

# Xtrawise™

A publication by the Sizewise Clinical Support Team

## SAFE PATIENT HANDLING AND MOBILITY: PAST AND PRESENT

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Musculoskeletal disorders (MSDs) are not a new issue. The first major nursing textbook, published in the late 1800s, spoke of a nurse's back injury due to improper patient repositioning.<sup>1</sup> Today, statistics still show that the healthcare industry remains among the top fields suffering from MSDs. Patients who lack proper movement, lifting, and mobility are at a high risk for issues like ulcers, skin tears, pneumonia, and organ atrophy. Having appropriate Safe Patient Handling and Mobility (SPHM) standards established and in place allows for a safer work environment, raises awareness for potential safety issues, and results in an increase in patient quality outcomes.

### THE NEED FOR STANDARDS

It is estimated that the nursing workforce will be down by 1 million by the year 2020. Part of this statistic is the 12-18 percent of nurses who quit due to chronic lower back pain.<sup>3,4</sup>

Increasing obesity, comorbidities, and patient complexity in the acute care setting places caregivers and patients at a higher risk for injury. Recent studies find that many caregivers' musculoskeletal injuries are the result of repetitive lifting movements (e.g. sliding/pulling a patient up

in bed). These motions produce a shearing force on the spine that cause micro-tears, which weaken the spine and make it more prone to injury.<sup>5</sup> A 2012 study by the US Department of Labor found that healthcare workers suffer more injuries than those in the manufacturing and construction industry. Injuries occurring from overexertion were twice the average rate, while nursing home workers accounted for more than three times the average rate of injury.<sup>7</sup> SPHM standards were long overdue to ensure a safer work environment, as well as a safer healing environment for patients.

### DEVELOPMENT OF SPHM STANDARDS

SPHM standards have been in development for decades. A Health and Safety Survey found that 62 percent of nurses surveyed in a sample of almost 5,000 identify musculoskeletal injuries as a top concern of their profession.<sup>2</sup> In addition, 34 percent of hospital nurses reported back, neck, and shoulder pain, and 84 percent of these respondents reported having a work-related back injury that limited their ability to move properly.<sup>10</sup>

In 2003, the American Nurses Association (ANA) introduced the *Handling with Care Campaign*. Ten



**Hercules Patient Repositioner™**



**Air Hercules Patient Repositioner™**

## GOOD FOR NURSES AND STAFF

- Only one caregiver required to reposition a patient
- Helps eliminate injuries associated with traditional methods of pulling patients up in bed
- Reduces amount of time needed for patient repositioning

## GOOD FOR PATIENTS

- Reduces the friction that can cause shear and skin tears
- Reduces the feeling of helplessness, protecting patient dignity
- Provides smooth and comfortable repositioning, improving overall patient satisfaction

## GOOD FOR HOSPITALS

- Demonstrates a high commitment to safety in the workplace
- Helps achieve accreditations like ANCC's Magnet status
- Helps enhance caregiver recruitment and retention
- Improves patient handling compliance

states were required to develop comprehensive programs in place to reduce MSDs through an increase in education regarding safe patient mobility, an increase in the use of assisted lifting and repositioning devices, and the commitment to adhere to federal and state ergonomic policies.<sup>11</sup> In 2011, development of official SPHM standards began, with completion in the summer of 2013 when the ANA published *Safe Patient Handling and Mobility: Inter-professional National Standards Across the Care Continuum*. The official standards within this publication were developed by a multidisciplinary team and included focus groups, reviews, and revisions before completion. These standards sought to reduce MSDs by fitting all healthcare settings, providing realistic goals, and providing best practices with an outcomes focus (See *Timeline for the Development of SPHM Standards*).

## ISSUES AND TRENDS

Staffing issues are a critical concern for SPHM. The healthcare setting is a high-stress work environment, and chronic, unrelieved stress can progress to employee “burnout”. This is often precipitated by a lack of resources (e.g. enough staff, time, equipment). The safety factor relating to this situation comes into play when the caregiver engages in shortcuts or “workarounds” in order to make up for the lack of resources. This not only jeopardizes patient safety, but also increases the chance for caregiver injury.<sup>12</sup>

The number of documented healthcare success stories reflecting improvement programs is small compared to industry and construction. One success story highlighted by National Public Radio (NPR) recently recounted the SPHM model adopted by the Loma Linda VA Hospital in California. They recognized that they had a back injury “epidemic” among their staff, and determined that the extent of these injuries was “interfering with their lives as well as productivity”.<sup>13</sup> Loma Linda VA responded to this by implementing an aggressive SPHM program. The approach involved: investing in equipment to reduce manual lifting; placing ceiling lifts in many patient rooms and ancillary departments; purchasing self-driving gurneys and transfer devices; investing in education with training for both new equipment operation and staff ergonomics; and ensuring education is ongoing and monitored by a full-time SPHM coordinator. Since the program’s onset in 2008, the employee injury rate at Loma Linda VA has been dramatically reduced. They credit much of their success to the willingness of hospital administration to invest the time and money

needed to improve safety.<sup>13</sup>

Cost is a major factor when considering what each facility needs for proper SPHM. It is costly to buy equipment and educate staff; however, it is also costly to treat MSDs relating to injury and overexertion on the job. In one four-year period, Loma Linda VA spent almost \$1 million hiring replacements for injured employees.<sup>13</sup> Although the upfront cost can be significant, studies have shown that hospitals can recover the investment in safe patient handling programs and equipment in fewer than five years.<sup>14</sup> Facilities that invest in programs and proper equipment see a significant reduction in MSDs and worker compensation cases due to a decline in back injuries suffered on the job (See *Hercules: A Value-Based Investment* on back page).

## CONCLUSION

SPHM standards have been needed for decades. Historically, it was considered the nurse's fault for injuring his/her back, and standards went undeveloped as injuries went unaddressed. While we have evolved from that mode of thinking, it is critical that our knowledge and thinking continues to guide efforts to make the healthcare environment safe for nurses, staff, and patients. Proper training and equipment can result in a significant reduction in back injuries, aid in early mobilization of patients, and increase quality of patient care. With nursing shortages and cost savings issues prevalent in our healthcare facilities, it is important that these standards be adopted as part of best practices. ◀

## TIMELINE FOR THE DEVELOPMENT OF SPHM STANDARDS

1<sup>st</sup> major nursing textbook generally stated that it is the nurse's fault if she injures her back from improper moving of a patient

1898

Study found nurses pulled patients up in bed an average of 9.9 times per shift

1995

Bureau of Labor Statistics identified nursing personnel as consistently being one of the top 10 occupations suffering from MSDs

2002

*Handling with Care Campaign* is brought to the public eye

2003

White paper published from The Facility Guidelines Institute called *Patient Handling and Mobility Assessment*

2010

Bureau of Labor Statistics continues to identify healthcare workers as having higher MSD rates

2011

SPHM standards development started with a multidisciplinary team

2011

*Safe Patient Handling and Mobility: Inter-professional National Standards Across the Care Continuum* (American Nurse Association, 2013). *Safe patient handling and mobility: Inter-professional national standards*. Silver Spring, MD. Available at: [Nursesbooks.org](http://Nursesbooks.org)

2013

## HERCULES: A VALUE-BASED INVESTMENT

- 11 Average number of times a bariatric patient is pulled up in bed per day
- 10 Average time in minutes to identify and manually pull a patient up in bed by caregivers
- 4+ Average number of caregivers\* required to manually pull up a patient in bed
- 1.7 Average time in minutes to identify and move a patient with Hercules Patient Repositioner

HERCULES UNITS	ANNUAL LIFT EVENTS <i>11 per pt per day</i>	LIFT EVENTS: STAFF HRS PER DAY		ESTIMATED SAVINGS WITH HERCULES
		W/O Hercules	W/Hercules	
10	40,150	73	3.1	\$640,727
25	100,375	183	7.8	\$1,601,818
50	200,750	367	15.6	\$3,203,635

Above data gathered during Sizewise customer trials \*NIOSH recommends a maximum weight of 35 lbs. per caregiver for safe patient handling

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