Introduction

Historically, the curriculum of most schools of nursing focus on manual handling, despite overwhelming evidence of the associated risks of musculoskeletal injury and musculoskeletal disorders (MSD) associated with manual handling of patients (Powell-Cope et al., 2018). During the past 40 years research has demonstrated that these approaches are inadequate to keeping caregivers or their patients safe. Combining Registered Nurses and Nursing Assistants, the U.S. Bureau of Labor Statistics (BLS) for Massachusetts in 2016 reported 3,570 days away from work for Nonfatal Occupational Injuries and Illness. In 2013, the Occupational Safety and Health Administration’s (OSHA) Caring for Our Caregivers - Facts about Hospital Worker Safety reported that in hospitals, musculoskeletal disorders (MSDs) accounted for 46.4% of days away from work.

The 2014 Department of Public Health (DPH) Report of the Massachusetts Hospital Ergonomics Task Force, identified the patient handling MSD rate for Massachusetts hospital workers was 7.3 per 1,000 full-time workers compared to a rate of 4.1 per 1,000 full time workers in hospitals throughout the country. Massachusetts nurses account for approximately 30% of the hospital workforce and often engage in patient handling activities resulting in musculoskeletal injuries and MSD. In 2004-2010, the BLS estimated that Massachusetts hospital workers sustained more musculoskeletal injuries than any other workforce in the Commonwealth, and twice that of all other industries (BLS, 2011). During this time, Massachusetts hospital worker patient handling MSDs were 70% higher than the national hospital rates, prompting investigatory action by the Occupational Health Surveillance Program (OHSP) of the Massachusetts DPH.

In addition to reducing the risk and incidence of nurse musculoskeletal injuries and MSDs, patient handling programs have reduced patient immobility related complications thereby improving patient health outcomes (Powell-Cope et al., 2018).

Patient Considerations

There are primarily two ways patients may experience physical harm related to patient handling:

- Injuries that occur due to manual lifting can include, but are not limited to, skin tears, abrasions, contusions, lacerations, sprains, strains, dislocations, fractures, concussion and bleeding (Elnitsky, et al., 2014)
- Medical consequences related to lack of mobility include but are not limited to problems of the circulatory, respiratory, gastrointestinal, urinary and musculoskeletal systems, as well as, pressure ulcers (bed sores), decreased ability for early mobility and increased length of hospital stay (Dittmer & Teasell, 1993)

Patients have also expressed emotional factors associated with patient handling activities that should also be considered (Nelson & Baptiste, 2004):

- Fear of being harmed or dropped
- Fear of caregiver/s being hurt
- Loss of dignity during lifting process
- Depression and anxiety
- Increased dependency on others
Positive findings for patients in facilities that have safe patient handling and mobility equipment and policies include (Nelson, et al., 2008):

- Lifting devices are said to increase the frequency and ease of moving a patient out of bed
- Improvements in the quality of life of previously bedridden nursing home residents
- Greater frequency of being out of bed, in turn physical functioning may also be improved
- Allows more frequent repositioning in bed, improving skin integrity
- Improved behavior is thought to be a result of reducing unwanted personal contact and moving a resident in a less painful manner when using lifting equipment
- Staff members and a few researchers have relayed data linking a decrease in combativeness with use of lifting equipment

**Caregiver considerations**

Safe Patient Handling and Mobilization (SPHM) programs aim to lower patient handling injuries by promoting positive workplace activities that reinforce education, support safe ergonomics, provide appropriate technical lift equipment, and champion early non-punitive reporting of injuries (Choi & Cramer, 2016).

Direct caregivers lift, move and turn patients who may easily weigh 250-pounds or more on an hourly basis, and most would consider a 100-lbs. patient to be “an easy lift.”

In August of 2013, the National Institute for Occupational Safety and Health (NIOSH) clarified its recommendations for the Revised NIOSH Lifting Equation (RNLE). In general NIOSH does recommend a 35-lb. weight limit for inanimate objects. Considering the multiple variables involved when moving patients, NIOSH states the RNLE is not intended to be used for determining safe weight limits when lifting people. NIOSH refers to Dr. T. Waters research.

“For most patient-lifting tasks, the maximum recommended weight limit is 35-lbs. - but even less when the task is performed under less than ideal circumstances, such as lifting with extended arms, lifting when near the floor, lifting when sitting or kneeling, lifting with the trunk twisted or the load off to the side of the body, lifting with one hand or in a restricted space, or lifting during a shift lasting longer than eight hours. The 35-lb. limit should help in identifying tasks for which the use of assistive lifting equipment would be appropriate. The rate of injury among workers handling patients shows that current approaches to prevent back injuries resulting from the manual handling of patients - such as training in biomechanics and the use of back-belts are not working” (Waters, 2007, p.55).

Additional factors regarding safe patient handling:

- Direct caregivers must frequently lift or move patients while also cautiously handling their patients’ intravenous (IV) or other tubing, casts, wound dressings, injured limbs, etc., which limits direct caregivers’ flexibility in their lifting movements, placing them at greater risk
- Patient lifting, transferring and handling is significantly more difficult and demanding than repositioning boxes
- **Patients don’t come equipped with “handles”**

Some of the factors exacerbating the risk of work-related injuries for direct caregivers include those listed below, (Important to remember: these factors are compounding. For example, repetitious heavy lifting continually insults the musculoskeletal system and can cause multiple microfractures that worsen over time and the more of these factors occurring, the greater the risk of injury):

- Heavy physical work
- Lifting and forceful movements
- Bending and twisting (awkward postures)
- Static work postures

Additional risk factors for direct caregivers are multifaceted:

- High acuity of patient population
- Higher nurse/patient ratios
- Staffing shortages with fewer staff to share in the lifting, turning and repositioning of patients
- Direct caregivers working longer
- Overtime hours and longer shifts
- Stress due to organizational change - direct caregivers who work as temporary workers or “float” to units where they may be exposed to:
  - unfamiliar or completely unrecognized manual handling risks
unfamiliar patients
unfamiliar lifting equipment

- Increasing levels of obesity among the general population
- Hospitals promoting weight loss treatments, resulting in previously relatively unseen numbers of bariatric surgery patients
- Predominately female direct caregivers
- Aging workforce - more vulnerable to injury or repeated injury
- Cumulative trauma - both long- and short-term

Recommended Solutions

To proficiently support a SPHM culture shift and to reduce patient handling injury requires a collaborative effort by healthcare organizational leaders, nurses, and all direct care workers. The MNA calls for an approach that would require all healthcare facilities in the State to develop and implement a Safe Patient Handling and Mobility Program. The program would strive to protect patients from injury and lengthy hospitalizations and provide a safer working environment for direct caregivers. The program would mandate the following:

- **A systematic process in each facility for addressing ergonomics, recognizing occupational health and safety hazards and preventing injuries specific in each health care facility** - Each facility will have a documented organization-wide Safe Patient Handling and Mobility program which will include but is not limited to:
  - **Policy and Procedures**
    - Describing their safe patient handling and mobility philosophy and approach
    - Describing how the institution will manage the enforcement of the policy and procedures
  - **Appropriate safe patient handling equipment readily available**
  - **Minimally annual education and training programs at each facility**
  - **Mechanism for addressing direct caregivers’ refusal to perform unsafe handling and mobilization**

- **Needs assessment by facility of patients’ lift and transfer requirements and resulting handling, lift and equipment needs** - Each facility will implement Safe Patient Handling and Mobility methods that are appropriate for their patient populations and census.

- **Specialized training of direct caregivers, with required demonstration of proficiency in handling techniques and use of lift equipment** - Each facility will use a resource nurse and/or educator for their patient handling and mobility education and training programs.

- **Protection for workers with a non-punitive process for resolution following refusal to lift or handle patients due to concerns about patient and/or direct caregivers’ safety** - When the direct caregiver determines the safety of the patient or the caregiver may be at risk because of insufficient: staff, equipment or adequate training, direct caregivers will not be subject to disciplinary action by the hospital or any of its managers or employees.

Contract Language

**Where and when appropriate,** it is strongly suggested that local bargaining units consider Safe Patient Handling and Mobility language in their contracts’ Health and Safety Section according to their specific needs.

Language recommendations include, but are not limited to:

- The facility and MNA will develop a Safe Patient Handling & Mobility program which will include staff nurses. Identify, assist and develop strategies to prevent injuries to patients and direct caregivers with the goal of eliminating manual lifting, repositioning, etc.
- Assess and maintain, in proper working order, appropriate equipment needed and insure easy accessibility
- Ongoing proper training of staff
- Right of refusal

Legislation

The MNA, members and staff, developed legislative language and has lobbied for SPHM legislation during each legislative session since 2002. During the Commonwealth’s 2019-2020 legislative session the MNA
filed legislation which outlined the measures required to produce safer working conditions for direct caregivers and patients. The MNA is committed to pursuing legislation for the betterment of direct caregivers and their patients.

The Massachusetts Department of Public Health-Occupational Health Surveillance Program organized The Hospital Ergonomic Task Force, composed of Massachusetts government agencies, hospital representatives, MNA representatives, ergonomic experts, direct caregivers and academic partners champions this philosophy. However, without legislative support to assure that healthcare organizations prioritize a culture of safety and assure that nurses are issued the education, equipment, and supportive human resources to facilitate SPHM behaviors, program efforts will remain stalled and develop in piecemeal. The MNA calls for an approach that would require all healthcare facilities in the State to develop and implement a Safe Patient Handling and Mobility Program.

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References


