEE INTERVIEW

Facility Description: H / NH E / W L / S Unit_____

Date ____/____/____ Interviewer:_____

1. What is your current position or title?_ ☐ RN ☐ LPN ☐ NAC
   ☐ Other _____
2. How long have you been in this position? _____years
3. How long have you been at this facility? _____years
4. On average, what percentage of residents you care for require:

   a) partial assistance when transferring _____%

   b) total assistance when transferring _____%

   c) repositioning in bed _____%

5. What are three tasks you find most physically demanding, or place you in awkward or fixed positions?

   a)_____

   b)_____

   c)_____

6. How likely are the three tasks above likely to cause:

	Very likely: Could happen anytime	Likely: Could happen sometime	Unlikely: Could happen but very rarely	Very Unlikely: Could happen but probably never will
Long term illness or serious injury	1	2	3	4
Medical attention, several days off work	1	2	3	4
First aid needed	1	2	3	4

7. For the tasks listed in Question 5, what are the 3 things that would make your job easier?

   a)_____

   b)_____

   c)_____

8. How likely is it that you will be working in this facility in a year?

   ⬭ ⬭ ⬭ ⬭ ⬭ ⬭

   Very Unlikely | Unlikely | Somewhat Unlikely | Somewhat Likely | Likely | Very Likely

9. If you were looking for a job now, how likely is it that you would decide to take this job again?

   ⬭ ⬭ ⬭ ⬭ ⬭ ⬭

   Very Unlikely | Unlikely | Somewhat Unlikely | Somewhat Likely | Likely | Very Likely

10. Where did you receive your training?_____
    (i.e. college/university, nursing home)

11. When was the last training you had on handling residents?

    _____

12. When was the last time you had to demonstrate resident transfers and repositioning as part of a training exercise?

    _____

13. Is there usually enough staff available to assist in resident handling?

    ☐ Yes ☐ No

14. a) Do you use resident handling equipment whenever needed?

    ☐ Yes ☐ No

    b) Is the current number of resident handling equipment adequate to meet the demands of resident handling?

    ☐ Yes ☐ No

c) If no, what other equipment is needed?

15. In general, do you think that using mechanical transfer equipment to move residents is:

	Extremely	Very	Somewhat	Neither	Somewhat	Very	Extremely	
a) Hard	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Easy
b) Worthless	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Valuable
c) Harmful	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Beneficial
d) Foolish	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Wise

16. How likely or unlikely is it that using mechanical transfer equipment to move residents will:

	Very Unlikely	Unlikely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely
a) Take more time to do.	⬭	⬭	⬭	⬭	⬭	⬭
b) Be uncomfortable for the residents.	⬭	⬭	⬭	⬭	⬭	⬭
c) Decrease the chance I will hurt myself at work.	⬭	⬭	⬭	⬭	⬭	⬭
d) Require more help from my co-workers.	⬭	⬭	⬭	⬭	⬭	⬭
e) Injure residents	⬭	⬭	⬭	⬭	⬭	⬭
f) Be refused by the resident or family member	⬭	⬭	⬭	⬭	⬭	⬭

17. How much do you agree or disagree with each of the statements listed below?

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree
a) I am sure I know how to use the mechanical transfer equipment in the right way.	⬭	⬭	⬭	⬭	⬭	⬭
b) I know who to tell if the equipment is not working.	⬭	⬭	⬭	⬭	⬭	⬭
c) There is usually someone to help with the equipment when needed.	⬭	⬭	⬭	⬭	⬭	⬭
d) I am not sure I will be able to find the equipment when I need it.	⬭	⬭	⬭	⬭	⬭	⬭
e) I will know the current transfer status of each resident with respect to using the equipment.	⬭	⬭	⬭	⬭	⬭	⬭
f) I will be able to explain to the residents what I am doing when I use lifts to move them.	⬭	⬭	⬭	⬭	⬭	⬭
g) I receive support from my supervisor for following policies.	⬭	⬭	⬭	⬭	⬭	⬭

18. List three things that you **LIKE** the most about the resident handling equipment you currently have in your facility.

a)_____

b)_____

c)_____

19. List three things that you **DISLIKE** the most about the resident handling equipment you currently have in your facility.
    a)_____

    b)_____

    c)_____

20. Is there a Health & Safety Committee here?
    ☐ Yes ☐ No ☐ Don't Know

    - If yes, is it working to prevent resident handling injuries?
      ☐ Yes ☐ No ☐ Don't Know

21. a) Are there policies or rules about handling the residents?
    ☐ Yes ☐ No ☐ Don't Know

    b) If yes, what happens if you don't follow the resident handling policies?

22. How are the transfer needs of residents communicated to those providing care?
    ☐ Care Plan ☐ Flow sheet/care sheet ☐ Something in room
    ☐ Verbal report (scheduled) ☐ Verbal report (informal) ☐ Resident chart
    ☐ Other _____

23. How often do you check if the resident handling needs have changed (i.e. check the care plan)?

    _____

24. Has this facility implemented a "no-lift" policy?
    ☐ Yes ☐ No
    b) If yes, when was the policy implemented? _____
    c) If no, are there plans to implement such a policy? When? _____

IF NO, YOU HAVE FINISHED THE QUESTIONNAIRE.
THANK YOU VERY MUCH FOR YOUR PARTICIPATION!!!!

IF YES, PLEASE FINISH THE REST OF THE QUESTIONNAIRE

25. The five (5) main components of a fully implemented **no-lift program** and the key elements that define each component are listed below. Rate on each scale how well you believe *your facility* has implemented each component based on the key elements listed.

a) **1ST Main Component: EQUIPMENT**:

Key Elements:				
• Adequate number of equipment to suit resident population and staff • Have adequate number of repositioning devices • Equipment is easily accessible to staff who need to use it				
How well has your facility implemented this component?				
No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

b) **2ND Main Component: TRAINING**

Key Elements:				
• Training on equipment is developed and integrated into overall training and staff development plan • Training on equipment is part of orientation AND regular on-going sessions • ALL nursing staff know how to use the equipment • Strategies for managing difficult residents are offered				
How well has your facility implemented this component?				
No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

c) **3RD Main Component: POLICIES, PROCEDURES AND ENFORCEMENT**

Key Elements:				
• Have policies and procedures for resident handling, including expected used of equipment • Assessment of resident function takes into account availability of equipment • All employees are aware of the policies • A system is in place for correction and coaching; progressive discipline as appropriate				
How well has your facility implemented this component?				
No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

d) **4TH Main Component**: **MANAGEMENT COMMITMENT AND EMPLOYEE INVOLVEMENT**

Key Elements:
• Funds have been allocated in the budget for a no-lift program • Management and employees understand and supports the concept of no-lift • Someone is accountable for the no-lift program • Employees are involved in the design of the no-lift program and help select equipment
How well has your facility implemented this component?

No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

e) **5TH Main Component: INJURY INVESTIGATION AND MEDICAL CASE MANAGEMENT**

Key Elements:
• Accidents are investigated to better understand how they occurred • The facility is active with medical case management of injured workers • Third party administrators (TPAs) and physicians know about the equipment available at the facility • Alternative "light" duty work is available
How well has your facility implemented this component?

No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

26. Finally, **consider your facility as a whole** with respect to the implementation of an overall no-lift program.

No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

Health Care Lifting Task Force ADMINISTRATION INTERVIEW: Nursing Homes

Date ____/____/____ **Facility Description: E / W L / S**

GENERAL INFORMATION

1. What is your current position/title? _____
2. How long have you held this position? _____years
3. How long have you worked in this facility? _____years
4. How long have you worked in this industry? _____years
5. In the past three (3) years, how many *Administrators* have worked at your facility? _____
6. In the past three (3) years, how many *Directors of Nursing Services* have worked at your facility? _____

FACILITY AND STAFFING

7. In what year did the facility open? _____
8. **As of this week**, what is the size of the following units?
   Total Number of units: _____ Total Number of beds: _____ Total Number of Residents: _____

Type of Resident	**Number of Beds**	**Number of Residents**
Medicare		
Long term care		
Dementia (alzheimers)		
Specialty		
Other please specify		

9. a) Other than RNs, LPNs and NACs, what other staff routinely handles residents?
   b) How many are there of each type of staff?

a) Staff Type	**b) Number**	**a) Staff Type**	**b) Number**
_____	_____	_____	_____
_____	_____	_____	_____

10. a) **As of this week**, what is the staffing level for the following?

Staff	**Current Level**	**Desired Level**
RNs	#	#
LPNs	#	#
NACs	#	#
PTs	#	#
Other	#	#
Other	#	#

b) How would you describe the current staffing level?

No shortage	**Small shortage**	**Moderate Shortage**	**Serious Shortage**	**Not Sure**
O	O	O	O	O
O	O	O	O	O
O	O	O	O	O
O	O	O	O	O
O	O	O	O	O
O	O	O	O	O

POLICIES AND PROCEDURES

11. Is there a written safety and health policy for the prevention of musculoskeletal injuries?

☐ Yes ☐ No

12. Has this facility implemented a "no-lift" policy?

☐ Yes ☐ No

a) If yes, when was the policy implemented? _____

b) If no, are there plans to implement such a policy? ☐ Yes ☐ No

When? _____

13. Is there a specific policy on using mechanical total body assists? ☐ Yes ☐ No

14. Is there a specific policy on using mechanical sit-stand assists? ☐ Yes ☐ No

15. Is there a specific policy on using ceiling lifts? ☐ Yes ☐ No ☐ N/A

16. Is there a specific policy on lift teams, if lift teams are used?
☐ Yes ☐ No ☐ N/A

17. How are the transfer needs of residents communicated to those providing care?
☐ Care Plan ☐ Flow sheet/care sheet ☐ Something in room
☐ Verbal report (scheduled) ☐ Verbal report (informal) ☐ Resident chart
☐ Other _____

18. Do nursing assistants participate in shift report? ☐ Yes ☐ No

19. a) Are you aware that Labor & Industries can provide funds for "job modifications" for workers with open injury claims? ☐ Yes ☐ No

b) If yes, have you ever used this process to obtain funds for resident handling job modifications? ☐ Yes ☐ No

c) If yes, what kind of modification(s) was obtained?

d) If yes, how would you describe the experience of securing job modification funds?

JOB ACTIVITIES

20. What are three tasks that are most physically demanding for the resident care staff, or place them in awkward or fixed positions?

a)_____

b)_____

c)_____

21. How likely are the three tasks above likely to cause:

	Very likely: Could happen anytime	Likely: Could happen sometime	Unlikely: Could happen but very rarely	Very Unlikely: Could happen but probably never will
Long term illness or serious injury	1	2	3	4
Medical attention, several days off work	1	2	3	4
First aid needed	1	2	3	4

EQUIPMENT

22. Approximately, how much did you spend in 2004 leasing equipment for resident handling?

☐ N/A ☐ $_____

23. Approximately, how much did you spend in 2004 purchasing equipment for resident handling?

☐ N/A ☐ $_____

24. Approximately, how much did you spend in 2004 on the maintenance of equipment for resident handling?

☐ N/A ☐ $_____

25. Who is involved in resident lifting purchasing or leasing decisions?

26. a) Is the current resident handling equipment being used, when appropriate?

☐ Yes ☐ No

b) Is the current number of resident handling equipment adequate to meet the demands of resident handling?

☐ Yes ☐ No

27. In general, do you think that using mechanical transfer equipment to move residents is:

	Extremely	Very	Somewhat	Neither	Somewhat	Very	Extremely	
a) Hard	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Easy
b) Worthless	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Valuable
d) Harmful	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Beneficial
e) Foolish	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Wise

28. How likely or unlikely is it that using mechanical transfer equipment to move residents will:

	Very Unlikely	Unlikely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely
a) Take more time to do.	⬭	⬭	⬭	⬭	⬭	⬭
b) Be uncomfortable for the resident.	⬭	⬭	⬭	⬭	⬭	⬭
c) Decrease the chance that staff will get hurt at work.	⬭	⬭	⬭	⬭	⬭	⬭
d) Require more help from coworkers.	⬭	⬭	⬭	⬭	⬭	⬭
e) Injure residents.	⬭	⬭	⬭	⬭	⬭	⬭
f) Be refused by the resident or family member.	⬭	⬭	⬭	⬭	⬭	⬭

TRAINING

29. a) Does your facility have a staff development coordinator? ☐ Yes ☐ No

b) If yes, how many have you had in the past three (3) years? _____

c) If yes, what are the coordinator's role/responsibilities?

30. Does your facility provide training to direct resident care staff on how to reduce the risk of musculoskeletal injuries from resident handling?

☐ Yes ☐ No

31. a) How frequently is resident care staff required to have refresher training in resident transfers? _____

b) Does the training require demonstrated competencies?

☐ Yes ☐ No

32. Is previous training on resident handling an important aspect when hiring?

☐ Yes ☐ No

33. What are the biggest challenges in attracting resident care staff?

34. What do you think would be the most important improvements to recruit and retain qualified resident care staff?

35. What are the biggest challenges in retaining resident care staff?

36. What would you say are the biggest obstacles to reducing injuries related to resident handling?

Physical plant related issues:

Policy/regulation related issues:

Staff related issues:

Equipment related issues:

Training issues:

Financial issues:

IF YOUR FACILITY HAS NO "NO-LIFT" PROGRAM, PLEASE PROCEED TO QUESTION 39

IF YOUR FACILITY HAS IMPLEMENTED A "NO-LIFT" PROGRAM, PLEASE CONTINUE.

“NO LIFT” PROGRAM

37. The five (5) main components of a fully implemented **no-lift program** and the key elements that define each component are listed below. Rate on each scale how well you believe *your facility* has implemented each component based on the key elements listed.

a) **1ST Component: EQUIPMENT**:

Key Elements:
• Adequate number of equipment to suit resident population and staff • Have adequate number of repositioning devices • Equipment is easily accessible to staff who need to use it

How well has your facility implemented this component?

No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

b) **2ND Component: TRAINING**

Key Elements:
• Training on equipment is developed and integrated into overall training and staff development plan • Training on equipment is part of orientation AND regular on-going sessions • ALL nursing staff know how to use the equipment • Strategies for managing difficult residents are offered

How well has your facility implemented this component?

No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

c) **3RD Component: POLICIES, PROCEDURES AND ENFORCEMENT**

Key Elements:
• Have policies and procedures for resident handling, including expected used of equipment • Assessment of resident function takes into account availability of equipment • All employees are aware of the policies • A system is in place for correction and coaching; progressive discipline as appropriate

How well has your facility implemented this component?

No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

d) **4TH Component**: **MANAGEMENT COMMITMENT AND EMPLOYEE INVOLVEMENT**

Key Elements:
• Funds have been allocated in the budget for a no-lift program • Management and employees understand and supports the concept of no-lift • Someone is accountable for the no-lift program • Employees are involved in the design of the no-lift program and help select equipment

How well has your facility implemented this component?

No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

e) **5TH Component: INJURY INVESTIGATION AND MEDICAL CASE MANAGEMENT**

Key Elements:
• Accidents are investigated to better understand how they occurred • The facility is active with medical case management of injured workers • Third party administrators (TPAs) and physicians know about the equipment available at the facility • Alternative "light" duty work is available

How well has your facility implemented this component?

No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

38. Finally, **consider your facility as a whole** with respect to the implementation of an overall no-lift program.

No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

39. What are some of the barriers to implementing a no-lift environment in your facility?

Physical plant related issues:

Policy/regulation related issues:

Staff related issues:

Equipment related issues:

Training issues:

Financial issues:

40. What are some of your successes in implementing a no-lift environment, if applicable?

Physical plant related issues:

Policy/regulation related issues:

Staff related issues:

Equipment related issues:

Training issues:

Financial issues:

THANK YOU FOR PARTICIPATION!!

Health Care Lifting Task Force Observation Sheet: Hospitals, Nursing Homes, Hospice

Date ____/____/____

Facility Description: H / NH / HP E / W L / S U / R
Unit_____

Observer_____**Shift**: ___AM ___PM ___Nights

Number of beds on unit: _____

1. a) For this shift, are you fully staffed? ☐ Yes ☐ No
   b) If no, how many staff are you short?

   RNs_____ LPNs_____ NACs_____

   Other _____

   Other _____

Obstructions that can affect handling patients/residents

2. Are there tripping hazards present in walkways (loose tile, loose carpet, objects)?
   ☐ Yes ☐ No

3. Are doorways free and clear?
   ☐ Yes ☐ No

4. Are there visible spills on the floor?
   ☐ Yes ☐ No

5. Are there hallway mirrors mounted at walkway intersections?
   ☐ Yes ☐ No

6. Are there any ladders or step stools present that create obstructions for patient handling?
   ☐ Yes ☐ No

7. What is the floor surface?
   ☐ Carpeting ☐ Tile/Linoleum ☐ Both _____(describe)_____

8. Are doorways wide enough for equipment?
   ☐ Yes ☐ No

9. Bathrooms:
   a) Is handling equipment used in the bathrooms?
   ☐ Yes ☐ No

List equipment:

_____ _____

_____ _____

_____ _____

b) If yes, is there enough room for handling equipment and staff to work unhampered?

☐ Yes ☐ No

Transferring Patients/Residents

10. Are there ceiling lifts in the rooms?

a) ☐ Yes ☐ No

b) If yes, ☐ In a few rooms ☐ In many rooms ☐ In all rooms

c) How long have they been in use _____

d) Describe any difficulties observed with the equipment?

11. Are there electric whole body floor lifts on the unit?

a) ☐ Yes ☐ No b) If yes, how many? _____

c) How long have they been in use?_____

d) Describe any difficulties observed with the equipment?

12. Are there electric sit-stand lifts on the unit?
    a) ☐ Yes ☐ No b) If yes, how many? _____

    c) How long have they been in use?_____

    d) Describe any difficulties observed with the equipment?

13. Are manual/ hand crank lifts used on the unit?
    a) ☐ Yes ☐ No b) If yes, how many? _____

    c) How long have they been in use?_____

    d) Describe any difficulties observed with the equipment?

14. Are gait belts used?
    a) ☐ Yes ☐ No

    b) If yes,
    ☐ By RNs ☐ By LPNs ☐ By NACs

15. Is the use of gait belts:
    ☐ Mandatory ☐ Voluntary ☐ Prohibited

16. Are walking belts with handles used?
    ☐ Never ☐ Rarely ☐ Sometimes ☐ Almost Always ☐ Always

17. Are gait belts used to move patients from bed to chair, etc?
    ☐ Never ☐ Rarely ☐ Sometimes ☐ Almost Always ☐ Always

18. Are **commercial** repositioning slip-sheets used?
    a) ☐ Yes ☐ No b) If yes, how many? _____

c) How long have they been in use?_____

d) Describe any difficulties observed with the equipment?

19. Are “hover mats” used for moving patient to stretcher?

a) ☐ Yes ☐ No b) If yes, how many? _____

c) How long have they been in use?_____

d) Describe any difficulties observed with the equipment?

20. Are lift teams used to transfer patients?

a) ☐ Yes ☐ No b) If yes, how many? _____

c) How long have they been in use?_____

d) How often are lift team used to transfer patients?

☐ Never ☐ Rarely ☐ Sometimes ☐ Almost Always ☐ Always

e) Describe any difficulties observed with the lift teams?

21. Are there low beds (close to floor)? ☐ Yes ☐ No

a) How many are being used now? _____

22. Are there electric height-adjustable beds?

☐ None ☐ Some ☐ All

23. When were staff last trained on patient transfers?_____
    RNs _____
    LPNs _____
    NACs _____

24. How often are patient transfer trainings given?

25. Staff Comments/Concerns

26. Other relevant observations

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APPENDIX SEVEN:

DATA COLLECTION FORMS, HOME SECTOR

Health Care Lifting Task Force EMPLOYEE INTERVIEW

***(Circle)*: Home Health Hospice Home Care**

E / W U / R

Date ____/____/____ Interviewer:_____

1. What is your current position or title?_ ☐ RN ☐ LPN ☐ NAC
   ☐ PT ☐ OT ☐ HHA ☐ Other _____
2. How long have you been doing this type of work? _____years
3. How long have you worked for this company or person (if only working for one person)? _____ years
4. Of all the patients/clients you physically help to move, what is the usual break down of those who need…

   a) some help from you to move/get up _____%

   b) all your help to move/get up (no help from patient/client) _____%

   c) any help to change position in bed _____%
5. How many home visits do you usually make per week (total)? _____
6. On average, how many times per week do you go to see a patient/client? _____
7. Typically, how long do you continue seeing your patient/client (in weeks)? _____
8. What 3 things at work are hardest on your body?
   (things that wear and tear on your body)
   a)_____

   b)_____

   c)_____

9. If you do those 3 things, is it likely that you will…
(mark one box per row)

	Very likely: Could happen anytime	Likely: Could happen sometime	Unlikely: Could happen but very rarely	Very Unlikely: Could happen but probably never will
Have a long-term illness or serious injury?	1	2	3	4
Need to see a doctor, be off work a few days?	1	2	3	4
Need first aid	1	2	3	4

10. What are 3 things that would make your job easier?

a)_____

b)_____

c)_____

11. Do you think you will be working for this company or same person, a year from now?

⬭	⬭	⬭	⬭	⬭	⬭
Very Unlikely	Unlikely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

12. Where did you get your training to do this job?_____
(some examples: college/university, nursing home/ on the job)

13. Who trained you in how to move a patient/client? _____

14. When was the last time you had this type of training? _____

15. When was the last time you had to actually show someone how you transfer and reposition a patient/client as part of a training exercise? _____

16. Have you been injured while moving a patient/client? _____

17. What do you do if you need help with a patient/client to transfer or reposition?
_____
_____
_____
_____

POLICIES AND PROCEDURES

18. Does your company have written rules to prevent musculoskeletal injuries such as back injuries?

☐ Yes ☐ No ☐ Don't Know

19. Is there a Health & Safety Committee?

☐ Yes ☐ No ☐ Don't Know

- If yes, is it working to prevent patient/client handling injuries?

☐ Yes ☐ No

20. a) Are there rules about "handling" the patients/clients?

☐ Yes ☐ No ☐ Don't Know

b) If yes, what happens if you don't follow those rules?

_____
_____
_____
_____

21. Does your company have a "no-lift" policy?

☐ Yes ☐ No

a) If yes, when did the policy start? _____

b) If no, are there plans to start one? _____ When? _____

22. How do you find out or let other caregivers know about the transfer or mobility needs of a patient/client?

(check all that apply)

☐ Information comes from the initial referral source

☐ medical record (electronic or paper)

☐ Something posted in patient's/client's home

☐ Care Plan

☐ Supervisor communicates it to you before the first visit and whenever it changes

☐ Other (describe)

_____

_____

23. How often do you check to see if your patient/client's "handling" needs have changed?

_____

24. How frequently do you work **with another caregiver** to move heavy or difficult patients/clients?

Never	Rarely	Sometimes	Often	Almost Always
☐	☐	☐	☐	☐

EQUIPMENT

25. What types of "handling" equipment do you use in patient/client homes?

_____
_____
_____

26. Are there new devices or equipment that you have tried that work well in a home environment?

☐ Yes ☐ No

If yes, please describe:

27. Does your company provide you with any equipment to take to patient/client homes that helps with moving or repositioning (this does not include ordering new equipment for patient/clients)?

☐ Yes ☐ No

a) What equipment? _____

_____
_____

28. IF your patient/client needs equipment to move in/out of:
bed, chair, wheelchair, toilet, or shower/tub,
how likely is it that they already have their own equipment?

	Extremely	Very	Somewhat	Neither	Somewhat	Very	Extremely	
Unlikely	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Likely

29. What if your patient/client needs handling equipment but…

- can't afford it OR
- it isn't covered by insurance OR
- the patient/client or the family doesn't want it in the home,

What can you do?

_____
_____
_____

30. How often do you order equipment for patient/client use in their homes (excluding lift equipment)?

Never	Rarely	Sometimes	Often	Almost Always
☐	☐	☐	☐	☐

31. How often do you order a mechanical lifting device for home use?

Never	Rarely	Sometimes	Often	Almost Always
☐	☐	☐	☐	☐

32. Do you know of any portable lift devices that are suitable for home care/ home health/ or hospice workers to take from home to home if needed?

☐ Yes ☐ No

List: _____

33. Does your company have any of these devices?

a) ☐ Yes ☐ No

b) How many? _____

34. In general, do you think that using mechanical transfer equipment to move patients/clients in a home environment is:

	Extremely	Very	Somewhat	Neither	Somewhat	Very	Extremely	
a) Hard	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Easy
b) Worthless	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Valuable
c) Useless	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Useful
d) Harmful	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Beneficial
e) Foolish	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Wise

35. If you use mechanical transfer equipment to move patients/clients do you think it will…

	Very Unlikely	Unlikely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely
a) Take more time to do?	⬭	⬭	⬭	⬭	⬭	⬭
b) Be uncomfortable for them?	⬭	⬭	⬭	⬭	⬭	⬭
c) Decrease the chance that you will get hurt at work?	⬭	⬭	⬭	⬭	⬭	⬭
d) Require more help from co-workers or others?	⬭	⬭	⬭	⬭	⬭	⬭

If your company has a "no-lift" program,
Please finish the rest of the questionnaire.

Otherwise, you have finished the questionnaire.
THANK YOU VERY MUCH FOR YOUR PARTICIPATION!!!!

NO LIFT" PROGRAM

The five (5) main components of a fully implemented **no-lift program** and the key things that define each component are listed below. Please rate how well you believe *your company* has implemented each component based on the key elements listed.

36. **EQUIPMENT includes:**

- Adequate amount of equipment for patient/client levels and staff
- Have adequate number of repositioning devices
- Equipment is easily accessible to staff who need to use it

How well does your company do these things?

Not at all	Poor Job	Good Job	Very Good Job	Excellent Job
☐	☐	☐	☐	☐

37. **TRAINING includes:**

- Training on equipment is developed and integrated into an overall training and staff development plan
- Training on equipment is part of orientation AND regular on-going sessions
- ALL direct care staff know how to use the equipment
- Strategies for managing difficult residents are offered

How well does your company do these things?

Not at all	Poor Job	Good Job	Very Good Job	Excellent Job
☐	☐	☐	☐	☐

38. **POLICIES, PROCEDURES AND ENFORCEMENT includes:**

- Have policies and procedures for patient/client handling, including expected used of equipment
- Assessment of patient/client function takes into account availability of equipment
- All employees are aware of the policies
- A system is in place for correction and coaching; progressive discipline as appropriate

How well does your company do these things?

Not at all	Poor Job	Good Job	Very Good Job	Excellent Job
☐	☐	☐	☐	☐

39. **MANAGEMENT COMMITMENT AND WORKER INVOLVEMENT includes:**

- Money is budgeted for a no-lift program
- Management and workers know and are in favor of the idea of "no-lift"
- Someone is held responsible for the no-lift program
- Workers are involved in the design of the no-lift program and help to choose equipment

How well does your company do these things?

Not at all	Poor Job	Good Job	Very Good Job	Excellent Job
☐	☐	☐	☐	☐

40. **INJURY INVESTIGATION AND MEDICAL CASE MANAGEMENT includes:**

- Accidents are investigated to better understand how they happened
- The company is active with medical case management of injured workers
- The people who take care of your workers' compensation program know about the "handling" equipment that your company has
- Your company uses "light duty" jobs when needed

How well does your company do these things?

Not at all	Poor Job	Good Job	Very Good Job	Excellent Job
☐	☐	☐	☐	☐

41. Finally, **think about your company as a whole…**How good of a job does it do with putting into practice an overall no-lift program.

Not at all	Poor Job	Good Job	Very Good Job	Excellent Job
☐	☐	☐	☐	☐

Comments:

Health Care Lifting Task Force Observation Sheet: Home Health, Home Care, Home Hospice

Date ____/____/____

Facility Description: HH / HC / HP _ E / W __L / S U / R

Observer_____Shift: ___AM ___PM ___Nights

Obstructions that can affect handling patients/residents

1. Are there tripping hazards present in the home (loose tile, loose carpet, objects)?
   ☐ Yes ☐ No

2. Are doorways free and clear?
   ☐ Yes ☐ No

3. Are there visible spills on the floor?
   ☐ Yes ☐ No

4. What is the floor surface?
   ☐ Carpeting ☐ Tile/Linoleum ☐ Both _____(describe)_____

5. Are doorways wide enough for equipment?
   ☐ Yes ☐ No

6. Bathrooms:
   a) Is handling equipment used in the bathrooms?
   ☐ Yes ☐ No

   List equipment:

_____ _____

_____ _____

_____ _____

   b) If yes, is there enough room for handling equipment and staff to work unhampered?
   ☐ Yes ☐ No

Transferring Patients/Residents

7. Is there a ceiling lift in the room?
   a) ☐ Yes ☐ No

   b) How long have they been in use _____

   c) Describe any difficulties observed with the equipment?

8. Is there an electric whole body floor lift in the home?
   a) ☐ Yes ☐ No b) How long has it been in the home?_____

   c) Describe any difficulties observed with the equipment?

9. Is there an electric sit-stand lift in the home?
   a) ☐ Yes ☐ No b) How long has it been in the home?_____

   c) Describe any difficulties observed with the equipment?

10. Is there a manual/ hand crank lift in the home?
    a) ☐ Yes ☐ No b) How long has it been in the home?_____

d) Describe any difficulties observed with the equipment?

11. Are gait belts used?
    a) ☐ Yes ☐ No

12. Is the use of gait belts:
    ☐ Mandatory ☐ Voluntary ☐ Prohibited

13. Are walking belts with handles used?
    ☐ Never ☐ Rarely ☐ Sometimes ☐ Almost Always ☐ Always

14. Are gait belts used to move patients from bed to chair, etc?
    ☐ Never ☐ Rarely ☐ Sometimes ☐ Almost Always ☐ Always

15. Are **commercial** repositioning slip-sheets used?
    a) ☐ Yes ☐ No b) If yes, how many? _____

    c) How long have they been in use?_____

    d) Describe any difficulties observed with the equipment?

16. Is a “hover mats” used for moving the client/patient?
    a) ☐ Yes ☐ No b) How long has it been used?_____

    d) Describe any difficulties observed with the equipment?

17. Are lift teams used to transfer patients?

a) ☐ Yes ☐ No

b) How often are lift team used to transfer patients?

☐ Never ☐ Rarely ☐ Sometimes ☐ Almost Always ☐ Always

c) Describe any difficulties observed with the lift teams?

18. Is the bed low (close to floor)? ☐ Yes ☐ No

19. Is the bed electrically height-adjustable?

☐ Yes ☐ No

20. How often are patient transfer trainings given?

21. Staff Comments/Concerns

22. Other relevant observations

Health Care Lifting Task Force ADMINISTRATION INTERVIEW:

***(Circle)*: Home Health Hospice Home Care**

Organization Description: E / W L / S

Date ____/____/____ Interviewer: _____

GENERAL INFORMATION

1. Who is the person who coordinates the services that your organization provides to individual clients/patients?

2. What is your current position/title? _____

3. How long have you held this position? _____years

4. How long have you worked for this organization? _____years

5. How long have you worked in this industry? _____years

6. In the past three (3) years, how many *Administrators* have worked at your organization? _____

7. In the past three (3) years, how many *Directors of Nursing Services* have worked at your organization? _____

ORGANIZATION AND STAFFING

8.

Staff	Do you provide this service to your client population? Y/N *(note if rarely)*	…is likely to provide direct physical handling assistance to your clients? Y/N
Nursing		
Physical therapy		
Occupational therapy		
Speech pathology		
Social work services		
Home health aide services		
Chore services		
Other (please identify):		

9.

Staff	Do you have sufficient levels of staffing to support your client base? Y/N	No shortage	Small shortage	Moderate Shortage	Serious Shortage	Not Sure
Nursing		O	O	O	O	O
Physical therapy		O	O	O	O	O
Occupational therapy		O	O	O	O	O
Speech pathology		O	O	O	O	O
Social work services		O	O	O	O	O
Home health aide services		O	O	O	O	O
Chore services		O	O	O	O	O
Other (please identify):		O	O	O	O	O

POLICIES AND PROCEDURES

10. Is there a written safety and health policy for the prevention of musculoskeletal injuries?

    ☐ Yes ☐ No

11. Has your organization implemented a "no-lift" policy?

    ☐ Yes ☐ No

    a) If yes, when was the policy implemented? _____

    b) If no, are there plans to implement such a policy? When? _____

12. How are the transfer or mobility needs of clients communicated to those providing care? (check all that apply)

☐ Information conveyed by initial referral source	☐ Client/Patient medical record (electronic or paper)	☐ Something in client's room
☐ Care Plan	☐ Verbal communication from supervisor (prior to initial visit and whenever there is a change in status)	☐ Other (describe)

JOB ACTIVITIES

13. What are three tasks that are most physically demanding for the direct care staff, or place them in awkward or fixed positions?

    a)_____

    b)_____

    c)_____

14. How likely are the three tasks above likely to cause:

	Very likely: Could happen anytime	Likely: Could happen sometime	Unlikely: Could happen buy very rarely	Very Unlikely: Could happen but probably never will
Long term illness or serious injury	1	2	3	4
Medical attention, several days off work	1	2	3	4
First aid needed	1	2	3	4

EQUIPMENT

15. Does your organization provide employees any equipment to take to patient/client homes to assist with patient/client handling (does not include ordering new equipment for clients)?

☐ Yes ☐ No

16. What types of equipment? _____

_____

_____

17. IF equipment is appropriate, how likely is it for the patient/client to already have their own equipment in their home to enable safe assisted transfers (in/out of bed, chair, wheelchair, toilet, shower/tub)

	Extremely	Very	Somewhat	Neither	Somewhat	Very	Extremely	
Unlikely	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Likely

18. If patient/client handling equipment is appropriate and patient/client does not have it, what does the employee do about it?

_____
_____
_____

19. If patient/client handling equipment is unaffordable or uncovered as an insurance expense or if the client/family does not want equipment in the home, what can the organization/employee do?

_____
_____
_____

20. Are you aware of any portable lift devices that are appropriate for use by employees to take from home to home, working for a home care/home health/hospice organization?

☐ Yes ☐ No

21. Does your organization have any such devices?

a) ☐ Yes ☐ No

b) How many? _____

22. Who decides what equipment to lease/buy?

_____

23. Is the current client handling equipment being used regularly?

☐ Yes ☐ No

24. Is there enough to meet the demand?

☐ Yes ☐ No

25. In general, do you think that using mechanical transfer equipment to move clients/patients in a home environment is:

	Extremely	Very	Somewhat	Neither	Somewhat	Very	Extremely	
a) Hard	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Easy
b) Worthless	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Valuable
c) Useless	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Useful
d) Harmful	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Beneficial
e) Foolish	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Wise

26. How likely or unlikely is it that using mechanical transfer equipment to move residents will:

	Very Unlikely	Unlikely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely
a) Take more time to do.	⬭	⬭	⬭	⬭	⬭	⬭
b) Be uncomfortable for the clients.	⬭	⬭	⬭	⬭	⬭	⬭
c) Decrease the chance that staff will get hurt at work.	⬭	⬭	⬭	⬭	⬭	⬭
d) Require more help from coworkers.	⬭	⬭	⬭	⬭	⬭	⬭

TRAINING

27. a) Does your facility have a staff development coordinator? ☐ Yes ☐ No

b) If yes, how many have you had in the past three (3) years? _____

c) If yes, what is the coordinator's role/responsibilities?

28. Does your facility provide training to direct client care staff on how to reduce the risk of musculoskeletal injuries from client handling?

☐ Yes ☐ No

a) Is it for all providers who provide physical assist to clients?

☐ Yes ☐ No

b) If no, who does it exclude? _____

29. a) How frequently is direct care staff required to have refresher training in client transfers? _____

b) Does the training require demonstrated competencies?

☐ Yes ☐ No

30. Is previous training on client handling an important aspect when hiring?

☐ Yes ☐ No

31. What are the biggest challenges in attracting direct client care staff?

32. What do you think would be the most important improvements to recruit and retain qualified direct care staff?

33. What are the biggest challenges in retaining direct client care staff?

34. What would you say are the biggest obstacles to reducing injuries related to client handling?

MANAGEMENT COMMITMENT AND EMPLOYEE INVOLVEMENT

35.

Key Elements:
1. Funds have been allocated in the budget for a no-lift program
2. Management and employees understand and supports the concept of no-lift
3. Someone is accountable for the no-lift program
4. Employees are involved in the design of the no-lift program and help select equipment

How well has your facility implemented this component?

No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

INJURY INVESTIGATION AND MEDICAL CASE MANAGEMENT

36.

Key Elements:
1. Accidents are investigated to better understand how they occurred
2. The facility is active with medical case management of injured workers
3. Third party administrators (TPAs) and physicians know about the handling equipment available to the organization
4. Alternative “light” duty work is available

How well has your facility implemented this component?

No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

37. Finally, **consider your organization as a whole** with respect to the implementation of an overall no-lift program.

No implementation	Poor Implementation	Good Implementation	Very Good Implementation	Excellent Implementation
☐	☐	☐	☐	☐

38. What are some of your successes in implementing a no-lift environment, if applicable?

39. What are some of the barriers to implementing a no-lift environment in your facility?

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APPENDIX EIGHT:

DATA COLLECTION FORMS, PRE-HOSPITAL MEDICAL SERVICES

Pre-hospital medical services survey

Date ____/____/____

GENERAL INFORMATION

1. What is your current position/title? _____
2. How long have you held this position? _____years
3. How long have you worked in this facility? _____years
4. How long have you worked in this industry? _____years

POLICIES AND PROCEDURES

5. Is there a written safety and health policy for the prevention of musculoskeletal injuries (e.g., back strains, shoulder injuries, wrist injuries)?
   ☐ Yes ☐ No
6. Have you implemented any lifting policies?
   ☐ Yes ☐ No
7. Is there a specific policy on team lifting?
   ☐ Yes ☐ No ☐ N/A

JOB ACTIVITIES

8. What are three tasks that are most physically demanding for staff?

   a)_____

   b)_____

   c)_____

10. How likely are the three tasks above likely to cause:

	Very likely: Could happen anytime	Likely: Could happen sometime	Unlikely: Could happen but very rarely	Very Unlikely: Could happen but probably never will
Long term illness or serious injury	1	2	3	4
Medical attention, several days off work	1	2	3	4
First aid needed	1	2	3	4

1. For the tasks listed above, what are the 3 things that would make your job easier?

a)_____

b)_____

c)_____

EQUIPMENT

What specific equipment do you have for lifting or moving patients?

Are there other pieces of equipment you are aware of but do not have?

What are the reasons why you do not have this other equipment?

Cost

Not sure if it would work

Too slow

Too difficult to use

Specific feasibility issues

Training related

Other

TRAINING

Is training provided in correct lifting techniques and/or use of equipment?

Where is training provided?

Do you feel this is the best place to provide the training?

What other training would you recommend?

11. What are some of the barriers or obstacles to reducing lifting and lifting-related injuries?

    Policy/regulation related issues:

    Staff related issues:

    Patient related issues:

    Equipment related issues:

    Training issues:

    Financial issues:

12. What are some of your successes in reducing lifting and lifting-related injuries, if applicable?

APPENDIX NINE:

OBSTACLES TO REDUCING INJURIES, HOSPITALS

Common Themes and Examples of Comments

OBSTACLES TO REDUCING INJURIES RELATED TO PATIENT HANDLING

Common Themes and Examples

1. Physical Plant (n=18)	
Common Themes	Examples of Responses
Equipment Size	• Lifts are big
Facility Design	• Carpeting • Department locations
Lack of Lift Equipment	• Not having ceiling lifts in all rooms
Room Size	• Size of room, especially bathrooms • Small rooms, west wing • Crowded rooms • Space between privacy curtain and beds when using lifts
Storage Space	• The portable equipment is often not readily available due to lack of storage on units • Proximity of lift storage

2. Financial (n=8)	
Common Themes	Examples of Responses
Costly Equipment	• Equipment is expensive
Initial Cost of Program	• Initial cost only
Need Reimbursement/grant	• Could not have gotten equipment without L&I H&S grant • Limitations on funds for equipment and additional staff • Big problem, go the BC route, need reimbursement or incentives
Updating Equipment	• Updating and continuing to purchase appropriate equipment

3. Training (n=11)	
Common Themes	Examples of Responses
Competing Demands	• Too many competing needs
Consistent Training	• None after initial training • Consistent training • Need more
New Equipment	• Need new equipment in acute care, ER, radiology
Redefine Training Program	• Training has occurred with PT manager…role is being re-defined
Room Size	• Need bigger room for equipment to try
Staff Habits	• New people have preceptors
Too Many to Train	• Difficult to train everyone • It is impossible for staff development to check every NAC and nurse with a return demo format except for

	initial orientation

4. Staffing (n=8)	
Common Themes	Examples of Responses
Aging Workforce	• Aging workforce
No Time for Training	• Time limitations for attending training
Perceived Increase in Time	• Staff always appear to be too busy to get additional staff and/or equipment to assist with lifts • Getting past "It takes too long to find the equipment-or get the equipment" • Convincing staff it will take less time
Staff Perceptions/Habits	• Staff's personal perceptions and old ways of doing things-hard to change • It takes a lot of staff rethinking especially staff that have been licensed for a long time • Convincing young staff it isn't safe to lift without assist or devices

5. Equipment (n=7)	
Common Themes	Examples of Responses
Easy Access	• Easy access • Staff know they can easily acquire it when they need it
Equipment Design	• The stretcher handler is too difficult • Board doesn't easily return to stretcher with patient weight on it
More Equipment	• Enough equipment that it is readily available • Need 1 sling per patient for infection control
Storage Space	• Difficult to store equipment on units due to lack of space • Storage

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APPENDIX TEN:

SUCCESSES IN NO-LIFT HOSPITALS

Common Themes and Examples of Comments

SUCCESSES IN IMPLEMENTING A NO-LIFT ENVIRONMENT IN HOSPITALS

Common Themes and Examples

1. Physical Plant

Theme	Respondent Comment
Ceiling Lifts	• Room XXX with ceiling lift. Had good patient success for heavy patients and can ambulate faster • 4th-floor has ceilings lifts in every room

2. Policy and Regulation

Theme	Respondent Comment
No-Lift Policy	• Developed zero-lift policy that extends to non-patient care

3. Financial

Theme	Respondent Comment
Decreased Claims	• Decrease workers' comp from 55 claims ($388,000) in 2003 to 30 claims ($148,000) in 2004 • Reduced patient handling injuries 50% in one year and costs by 60%
Funds Approved for Ceiling Lifts	• Additional funds approved to purchase more ceiling lifts
Received Grant/Rebate	• Got H&S grant from L&I made getting equipment possible, otherwise would have none • Grant to purchase initial equipment

4. Staff

Theme	Respondent Comment
Employee Morale/Value	• Mindset change • Fewer injuries increased morale • As staff use equipment and realize the benefits, they in turn help others see the advantages
Using Equipment	• Willing to get sit-to-stands to get patients up • Saves backs • Got lift team

5. Training

Theme	Respondent Comment
One-on-one Training	• One-on-one training continues as needed • ICU staff use ceiling lifts after additional one-on-one training • Lifts reviewed during updates with hands on return demo
Physical Therapy/Rehab Trains	• PT trains NAs and they become experts • Have PT involved makes them the experts folks will listen to
Team Training	• Do team teaching

APPENDIX ELEVEN:

BARRIERS TO A NO-LIFT ENVIRONMENT, HOSPITALS

Common Themes and Examples of Comments

BARRIERS TO IMPLEMENTING A NO-LIFT ENVIRONMENT IN HOSPITALS

Common Themes and Examples

1. Financial	
Common Themes	Examples of Responses
Costly Equipment	• Cost of equipment
Costly Program	• Lift team $150,000
Lack of Funds	• Lack of funds for equipment • Initial cost only
Updating Equipment	• Updating and continuing to purchase appropriate equipment

2. Physical Plant	
Common Themes	Examples of Responses
Facility Design	• Carpeting • Department locations
Lack of Equipment	• Lack of equipment at point of service
Equipment Size	• Lifts are big
Room Size	• Crowded rooms • Space

3. Training	
Common Themes	Examples of Responses
Not enough training	• Too few hours for training • Schools need to be more aggressive in training students in ergonomics • None after initial training
Competing demands	• Too many competing demands
Need staff	• Need full time injury prevention/ergo person

4. Staff	
Common Themes	Examples of Responses
Staff Perceptions/Habits	• Staff not full engaged in the need to have no-lift policy • Convincing young staff it isn't safe to lift without assist and devices • Convincing staff it is not embarrassing, difficult for patient
Recruitment	• Done well with recruiting/referring people her in community • Core group of staff who feel good about hospital so they recruit friends

Time to do Task	• Convincing staff it will take less time

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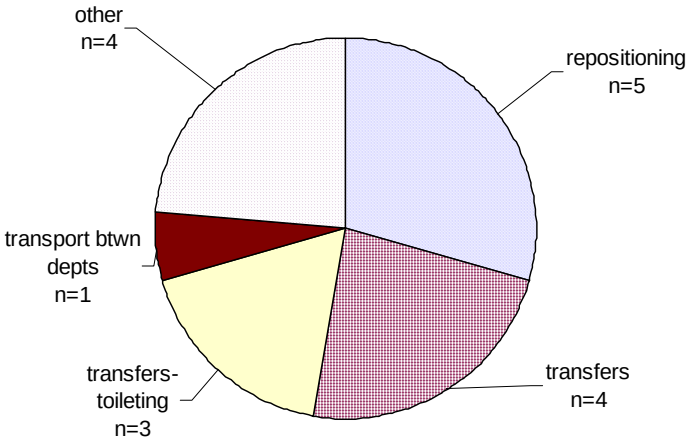
APPENDIX TWELVE:

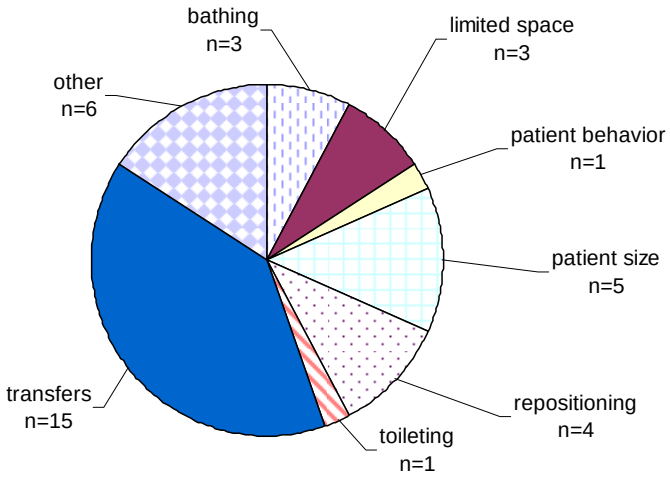
COMPARISONS OF HOSPITAL STAFF TO MANAGEMENT RESPONSES

COMPARISON OF HOSPITAL SURVEY RESULTS, MANAGEMENT AND EMPLOYEE

Figure 1. Physically Demanding Tasks Described

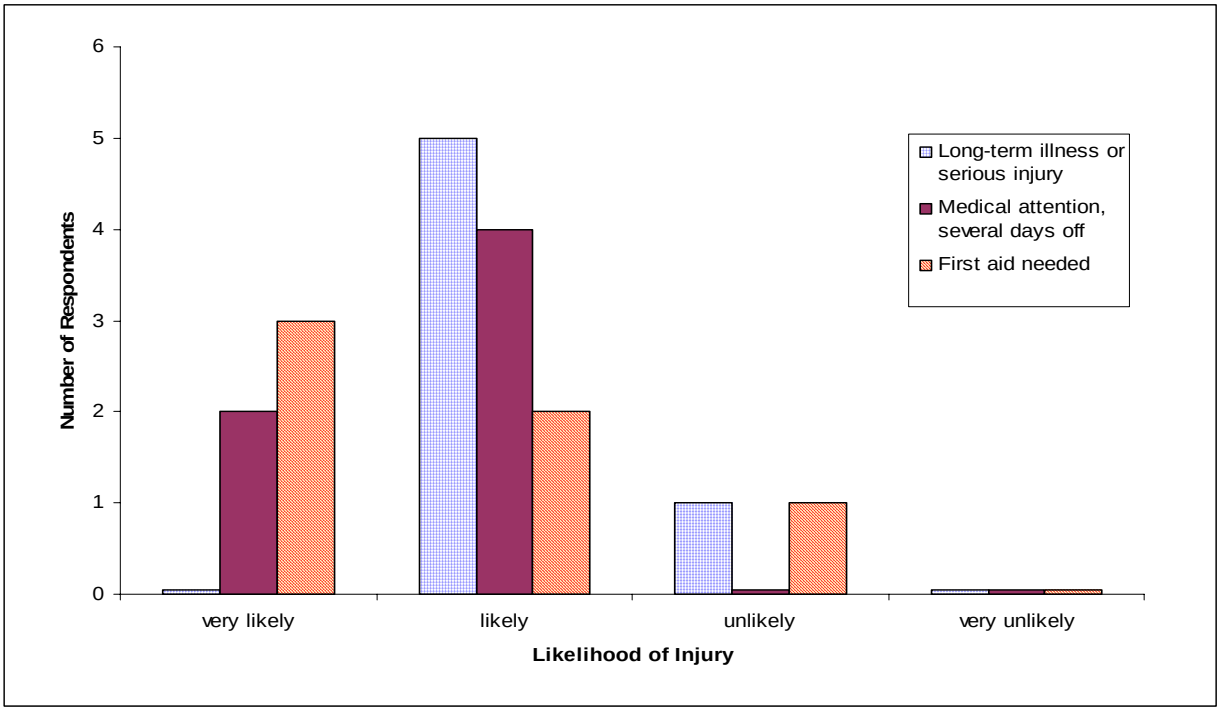


a) Hospital Management

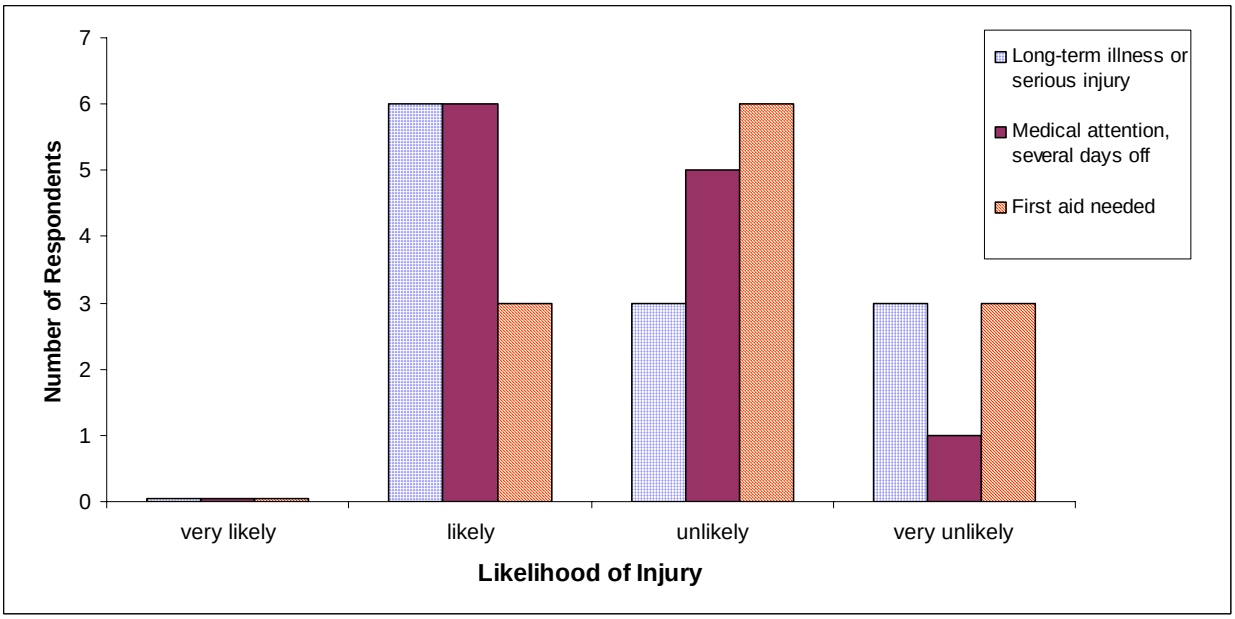


b) Hospital Employees

Figure 2. Perceptions of the Likelihood of Injury as a Result of the Most Physically Demanding Tasks

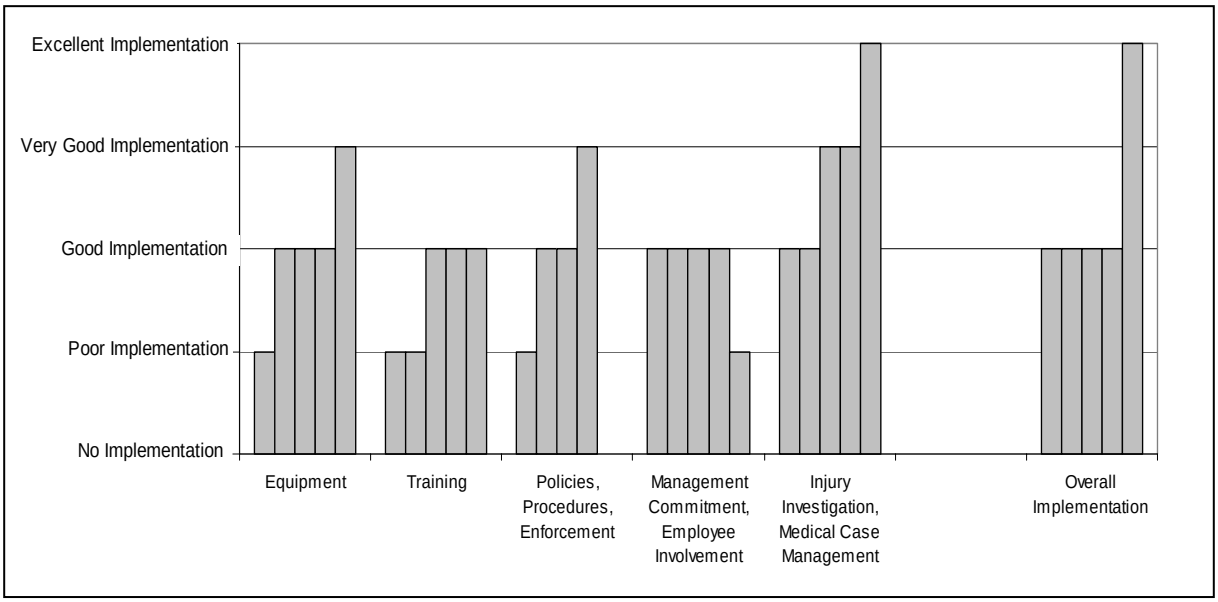


a) Hospital Management

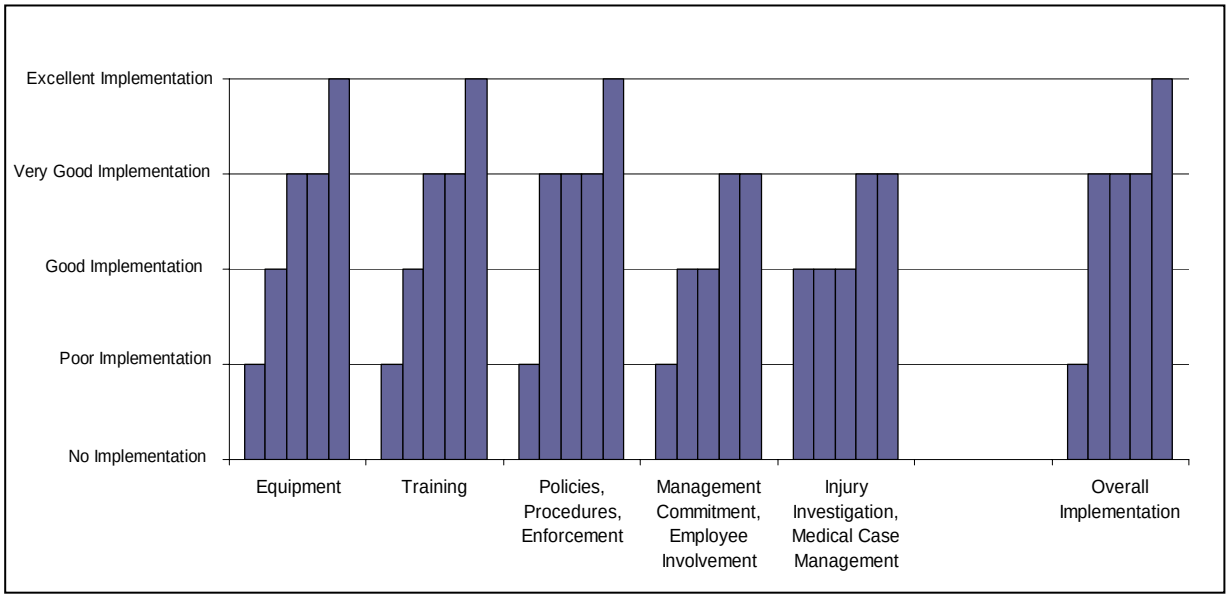


b) Hospital Employees

Figure 3. Assessment of Progress in Implementing Components of a No-Lift Program

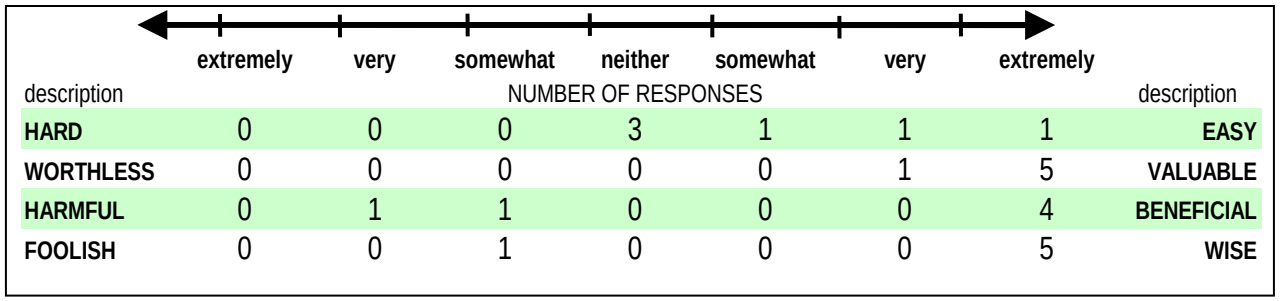


a) Hospital Management (n=5)



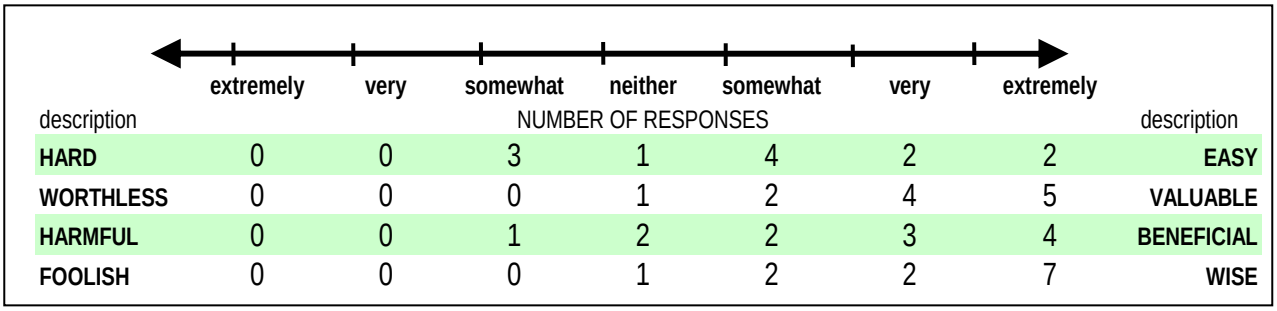
b) Hospital Employees (n=5)

Figure 4. Impressions on Using Mechanical Transfer Equipment



description	extremely	very	somewhat	neither	somewhat	very	extremely	description
	NUMBER OF RESPONSES							
HARD	0	0	0	3	1	1	1	**EASY**
WORTHLESS	0	0	0	0	0	1	5	**VALUABLE**
HARMFUL	0	1	1	0	0	0	4	**BENEFICIAL**
FOOLISH	0	0	1	0	0	0	5	**WISE**

a) Hospital Management (n=6)



description	extremely	very	somewhat	neither	somewhat	very	extremely	description
	NUMBER OF RESPONSES							
HARD	0	0	3	1	4	2	2	**EASY**
WORTHLESS	0	0	0	1	2	4	5	**VALUABLE**
HARMFUL	0	0	1	2	2	3	4	**BENEFICIAL**
FOOLISH	0	0	0	1	2	2	7	**WISE**

b) Hospital Employees (n=12)

Figure 5. Perceived Likely Effect of Using Mechanical Transfer Equipment

Effect	VERY UNLIKELY	UNLIKELY	SOMEWHAT UNLIKELY	SOMEWHAT LIKELY	LIKELY	VERY LIKELY
	number of responses					
Take more time to do	0	1	0	4	5	0
Decrease the chance the staff will get hurt at work	0	0	0	0	1	6
Require more help from co-workers	0	1	2	2	1	0
Be uncomfortable for the patients	0	3	1	2	0	0
Injure patients	1	4	1	0	0	0
Be refused by patient or family member	0	4	0	1	1	0

a) Hospital Management (n=6)

Effect	VERY UNLIKELY	UNLIKELY	SOMEWHAT UNLIKELY	SOMEWHAT LIKELY	LIKELY	VERY LIKELY
	number of responses					
Take more time to do	0	3	1	1	4	3
Decrease the chance the staff will get hurt at work	0	0	0	1	4	7
Require more help from co-workers	1	3	2	4	2	0
Be uncomfortable for the patients	1	0	4	5	2	0
Injure patients	4	2	5	0	0	0
Be refused by patient or family member	1	7	4	0	0	0

b) Hospital Employees (n=12)

APPENDIX THIRTEEN:

OBSTACLES TO REDUCING INJURIES, NURSING HOMES

Common Themes and Examples of Comments

OBSTACLES TO REDUCING INJURIES RELATED TO RESIDENT HANDLING IN NURSING HOMES

Descriptions and Examples

1. Physical plant
    a. Old facilities were not designed with lifting equipment in mind, no storage space, ceilings can't handle ceiling tracks and lifts
    b. The proximity of lifting equipment storage
    c. The need to charge floor lifts in the bathroom at night because they cannot be left in the hallway
    d. The space between the bed and curtain is too small for using a lift and maintaining privacy
2. Policy
    a. The use of psychotropic medicines had decreased tremendously. There may be a link between this to confusion and potentially combative behavior during transfers, endangering both the resident and staff. The judicious use of psychotropics under the supervision of a psychiatrist on staff is still possible.
    b. Nursing homes can no longer use side rails or any restraints to prevent falls. Most nursing homes do not have electric beds. Therefore, they have gone to low beds on the floor for at risk residents. This results in tremendous back and shoulder loads for staff that make beds, dress, reposition and transfer residents. It also makes it more difficult for residents who may be able to partially or fully weight-bear to get up from the bed. These concerns are particularly problematic because as we age, we lose muscle mass, particularly in our lower limbs. Without adjustable beds, there is a likelihood that residents will be less likely to want to get up, thereby decreasing their functional capacity, as well as putting staff at greater risk of injury. It was suggested that the Departments of Labor and Industries and Social and Health Services staff discuss finding ways to improve both resident and staff health and safety.
3. Staff
    a. "Need to have consistent staffing numbers. This facility had a 67% stability rate for NACs" (Stability rate = # NACs present last month of the quarter that have been there more than one year / total # NACs)
    b. "NACs think we don't care about them"
    c. "Staff don't always follow policies"
    d. "Change in policy regarding how many staff have to be present when using lifting device"
    e. "Using bad mobility equipment"
    f. "New staff are at highest risk: need to know they can ask for help"
    g. "Working short"
    h. "Staff turnover is high"

4. Equipment
    a. "Batteries are not always charged when equipment is needed so resort to manual transfer"

   b. “Lack of consistency in equipment such as how to charge the machine: some batteries, some plug in.”
   c. “Performing standing transfers into a bus make it difficult to support the weight and handle the equipment”
5. Training
   a. “The lifting component of what the NAC is required to learn needs to be on the job, so the training required by DSHS is reasonable”
   b. “A 2 week buddy system for new hires”
   c. “It is impossible for staff development coordinator to check every NAC all the time with respect to appropriate transfers”
   d. “Lack of consistent training and reinforcement”
   e. “Training without enforcement and reinforcement”
6. Residents
   a. “In the past 5 years, nursing home populations have changed: more rehabilitation patients are at nursing homes because Medicare pays better than Medicaid”
   b. “The acuity of residents has increased, more are on intravenous medications, antibiotics, require more treatments, etc.”
   c. “Residents are living longer with greater disabilities so they are more vulnerable”

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APPENDIX FOURTEEN

KEY COMPONENTS TO A NO-LIFT PROGRAM

KEY COMPONENTS OF A NO-LIFT PROGRAM

1ST Component: EQUIPMENT:

Key Elements:
• Adequate number of equipment to suit resident/patient population and staff • Have adequate number of repositioning devices • Equipment is easily accessible to staff who need to use it

2ND Component: TRAINING

Key Elements:
• Training on equipment is developed and integrated into overall training and staff development plan • Training on equipment is part of orientation AND regular on-going sessions • ALL nursing staff know how to use the equipment • Strategies for managing difficult residents are offered

3RD Component: POLICIES, PROCEDURES AND ENFORCEMENT

Key Elements:
• Have policies and procedures for resident/patient handling, including expected used of equipment • Assessment of resident function takes into account availability of equipment • All employees are aware of the policies • A system is in place for correction and coaching; progressive discipline as appropriate

4TH Component: **MANAGEMENT COMMITMENT AND EMPLOYEE INVOLVEMENT**

Key Elements:
• Funds have been allocated in the budget for a no-lift program • Management and employees understand and supports the concept of no-lift • Someone is accountable for the no-lift program • Employees are involved in the design of the no-lift program and help select equipment

5TH Component: INJURY INVESTIGATION AND MEDICAL CASE MANAGEMENT

Key Elements:
• Accidents are investigated to better understand how they occurred • The facility is active with medical case management of injured workers • Third party administrators (TPAs) and physicians know about the equipment available at the facility • Alternative “light” duty work is available

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APPENDIX FIFTEEN:

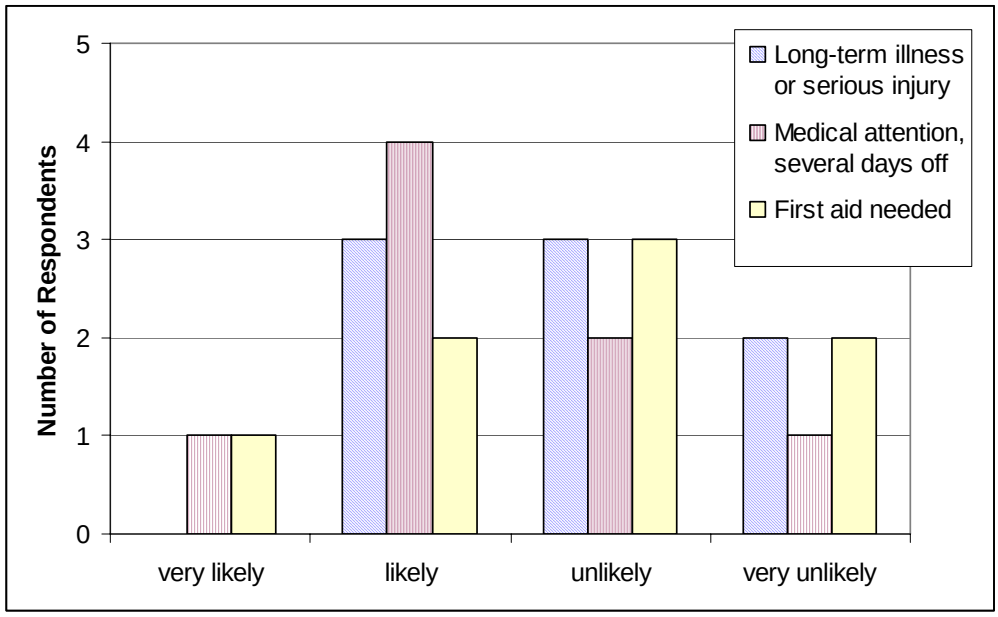
COMPARISONS OF NURSING HOMES STAFF TO ADMINISTRATION RESPONSES

COMPARISON OF NURSING HOME SURVEY RESULTS, ADMINISTRATORS AND EMPLOYEES

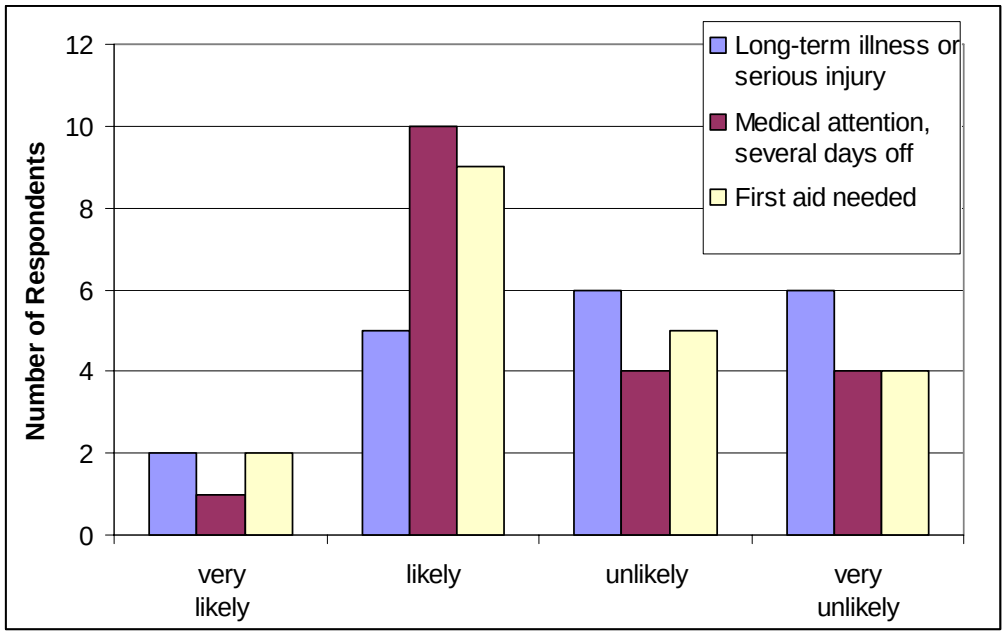
Table 1. Physically Demanding Tasks Described

Administrator Responses	Employee Responses
• Transferring residents from the bed (particularly low beds required by DSHS for residents who are at risk for falls from bed)	• Transferring residents from low beds
• Repositioning in bed	• Repositioning in bed
• Bathing the resident	• Awkward postures while transferring, dressing, repositioning
• Preventing a fall	• Lifting objects
• Constant bending and stooping, particularly when cleaning the resident in the bathroom	• Being a man working with female NACs who ask for assistance lifting the heavy residents
• Transferring combative residents	• Transferring combative residents
• Transferring obese residents, gait training, transfers from chair to car	• Handling obese residents
	• Toileting
	• Working short staffed
	• Equipment failure
	• Lack of team work
	• Dressing residents
	• Transferring when a resident faints or looses his/her balance
	• Limited space to maneuver wheelchairs

Figure 1. Perceptions of the Likelihood of Injury as a Result of the Most Physically Demanding Tasks

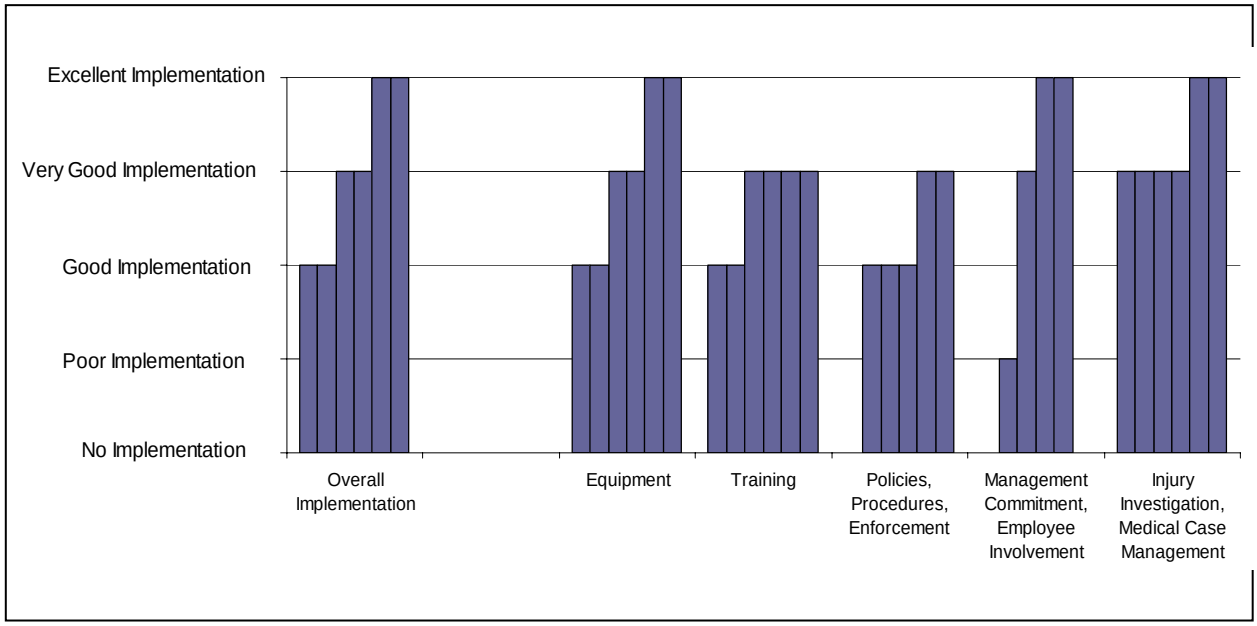


a) Nursing Home Administrators (n=8)

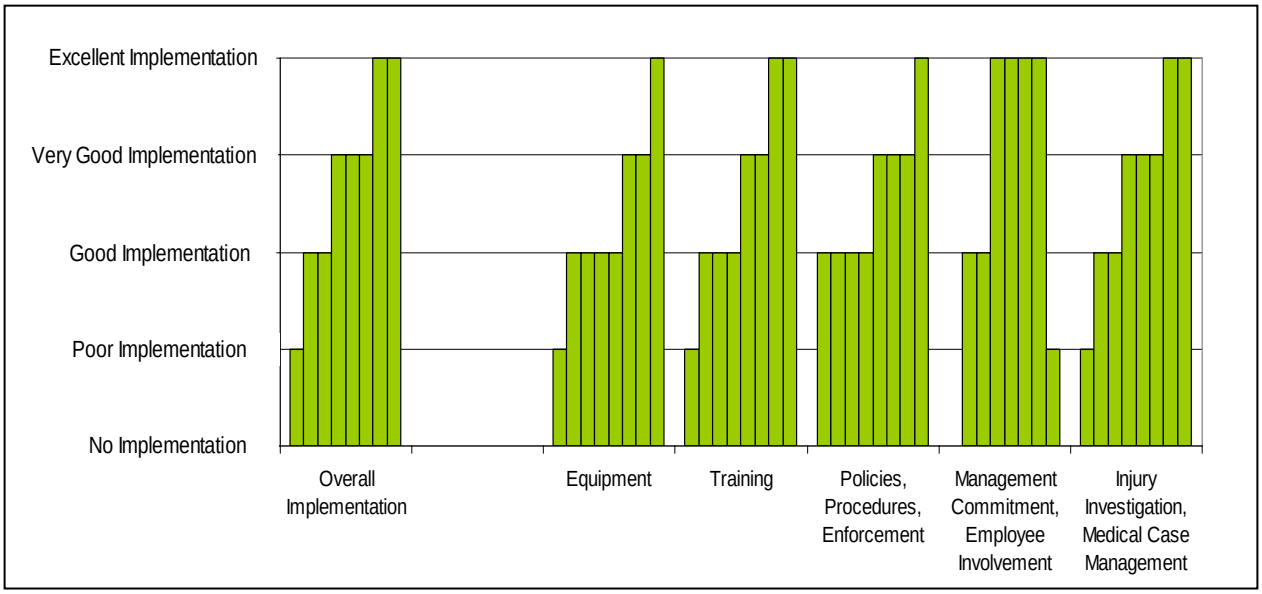


b) Nursing Home Employees(n=22)

Figure 2. Assessment of Progress in Implementing Components of a No-Lift Program

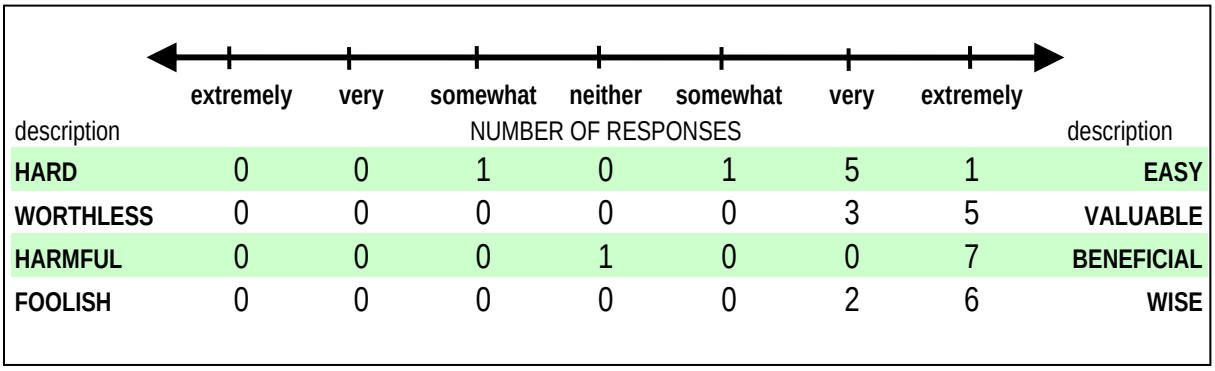


a) Nursing Home Administrators (n=8)



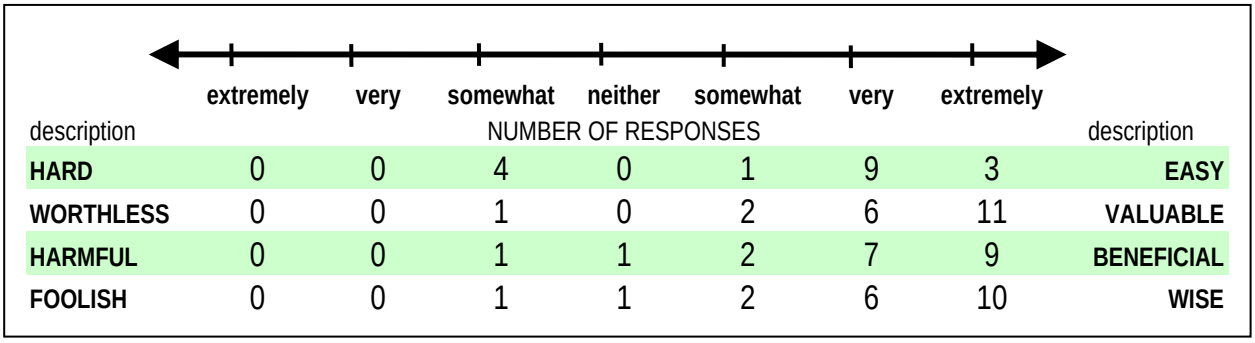
b) Nursing Home Employees (n=8)

Figure 3. Impressions on Using Mechanical Transfer Equipment



description	extremely	very	somewhat	neither	somewhat	very	extremely	description
	NUMBER OF RESPONSES							
HARD	0	0	1	0	1	5	1	**EASY**
WORTHLESS	0	0	0	0	0	3	5	**VALUABLE**
HARMFUL	0	0	0	1	0	0	7	**BENEFICIAL**
FOOLISH	0	0	0	0	0	2	6	**WISE**

a) Nursing Home Administrators (n=8)



description	extremely	very	somewhat	neither	somewhat	very	extremely	description
	NUMBER OF RESPONSES							
HARD	0	0	4	0	1	9	3	**EASY**
WORTHLESS	0	0	1	0	2	6	11	**VALUABLE**
HARMFUL	0	0	1	1	2	7	9	**BENEFICIAL**
FOOLISH	0	0	1	1	2	6	10	**WISE**

b) Nursing Home Employees (n=22)

Figure 4. Perceived Likely Effect of Using Mechanical Transfer Equipment

Effect	VERY UNLIKELY	UNLIKELY	SOMEWHAT UNLIKELY	SOMEWHAT LIKELY	LIKELY	VERY LIKELY
	number of responses					
Take more time to do	0	2	2	4	0	0
Decrease the chance the staff will get hurt at work	0	0	0	0	3	6
Require more help from co-workers	0	3	1	1	2	1
Be uncomfortable for the residents	2	1	2	3	0	0
Injure residents	5	0	0	2	0	0
Be refused by resident or family member	4	1	0	2	0	0

a) Nursing Home Administrators (n=8)

Effect	VERY UNLIKELY	UNLIKELY	SOMEWHAT UNLIKELY	SOMEWHAT LIKELY	LIKELY	VERY LIKELY
	number of responses					
Take more time to do	2	4	2	1	5	7
Decrease the chance the staff will get hurt at work	1	1	1	1	6	11
Require more help from co-workers	2	1	3	4	5	6
Be uncomfortable for the residents	2	4	6	5	3	1
Injure residents	7	5	1	2	2	1
Be refused by resident or family member	0	2	9	5	1	1

b) Nursing Home Employees (n=22)

APPENDIX SIXTEEN:

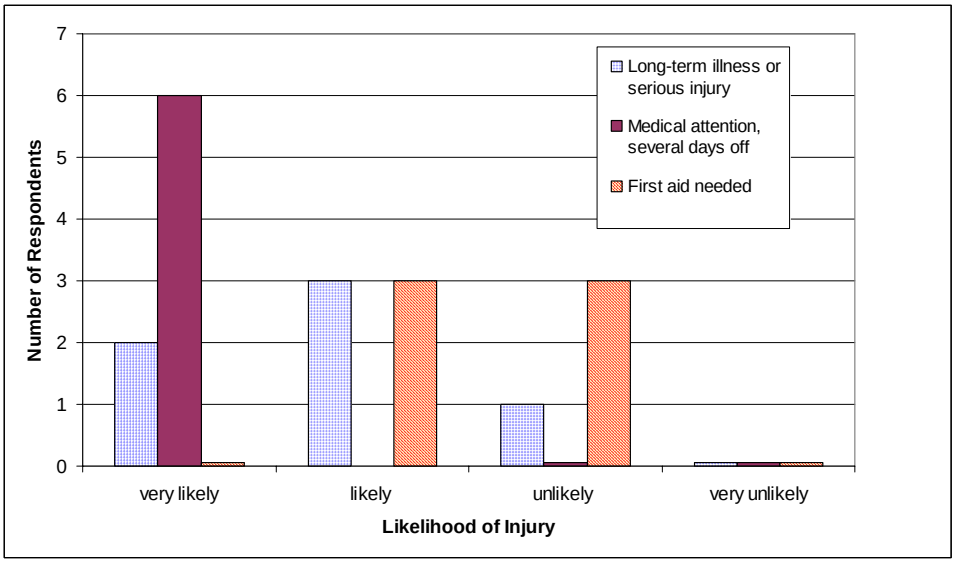
COMPARISONS OF HOME SECTOR STAFF TO ADMINISTRATION RESPONSES

COMPARISON OF HOME SECTOR SURVEY RESULTS, MANAGEMENT AND EMPLOYEE

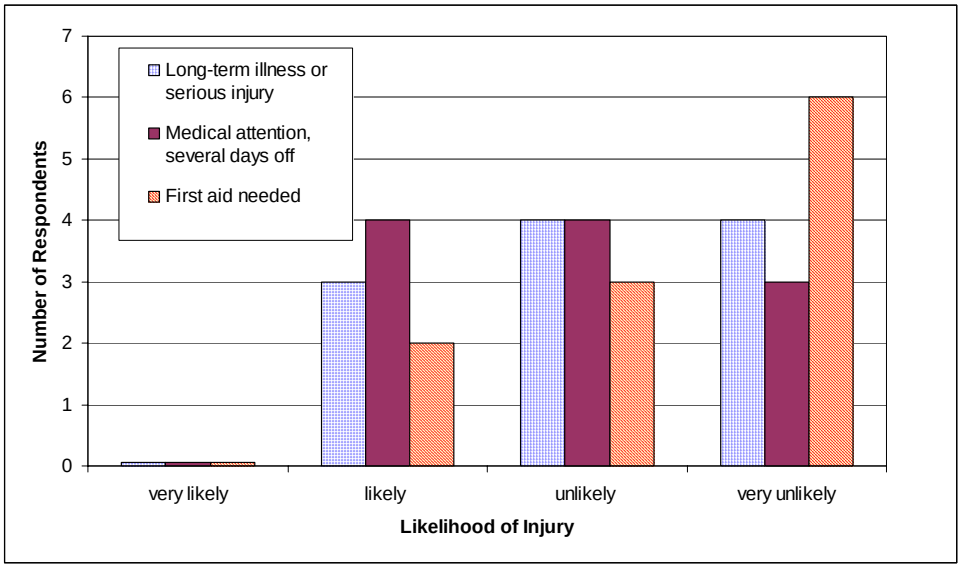
Table 1. Physically Demanding Tasks Described

Administrator Responses	Employee Responses
• Toilet transfers (includes commode)	• lifting
• Transfers in/out of bed	• bathing and associated awkward bending over tubs or beds (bed bath)
• Moving (relatively) immobile patients such as those with MS, ALS, cord compression	• repositioning patient/client on the bed
• Bathing patient/client in tub or with bed baths and the associated awkward postures	• assisting patient/client with toileting
• Lifting patients/clients	• transfers (including to/from tub)
• Coping with environmental limitations	• stooping
• Lifting patients/clients from floor after a fall	• bending over bed while changing catheter
• Dressing patients/clients	• kneeling on floor
• Working with patients/clients on low beds (includes catheter placement)	• dressing changes
	• putting TED's support hose on patients/clients
	• carrying equipment/supplies (includes bag, scale, etc. and carrying them up/down stairs)
	• rolling a "rigid" patient/client in bed
	• standing for long periods of time
	• sitting for long periods of time
	• driving (back)
	• phone use (neck)
	• stress dealing with some family members of patient/client

Figure 1. Perceptions of the Likelihood of Injury as a Result of the Most Physically Demanding Tasks

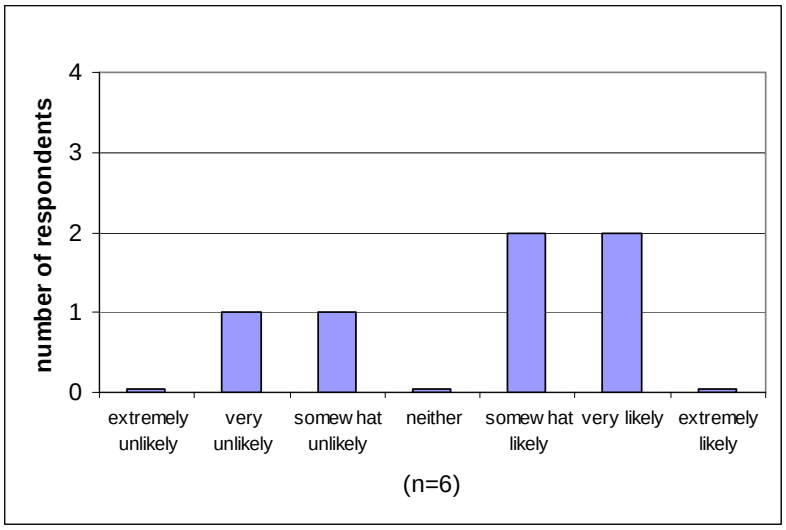


a) Home Sector Management (n=6)

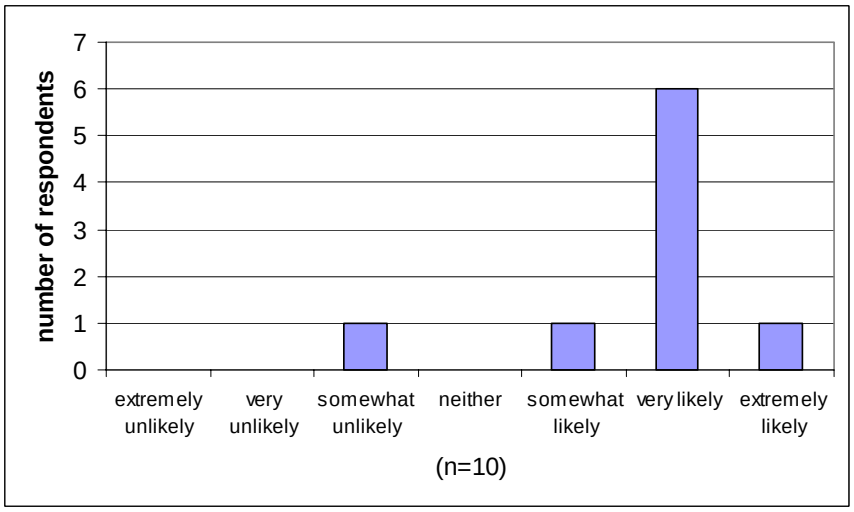


b) Home Sector Employees (n=11)

Figure 2. Likelihood That Patient/Clients Already Has Transfer Equipment at Home



a) Home Sector Management (n=6)

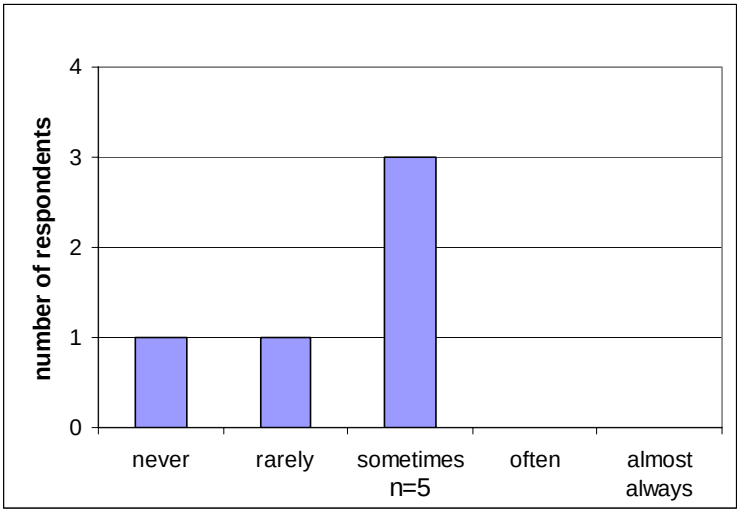


b) Home Sector Employees(n=10)

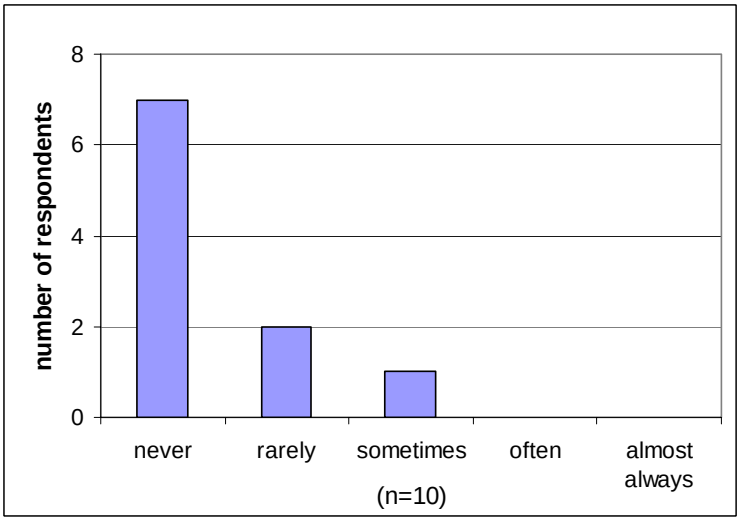
Table 2. Actions Taken to Obtain Recommended Equipment

What is done when recommended equipment is not affordable to patient/client, not covered by insurance, or not wanted in the home:	
Management Responses	**Employee Responses**
• Strongly suggest (to patient/client/and family), otherwise we are unable to do anything	• Social worker coordinates with community services. Home health can't use donated equipment
• Look for any alternatives that are safe. Other than that, nothing…we are not a DME	• Make referral to OT or PT
• Limit service - meaning we may still provide bathing/personal care but not move or transfer the patient	• I recommend they call The Donor Closet 206-718-0426 (HELPING HANDS)
• Discuss necessity with family, explain (caregiver's) refusal to lift	• Talk with family or supervisor
• Report needs to social worker or case manager	• Donor closet sells cheap, used equipment
	• Ask Bridge ministries equipment department, or my church has equipment to loan
	• Call nurse or DME. Talk to nurse about options
	• Often our nurse manager will find a way to provide the equipment if they can't afford it. We haven't had any refusals of equipment by my clients but if they refused it would be up to the nurse manager to decide if the client were safe without the equipment

Figure 3. Frequency of Home Sector Employees Ordering Lift Equipment, Home Sector Administrative Survey (n=5)



a) Home Sector Management (n=5)



b) Home Sector Employees (n=10)

Figure 4. Impressions on Using Mechanical Transfer Equipment

USING MECHANICAL TRANSFER EQUIPMENT IN THE HOME IS…

description	extremely	very	somewhat	neither	somewhat	very	extremely	description
	NUMBER OF RESPONSES							
HARD	1	0	3	0	2	0	0	**EASY**
WORTHLESS	1	0	0	2	0	0	3	**VALUABLE**
USELESS	1	0	0	2	0	2	1	**USEFUL**
HARMFUL	0	0	0	3	0	2	1	**BENEFICIAL**
FOOLISH	1	0	0	2	0	2	1	**WISE**

a) Home Sector Management (n=6)

USING MECHANICAL TRANSFER EQUIPMENT IN THE HOME IS…

description	extremely	very	somewhat	neither	somewhat	very	extremely	description
	NUMBER OF RESPONSES							
HARD	0	0	3	0	1	3	2	**EASY**
WORTHLESS	0	0	0	0	1	4	4	**VALUABLE**
USELESS	0	0	0	0	1	4	4	**USEFUL**
HARMFUL	0	0	0	0	1	4	4	**BENEFICIAL**
FOOLISH	0	0	0	0	1	4	4	**WISE**

b) Home Sector Employees (n=9)

Figure 5. Perceived Likely Effect of Using Mechanical Transfer Equipment

	very unlikely	unlikely	somewhat unlikely	somewhat likely	likely	very likely
	NUMBER OF RESPONSES					
Take more time	0	0	0	3	0	3
Be uncomfortable for patients/clients	0	1	3	2	0	0
Decrease the chance of employee injury	0	0	1	2	0	3
Require help from others	0	0	0	5	0	1

a) Home Sector Management (n=6)

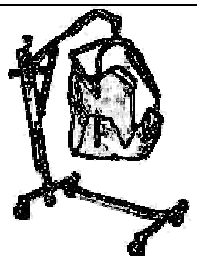
USING MECHANICAL TRANSFER EQUIPMENT WILL…	very unlikely	unlikely	somewhat unlikely	somewhat likely	likely	very likely
	NUMBER OF RESPONSES					
Take more time	0	4	0	2	3	1
Be uncomfortable for patients/clients	1	4	3	1	1	0
Decrease the chance of employee injury	0	0	0	1	2	7
Require help from others	3	3	2	0	2	0

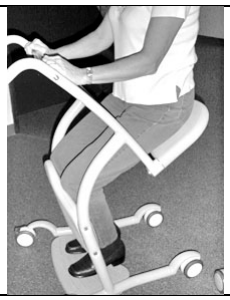
b) Home Sector Employees (n=10)

APPENDIX SEVENTEEN:

EQUIPMENT FOR THE HOME SECTOR

HOME SECTOR EQUIPMENT

Equipment	Insurance	Approximate costs	
Manual hydraulic total lift ("hoyer" lift)	Yes – if specific criteria is met	~ $700 - $1000 as a purchase ~ $105/mo as a rental	
Battery powered total lift	No	~$3500 - $5000 Not available as a rental	
Powered standing assist device (sit-stand device)	No	~$3000 - $3700 Not available as a rental	
Non-powered sit-stand aids	No No	Transfer pole ~$200 ~$1770	

		Not available as a rental	
Ceiling lift (tracks installed, including motor unit and a sling)	No	~$4800 - $5600 Not available as a rental	
"Portable" ceiling lift (available as a 2 post frame or 4 post gantry style)	No	2 post: ~ $4500 (includes sling and lift device mechanism) Not available as a rental