

Action Plan

- Institutional Support
- Equipment Needs
- Encourage Lift Use
- Maintain the Program

Supplementary Material

- Table. Healthcare Occupations with Work-Related Musculoskeletal Injuries Requiring Days Away from Work, 2011
- Table. Distribution of Total Musculoskeletal Injuries by Body Part for Selected Nursing Personnel, 2011
- Handout. Manual Patient Handling Injuries in Healthcare
- Handout. Nursing Assistants: Protect Yourself and Your Patients—Use a Lift
- Handout. Nurses: Protect Yourself and Your Patients—Use a Lift
- Educational Course. The Dangers of Manual Patient Handling: Protect Yourself and Your Patients—Use Lifting Equipment!

Route To

Administration, Clinical/bio-medical engineering, Director of nursing, Director/VP of health services, Facilities/building management, Home care, Hospice, Human resources, Infection control, Insurance, Legal counsel, Medical director, Occupational health, Quality improvement, Risk manager, Staff education

► Safe Resident Handling and Movement

IN BRIEF

It is not unusual for residents to require assistance with movement, and many times, staff will manually move the resident; however, manual resident handling can be detrimental to both the resident and the worker.

Under ideal conditions, the absolute maximum a healthcare worker should manually lift is 35 lb (Waters). Considering that residents weigh well over this limit, most manual resident handling is not safe for workers and can cause injury. Data from 2010 indicates that almost 60% of all musculoskeletal disorders in the healthcare profession were caused by resident handling activities (BLS “Injuries”), such as transferring and repositioning residents, as well as working in awkward positions (OSHA “Safe”).

Musculoskeletal injuries are a major issue in healthcare. According to 2011 Bureau of Labor Statistics data, 14% of all musculoskeletal injuries that required days away from work occurred in healthcare workers. The occupation with the highest number of musculoskeletal injuries was nursing assistants, with 25,010 injuries and a median of six days away from work. The incidence rate for musculoskeletal injuries in nursing assistants, orderlies, and attendants was 239 per 10,000 full-time workers—six times as high as the average for all occupations. Also in the top five occupations that suffered the most musculoskeletal injuries was nurses, who reported just under 12,000 cases, with a median of eight days away from work. The incidence rate for nurses, nurse anesthetists, midwives, and nurse practitioners was about 58 injuries per 10,000 full-time workers, more than one and a half times as high as the average for all occupations. (BLS “Table 18”; BLS “Nonfatal”)

Musculoskeletal disorders can be particularly harmful to workers. Workers who experience these types of injuries may be plagued

ECRI Institute would like to thank the Association of Safe Patient Handling Professionals and in particular Wendy Weaver, Tamara James, Dee Kumpar, and Charlotte Lynch for their assistance with this article. For additional information about the Association of Safe Patient Handling Professionals and its certification program, see “Resource List.”

with chronic pain and disability. They may also be more frequently absent or subject to turnover, as well as less productive, less attentive, more susceptible to additional injuries, and more likely to affect the health and safety of others. Healthcare facilities may have increased costs due to medical expenses, disability compensation, and litigation. Direct and indirect costs for back injuries alone in the healthcare sector total \$20 billion per year. (OSHA “Safe”)

Worker safety is intertwined in resident safety. The Joint Commission comments that this link is seen in few activities more “directly” than when staff assist residents in movement (Joint Commission). Considering how harmful manual resident handling can be for workers, it is no surprise that residents may also be adversely impacted. Associated negative resident outcomes include falls, skin tears, joint dislocations, fractures, pain, and inadequate mobilization (FGI “Patient”). Residents may also experience pain and discomfort from manual handling or anxiety from the process of being moved manually (Joint Commission).

Safe resident handling and movement programs focus on minimizing the amount of manual resident handling to a reasonable extent (there are often exceptions in emergency situations). While healthcare organizations have purchased lifting equipment to assist workers in moving residents, there is much more to a successful safe resident handling and movement program than the procurement of equipment. For example, enough equipment must be purchased for the types of resident populations served, the equipment must be stored (if necessary) in a convenient area, and staff must be trained and encouraged to use lift equipment. One nursing study found that even though

two-thirds of nurses worked at facilities with lifting equipment, less than one-third used the equipment frequently (ANA “2011”).

► ACTION RECOMMENDATIONS

- Gain support for a safe resident handling and movement program by demonstrating its value. One way to do this is to evaluate data related to resident handling tasks to determine the scope of the issue at the facility. Areas to consider include workers’ compensation records, short-term and long-term disability claims, litigation, resident falls, and pressure ulcers.
- Purchase the appropriate types and amount of equipment for the facility. To do this, evaluate the resident populations the organization serves, identify the types and amount of equipment needed to properly implement a safe resident handling program, and involve staff in the evaluation of equipment.
- The safe resident handling and movement program should include provisions for training and assistance for staff on equipment use. Be sure that the program includes requirements to ensure staff competence on a specified basis and that compliance with lift use is monitored.
- Promote safe resident handling equipment use among staff; this will require an emphasis on the facility’s culture of safety.
- Ensure that the program includes recommendations for the continued maintenance of the program.

► Safe Resident Handling and Movement

IN BRIEF

It is not unusual for residents to require assistance with movement, and many times, staff will manually move the resident; however, manual resident handling can be detrimental to both the resident and the worker.

Under ideal conditions, the absolute maximum a healthcare worker should manually lift is 35 lb (Waters). Considering that residents weigh well over this limit, most manual resident handling is not safe for workers and can cause injury. Data from 2010 indicates that almost 60% of all musculoskeletal disorders in the healthcare profession were caused by resident handling activities (BLS "Injuries"), such as transferring and repositioning residents, as well as working in awkward positions (OSHA "Safe").

Musculoskeletal injuries are a major issue in healthcare. According to 2011 Bureau of Labor Statistics data, 14% of all musculoskeletal injuries that required days away from work occurred in healthcare workers. The occupation with the highest number of musculoskeletal injuries was nursing assistants, with 25,010 injuries and a median of six days away from work. The incidence rate for musculoskeletal injuries in nursing assistants, orderlies, and attendants was 239 per 10,000 full-time workers – six times as high as the average for all occupations. Also in the top five occupations that suffered the most musculoskeletal injuries was nurses, who reported just under 12,000 cases, with a median of eight days away from work. The incidence rate for nurses, nurse anesthetists, midwives, and nurse practitioners was about 58 injuries per 10,000 full-time workers, more than one and a half times as high as the average for all occupations. (BLS "Table 18"; BLS "Nonfatal")

Musculoskeletal disorders can be particularly harmful to workers. Workers who experience these types of injuries may be plagued with chronic pain and disability. They may also be more frequently absent or subject to turnover, as well as less productive, less attentive,

more susceptible to additional injuries, and more likely to affect the health and safety of others. Healthcare facilities may have increased costs due to medical expenses, disability compensation, and litigation. Direct and indirect costs for back injuries alone in the healthcare sector total \$20 billion per year. (OSHA "Safe")

Worker safety is intertwined in resident safety; Joint Commission comments that this link is seen in few activities more "directly" than when staff assist residents in movement (Joint Commission). Considering how harmful manual resident handling can be for workers, it is no surprise that residents may also be adversely impacted. Associated negative resident outcomes include falls, skin tears, joint dislocations, fractures, pain, and inadequate mobilization. (FGI "Patient") Residents may also experience pain and discomfort from manual handling, as well as anxiety from the process of being moved manually (Joint Commission).

Safe resident handling and movement programs focus on minimizing the amount of manual resident handling to a reasonable extent (there are often exceptions in emergency situations). While healthcare organizations have purchased lifting equipment to assist workers in moving residents, there is much more to a successful safe resident handling and movement program than the procurement of equipment. For example, enough equipment must be purchased for the types of resident populations served, the equipment must be stored (if necessary) in a convenient area, and staff must be trained and encouraged to use lift equipment. One nursing study found that even though two-thirds of nurses worked at facilities with lifting equipment, less than one-third used the equipment frequently (ANA "2011").

THE ISSUE IN FOCUS

Manual resident handling is a well-known, persistent, and problematic practice in healthcare. It can cause injury to both the resident and the worker. Further,

healthcare occupations' share of musculoskeletal disorders, which are largely attributed to manual resident handling, is quite substantial: 14% of all occupational musculoskeletal disorders requiring days away from work in 2011 occurred in the healthcare industry. See "Table 1. Healthcare Occupations with Work-Related Musculoskeletal Injuries Requiring Days Away from Work, 2011" for more information about these types of injuries in healthcare workers.

The Maximum Weight

Often, nurses and other healthcare workers were taught that basic biomechanics could prevent musculoskeletal injuries; however, this is simply not true. Healthcare workers should only lift a maximum of 35 lb under the following "ideal conditions" (Waters):

- The resident can follow directions and is not combative.
- The caregiver can estimate the amount of weight to be handled.
- The lift is smooth and slow.
- The body and hand positions in relation to the person or body part being lifted and the amount of weight being lifted will not change.

It is important to remember that 35 lb is the maximum, and some situations may make it precarious to lift even that much unassisted. For example, the

following situations would preclude safe manual lifting of 35 lb (Waters):

- Lifting with extended arms
- Lifting near the floor
- Lifting when sitting or kneeling
- Lifting with the trunk twisted or with the load positioned on the side of the body
- Lifting with one hand in a restricted space
- Lifting during a shift over eight hours

High-Risk Tasks

Tasks are considered "high risk" if they require the worker to sustain "significant biomechanical and postural stressors" (Nelson and Baptiste). Some particularly high-risk resident handling tasks include the following (OSHA "Safe"):

- Transfers
 - From toilet to chair
 - From chair to bed
 - From bathtub to chair
- Repositioning
 - From side to side in bed
 - Of a resident in a chair
- Lifting a resident in bed
- Making the bed with the resident in it

Table 1. Healthcare Occupations with Work-Related Musculoskeletal Injuries Requiring Days Away from Work, 2011

Rank and Occupational Group	Total Number of Musculoskeletal Injuries	Incidence Rate (per 10,000 workers)	Median Days Away from Work
1. Nursing assistants	25,010	239.2*	6
5. Registered nurses	11,880	58.2*	8
16. Emergency medical technicians and paramedics	4,830	239.7	7
21. Personal care aides	3,870	68.1	16
23. Home health aides	3,480	50.8	13
29. Licensed practical and licensed vocational nurses	2,840	21.1	7
45. Healthcare support workers (other)	1,750	Not available	12
80. Medical and health services managers	1,010	68.4	8
All occupations	387,820	38.5	11

* Incidence rate includes other related occupations that the Bureau of Labor Statistics separated in 2010.

Source: Bureau of Labor Statistics. U.S. Department of Labor. Table 18 [online]. 2012 Nov 8 [cited 2013 Aug 2]. <http://www.bls.gov/news.release/osh2.t18.htm>

- ▶ Bathing residents in bed (U.S. VA “Safe Patient”)
- ▶ Assisting residents during movement (U.S. VA “Safe Patient”)
- ▶ Dressing residents (U.S. VA “Safe Patient”)

High-risk tasks can vary depending on the type of healthcare facility and unit, as some facilities may group similarly abled residents together. One organization, for example, had a unit that mainly housed dependent residents who had cognitive and physical impairments (Fragala). It is important to recognize that resident handling activities are present almost everywhere in the facility, and workers should be adequately protected from injury.

The Injuries

When a healthcare worker suffers a musculoskeletal disorder from a resident handling task, the body parts the worker most frequently injures are the back and shoulders (OSHA “Safe”). See “Table 2. Distribution of Total Musculoskeletal Injuries by Body Part for Selected Nursing Personnel, 2011.”

It is important to understand that resident handling and movement injuries are not only caused by a one-time overexertion of the body and that resident handling is not confined to one movement; rather, it involves various motions, such as lifting and twisting (Kim et al.). When nurses and other healthcare workers move residents constantly throughout their shift, they may suffer “micro-injuries,” such as “micro-tears” in muscles or “micro-fractures” in the spine, that can add up to a debilitating injury, sometimes caused by an innocuous movement (FGI “Patient”).

Unfortunately, musculoskeletal injury and pain has become a way of life for many healthcare workers. One nurse survey indicated the following (ANA “2011”):

- ▶ Sixty-two percent of surveyed nurses reported that they have suffered a “disabling musculoskeletal disorder.”
- ▶ Eight in 10 surveyed nurses indicated that they work with musculoskeletal pain frequently.
- ▶ More than half of respondents experienced musculoskeletal pain caused or made worse by the job.

Cost

In addition to the detrimental effects that these injuries can have on workers, they cost organizations money when staff cannot work and need to be replaced, even if for a short amount of time. Additionally, these on-the-job

Table 2. Distribution of Total Musculoskeletal Injuries by Body Part for Selected Nursing Personnel, 2011

Body Part	Nursing Aides, Orderlies, and Attendants	Registered Nurses
Back	54.8%	52.9%
Shoulder	12.6%	13.0%
> 1 body part	7.9%	9.2%
Leg	6.1%	6.6%
Wrist	3.8%	2.4%
Arm	3.0%	2.2%
Abdomen	1.1%	0.8%

Source: Bureau of Labor Statistics. U.S. Department of Labor. Nonfatal occupational injuries and illnesses requiring days away from work, 2011 [online]. 2012 Nov 8 [cited 2013 Aug 2]. <http://www.bls.gov/news.release/osh2.nr0.htm>

injuries cost money in workers’ compensation. Back injuries in the healthcare sector cost more than \$20 billion per year (OSHA “Safe”).

In addition to direct costs like workers’ compensation, there are also indirect costs with employee injuries, such as modified duty assignments, replacement workers, administrative time, and decreased morale and productivity, all of which often add up to a higher amount than direct costs alone (FGI “Patient”).

One facility that extensively evaluated some of these issues found that the implementation of a safe resident handling and movement program created great financial savings through many different avenues. Mean turnover decreased for both nursing aides and licensed practical nurses between the pre- and postimplementation period, from 28.2 to 25.7 and from 24.0 to 20.9, respectively. While it only represented 18% of the organization’s total avoided costs, the cost associated with turnover saved this organization \$817,581 annually. (Lahiri et al.) Another organization cut workers’ compensation costs annually from close to \$140,000 to less than \$4,000 after implementing a safe resident handling and movement program (OSHA “Guidelines”).

Dee Kumbar, RN, B.S.N., M.B.A., CSPHP, safe patient handling and movement expert and board member for the Association of Safe Patient Handling Professionals, believes that facilities also need to look at resident conditions related to handling in order to fully understand the benefits of a safe resident handling and movement program, such as the costs associated with

resident falls and pressure ulcers. Calculating the costs associated with resident conditions is often a neglected part of the evaluation of this problem, she explains. (Kumpar)

Solution

Resident handling and movement programs, which use a variety of methods to provide staff with safe alternatives to manually lifting and moving residents, can help to reduce the risk of musculoskeletal injury by allowing resident lifting to be within workers' biomechanical limits. A major portion of these programs is the provision of resident lifting and movement equipment. Residents may benefit from the use of this assistive technology, as well; residents have reported decreased anxiety about movement and increased feelings of dignity and autonomy when lift equipment is used. (FGI "Patient") Charlotte Lynch, M.S., CNS, CSPHP, safe patient handling and movement expert and board member for the Association of Safe Patient Handling Professionals, notes that patients often complain when workers do not use lifts to move them.

Safe resident handling and lifting programs contain the following elements (OSHA "Safe"):

- Commitment from management to support the program
- Participation of workers in the assessment of safe resident handling and movement processes, as well as in the use of tools and equipment
- Provision of appropriate tools and equipment in conveniently located areas (ANA "Safe")
- Assessment of resident handling and movement needs in resident care plans
- Training to assess resident mobility and to select and use appropriate equipment
- Evaluation of the program for effectiveness through quality indicators and established goals
- Maintenance of the program through continued education and training

Many facilities have implemented safe resident handling and movement programs and have seen great success in decreasing injuries and costs to the organization. See "Safe Resident Handling and Movement Success Stories."

A general overview of key element of a safe resident handling and movement program is described throughout the rest of this Risk Analysis. It is important to keep

in mind that the differences among facilities and even units will likely require facilities to identify unique ways to best implement this program.

REGULATIONS AND STANDARDS

Regulations

OSHA. In an effort to protect workers from musculoskeletal injuries, the Occupational Safety and Health Administration (OSHA) announced a campaign to raise awareness about the hazards that may cause these injuries in healthcare facilities, including manual lifting (OSHA "US"). OSHA has issued voluntary guidelines for preventing musculoskeletal disorders in nursing home workers, last revised in March 2009. The guidelines, while voluntary, recommend that manual lifting be "minimized in all cases and eliminated when feasible" (OSHA "Guidelines"). More information about this guide and others is available in "Resource List."

OSHA recognizes that small employers may need help when implementing the type of program it suggests in its guide and encourages these organizations to reach out to the free OSHA consultation service for advice and assistance. Individual states run the consultation service, which provides occupational safety and health professionals who can assist facilities in maintaining a "safe and healthful" workplace. More information about this service can be found in "Resource List." (OSHA "Guidelines")

While OSHA has issued voluntary guidance regarding musculoskeletal disorders in a variety of healthcare environments, the regulation related most closely to this issue is the general-duty clause of the Occupational Safety and Health Act of 1970, which requires employers to provide a working environment "free from recognized hazards that are causing or are likely to cause death or serious physical harm." Within this broad mandate, healthcare facilities are responsible for addressing injuries workers suffer when manually moving residents. (29 USC § 654)

OSHA has used this mandate to require a nursing home corporation to implement a safe resident handling policy and program throughout its organization; for more information, see "The Beverly Settlement."

State and federal legislation. Since 2005, 11 states (California, Illinois, Maryland, Minnesota, Missouri, New Jersey, New York, Ohio, Rhode Island, Texas, and Washington) have enacted legislation to require hospitals and other

Safe Resident Handling and Movement Success Stories

Worker injury from resident handling is a well-known problem that many facilities want to solve. Some organizations have thought that the investment in lifts, along with worker training, will reduce the number of injuries but have been disappointed in the results. For example, one nursing survey showed that while two-thirds of participants indicated that lifts were available at their facilities, only one-third used them “frequently” (ANA). However, other facilities have seen great success in safe patient handling and movement programs.

A study evaluating the effects of a newly implemented safe resident handling program on 1,728 nursing employees in six nursing homes in 1998 found that workers’ compensation claim rates, resident handling injury rates, and lost and restricted workdays due to handling injuries decreased significantly. In regard to the reduction in worker injuries, the authors commented that the largest reduction occurred in the more serious injuries that led to workers’ compensation claims. The reduction in the cost for workers’ compensation claims alone provided a return on investment for the program in about three years. In addition to these decreases, the researchers found that assaults on healthcare workers during resident handling were lower following the intervention. The safe resident handling program contained many elements discussed in this Risk Analysis, including lift equipment, a written “zero lift” policy, and staff training. (Collins et al.)

One facility initiated a safe resident handling program in its highest staff risk area, a unit where the 57 residents were severely cognitively or physically impaired, with most totally dependent for all activities. Staff were surveyed both before and after program implementation. The survey showed improvement in staff enjoyment in coming to work, staff morale, and belief by staff that management was concerned about their safety on the job. Following the intervention, staff also found that the use of lifts helped with more than moving patients—for example, some lifts could also be used to weigh residents. Staff also commented that residents were happy with the lifts, as they smiled and were less rigid when lifts were used. (Fragala)

In addition to the positive benefits for residents and staff, this organization also observed no resident handling injuries after implementing the program for 12 months; previously, this unit had four resident-handling-related injury cases that caused 236 lost workdays and 2 restricted workdays. A similar unit that was not part of the intervention had injury rates close to that of the preintervention pilot unit. This facility noted that the program was implemented without additional staff and with some initial

outside support. In addition, the program has been sustainable through internal resources. (Fragala)

One nursing home chain with 110 sites reported on a very thorough calculation of the net benefits of rolling out a safe resident handling, using not only workers’ compensation and malpractice claims but also productivity losses from presenteeism and absenteeism, employee turnover, poor labor relations, and “other costs related to tarnished image or goodwill.” The calculations estimated a return on investment within two years. Three years after implementing the program, the chain achieved a total net savings of at least \$1.89 million. The researchers also noted that before implementation, there was no identifiable trend in workers’ compensation claims; however, following implementation of the program, it decreased. While there was much variation in the cost-benefit ratios between individual facilities, the authors believe that the programs “show a favorable economic outcome” related to workers’ compensation claims and employee turnover. (Lahiri et al.)

There are many more examples of effective and sustainable safe resident handling and movement programs throughout the country. Committed organizations are the key to successful programs because they provide support to encourage staff to take part in the culture change that is often needed when introducing a new process that improves care.

References

- American Nurses Association (ANA). 2011 ANA health and safety survey: hazards of the RN work environment [online]. 2011 [cited 2013 Aug 2]. <http://nursingworld.org/FunctionalMenuCategories/MediaResources/MediaBackgrounders/The-Nurse-Work-Environment-2011-Health-Safety-Survey.pdf>
- Collins JW, Wolf L, Bell J, et al. An evaluation of a “best practices” musculoskeletal injury prevention program in nursing homes. *Inj Prev* 2004 Aug;10(4):206-11. Also available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1730104>
- Fragala G. Creating safer environments for long-term care staff and residents. *Ann Longterm Care Clin Care Aging* 2012 Feb;20(2):42-6. Also available at <http://www.annalsoflongtermcare.com/article/creating-safer-environments-long-term-care-staff-and-residents>
- Lahiri S, Latif S, Punnett L, et al. An economic analysis of a safe resident handling program in nursing homes. *Am J Ind Med* 2013 Apr;56(4):469-78. PubMed: <http://www.ncbi.nlm.nih.gov/pubmed/23203729>

healthcare facilities to adopt measures to prevent musculoskeletal disorders among healthcare workers resulting from manual healthcare recipient handling; in addition, Hawaii passed a resolution calling for the

state to support the principles of safe patient handling and movement from the American Nurses Association (ANA) (ANA “Safe Patient Handling and Mobility [SPHM]”). The momentum began after ANA launched

The Beverly Settlement

Between 1991 and 1993, OSHA issued a series of violations to five nursing homes in Pennsylvania that were part of one of the largest nursing home corporations in the country. The citations, based on OSHA's general-duty clause, were in response to complaints that workers were suffering from back injuries due to lifting and transferring residents. During the OSHA investigation, inspectors noted that nursing assistants had many musculoskeletal injuries that "resulted in extensive lost work time and restricted work duty," allegedly ranging from six months to a year (Abrams). Additionally, back injuries represented two-thirds of the organization's workers' compensation claims. (OSHA "OSHA"; OSHA "Nursing")

Eleven years after some of the first citations were issued, the corporation and OSHA finally came to a settlement. The corporation agreed to incorporate a plan to help decrease the incidence of back injuries in workers during lifting and movement, purchase safe lifting equipment, and establish a training program for safe resident handling for its workers. As part of the settlement, OSHA created a policy and guide for lifting, transferring, and repositioning residents. In addition to the five nursing homes that received citations, the corporation also agreed to implement these safe resident handling strategies in its other homes throughout the country. (*Chao v. Beverly Enterprises, Inc.*)

This case shows that OSHA is willing and able to levy fines against healthcare organizations that place their employees at risk of injury due to unsafe resident handling practices.

References

- Abrams AL. OSHA & ergonomics: enforcement under the general duty clause. 2002 Sep [cited 2013 Sep 13]. <http://www.asse.org/professionalsafety/pastissues/047/09/068484km.pdf>.
- Chao v. Beverly Enterprises, Inc. [settlement agreement online]. [cited 2013 Sep 13]. https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=843&p_table=CWSA
- Occupational Safety and Health Administration (OSHA). U.S. Department of Labor:
- Nursing home company settles case: Beverly adopts ergonomic measures to reduce back injuries [press release online]. 2002 Jan 15 [cited 2013 Sep 13]. https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=news_releases&p_id=1264
- OSHA to appeal Beverly Enterprises decision [press release online]. 1995 Nov 2 [cited 2013 Sep 13]. https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=1156&p_table=NEWS_RELEASES

its Handle With Care campaign in 2003 to promote safe resident handling to prevent musculoskeletal disorders among nurses (ANA released a safe patient handling and movement standard in 2013, detailed later in this Risk Analysis). Check with your organization's legal counsel to determine the specific requirements.

Legislation related to safe resident handling was also introduced on a federal level in the House of Representatives in 2013 titled Nurse and Health Care Worker Protection Act of 2013 (H.R. 2480). As of this writing, the bill has been referred to committee.

Standards

ANA. ANA, an organization long committed to this issue, published a standard for safe patient handling and mobility in June 2013. The standard is intended to be used throughout the entire continuum of care—from home care to ambulatory care to long-term care facilities. This group noticed that even though many states have established regulations related to patient handling, no one state had a majority of the components of ANA's recommendations issued in the Handle With

Care campaign. Additionally, even though many efforts have been made to improve patient handling, worker injuries are still occurring at a high rate. As such, the group identified evidence-based and multidisciplinary standards that were realistic for all healthcare settings. (ANA "Navigating")

Eight standards are included in the publication (*ANA Safe Patient Handling and Mobility: Interprofessional*):

1. Establish a culture of safety.
2. Implement and sustain a safe resident handling and mobility program.
3. Incorporate ergonomic design principles to provide a safe environment of care.
4. Select, install, and maintain safe resident handling and mobility technology.
5. Establish a system for education, training, and maintaining competence.
6. Integrate resident-centered safe resident handling and mobility assessment, plan of care, and use of safe resident handling and mobility technology.

7. Include safe resident handling and mobility in reasonable accommodation and postinjury return to work.
8. Establish a comprehensive evaluation system.

FGI. The Facility Guidelines Institute's (FGI) *Guidelines for Design and Construction of Health Care Facilities* added a new provision for safe patient handling and movement in the 2010 edition. A patient handling and movement assessment was created in order to help all healthcare facilities plan for patient movement, and it includes two phases: a needs assessment to identify the necessary equipment to meet the patient handling and movement needs for areas where patient movement occurs and a definition of the space requirements, as well as the structural and other design considerations that may need to be accounted for when planning for resident movement.

The assessment should be conducted by an interdisciplinary team, which may include the nurse manager or supervisor and representatives from frontline staff; staff with experience in risk management, safety, or ergonomics; and staff responsible for facility design. (FGI *Guidelines*)

The types of equipment needed to handle and move residents will vary due to individual differences; however, it is essential that the correct type, size, weight capacity, and quantity of equipment be available for use and be stored appropriately in facilities. Fixed patient handling and movement systems will influence the design and construction of a facility the most, but portable resident lifts also have to be taken into consideration because they may need a significant area for storage. (FGI *Guidelines*) These guidelines are discussed throughout this Risk Analysis.

► ACTION PLAN

INSTITUTIONAL SUPPORT

Action Recommendation: *Gain support for a safe resident handling and movement program by demonstrating its value. One way to do this is to evaluate data related to resident handling tasks to determine the scope of the issue at the facility. Areas to consider include workers' compensation records, short-term and long-term disability claims, litigation, resident falls, and pressure ulcers.*

The first step in beginning a safe resident handling and movement program should be to assemble a

multidisciplinary committee of stakeholders, such as physicians, nurses, physical therapists, occupational therapists, and representatives from risk management and occupational health. In addition, clinical engineering and facilities staff will also be important in this group. The group should also secure an administrator to sponsor the activities. (ECRI Institute) A sample recruitment flyer is available from the Washington State Safe Patient Handling Steering Committee; see "Resource List" for more information.

Kumpar shared her opinion about how organizations can help support safe resident handling and movement programs. See "What Are Key Steps to a Successful Safe Resident Lift and Movement Program?"

Gaining Upper Management Support

In order to be successful, safe resident handling and movement programs require institutional support. Like many other safety programs or initiatives an organization embarks upon, safe resident handling and movement programs will require financial support for equipment and maintenance, as well as organizational support to assist in changing the culture in order for staff to be more open to using lifts consistently. Organizational support will allow staff the opportunity to be trained, attend educational sessions, and be evaluated for competency in safe resident lifting and movement activities.

"Management has to see how a safe patient handling and movement [program] will improve staff efficiencies while providing quality care and patient outcomes," says Kumpar.

The business case for safe resident handling and movement programs must be made in order to secure the financial backing of the organization for equipment and training. FGI suggests comparing the costs incurred without a program with the estimated value added from a safe resident handling program. Safe resident handling programs can vary in their content; some facilities, for example, will not be able to install ceiling lifts due to the facility's design and will need to evaluate mobile lifts. FGI thus recommends that facilities review different types of programs, from a program that meets minimal objectives to one with "all the bells and whistles." (FGI "Patient")

Data to consider when calculating value may include the costs of the following (FGI "Patient"):

- Workers' compensation claims
- Resident falls

What Are Key Steps to a Successful Safe Resident Lift and Movement Program?

In an interview with Dee Kumpar, RN, B.S.N., M.B.A., CSPHP, safe patient lifting and movement expert and board member of the Association of Safe Patient Handling Professionals, she offers suggestions of ways to ensure an effective patient handling program.

[Facilities] should be able to recognize the upside of risk and cost-saving opportunities [that] a safe patient handling program can provide. If the potential for injury [is removed] by providing a safer alternative, then [healthcare organizations] are not dealing with the aftermath and expense associated with workers' compensation claims and possible short-term or long-term disability, not to mention litigation, should the injury also include a patient.

I [Kumpar] would encourage [facilities] to:

- Look at the financials in their facility tied to patient risk, such as the cost of care for a fall or care of a stage 3 or 4 pressure ulcer, then work to standardize procedures that are incorporated into fall and skin bundles (to eliminate variability) and begin to track rates to see how

a safe patient handling and mobility program makes a difference. Share the outcomes openly with each unit and applaud their willingness to change their old practice patterns and incorporate safe lifting and mobility standards.

- Address your safe patient handling and movement program as a quality initiative and include chart reviews to see if there is recorded evidence that safe lifting practices are being performed.
- Be an active participant on the safe patient handling and movement program committee and in the development of policy and procedures.
- Perform root-cause analyses when an event occurs, [in a similar fashion to the analyses that occur] with patient injuries. We have to be able to recognize the problem in order to recommend the right solution for prevention.

Source: Kumpar, Dee (Board Member, Association of Safe Patient Handling Professionals). Conversation with: ECRI Institute. 2013 Aug 7.

- Pressure ulcers
- Resident satisfaction
- Resident injuries
- Staff injuries
- Worker satisfaction
- Worker retention and turnover

At least one year of resident handling injury data should be used to identify trends; data should include the following: a description of the incident, the type of injury, when and where the incident occurred, the body part affected, the number of workdays lost, and the number of modified-duty days. Areas that have a high incidence and severity of injuries (those reporting a high number of lost and modified-duty days) should be classified as "high risk," and interventions should be initiated in these areas first. Some of this data can be found in incident reports and OSHA 300 injury and illness logs. (U.S. VA "Patient") However, it will be useful to contact your insurance provider for information about workers' compensation claims and other claims data. The U.S. Department of Veterans Affairs (VA) offers a sample injury data collection tool in its *Patient Care Ergonomics Resource Guide*; see "Resource List."

Reliance on record review alone is not enough; staff may underreport the incidence of musculoskeletal injuries due to fear of job loss or acceptance of physical pain as "part of the job." Discussions with staff and

managers will help determine whether the actual incidence may be higher than reported. The use of surveys or suggestion boxes will help reveal employee concerns about potential job-related hazards. As with any safety program, it is important to understand how and why workers are performing their duties; as such, the committee tasked with implementing this program should also ensure that observation is used to identify risks and identify any patterns or trends. Additionally, surveying staff on their thoughts about resident handling and movement and what can be done to improve it can also be helpful. (ANA "Safe Patient Handling Tip Sheet")

The costs associated with implementing a program must also be taken into consideration when evaluating the program's return on investment. One facility's list of costs included the following (FGI "Patient"):

- Capital equipment costs, including labor during installation
- Maintenance and supply costs for the equipment (e.g., batteries, sling replacement, laundry)
- Initial and ongoing training of staff on how to use the equipment

After calculating the potential benefits and costs, the same healthcare facility determined that a safe resident handling and movement program would add, at minimum, \$2 million in value over five years; however, the maximum value-add could be as high as \$12 million (FGI "Patient").

A highly detailed analysis regarding calculating the cost of safe resident handling programs, with an example of how one organization performed its return-on-investment calculations, can be found in the FGI *Patient Handling and Mobility Assessment* white paper. Additionally, return-on-investment calculators specifically for safe resident handling and movement programs are available from a variety of sources.

Creating a Program Plan

After evaluating the facility's resident handling costs and identifying high-risk areas, the group's next major task will be creating an overall plan for the safe resident handling and movement program. A few major components of the plan are discussed in this section.

Program policies and procedures will be one part of the communication effort between the organization and frontline workers. Essential elements of a safe resident handling and movement policy include the following (Nelson and Baptiste; NIOSH):

- ▶ Manual lifting of most or all of the resident's weight is not permitted due to the intrinsic dangers present to staff and residents, except in exceptional or life-threatening situations.
- ▶ A resident lift assessment will be conducted for each resident upon admission and whenever the resident's condition changes. In cases in which the resident's condition is subject to rapid deterioration, assessment will be performed prior to each transfer or lift. The Centers for Medicare and Medicaid Services (CMS) offers a Resident Assessment Instrument to be used to assess resident capabilities and needs during care planning, and this tool may be helpful in identifying the appropriate methods for lifting or repositioning residents. See "Resource List" for more information.
- ▶ Residents are to be encouraged to assist staff in conducting transfers whenever possible and not in conflict with the resident's needs.
- ▶ Staff must select and use appropriate lifting equipment as required by the results of the individual resident's most current lift assessment.
- ▶ The appropriate type and quantity of well-maintained lifting equipment will be conveniently available to staff.
- ▶ Safe resident handling training will be available for and required of staff, including training on properly using and maintaining equipment, conducting lift

assessments, and educating residents on the need for using transfer equipment.

- ▶ Staff must demonstrate competency regarding resident handling procedures.

VA provides a sample safe resident handling policy in its *Safe Patient Handling Guidebook*; see "Resource List" for more information.

The program plan should take into consideration all applicable laws and regulations, as well as standards from accrediting organizations and other groups, such as ANA and FGI. The plan should also outline specific goals and objectives, such as reduction in employee injuries, lost workdays, manual resident movements, and employee turnover. (U.S. VA "Patient") The plan should also include a timeline and the evaluation requirements to meet the predetermined goals (ANA "Interprofessional").

When starting the program, it may be useful to begin in the previously identified high-risk areas. Kumpar states that by doing this, the enthusiasm from positive results builds within the facility, and other managers are then eager to receive the equipment and train staff in safe resident handling techniques.

The plan for the program must go beyond basic start-up costs and should detail sources of continued funding to maintain equipment and sustain positive results. Like other safety programs, people can forget about it without consistent reinforcement, says Tamara James, M.A., CPE, CSPHP, ergonomics director for Duke University Health System and board member for the Association of Safe Patient Handling Professionals, who also recommends peer leader programs, which are discussed below.

It is also essential that a position be created to run the safe resident handling and movement program, says James. Otherwise, the program "will fall by the wayside," she says. See "Resource List" for information on accessing the VA *Safe Patient Handling Guidebook*, which includes a job description for the safe resident handling and movement coordinator.

EQUIPMENT NEEDS

Action Recommendation: *Purchase the appropriate types and amount of equipment for the facility. To do this, evaluate the resident populations the organization serves, identify the types and amount of equipment needed to properly implement a safe resident handling program, and involve staff in the evaluation of equipment.*

Resident lift equipment is discussed in detail in the Risk Analysis “Resident Lifts,” located in the *Equipment and Technology* section of the *Continuing Care Risk Management (CCRM) System*. However, facilities will need to consider a few factors when choosing lifts, as discussed below.

Assessing the Resident Population

The resident population served at the organization is an important indicator to the types of equipment that will be needed to safely lift and assist in movement.

When evaluating the assistance needed by residents for CMS standards, the following coding is used to assess activities of daily living (e.g., moving within the bed, transferring between surfaces, toileting transfers, walking in the room and facility, bathing) over five days (CMS):

- Independent (score 0): Resident can complete activity without help or oversight.
- Set up assistance (score 1).
- Supervision (score 2): Resident needs oversight, encouragement, or cueing throughout the activity.
- Limited assistance (score 3): Resident needs non-weight-bearing assistance (including guided maneuvering of the limbs) at least once.
- Extensive assistance, one-person assist (score 4): Resident needs one staff member for weight-bearing support during either part of or the entire activity at least once.
- Extensive assistance, assistance from two or more staff (score 5): Resident needs two or more staff members at least once for weight-bearing support during either part of or the entire activity at least once.
- Total dependence, one-person assist (score 6): Resident needs full staff performance of activity from one person at least once, and the resident is either unable or unwilling to perform any part of the activity.
- Total dependence, assistance from two or more staff (score 7): Resident needs full staff performance of activity from two or more people at least once, and the resident is either unable or unwilling to perform any part of the activity.

In order to determine how many lifts to purchase and the placement of fixed lifts, use the average percentage of residents who are dependent or require extensive assistance to move. For floor-based lifts and sit-to-stand lifts, FGI recommends about one lift per 8 to 10 residents. For fixed systems, the location and configuration

of tracks will determine how much of the facility can be covered using these lift systems. (FGI *Guidelines*)

The bariatric resident. In addition to understanding the typical resident mobility profile, organizations need to plan for lifting equipment that will accommodate the obese resident. Many lifts have weight capacities of 400 lb, while specialty bariatric lifts may be able to lift weights of 1,000 lb or more. Lifts that have weight limits between 500 and 600 lb will be able to lift a “good range” of residents, according to FGI. (FGI *Guidelines*)

Lynch, a resident safety and movement expert, says that when planning, as a general rule of thumb, facilities should understand that about 35% of the U.S. population is obese (Ogden et al.), which can help guide initial equipment estimates; however, a needs assessment throughout the facility is necessary (Lynch). Some facilities have reported querying the surrounding community with surveys to determine needs (Joint Commission).

For facilities that are unsure whether to invest in bariatric lifts, Lynch recommends looking into rental programs, as there are several that provide packages specifically for bariatric lifts and as equipment can oftentimes be provided in a matter of hours. More information about equipment for bariatric residents is available in the Risk Analysis “Addressing the Needs of Obese Residents,” located in the *Patient/Resident Care* section of the *CCRM System*.

In addition to specialty lifts for bariatric residents, facilities must take into account the space that will be needed to lift these residents with a mobile lift. In a vertical lift transfer from bed to chair, for example, there must be enough space for the lift and at least three caregivers to help with the transfer, and the lift must be able to turn 180° from the bed to the chair. (Pelczarski)

See the online version of this Risk Analysis to hear handling and movement expert Lynch discuss safe resident handling of bariatric residents.

Selecting Equipment

After determining the types of equipment needed to assist staff in safe resident handling and movement, the organization will need to go through the process of selecting equipment. The employees that will be using the equipment on a daily basis *must* be part of this process. Otherwise, the equipment selected may not meet worker needs or preferences, which will make it difficult to entice staff to use the equipment.

Other factors to consider when determining the equipment for a department include the number and availability of staff working on the unit, shift patterns, unit configuration, resident room size, and available storage space, as well as the types of transfers performed and the number of staff needed to assist in movement (ECRI Institute).

Facilities may also wish to consider inviting lift and other resident transfer vendors to the facility for an “equipment fair,” during which a variety of personnel can come to review and test the products. Soliciting worker feedback through questionnaires can help management gauge the level of interest in the equipment and the ease of use. VA’s *Safe Patient Handling Guidebook* includes information related to these fairs, including an example of an equipment rating survey; see “Resource List” for more information. (U.S. VA “Safe Patient”)

ENCOURAGE LIFT USE

Action Recommendations: *The safe resident handling and movement program should include provisions for training and assistance for staff on equipment use. Be sure that the program includes requirements to ensure staff competence on a specified basis and that compliance with lift use is monitored.*

Promote safe resident handling equipment use among staff; this will require an emphasis on the facility’s culture of safety.

Support and encourage workers to protect themselves during resident handling by using equipment. This important element is directly tied to the organization’s culture of safety. More information about this subject can be found in the Risk Analysis “Culture of Safety,” located in the *Quality Assurance and Risk Management* section of the *CCRM System*.

Changing the culture can be difficult, according to Lynch. She likens it to when nurses were required to start wearing gloves, which took years before it was well implemented (Lynch).

Emphasizing Safe Resident Movement

Just like management needs justification to fund a safe resident handling and movement program, staff also need to see the value in this type of program. Kumpar recommends that management be visible and engaged in the program, including going on rounds and inquiring about lift use.

“When employees see the [high] level of interest expressed by leadership, they begin to realize that safe

[resident] handling is important,” says Kumpar. In addition, facilities should ensure that the safe resident handling and movement requirements and equipment are easy to use and readily available.

Some managers might be resistant to this policy change for issues such as lack of storage space for equipment, says Lynch. “It takes a great relationship and coordinator, staff and managers, [to make] the program successful,” she says.

Staff should be encouraged to consult algorithms to assist them in determining how to move residents and what equipment to use; VA’s *Safe Patient Handling Guidebook* contains a variety of algorithms for both bariatric and nonbariatric residents, as do many of the other guides listed in “Resource List.” While algorithms are helpful in determining what steps are necessary to ensure the safe movement of the resident, it should be noted that they may be general; therefore, during education sessions, it is a good idea to include tips on how to handle situations for which the algorithm does not plan for (e.g., equipment malfunction) and residents for which movement with a lift will be complicated (e.g., residents in severe pain) (de Ruiter and Liaschenko).

Lift use must be evaluated. If staff do not use the lifts, the investment will be lost and injuries to both workers and residents will continue to occur. If staff are noncompliant, ask workers reasons why they are not using lifts. In an effort to encourage lift use and maintain employee accountability, one facility did monthly assessments of lift use and also added use of lift equipment to employee performance reviews (Missar et al.).

A common barrier to lift use is the argument that using the lift will take more time. Indeed, in one Washington State survey of safe lifting and movement practices, over half of nursing home assistants believed this to be the case (Silverstein et al.). However, lift use may not only prevent injuries but also may allow for more efficient use of time; one study noted that after staff members became accustomed to using the equipment, they found that it did not increase the time necessary for the task and helped during movement (Fragala).

Along those lines, employees must be held accountable for complying with safe resident handling practices, says Kumpar. Lynch agrees, and she recommends a strong policy with consequences for not using equipment, along with remedial training programs after injuries that may have been prevented by equipment use.

Facilities should be aware that it can take time for employees to become comfortable incorporating

resident mobility assessments into their current practice and “to develop their skills in confidence in using equipment,” says Kumpar.

“One of the biggest reasons that [staff] don’t use equipment is lack of knowledge,” says Lynch. “They forget about training. Comfort level is critical in making that culture change [to embrace safe resident handling and movement].”

Equipment Accessibility

Particularly for mobile lifts, accessibility is paramount to use. Many respondents to a Medical Product Safety Network (also known as MedSun) facilities survey indicated that employees often will not wait for a lift to be delivered, opting to move the resident themselves. Ceiling lifts are used more often due to their availability. (U.S. FDA) Lifts, as well as any necessary accessories, such as slings, must be readily available and in workable condition when the worker needs to use it; otherwise, it will be difficult to persuade staff to continue use the equipment.

Some recommendations from FGI regarding storage include the following (FGI *Guidelines*):

- Provide a centrally located storage area for lifts, if possible, and ensure that the storage areas are distributed throughout the facility.
- Regarding resident handling equipment accessories, store extra slings in the same location as lifts, provide specific locations for slings and other lift accessories (e.g., hanger bars, trapezes, friction-reducing devices) in lift storage spaces (e.g., large hooks, shelves), and store resident-specific slings in their rooms.

Lift storage units should contain battery charging areas. Ensuring that lifts have fully charged batteries is clearly important to their use, but staff often forget to plug the lifts in when returning them after use. (FGI *Guidelines*) Indeed, the respondents to the FDA MedSun survey indicated that battery charging and replacement was a major problem with lifts (U.S. FDA).

Peer Support

VA defines the peer unit leader’s role as assisting in the implementation of the safe resident handling and movement policy, algorithms, and other “key interventions.” Additionally, these workers can train coworkers and help with program monitoring and evaluation. As resources on their units, the unit peer leaders can continue to help encourage staff by reminding them to

use resident lifting equipment and also by acting as resources in the event that a colleague has difficulty with the equipment. VA states that this element of the program needs continued exposure, with ongoing training and support, to new strategies for safe resident movement. Because this element requires a large effort, VA states that it “is probably most applicable for high-risk units.” (U.S. VA “Patient”)

One facility that was having difficulty getting staff to use lift equipment had peer leaders observe patient handling and movement tasks to increase staff awareness; many workers were reportedly “surprised” to learn about the high-risk tasks that they were performing. (Stevens et al.)

Lift Teams

Lift teams may be another way to assist in the safe resident handling and mobility program, but there have been misconceptions about them, namely that they are a set of men who manually move residents. This is not true and perpetuates the myth that strong, physically fit workers can manually lift more than 35 lb. (FGI “Patient”)

Lift teams may be another way to assist in the safe resident handling and mobility program. Lift teams generally comprise at least two workers who are responsible for resident transfers. Members of the lift team may be physically evaluated to determine ability to be on the team through injury history query, examination, and spinal evaluation to detect any abnormalities. (U.S. VA “Patient”)

Lift team members have additional education and training on safe resident lifting techniques, which they use to safely move residents, and they have been shown to help nurses by allowing staff to tend to tasks other than moving residents. However, availability is key. Without it, nursing staff are not likely to wait for the lift team before moving the resident, posing a risk of injury. (FGI “Patient”)

One facility found the following provisions key to the successful use of lift teams (AHRQ):

- Making lift teams available for all shifts at the facility.
- Evaluating and training team members on a regular basis to ensure competency.
- Educating nursing staff regarding when to call for lift team assistance and how to contact the team.

(continued on page 14)

Resource List

American Nurses Association

(800) 274-4ANA (4262)

<http://www.nursingworld.org>

- Safe patient handling and mobility [resource center]. <http://nursingworld.org/MainMenuCategories/WorkplaceSafety/SafePatient>

Association of Safe Patient Handling Professionals

(610) 248-9911

<http://www.asphp.org>

- Certification. <http://www.asphp.org/certification>
- Learning center. <http://www.asphp.org/learning-center>

Centers for Medicare and Medicaid Services

(877) 267-2323

<http://www.cms.gov>

- MDS 3.0 RAI manual. <http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/MDS30RAIManual.html>

Duke University Occupational and Environmental Safety Office, Ergonomics Division

(919) 668-ERGO (3746)

<http://www.safety.duke.edu>

- Safe patient handling. <http://www.safety.duke.edu/Ergonomics/SPH/Default.htm>

Ergonomics in Healthcare

<http://www.ergonomicsinhealthcare.org>

- Training modules. <http://www.ergonomicsinhealthcare.org/index.asp?pageID=96>

National Institute for Occupational Safety and Health

Centers for Disease Control and Prevention

(800) CDC-INFO (232-4636)

<http://www.cdc.gov/niosh>

- Safe patient handling. <http://www.cdc.gov/niosh/topics/safepatient>
- Safe patient handling and movement [educational course]. <http://www.cdc.gov/niosh/docs/2009-127/safe.html>

Occupational Safety and Health Administration

(800) 321-OSHA (6742)

<http://www.osha.gov>

- Back facts—a training workbook to prevent back injuries in nursing homes. <https://www.osha.gov/SLTC/healthcarefacilities/training/index.html>
- Ergonomics training for nursing home workers. https://www.osha.gov/dte/grant_materials/fy11/sh-22314-11.html

- Guidelines for nursing homes. https://www.osha.gov/ergonomics/guidelines/nursinghome/final_nh_guidelines.html

- Lift program policy and guide. <https://www.osha.gov/CWSA-attachment/beverlyliftprogramguide.pdf>

- On-site consultation. <https://www.osha.gov/dcsp/small-business/consult.html>

- Safe patient handling. <https://www.osha.gov/SLTC/healthcarefacilities/safepatienthandling.html>

Oregon Coalition for HealthCare Ergonomics

<http://hcergo.org>

- Safe patient handling—acute care. <http://hcergo.org/AcuteCare.htm>

Safe Lifting Portal

(888) 545-6671

<http://www.safeliftingportal.com>

- Getting started. <http://www.safeliftingportal.com/gettingstarted/index.html>
- Safe lifting library. <http://www.safeliftingportal.com/safeliftinglibrary/index.html>
- Safe lifting toolkit. <http://www.safeliftingportal.com/toolkit>

Safe Patient Handling in Washington State

<http://www.washingtonsafepatienthandling.org>

- Best practices. <http://www.washingtonsafepatienthandling.org/bestpractices.html>
- Recruitment flyer. http://www.washingtonsafepatienthandling.org/images/PSPH_ESHCAug06.pdf
- Tools. <http://www.washingtonsafepatienthandling.org/tools.html>

Veterans Integrated Service Network 8 Patient Safety Center of Inquiry, Tampa

U.S. Department of Veterans Affairs

<http://www.visn8.va.gov/patientsafetycenter>

- Safe patient handling and movement. <http://www.visn8.va.gov/visn8/patientsafetycenter/safePtHandling/default.asp>

WorkSafeBC

(604) 276-3100

<http://www.worksafebc.com>

- Injury prevention resources for health care—patient handling. <http://www2.worksafebc.com/Portals/Health-Care/PatientHandling.asp>

(continued from page 12)

- Scheduling and prioritizing lifts throughout the facility on a daily basis. Staff are also able to contact the team for assistance on an as-needed basis. When no lifts are scheduled, the team rounds the facility.

MAINTAIN THE PROGRAM

Action Recommendation: *Ensure that the program includes recommendations for the continued maintenance of the program.*

After implementing the program and seeing its success, the key to keeping resident lifting and movement safe is maintaining the program. As stated earlier, continued support—both financially and through reinforcement of the safe resident handling program throughout the facility—is necessary for success.

Resident safety experts have found creative ways to keep staff engaged in safe resident handling and movement practices. James's organization, for example, holds a local safe resident handling conference where nursing staff and other healthcare workers are asked to share their perspectives on safe resident handling and movement. Outside experts are also invited to give presentations, and vendors display new products that staff can test. (James)

In addition to annual competence evaluations for workers, consider promoting safe resident handling through workshops, outside conferences, vendor product demonstrations, and promotional materials (e.g., posters, handouts, articles). (Sample handouts are available on the CCRM members' website.) Share safe resident handling and movement success stories.

James believes that people have to remember that safe resident handling is "no different than any other safety program"—it needs continual review and staff training because performing safe resident handling and movement is not necessarily intuitive to staff, and the fact of the matter is that people don't always do what is best for them all the time. Reminders, incentives, and continual education can keep the momentum going, creating a safe place to work and a safer place for residents.

References

29 USC § 654.

Agency for Healthcare Quality and Research (AHRQ). U.S. Department of Health and Human Services. Patient lift team program reduces injuries and boosts productivity among nurses [online]. 2008 Apr 14 [cited 2013 Aug 29]. <http://www.innovations.ahrq.gov/content.aspx?id=1813>

American Nurses Association (ANA).

2011 ANA health and safety survey: hazards of the RN work environment [online]. 2011 [cited 2013 Aug 2]. <http://nursingworld.org/FunctionalMenuCategories/MediaResources/MediaBackgrounders/The-Nurse-Work-Environment-2011-Health-Safety-Survey.pdf>

Navigating the new safe patient handling and mobility interprofessional national standards [online]. 2013 Jun 19 [cited 2013 Aug 12]. <http://nursingworld.org/MainMenuCategories/CertificationandAccreditation/Continuing-Professional-Development/NavigateNursing/NewSafePatientHandlingMobilityStandards.html>

Safe patient handling and mobility: interprofessional national standards across the continuum of care. Silver Spring (MD): ANA; 2013 Jun.

Safe patient handling and mobility (SPHM) [online]. 2013 May 1 [cited 2013 Aug 12]. <http://nursingworld.org/MainMenuCategories/Policy-Advocacy/State/Legislative-Agenda-Reports/State-SafePatientHandling>

Safe patient handling tip sheet [online]. [cited 2013 Aug 29]. <http://gm6.nursingworld.org/MainMenuCategories/WorkplaceSafety/Healthy-Work-Environment/SafePatient/Resources/TipSheet.html>

Bureau of Labor Statistics (BLS). U.S. Department of Labor: Injuries, illnesses, and fatalities: frequently asked questions (FAQs) [online]. 2012 Aug 27 [cited 2013 Aug 15]. <http://www.bls.gov/iif/oshfaq1.htm>

Nonfatal occupational injuries and illnesses requiring days away from work, 2011 [online]. 2012 Nov 8 [cited 2013 Aug 2]. <http://www.bls.gov/news.release/osh2.nr0.htm>

Table 18 [online]. 2012 Nov 8 [cited 2013 Aug 2]. <http://www.bls.gov/news.release/osh2.t18.htm>

Centers for Medicare and Medicaid Services (CMS). MDS 3.0 for nursing homes and swing bed providers [online]. [cited 2013 Sep 6]. <http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/NHQIMDS30.html>

Collins JW, Wolf L, Bell J, et al. An evaluation of a "best practices" musculoskeletal injury prevention program in nursing homes. *Inj Prev* 2004 Aug;10(4):206-11. Also available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1730104>

de Ruiter HP, Liaschenko J. To lift or not to lift: patient-handling practices. *AAOHN J* 2011 Aug;59(8):337-43. PubMed: <http://www.ncbi.nlm.nih.gov/pubmed/21780736>

ECRI Institute. Watch your back [guidance article]. *Health Devices* 2012 Jan;41(1):6-11.

Facility Guidelines Institute (FGI):

Guidelines for design and construction of hospitals and health care facilities. Dallas (TX): FGI; 2010.

Patient handling and movement assessment: a white paper [online]. 2010 Apr [cited 2013 Aug 12]. http://www.fgiguide-lines.org/pdfs/FGI_PHAMA_whitepaper_042810.pdf

Fragala G. Creating safer environments for long-term care staff and residents. *Ann Longterm Care Clin Care Aging* 2012 Feb;20(2):42-6. Also available at <http://www.annalsoflongtermcare.com/article/creating-safer-environments-long-term-care-staff-and-residents>

- James, Tamara (Ergonomics Director, Duke University Health System; Board Member, Association of Safe Patient Handling Professionals). Conversation with: ECRI Institute. 2013 Aug 7.
- Joint Commission. Improving patient and worker safety: opportunities for synergy, collaboration and innovation [online]. 2012 Nov [cited 2013 Aug 12]. http://www.joint-commission.org/improving_Patient_Worker_Safety
- Kim H, Dropkin J, Spaeth K, et al. Patient handling and musculoskeletal disorders among hospital workers: analysis of 7 years of institutional workers' compensation claims data. *Am J Ind Med* 2012 Aug;55(8):683-90. PubMed: <http://www.ncbi.nlm.nih.gov/pubmed/22237853>
- Kumbar, Dee (Board Member, Association of Safe Patient Handling Professionals). Conversation with: ECRI Institute. 2013 Aug 7.
- Lahiri S, Latif S, Punnett L, et al. An economic analysis of a safe resident handling program in nursing homes. *Am J Ind Med* 2013 Apr;56(4):469-78. PubMed: <http://www.ncbi.nlm.nih.gov/pubmed/23203729>
- Lynch, Charlotte (Board Member, Association of Safe Patient Handling Professionals). Conversation with: ECRI Institute. 2013 Aug 29.
- Missar VJ, Metcalfe D, Gilmore G. Transforming a hospital safety and ergonomics program: a four year journey of change. *Work* 2012;41 Suppl 1:5912-6. Also available at <http://iospress.metapress.com/content/vj58714127274310/fulltext.pdf>
- National Institute for Occupational Safety and Health (NIOSH). Centers for Disease Control and Prevention. Safe lifting and movement of nursing home residents [online]. 2006 Feb [cited 2013 Aug 29]. <http://www.cdc.gov/niosh/docs/2006-117>
- Nelson A, Baptiste A. Evidence-based practices for safe patient handling and movement [online]. *Online J Issues Nurs* 2004 Sep [cited 2013 Aug 30]. www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Volume92004/No3Sept04/Evidence-BasedPractices.aspx
- Nurse and Health Care Worker Protection Act of 2013, H.R. 2480, 113th Cong. (2013). Also available at <http://beta.congress.gov/bill/113th/house-bill/2480/text>
- Occupational Safety and Health Administration (OSHA). U.S. Department of Labor:
Guidelines for nursing homes: ergonomics for the prevention musculoskeletal disorders [online]. 2009 Mar [cited 2013 Sep 13]. https://www.osha.gov/ergonomics/guidelines/nursinghome/final_nh_guidelines.html
- Safe patient handling [online]. [cited 2013 Aug 2]. <https://www.osha.gov/SLTC/healthcarefacilities/safepatienthandling.html>
- US Department of Labor's OSHA announces outreach campaign to protect health care workers from hazards causing musculoskeletal disorders [online]. 2013 Jul 16 [cited 2013 Aug 29]. https://www.osha.gov/pls/oshaweb/owadispl.show_document?p_table=NEWS_RELEASES&p_id=24378
- Ogden CL, Carroll MD, Kit BK, et al. Prevalence of obesity in the United States, 2009-2010 [online]. 2012 Jan [cited 2013 Sep 20]. <http://www.cdc.gov/nchs/data/databriefs/db82.pdf>
- Pelczarski KM. Back in action: design considerations for safe patient handling. *Health Facil Manage* 2012 Aug;25(8):21-5. PubMed: <http://www.ncbi.nlm.nih.gov/pubmed/22916503>
- Silverstein B, Howard N, Cullen J. Lifting patients/residents/clients in health care: Washington state 2005 [online]. 2006 Jan [cited 2013 Sep 16]. http://www.washingtonsafepatienthandling.org/images/01_FINAL_REPORT_No_Apps.pdf
- Stevens L, Rees S, Lamb KV, et al. Creating a culture of safety for safe patient handling. *Orthop Nurs* 2013 May-Jun;32(3):155-64. PubMed: <http://www.ncbi.nlm.nih.gov/pubmed/23695761>
- U.S. Department of Veterans Affairs (VA):
Patient care ergonomics resource guide: safe patient handling and movement [online]. 2001 Oct [cited 2013 Aug 29]. <http://www.visn8.va.gov/VISN8/PatientSafetyCenter/resguide>
- Safe patient handling guidebook for facility champions/coordinators [online]. [cited 2013 Aug 13]. <http://www.visn8.va.gov/VISN8/PatientSafetyCenter/safePtHandling/SPHGuidebook.doc>
- U.S. Food and Drug Administration (FDA). Non-powered and powered patient lifts: MedSun small sample survey summary [online]. *MedSun News* 2012 Jun [cited 2012 Aug 28]. <http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/medsun/news/newsletter.cfm?news=73#5>
- Waters TR. When is it safe to manually lift a patient? *Am J Nurs* 2007 Aug;107(8):53-8. PubMed: <http://www.ncbi.nlm.nih.gov/pubmed/17667392>