



New Yorkers for Patient  
& Family Empowerment

# The Case for Caring Technology:

Why New York Patients & Nursing Home Residents  
Should Be Entitled to the Use of Safer, Technology-  
Based Methods for Lifting and Moving  
("Safe Patient Handling")

*A Report by New Yorkers for Patient & Family Empowerment*

Suzanne Y. Mattei, Author  
Renee Kameko Hasman, Esq. Research Assistant  
Colleen Hoeffling, Research Intern  
Phyllis Eckhaus, Esq., Advisor

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## Executive Summary

It may seem counter-intuitive, but the most caring, effective way to manage lifting or repositioning of patients with mobility issues is not “hands on” but “hands off.”

Lifting or repositioning of patients and nursing home residents who have mobility issues can occur many times a day. But when healthcare workers undertake this effort manually – without modern equipment – both the patient and the healthcare worker can be harmed. A care giver should manually lift no more than 35 pounds of body weight. Yet in considering typical risk scenarios such as:

- Transferring a patient between a bed and chair;
- Transferring a patient between a chair and a shower or bathtub; and
- Laterally transferring a patient between a bed and a stretcher,

it is clear that caregivers lift much more. Indeed, a typical bedside nurse lifts two tons per day.

The safe approach is the approach that is truly caring. Under a safety-based program, trained healthcare workers use modern mechanical lifts and repositioning devices rather than bearing the patient's weight. One study documented a 49 percent reduction in patient falls related to lift and transfer activities. This also frees healthcare staff from the burden of lifting patients so they can devote their energies to direct patient care. The goal is to let the healthcare workers do the healthcare, and let proper, safe mechanical devices do the lifting. This is the best way to protect both patients and health care workers from injury.

Recognizing this, eight states have enacted “safe patient handling laws,” and the U.S. Veterans Health Administration has made it a policy for all of its facilities. As the New Jersey Legislature noted in its statement of findings, “Studies show that manual patient handling and movement negatively affect patient safety, quality of care and patient comfort, dignity and satisfaction,” and “it is appropriate public policy to minimize unassisted patient handling.” Strong evidence shows that this approach:

- Reduces the risk of injury to patients from unsafe lifting;
- Helps avoid awkward handling and improves patient comfort; and,
- Promotes patient mobilization (which helps prevent pneumonia and other ailments).

These are benefits to which all New York patients and nursing home residents should be entitled.

New York should become a leader in promoting safe lifting and moving in healthcare through establishment of a statewide “safe patient handling” policy. While a number of healthcare facilities in New York have some form of a lifting equipment and training program, consumers have no assurance from the Department of Health that such programs are adequate and consistent. This report:

- Emphasizes that every hospital and nursing home should disclose and discuss its lifting and moving policies with patients/residents and their loved ones.
- Explains why disclosure is not enough; statewide standards and government oversight are essential to ensure safety; and
- Compares the currently proposed legislation with laws already in place in other states.

## When Safe Lifting and Moving in Healthcare Is Needed

A plethora of manual patient lifting and moving activities occur on a daily basis in hospitals and nursing homes even though they are in fact considered to be “high risk.” The following are examples of some activities that should not be conducted manually:

- Transferring a patient between a bed and chair;
- Transferring a patient between a toilet and chair;
- Transferring a patient between a chair and a shower or bathtub;
- Transferring a patient on and off an operation room bed;
- Lifting a patient up from the floor;
- Laterally transferring a patient between a bed and a stretcher; and
- Lifting and holding a patient's leg, especially for a prolonged period during a medical examination or procedure.<sup>1</sup>

High risk conditions also occur frequently when patients with mobility issues need to be repositioned while in a bed or chair. Indeed, a report for the Veterans Health Administration noted that, “Pushing and pulling actions, regularly performed during the repositioning of patients, was the most commonly cited single cause of injuries” for its nursing home direct care workers.<sup>2</sup> Repositioning activity may be needed for a variety of reasons, including:

- Patient care purposes, such as performing an examination, a medical procedure or a personal hygiene task;
- To prevent bedsores (a patient's position should be changed regularly for this purpose);
- To minimize pooling of upper-respiratory fluids and optimize infusion of oxygen into the lungs;
- To promote comfort (such as helping a patient move back up in the bed after sliding down, or restoring better posture in a patient who has slumped down in a chair);
- To ease breathing or reduce nausea; or
- To ensure a vertical upper body position when a patient is eating or swallowing liquids.<sup>3</sup>

Repositioning activities may take up as much as 50 percent of a healthcare worker's time with patients.<sup>4</sup>

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<sup>1</sup> See M. Cohen, *et al.*, 2010 Health Guidelines Revision Commission, Specialty Subcommittee on Patient Movement, “Patient Handling and Movement Assessments: A White Paper” (Facility Guidelines Institute, April 2010) ([http://www.fgiguilines.org/pdfs/FGI\\_PHAMA\\_whitepaper\\_042810.pdf](http://www.fgiguilines.org/pdfs/FGI_PHAMA_whitepaper_042810.pdf)), Appendix A.

<sup>2</sup> Mary Matz, MSPH, *et al.*, “Analysis of VA Patient Handling and Movement Injuries and Preventive Programs” (Presented to Michael Hodgson, MD, MPH, Chief Consultant, Occupational Health, Safety and Prevention Strategic Healthcare Group, Veterans Health Administration)(Aug. 2008), p. 7.

<sup>3</sup> M. Cohen, *et al.*, *supra*, p. 16.

<sup>4</sup> *Id.*, p. 16.

## The Wrong Way to Do It: Examples of Risky Methods to Lift or Move a Patient

It is well-established that nurses and other direct care givers should not lift patients manually. The National Institute for Occupational Safety & Health (“NIOSH”), a scientific agency that is part of the federal Centers for Disease Control (“CDC”), recommends that a care giver should manually lift no more than 35 pounds of a person's body weight vertically.<sup>5</sup> To put this in context, the leg of a 200-250 pound person generally weighs between 21 and 39 pounds.<sup>6</sup> Clearly, most lifting and moving tasks in healthcare involve much more than 35 pounds of body weight.

Even lifting 35 pounds of a person's body weight is often unsafe. As research safety engineer Dr. Thomas Waters reported in his ground-breaking article on the 35-pound maximum weight limit for lifting/moving of patients – this amount of weight should be allowed only when the following conditions are met:

1. The patient is able to follow directions and is cooperative;
2. The amount of weight the care giver handles can be estimated;
3. The lifting is smooth and slow;
4. The “geometry” of the lift – the body and hand positions of the care giver in relation to the body or part of the body of the person being lifted – and the amount of weight lifted are not subject to change.<sup>7</sup>

Dr. Waters explained that the amount of allowable body weight to be lifted should be even lower, however, if the task is performed under less favorable circumstances, such as:

- Lifting with extended arms;
- Lifting when near the floor;
- Lifting when sitting or kneeling;
- Lifting with one's trunk twisted or the person off to the side of one's body;
- Lifting with one hand;
- Lifting in a restricted space; or
- Lifting during a shift lasting longer than eight hours.<sup>8</sup>

Many lifts in a healthcare setting fall among these categories. Even a patient who is able to help with a lift may sometimes slip, trip, faint or have a muscle spasm. Also, a patient's movements during a lift can unexpectedly create loads within the lifter's spine greater than those created by the slow, smooth lifting of a stable object. There is simply no way to predict that a manual lift of a patient will be safe.

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<sup>5</sup> Visit <http://www.cdc.gov/niosh/topics/safepatient/>; T. Waters, Ph.D., “When Is it Safe to Manually Lift a Patient? The Revised NIOSH Lifting Equation Provides Support for Recommended Weight Limits,” *American J of Nurs* 107(8)53-58 (Aug. 2007); Capt. James W. Collins, Ph.D., Associate Director for Science, Division of Safety Research, NIOSH, CDC, “Safe patient Handling & Lifting Standards for a Safer American Workforce” (statement before the U.S. Senate Committee on Health, Education, Labor and Pensions, Subcommittee on Employment & Workplace Safety, Apr. 19, 2011), available at: [http://www.hhs.gov/asl/testify/2010/05/t20100511a.html?\\_ftn9](http://www.hhs.gov/asl/testify/2010/05/t20100511a.html?_ftn9).

<sup>6</sup> T. Waters, Ph.D., *supra*, p. 57, referencing D.B. Chaffin, *et al.*, editors, *Occupational Biomechanics*, 4<sup>th</sup> ed. (Hoboken, NJ: Wiley-Interscience, 2006).

<sup>7</sup> T. Waters, Ph.D., *supra*, p. 54.

<sup>8</sup> *Id.*, p. 55.

Not surprisingly, Dr. Waters notes that accidents are one of the reasons that some facilities have adopted rules banning the manual lifting of patients.<sup>9</sup>

The hazards of lifting and moving in healthcare, moreover, are worsening. As Research Director Dr. Barbara Silverstein of the Washington State Department of Labor and Industries observes:

Patients are older, bigger, heavier, sicker, and rapidly changing status. Nursing staffs are also getting older, fewer, working longer hours, suffering from career ending injuries and are not easily replaced. Nursing schools have difficulty in recruiting faculty.... Hospital and nursing home injury rates are high and workers compensation claims for back injuries are costly.<sup>10</sup>

Despite this readily available information, out-dated methods of patient/resident transfer are still widely used. The old “Hook and Toss” approach (in which a care giver hooks his or her arms under the armpits of the patient and lifts) and the old “Bear Hug” method (in which the care giver places both arms around the patient's waist) are commonly used to hoist and move a patient. Another risky measure is the “Pivot Transfer,” which requires that patients be able to stand and take a step. If a patient is unable to stand properly or take that step, the healthcare worker may suddenly have to bear the patient's full weight.<sup>11</sup> These practices fly in the face of common sense and run counter to the goal of “evidence-based medicine.”

## **How Wrong Approaches to Lifting and Moving Pose Health Risks for Patients**

Manual lifting of patients or nursing home residents is a risky activity. Registered Nurse Jan DuBose, writing for the Massachusetts Nurse Newsletter, explains:

[S]ignificant injuries to the patient can result from unintended care giver actions such as over-stressing the patient's arms or shoulders. Also, if the patient has limited range of motion due to old humeral head fractures, shoulder subluxation or arthritis, this can predispose him to pain and further injury. Skin tears or bruising can result from excessive grasping of the patient. While infrequent, even dropping of the patient can occur, with resulting head injuries, hip fractures or other traumatic injuries.... Other adverse effects that can result from lack of adequate mechanical lifting assistance include pressure sores caused from too infrequent repositioning, or skin shear as a result of linen friction while being dragged rather than lifted up in bed. Loss of patient dignity can also result from awkward manual lifts. In brief, injuries or significant clinical

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<sup>9</sup> *Id.*, pp. 56-56.

<sup>10</sup> Testimony of Dr. Barbara Silverstein, MSN, MPH, PhD, CPE, Research Director, Safety & Health Assessment and Research for Prevention (SHARP) Program, Washington State Dept. of labor and Industries, in “Safe patient Handling and Lifting Standards for a Safer American Workforce: Hearing before the Subcomm. On Employment & Workplace Safety of the Committee on Health, Education, Labor and Pensions, U.S. Senate, 111th Congress, 2d. Sess., May 11, 2010)(U.S. Government Printing Office, 2012), p. 26. Also available at <http://www.help.senate.gov/imo/media/doc/silverstein.pdf>.

<sup>11</sup> Paula Pless, Director of Safe Patient Handling & Movement, Kaleida Health in Buffalo, “A Close Look at Pivot Transfer,” *Caring for the Ages* (Dec. 2005)(available in reprint at [www.zeroliftformy.org/faqs.php](http://www.zeroliftformy.org/faqs.php)). See also, T. Waters, Ph.D., *supra*.

regression can result from not using available lift and transfer equipment, sometimes even causing re-injury and/or requiring costly extension of the patient's hospitalization.<sup>12</sup>

Unsafe lifting and moving of patients and nursing home residents can cause:

- Back pain;
- Shoulder damage;
- Joint pain;
- Muscle pain;
- Bruises;
- Skin tears;
- Aggravation of pressure sores; and
- Falls.<sup>13</sup>

The issue of falls is particularly important. In an analysis of over 7,000 inpatient falls among nine hospitals, researchers found that 26.4 percent (over one out of four) resulted in some type of injury, and that the risk is greater in older populations.<sup>14</sup>

Sometimes a fall can be fatal. The death of a nursing home resident, Sinia Malone, in February 2012, was reportedly due to a fall she suffered during a bed to wheelchair transfer at the Tarrytown Hall Care Center in Rockland County, New York. The resident's care plan reportedly required the use of a mechanical lift and two persons to move her from her bed to a wheelchair, but an aide attempted the transfer alone. The resident reportedly fell to the floor and suffered fractures to her spine and right leg, a broken nose and bruising.<sup>15</sup>

## **The Right Way to Do It: A Safe Lifting and Moving System Using Proper Equipment and Training**

Under a proper safety program, trained healthcare workers use modern mechanical lifts and reposition devices to transfer and reposition patients, rather than the healthcare worker trying to bear the patient's weight. The equipment ranges from items as simple as "frictionless sheets" (which allow a patient to

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<sup>12</sup> Jan DuBose, R.N., "The Benefits of Safe Patient Handling," *Massachusetts Nurse Newsletter* (Nov./Dec. 2006) (<http://www.massnurses.org/health-and-safety/articles/safe-patient-handling/p/openitem/1308>).

<sup>13</sup> The Joint Commission, "Improving Patient and Worker Safety: Opportunities for Synergy, Collaboration and Innovation," (Nov. 2012) ([http://www.jointcommission.org/improving\\_Patient\\_Worker\\_Safety/](http://www.jointcommission.org/improving_Patient_Worker_Safety/)), p. 62; J. DuBose, R.N., and T. Donahue, B.S.N., R.N., "Taking the Pain Out of Patient Handling," *American Nurse Today* 1(2):37-43 (July 2008); available at <http://www.americannursetoday.com/article.aspx?id=3876&fid=3862>. See also Jan DuBose, R.N., "The Benefits of Safe Patient Handling," *supra*.

<sup>14</sup> The Joint Commission (Nov. 2012), *supra*, p. 74.

<sup>15</sup> Jane Lerner, "Family Horrified by Tarrytown Nursing Home Death," *The Journal News* (Oct. 25, 2012) (<http://www.lohud.com/article/20121026/NEWS03/310260038/Family-horrified-by-Tarrytown-nursing-home-death>); Office of NYS Attorney General, News Release, "A.G. Schneiderman Announces Arrests of Two Nursing Home Aides Who Failed to Provide Care Resulting in Death of Elderly Resident: Aide Enlisted Colleague to Cover Up Crime, Both Face Jail Time" (Oct. 24, 2012) (<http://www.ag.ny.gov/press-release/ag-schneiderman-announces-arrests-two-nursing-home-aides-who-failed-provide-care>).

slide more easily into or out of a bed, or to be turned or repositioned more easily) and height-adjustable electric beds to equipment such as mobile mechanical patient lifts and ceiling-mounted lifts.

The equipment is not used for the purpose of prolonging dependence; rather, healthcare staff members evaluate a patient's ability to assist in his or her own movement, and identify equipment to match that patient's ability, which helps to promote patient autonomy. By regularly re-evaluating the patient and making adjustments to equipment selection and use, the program fosters the patient's rehabilitation.<sup>16</sup>

Engagement of healthcare workers is critical. Staff engaged in direct care have the best sense of how close assistive devices or equipment must be in order for it to be practical for them, in the course of their busy work day, to retrieve and use. Safety equipment is of no help if the patient is in a room at one end of the hall and the equipment is in the back of a closet at the other end of the hall. A study undertaken by the Veterans Health Administration sought to determine why healthcare workers may not use equipment and found that:

Accessibility was the number one issue and was impacted by lack of adequate numbers and types of equipment as well as storage availability, a huge issue for utilization of portable lifts.<sup>17</sup>

The temptation to cut corners to save time is strong when the workload is heavy – and, for nurses and other direct care givers, the workload usually is very heavy indeed. The time-stress factor is important in staff work practices and must be considered in planning. The study conducted for the Veterans Health Administration also emphasized involving staff in the equipment selection process. Staff engaged in direct care are likely to have a good sense of what equipment will be most helpful for the patient or resident and most adaptable to the constraints of the facility's space.

Active administrative support, establishment of “coaches” or “mentors” for each unit of the health facility to engage staff in safe lifting and moving protocols, and regular re-evaluation of the needs of patients or residents and the effectiveness of equipment and protocols are key ingredients for long-term success. Staff need adequate training in the use of safety equipment so that they feel confident in using it – otherwise, they will be reluctant to do so.<sup>18</sup> It takes time and effort to achieve positive “culture change” in healthcare practices.

Such a well-planned, well-equipped program is good for patients. It better maintains the patient's health and dignity because it:

- Reduces the risks of injury, such as skin tears or muscle or joint pain (and reducing skin tears may also help lower infection risks);
- Reduces the risks of falls;
- Helps avoid awkward handling;
- Improves patient comfort;

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<sup>16</sup> A. Nelson, *et al.*, “The Link Between Safe Patient handling and Patient Outcomes in Long-Term Care,” *Rehabilitation Nursing*, 33(1):33-43 (2008).

<sup>17</sup> Mary Matz, MSPH, *et al.*, *supra*, p. 7.

<sup>18</sup> *Id.*, p. 5.



- Promotes patient mobilization and activity (important to help prevent pneumonia, deep vein thrombosis, constipation, urinary infection, and other ailments);
- Facilitates better and safer care with regard to tasks such as toileting, skin treatment and rehabilitation activities through safer and more secure repositioning; and
- Helps care givers devote more of their energy and attention to caring for patients' personal physical needs.<sup>19</sup>

June Altaras, R.N., Administrative Nursing Director for the largest nonprofit healthcare provider in the Northwest (Swedish Medical Center), provided the following testimony to the United States Senate in 2010 regarding the positive impact of their “Safe Moves” program – established after passage of the Washington State statute – on patient health and dignity:

There have been many instances of bariatric patients walking rapidly after surgery because they are no longer fearful of falling, as the right equipment is in place to support them. Patients report feeling less guilty about staff potentially hurting themselves while assisting them with ambulating or repositioning, and also feeling less embarrassed when the right equipment is there and appropriately sized. We have also experienced decreased skin injuries, due, in part, to appropriate equipment to reposition our immobile patients.<sup>20</sup>

The impact on patient falls was measured by Intermountain Healthcare, a nonprofit system consisting of 22 hospitals and over a hundred clinics in Utah and Idaho. They launched their program for safe lifting and moving in 2008, and by the end of 2010 they had documented a 49 percent reduction in patient falls related to lift and transfer activities. Locally, at a long-term care facility in Niagara County, two patients suffered a lower extremity spiral fracture (a bone fracture caused by a twisting force) during a manual “pivot transfer” in the year before establishing a “safe patient handling” program. The following year, no such injuries occurred, and no manual pivot transfers were allowed thereafter.<sup>21</sup>

Nurses and other direct care givers often work with chronic back pain. Indeed, they suffer more musculoskeletal injuries than construction workers. The rate of such injuries for nursing aides, orderlies and nursing attendants was seven times higher than the average of all occupations.<sup>22</sup> The federal Occupational Safety and Health Administration (“OSHA”) reports:

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<sup>19</sup> M. Cohen, *et al.*, *supra*, pp. 16-19 and 23-24; A. Nelson, *et al.*, *supra*; Arun Garg, “Long-term Effectiveness of Zero-Lift Program in Seven Nursing Homes and One Hospital,” prepared for NIOSH, Contract 460/CCU512089-2 (Aug. 16, 1999)(<http://www.aft.org/pdfs/healthcare/zerolift0899.pdf>, downloaded 06/03/13; *See also*, CDC/NIOSH webpage on “Safe Patient Handling,” <http://www.cdc.gov/niosh/topics/safepatient/>; and Jan DuBose, R.N., “The Benefits of Safe Patient Handling,” *supra*.

<sup>20</sup> Testimony of June M Altaras, RN, BSN, MN, Administrative Nursing Director, Swedish Medical Center, Seattle, WA, in “Safe patient Handling and Lifting Standards for a Safer American Workforce: Hearing before the Subcomm. On Employment & Workplace Safety of the Committee on Health, Education, Labor and Pensions, U.S. Senate, 111<sup>th</sup> Congress, 2d. Sess., May 11, 2010)(U.S. Government Printing Office, 2012), p. 34.

<sup>21</sup> The Joint Commission, *supra*, p. 72; email from Paula Pless, Dir., Safe Patient Handling, Kaleida Health, June 6, 2013.

<sup>22</sup> OSHA, “Safe Patient Handling” webpage, at <http://www.osha.gov/SLTC/healthcarefacilities/safepatienthandling.html>.

More workers are injured in the healthcare and social assistance industry sector than any other.....Nursing aides, orderlies, and attendants had the highest rates of musculoskeletal disorders of all occupations in 2010. The incidence rate of work related musculoskeletal disorders for these occupations was 249 per 10,000 workers. This compares to the average rate for all workers in 2010 of 34.<sup>23</sup>

And it is estimated that as much as half of all such injuries among healthcare workers go unreported.<sup>24</sup> As research safety engineer Dr. Thomas Waters reported in his ground-breaking article on the 35-pound maximum weight limit for lifting/moving of patients, “Extensive laboratory-based research has documented high levels of biomechanical stress on care givers' spines, shoulders, hands, and wrists from patient lifting and repositioning.”<sup>25</sup> It is reasonably likely that such health impairments are having a significant impact on the energy and productivity of these care givers on the job. Indeed, one study found that nearly 84 percent of nurses from two acute care hospitals had experienced work-related low back pain in the past, and over 36 percent had experienced it in the prior year to an extent that it limited movement or interfered with routine activities.<sup>26</sup> Hospital patients and nursing home residents need experienced nurses and care givers who can devote their full energy to their job.

Healthcare workers should do healthcare, not dangerous forms of hoisting and hauling. People with mobility needs, in turn, should be treated respectfully, with their needs met in a modern manner that is safe for both them and their care givers. These should be the central guiding principles for safe lifting and moving in healthcare.

The long-term benefits can be substantial. A study of 111 nursing home residents living on 24 units in six Veterans Administration facilities found that after two and a half to three years of implementation of a “safe patient handling” program, residents exhibited:

- Improved urinary continence;
- Higher engagement in activities; and
- Higher levels of alertness during the day.<sup>27</sup>

## **Real World Experience: Existing Programs in New York and in Veterans Healthcare Facilities**

The Kaleida Health System in New York arguably has the most experience with implementation of programs for safe lifting and moving in New York. The facilities in the Kaleida Health System that are implementing its “Safe Patient Handling” program include: Buffalo General Hospital; DeGraff

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<sup>23</sup> OSHA factsheet on the healthcare industry (<http://www.osha.gov/SLTC/healthcarefacilities/>).

<sup>24</sup> N. Menzel, “Underreporting of Musculoskeletal Disorders Among Health Care Workers: Research Needs,” *AAOHN Journal*, 56 (12): 487-90 (2008); *see also* M. Matz, MSPH, *et al.*, *supra*, p. 8.

<sup>25</sup> T. Waters, Ph.D., *supra*.

<sup>26</sup> G. Byrns, *et al.*, “Risk Factors for Work-related Low Back Pain in Registered Nurses, and Potential Obstacles in Using Mechanical Lifting Devices,” *J Occup. Environ. Hyg.* 1(1):11-21 (Jan. 2004). The primary reason given by the nurses for failure to use lifting equipment was unavailability of equipment.

<sup>27</sup> A. Nelson, *et al.*, *supra*, pp. 38-40.

Memorial Hospital and Long Term Care facility (North Tonawanda); HighPoint on Michigan; and the Women's and Children's Hospital of Buffalo. The HighPoint on Michigan complex, a long-term and sub-acute care facility with a complex rehabilitation center that opened in December 2011, provides a model for new facility construction. It includes track and ceiling lifts throughout the 300-bed long term care facility.<sup>28</sup>

The Kaleida Health System has achieved positive results with its program. It launched its original program in late 2004 and recovered its investment by 2007 (under three years), primarily through reduced staff Lost Work Days due to injuries from repositioning or lifting/transferring.<sup>29</sup> Lost Work Days in its long-term care facilities dropped by 77 percent within those first four years,<sup>30</sup> and has continued to decline.<sup>31</sup> This indicates a substantial increase in safety that clearly benefited the healthcare staff. It also reported achieving significant reductions in patient injuries within 4 months after instituting a “safe patient handling” program in a 120-bed long-term care facility.<sup>32</sup>

Other facilities in New York with “safe patient handling” programs include the Riverhead Care Center, Saint James Healthcare Center, Glens Falls Hospital, Geneva Living Center, and Staten Island University Hospital. Pilot programs have been developed at Saratoga County Maplewood Manor (Ballston Spa), Medina Memorial Hospital, John T. Mather Memorial Hospital (Port Jefferson), Adirondack Tri-County Nursing & Rehab Center (North Creek), the New York State Veterans Home at Oxford, and Champlain Valley Physicians Hospital Medical Center (Plattsburgh)<sup>33</sup>

The New York State Veterans Home at Batavia pioneered a program with a strong track record that is consistent with national policy requiring “safe patient handling” in federal facilities. The James A. Haley Veterans Administration Hospital in Tampa, Florida, was a leading facility in the early development of a safe lifting and moving program. After federal reports documented improvements in health and safety from “safe patient handling” programs – including a study of seven facilities with 19 nursing home and four spinal cord injury units<sup>34</sup> – the United States Veterans Health Administration, Department of Veteran's Affairs, developed and issued a 2010 Administration Directive stating that a

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<sup>28</sup> Email communication with Paula Pless, Director of Safe Patient Handling for the Kaleida System, June 4, 2013. The States of Maryland, Minnesota and Rhode Island require hospitals and nursing homes to consider mechanical lifting devices in planning for new construction.

<sup>29</sup> NYS Assembly Sub-committee on Workplace Safety, NYS Assembly Committee on Labor, NYS Assembly Committee on Health, *Safe Patient Handling in New York: Short Term Costs Yield Long Term Results* (May 2011) (<http://docstock.com/docs/81133787/NYS-Safe-Patient-Handling-Report>) (hereafter, *Assembly Report on Safe Patient Handling*), p. 10.

<sup>30</sup> Paula Pless, Kaleida Health, “Kaleida Health's LTC Facilities: Total LWD's After SPHM Program” (2007).

<sup>31</sup> See, “Kaleida Health 2010 SPH LWDS – 4 Years of Data” (prepared by Paula Pless, Director, and Robert Guest, Coordinator, Safe Patient Handling program)(submitted to NYS Department of Health, 2011)

<sup>32</sup> Paula Pless, “A Close Look at Pivot Transfers,” *supra*.

<sup>33</sup> See *Assembly Report on Safe Patient Handling*, pp. 10-12. Kaleida Health's Buffalo General Hospital, noted above, also participated in this pilot.

<sup>34</sup> Kris Siddharthan, *et al.*, “Cost Effectiveness of a Multifaceted Program for Safe Patient Handling,” *Advances in Patient Safety* 3:347-58 (2005) ([www.ahrq.gov/downloads/pub/advances/vol3/Siddharthan.pdf](http://www.ahrq.gov/downloads/pub/advances/vol3/Siddharthan.pdf)). Also, NIOSH/CDC, *Safe Lifting and Movement of Nursing Home Resident* (DHHS Pub. No. 2006-117)(Feb. 2006), pp. 5 and 7; J. Collins, *et al.*, “An Evaluation of a 'Best Practices' Musculoskeletal Injury Prevention Program in Nursing Homes,” *Injury Prev* 10:206-211 (2004)(NIOSH study of six nursing homes)([www.cdc.gov/niosh/awards/hamilton/pdfs/Collins-practices.pdf](http://www.cdc.gov/niosh/awards/hamilton/pdfs/Collins-practices.pdf)).

“program to protect care givers and patients from injuries due to patient handling and movement must be established and maintained in all VHA facilities.”<sup>35</sup>

## **Why Government Action Is Needed to Spur Systematic Change: Institutional Resistance to Evidence-based Approaches to Safe Lifting and Moving**

It is disturbing that, despite the overwhelming evidence of musculoskeletal injuries in healthcare staff, unsafe lifting and moving protocols continue to be tolerated in – of all places – the healthcare sector. The evidence is clear that proper programs for safe lifting and moving in healthcare promote patient health as well as healthcare worker safety. Yet, many healthcare institutions resist the establishment of full “safe patient handling” programs, with staff input and government oversight. Several factors may be at work.

Part of the impediment to improving safety in lifting and moving of patients and nursing home residents may simply be the problem of culture-change resistance. For example, one analysis of evidence-based practices in critical care nursing identified seven practices for which medical evidence does not support traditional approaches, and yet practice continues to follow tradition.<sup>36</sup> In its resource guide for implementing “safe patient handling” programs in acute care settings, OSHA notes:

It is difficult to change behavior. Manual patient handling has been the norm for the vast majority of healthcare workers. For generations, the “culture” of healthcare has perpetuated manual patient handling.... The leader of the implementation process should prepare the team for resistance to change. Incorporate information on change into staff education, and acknowledge staff concerns about change. Continue with participation of front-line staff in this change process to continue to promote buy-in.<sup>37</sup>

The lag in implementing evidence-based protocols for safety in healthcare is a well-known concern, and often outside pressure is necessary to bring about change.

Another factor underlying the opposition to change may be resistance to making the investment in equipment, yet even this is not evidence-based. Substantial, real world experience with “safe patient handling” programs indicates that an investment in such equipment can be recovered in roughly three years.<sup>38</sup> This is certainly a faster return than many other investments that large institutions make. Such a short lag in the return on investment does not justify the continued tolerance in the healthcare sector of musculoskeletal injuries among direct care staff members.

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<sup>35</sup> See [www.va.gov/vhapublications/ViewPublication.asp?pub\\_ID-2260](http://www.va.gov/vhapublications/ViewPublication.asp?pub_ID-2260).

<sup>36</sup> Mary Beth Flynn Makic, *et al.*, *supra*, p.38.

<sup>37</sup> OSHA and AOHP Alliance, *Beyond Getting Started: A Resource Guide for Implementing a Safe Patient Handling Program in the Acute care Setting*, 2d Ed. (Rev., Summer 2011)(hereafter, *Beyond Getting Started*) ([www.aohp.org/About/documents/GSBeyond.pdf](http://www.aohp.org/About/documents/GSBeyond.pdf)), pp. 17-18.

<sup>38</sup> *Assembly Report on Safe Patient Handling*, p. 10; Kris Siddharthan, *et al.*, *supra*; J. Collins, *et al.*, *supra*.

Finally, institutions can have trouble maintaining a system if no outside pressure is insisting upon it. The 2008 analysis conducted for the Veterans Health Administration of its “Safe Patient Handling” program found that the program elements originally instituted “were generally not well maintained” despite staff appreciation of the value of the protocols. The researchers noted that the key to successful maintenance appeared to be maintaining a site coordinator with strong upper management support.<sup>39</sup> Germain Harnden, Executive Director of the Western New York Committee for Occupational Safety & Health, notes that in their training programs for healthcare staff who are trying to manage “safe patient handling” programs, the same problem is raised again and again:

It's not that no safety programs exist. Several health institutions have programs. The problem is consistency – keeping them vigorous. What we often find in New York is that a program becomes less effective over time because of lack of communication, lack of re-training and re-assessment of plans, and especially by lack of commitment from management. So we find varying degrees of success. All it takes is a little staff turnover and there are missing pieces. There can be very uneven implementation even among different units of the same health facility. There's simply no accountability. And that means there's no assurance of safety for the healthcare worker or the patient.<sup>40</sup>

Even if a facility establishes a program, steps must be taken to ensure its vitality over time. A lack of accountability means that a program can atrophy and no one outside the facility will know. This leaves the public unprotected.

Whether due to culture-change resistance, unwillingness to make a good investment in safety, or lack of long-term commitment by management, the lack of a strong statewide mechanism to ensure safe lifting and moving in healthcare is putting patients and nursing home residents at risk and jeopardizing the health of direct caregivers.

## **Other States that Require Health Facility Policies on Safe Lifting and Moving**

Eight states – California, Illinois, Maryland, Minnesota, New Jersey, Rhode Island, Texas and Washington – have statutes that require all hospitals to establish a safe patient handling system. All but California and Washington also require safe lifting and moving programs to be established for nursing home residents who have mobility needs.<sup>41</sup> Minnesota's 2007 law was amended in 2009 to expand

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<sup>39</sup> Mary Matz, MSPH, *et al.*, *supra*, p. 6.

<sup>40</sup> Telephone conversation with Germain Harnden, Executive Director, Western New York Committee on Occupational Safety & Health, May 29, 2013.

<sup>41</sup> See California Labor Code §6403.5 (2011) (applies to general acute hospitals only); Illinois, 210 ILCS 85/6.25 (Hospital Licensing Act – Safe Patient Handling Policy) and 210 ILCS 45/3-206.05 (Nursing Home Care Act – Safe Resident Handling Policy)(2009) (applies to nursing homes and facilities in the University of Illinois hospital system); Maryland Safe Patient Lifting Law, Maryland Code §§ 19-377 and 19-1410.1 (2007 and 2008)(applies to nursing homes and hospitals); Minnesota Safe Patient Handling Act, Minn. Stat. 182.6551 *et seq.* (2009) (applies to nursing homes, hospitals and out-patient surgical centers); New Jersey Safe Patient Handling Act, NJ Stat. 26:2H-14.8 *et seq.* (2008) (applies to hospitals and nursing homes, plus State developmental centers and State and county psychiatric hospitals); Rhode Island Safe Patient Handling Act of 2006, R.I. Code §§23-80-1, 23-80-2, 23-17-58 and 23-15-4 (2006) (applies to nursing homes

coverage to clinical settings such as outpatient surgery facilities.<sup>42</sup>

Coverage of nursing homes is critically important. In New York, the incidence rate for nonfatal occupational injuries in local government owned nursing homes is 10.1 (per 100 full-time workers) in nursing and residential care facilities, compared with 6.6 for local government owned hospitals.<sup>43</sup> Dr. Barbara Silverstein, Research Director for the Washington State Department of Labor and Industries, in testimony to Congress in 2010, essentially admitted that failing to cover nursing homes in Washington's law was a mistake that was having significant consequences:

Since the [“safe patient handling”] law went into effect, injuries related to lifting patients in Washington State have decreased about 35 percent. The legislation is fully implemented at the end of this year, but we've already decreased over 35 percent. And when we compare that to nursing homes, that are not affected by the legislation, their injury rates have been going up.<sup>44</sup>

To further encourage facilities to do the right thing, even though investments can be gradual and are reasonably expected to be recouped quickly, financial incentives could be helpful. The State of Washington's law, for example, has an interesting provision that allows health facilities that adopt “safe patient handling” programs to get a tax credit for purchase of equipment and to qualify for a special reduced premium workers compensation risk class.<sup>45</sup> Ohio has a no-interest loan funding program for hospitals and nursing homes to purchase Safe Patient Handling equipment and pay for staff training.<sup>46</sup> These are approaches that could potentially enhance and speed adoption by healthcare facilities of proper safety programs.

The table in Appendix A sets out some key provisions of these laws and compares the strengths of the various statutes as well as the bill currently under consideration in the New York State legislature. It identifies 10 facility planning and implementation requirements and assigns one point to each. The laws that apply not only to hospitals but also to nursing homes can receive an additional 10 points.

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and hospitals); Texas, TX HS. Code Ann. §256.002 (2005) (applies to nursing homes and hospitals); State of Washington RCW §§ 70.41.390, 72.23.390, 51.16.230 and 82.04.4485 (2006) (applies to hospitals only). B. Silverstein, *et al.*, Safety & Health Assessment & Research for Prevention (SHARP), Wash. State Dept. of Labor & Industries, *Implementation of Safe Patient Handling in Washington State Hospitals* (2011), p. 3. The State of New Jersey also adopted regulations, available at [http://web.doh.state.nj.us/apps2/documents/bc/hcab\\_nop\\_safe\\_patient\\_handling\\_0910.pdf](http://web.doh.state.nj.us/apps2/documents/bc/hcab_nop_safe_patient_handling_0910.pdf). Many other countries are well aware of this problem and have taken action to address it. Great Britain established a national policy prohibiting nurses from lifting patients back in 1993. Other countries that ban manual lifting of patients include Australia, Canada, Finland, Ireland, the Netherlands and Switzerland. *Beyond Getting Started*, p. 3.

<sup>42</sup> Minnesota Safe Patient Handling Act, Minn. Stat. 182.6551 *et seq.* (2009) (applies to nursing homes, hospitals and outpatient surgical centers)

<sup>43</sup> In privately run facilities, the incident rate for non-fatal worker injuries is 6.6 per 100 full-time workers in nursing and residential care facilities, compared with 5.4 in hospitals, although in State-owned facilities, the incident rate is higher in hospitals (17.2 compared with 15.0 for nursing and residential care facilities). NYS Dept. of Labor, *Table 10: Incidence Rates and Numbers of Nonfatal Occupational Injuries by Industry, 2011*.

<sup>44</sup> Testimony of Dr. Barbara Silverstein, *supra*, p. 25.

<sup>45</sup> RCW 51.16.230 and 82.094.4485. The tax credit is equivalent to \$1,000 per acute care bed for SPH equipment purchases up to \$10 million total. Testimony of Dr. Barbara Silverstein, *supra*, p. 26.

<sup>46</sup> Ohio Revised Code §4121.48 (enacted 2005).

## **Why Patients and Nursing Home Residents Benefit from State Standards and Agency Oversight**

Many family members labor under tremendous strain to make sure that their loved ones get proper, effective and safe care in hospitals and nursing homes, yet it is hard for them to tell whether or not a hospital or nursing home is providing a safe regimen for lifting and moving patients with mobility issues. Unsubstantiated and unmonitored claims of safety can result in a false sense of security for a patient or nursing home resident and their loved ones. Government agencies need to establish standards of care not only to give reliable guidance to facilities but also to provide benchmarks to which consumers can look when seeking healthcare for themselves or their loved ones.

While facilities need some flexibility in order to adapt policies to the unique configurations of their buildings as well as their patient or resident population and staff, basic principles of program development, design and operation should be established to which all healthcare facilities must adhere.

Continuing regulatory oversight, also, is important to ensure that the vitality and effectiveness of a program is maintained. As noted above, the 2008 analysis conducted for the Veterans Health Administration of its “Safe Patient Handling” program found that the program as launched was “generally not well maintained” despite staff appreciation of its value. The researchers noted that the key to successful maintenance appeared to be maintaining a site coordinator with strong upper management support.<sup>47</sup> Requiring healthcare facilities to provide reports on the effectiveness of their programs will help spur them to keep the programs current.

Finally, uniform requirements are important in order to establish a “fair and level playing field” in the healthcare industry in New York. It is unacceptable to have a situation in which one hospital or nursing home invests in a proper program for safe lifting and moving in healthcare while a similar facility chooses to give this critical health and safety issue short shrift. All facilities should be required to invest in proper equipment and training, for the benefit of all patients and nursing home residents and for the safety of all healthcare workers.

## **Healthcare Facilities Should Disclose Their Lifting and Moving Protocols to Patients/Residents and Their Loved Ones**

Even with government oversight systems in place, healthcare facilities should disclose to healthcare consumers exactly what they are doing with regard to “safe patient handling.” If a patient or resident has mobility issues, the healthcare facility should not wait for them or their loved ones to ask questions before informing them about its approach to safe lifting and moving of patients/residents. The healthcare facility should take the initiative to broach the conversation, especially since most people would not know what questions to ask. Moreover, healthcare facilities would benefit substantially in their ability to evaluate their own programs if they engage patients/residents and their loved ones in the

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<sup>47</sup> Mary Matz, MSPH, *et al.*, *supra*, p. 6.

evaluation process.

The following questions, which an informed healthcare consumer might direct toward a healthcare facility manager, are examples of questions that could be used by a healthcare facility in a “FAQS” approach to help start a discussion with patients/residents and their loved ones about its program:

1. Do you have a written policy on safe lifting and moving of patients? If so, will you provide a copy to the patient/resident (or their representative, where appropriate)?
2. Do you allow a single staff member, alone, to lift a patient manually? (*The answer should be no, except under extraordinary emergency conditions if no reasonable alternative is available.*)
3. Do you allow staff to manually lift a patient who cannot move his or her own feet? (*The answer should be no, except under extraordinary emergency conditions if no reasonable alternative is available. Yet many facilities still do this rather than using modern technology.*)
4. What equipment do you use for safe patient transfers? How easy is it for staff to access it? (*The care giving staff should have been directly involved in the planning on where to store the equipment.*)
5. How do you decide how much equipment you need, to make sure that no significant delay occurs in getting the equipment to the person who needs it in a timely way? (*The CDC recommends providing at least one full-body lift for every eight to ten non-weight bearing patients and one stand-up lift for every eight to ten partially-weight bearing patients.*<sup>48</sup>)
6. Would you describe the training your careworkers receive in safe lifting and moving of patients in healthcare and how to use the mechanical equipment?
7. Who is responsible for assessing the needs of a patient or resident regarding safe repositioning and transfers/moving? When does this occur, and how is this assessment communicated to staff?
8. What steps do you take to check up on whether or not the safe repositioning and transfer/moving protocol for the patient or resident is being followed? How and when does this occur?

Developing and providing answers to each of these questions will be a useful exercise for healthcare facilities in evaluating their own programs and communicating their policies and protocols to healthcare consumers.

Healthcare facilities should, in addition, engage patients and nursing home residents in planning and evaluation of safety programs. Facilities would learn from this interaction, and patients and nursing home residents would benefit from discussions that help them feel comfortable with safe lifting and moving equipment. (The bill in the New York State legislature, for example, acknowledged the value of such input by urging that nursing homes having “resident councils” should include a representative from that council on their in-house planning and evaluation committee.) OSHA's resource guide for

<sup>48</sup> NIOSH, *Safe Lifting and Movement of Nursing Home Residents*, *supra*.



implementing a “safe patient handling” program in the acute care setting recommends that healthcare facilities should:

Determine patient satisfaction. Develop a tool to evaluate patient and family response to patient handling with assistive devices while hospitalized and as part of a post-hospitalization patient satisfaction survey.<sup>49</sup>

The following are examples of some questions that a healthcare facility could ask its patients or residents regarding the facility's lifting/moving protocols and practices:

1. Are you aware that, except in an emergency situation, a healthcare staff member is not allowed to manually lift or transfer you?
2. Have you ever been lifted or transferred in a way that made you feel unsafe? Would you describe what occurred?
3. Have you ever been injured during a lift or transfer? Would you describe what occurred?
4. Have you ever felt that there was too much body-to-body contact during a lift or transfer? Would you describe what occurred?
5. Do you feel that you received enough education or orientation about a lifting device, before its use, in order for you to feel comfortable and safe regarding its use for you?
6. Is there any equipment used for lifting or moving in this facility that worries you or makes you feel unsafe?
7. Do you have any suggestions for improving how our healthcare staff members work with you on lifting, transferring or moving efforts?

Evaluating the responses to these questions could provide important and useful feedback for staff and management in assessing the success of the facility's program.

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<sup>49</sup> *Beyond Getting Started*, p. 18.

## **Conclusion**

New York cannot afford to lag behind in the effort to establish reliable, evidence-based protocols for safe lifting of patients and nursing home residents throughout the State. The United States Veterans Health Administration and several other states have paved the way. Our neighboring state, New Jersey, not only has a statute but also a comprehensive set of regulations already in place. New Yorkers, whether as patients, nursing home residents, healthcare workers or concerned loved ones, need to know that proper safety programs are in place to prevent injuries from unsafe methods of lifting and moving in healthcare in New York. Engagement of “frontline” direct care workers in planning and evaluation, commitment of healthcare facility administrators to maintain and improve the program, open discussion with patients/nursing home residents and their loved ones, and vigilant government standards and oversight are essential factors that must be in place to ensure safety.

## Appendix A: Table Comparing State Statutory Requirements on Safe Lifting & Moving in Healthcare

Statute on Safe Lifting & Moving in Healthcare (“Safe Patient Handling”) - Facility planning & implementation requirements	California (enacted 10/07/2011; interim agency guidance)	Illinois (Enacted 01/01/2010 & 07/14/2011)	Maryland (Enacted 04/01/2007)	Minnesota (enacted 05/01/2007; & clinics 2009)	New Jersey (enacted 01/03/2008; regulations promulgated)	- New York - <b>proposed</b> <b>A02180/ S01123</b>	Rhode Is. (enacted 07/07/2006; regulations promulgated)	Texas (enacted 06/17/2005)	Washington (enacted 03/22/2006)
Overall Score out of 20 points (A “yes” for item #11 doubles the preceding 10-point-based score)	5	10	7	16	18	18	15	12	9
1. Facility's SPH policy must meet specific standards or be approved by agency	√	—	—	√	√	√	√***	—	√
2. Facility must establish in-house committee to develop/oversee program, 50% must be direct care staff.	—	—	√	√	√	√	√	—	√
3. Facility must assess patient's needs for assistance	√	√	1/2√**	√	√	√	√	√	√
4. Facility must plan to procure adequate supply of SPH equipment or devices	√	√*	1/2√**	√	√	√	√*	√*	√
5. Facility must have method to ensure equipment is set up and maintained properly	—	—	—	—	√	√	—	—	—
6. Facility must provide training to its healthcare workers in use of equipment	√	√	1/2√**	√	√	√	√	√	√
7. Training must include ongoing training	—	—	—	√	√ (annual)	√ (annual)	√ (annual)	—	√
8. Facility must consider mechanical lifting devices in construction/renovation plans	—	—	√	√	—	—	1/2√ (only new construction)	√	√
9. Facility must evaluate program's success annually	—	√	—	√	√	√	√	√	√
10. Establishes right of staff refusal to engage in unsafe lifting/moving of patients	√	√	—	—	√	√	—	√	√
11. Above applies to nursing homes as well as hospitals	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No

\*California's law is an amendment to the California Occupational Safety and Health Act, and is read within the context of that law.

\*\*Requires facility safe lifting policy to “consider” this factor, with the goal to reduce employee injuries associated with patient lifting.

\*\*\*Rhode Island's requirements are established as a condition of licensing.