

# Beyond Safety: Strategies for Improving Outcomes with Safe Patient Handling

**EQUIPMENT, PROGRAMS & PRACTICE**



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# Introduction

Even with training and skill, the process of patient handling is often unsettling and dangerous to both patient and caregiver. For decades nurses and nursing assistants have moved patients by hand from bedside to wheelchair to walker to therapeutic environment, lifting, rolling, hoisting, and positioning without the aid of mechanical lifts.

Even as research has shown that patient outcomes dramatically improve if the patient is ambulatory as soon as possible after injury or surgery, the method of patient movement remains firmly affixed in manual lifting. A major paradigm shift in safe patient handling is long overdue and may be found in the wide-spread implementation of safe patient handling and mobility programs in hospitals and care facilities across the country.



A major paradigm shift  
in safe patient handling  
is long overdue.

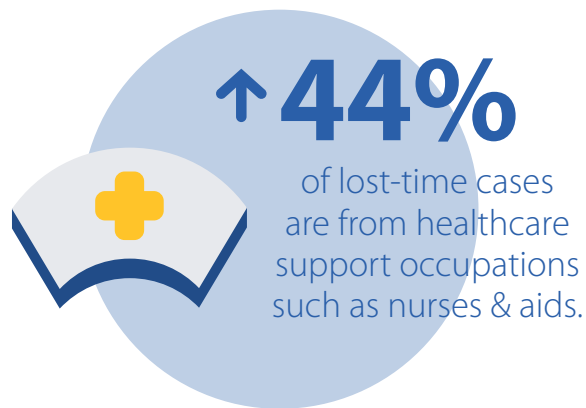


# The Case for Safe Patient Handling & Mobility Programs

The advantages for implementing a Safe Patient Handling & Mobility (SPHM) program can be easily divided into two categories – healthcare worker safety and patient outcomes. But before we can explore such benefits, it is important to consider what we know about the effects of current methods of patient handling.

- [Between 2013 and 2015](#), nursing assistants suffered more musculoskeletal injuries than any other occupation.
- There are more than 23,000 cases of work-related pain reported every year in the healthcare industry, 44 percent of which are from support occupations such as nurses and aids.<sup>1</sup>
- [According to the CDC](#), musculoskeletal disorders alone have a \$45 to \$54 billion economic impact on each year.

But what do these statistics have to do with patient mobility?



**\$45-\$54  
billion**

Annual impact of work-related MSDs

<sup>1</sup> ANA. Safe Patient Handling and Mobility: Interprofessional National Standards, First Edition. American Nurses Association, Inc., 2013.



—  
A nurse will lift a cumulative weight of 1.8 tons in an eight hour shift.  
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Patient handling, particularly lifting and transferring patients, is one of the most physically demanding and often unpredictable aspects of a healthcare worker's job. Often performed under unfavorable conditions, these basic tasks are among the highest risk activities for both the nurse and the patient.

In non-healthcare environments, when something heavy is lifted, the weight is solid, concentrated and predictable. When lifting a patient, especially one who is conscious, the weight of that person cannot necessarily be controlled. Even if the patient is cooperative, it is nearly impossible for a nurse or nursing assistant to predict how the patient will balance, the amount of strength they will have, whether they will attempt to "help" or how their weight will shift from one location to another.

Given the average weight of an adult male patient is 185 pounds, it's estimated that a nurse will lift a cumulative weight of 1.8 tons in an eight hour shift, or nine tons per week. To make matters worse, much of that lifting occurs over chairs or beds, bent over, or at an awkward angle.

Since that weight cannot be changed to make the job easier or safer, it's no wonder nurses are injured at such a high rate.

## Reducing the Frequency and Severity of Caregiver Injuries

Significant time and effort has been spent on establishing the link between SPHM programs and the reduction in occurrence of caregiver injuries.

- [It is estimated](#) that 40 percent of injuries that result from lifting patients may have been prevented by the use of SPHM equipment.
- 32 percent of injuries result from repositioning or turning patients, pulling patients up in bed or catching falling patients, [all risks that can be mitigated](#) by implementing an SPHM program.
- [Studies](#) in hospitals who have implemented such programs have shown a significant decrease in the number of musculoskeletal injuries and modified duty days per injury.

What's even more interesting are some of the unintended benefits associated with implementing such a program. One [study](#) examined not only the frequency and severity of caregiver injuries, it looked at how the implementation of an SPHM program affected a less quantitative, but equally important aspect of healthcare – job satisfaction.

It is estimated that

**40%** of injuries that result from lifting patients may have been **prevented** with **SPHM equipment.**



—————  
The implementation of an SPHM program affected a less quantitative, but equally important aspect of healthcare – job satisfaction.  
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### **Job Satisfaction**

Once an SPHM program was in effect, statistically significant increases in professional status and task requirements and a significant decrease in the self-reported number of unsafe patient handling practices performed on a daily basis were noted. Nurses were also complimentary of the equipment purchased for such a program.

In a profession notorious for risking caregiver health and safety in favor of patient outcomes, implementing an SPHM program has been shown to help clinical and rehabilitation staff feel valued for their contribution to patient health and safety.



## Recovering Initial Capital Investment

With rising healthcare costs, it is impossible to look at the implementation of such a program without also considering the capital investment and long-term costs. Several studies have shown that SPHM programs can recover the initial costs in equipment and training in just a few years. One [study](#) showed that, on average, the post-intervention savings in more than \$200,000 in workers' compensation expenses and costs associated with lost work days covered the initial cost in approximately 3.75 years.

None of the studies factored in additional costs in patient care, malpractice suits or other compensation paid to patients and their families after injuries associated with patient handling and mobility. Still, it's not much of a leap to make. If healthcare workers are injured less often during patient handling, patients would also be injured less often. If there is a financial cost to workplace injuries involving staff, there are also additional costs in patient care for the people they care for.

Since early mobilization [has been shown](#) to reduce the length of stay in both the ICU and the hospital for critically ill or injured patients, it is possible that the initial capital investment in SPHM programs or equipment could be recouped much faster when factoring in these costs.



SPHM programs can **recover initial costs** in just a few years.





## Improvement in Patient Care

Despite the preponderance of evidence for SPHM programs, many healthcare facilities are reluctant to adopt this type of sweeping change. In fact, [studies have shown](#) that there is a 17-year lag across the board for facilities to implement evidence-based strategies of any type. Some site a lack of funding. Others await long-term evidence to justify investment in a particular piece of equipment. Still others feel that SPHM programs create a dependence on the equipment rather than a progression in patient outcomes.

[Mounting evidence](#) suggests that the early mobilization of both critically ill and post-surgical patients actually shortens hospital stays. Such movement also increases muscle strength and levels of independence that are crucial for positive long-term outcomes.

That's not to say improvement in patient care is limited to the measurement of hospital stays. Patient handling equipment prevents falls, bruises, skin tears, and other injuries while imbuing patients with increased confidence in themselves and their healthcare team. [According to OSHA](#), patients as a whole feel more secure in their own abilities when a mechanical device is used to help them sit, stand, walk, or otherwise move.




Patients feel more comfortable and secure when a mechanical device is used.



Therapists' fear that patients will become reliant on SPHM equipment appears unfounded from a research standpoint. In fact, [patients report](#) higher levels of initial mobility using equipment. Patients with access to SPHM equipment performed better across the board – in length of hospital stay, improvement in strength and movement, and independence – than patients without access to such programs.

When these programs are implemented, especially in long-term care facilities, patients' physical function, activity level, ability to perform activities of daily living, and wakefulness all improve. Even when these trends are difficult to show in nursing home residents, where there is a general health decline, there is a [statistically significant](#) reduction in the amount of falls that occur when a safe patient handling program is implemented.



Patients with access to SPHM equipment performed better across the board.

# What an SPHM Program Looks Like

## Equipment

When choosing equipment for an SPHM program, it is important to consider space limitations, patient needs and the types of equipment that will improve both staff safety and patient mobility. Equipment that suits more than one purpose and enhances the recovery process is key to getting the most out of your investment:

### Stand-Assist Device

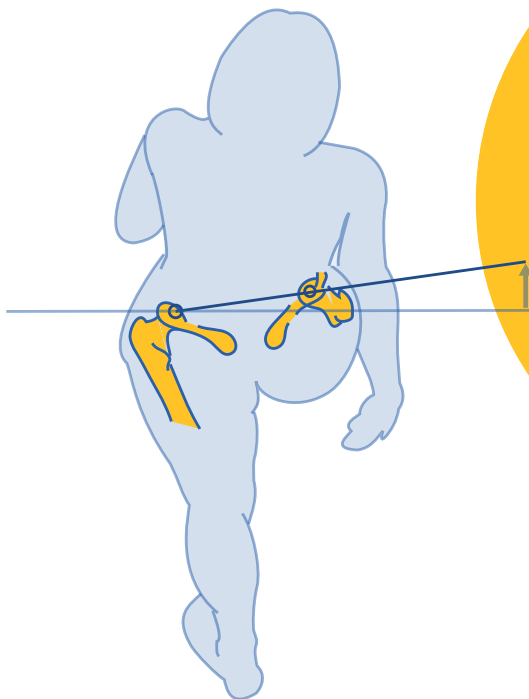
When it comes to getting up and getting going, therapists, nurses and caregivers often have the most difficulty supporting patients while they stand and begin to walk. Stand-assist devices often include safety harnesses that help support correct posture and stance while a patient stands. These devices eliminate the bend-and-lift motion that causes so many workplace injuries in healthcare, but it also reduces the risk of a patient fall as they move from one location to another. [New technology](#) has motorized the stand-assist device while combining it with a walk-assist device that allows a patient to remain in one harness system as they stand up from sitting and begin to walk.



Equipment that suits more than one purpose and enhances the recovery process is key to getting the most out of your investment.

### Unweighing System

For patients with limited mobility, a system that supports their full weight and can be adjusted to support their partial weight is necessary. Unweighing systems are sometimes criticized for creating improper gait mechanics. It is important to look for an [unweighing system](#) that allows for the vertical displacement and pelvic rotation necessary for correct walking posture. As an added bonus, look for one that can be positioned over a treadmill or a gait trainer so therapists and nurses can observe and assist as needed in a functional environment.



It is important to look for an unweighing system that allows for the vertical displacement and pelvic rotation necessary for correct walking posture.

### Overhead Track and Harness

Since patients report more confidence when mechanical intervention is involved in their recovery, an [overhead track and harness](#) can help patients move safely from one point to another. Without a fear of falling, patients, therapists and nurses can focus on gait and balance as they move freely over ground, while secured to the overhead track.



## Policies & Training

Of course, no amount of equipment will ever improve patient outcomes unless personnel are trained in its use. Even then, knowledge may not be enough to convince some healthcare workers of the validity of safe patient handling practices. Facility-wide policies must follow equipment purchase and training if a culture of safety is ever to take hold.

One of the most effective ways these policies and training procedures are established is through the formation of a hospital-wide multi-disciplinary team, formed to evaluate the needs of the patients, nursing staff physicians and therapists. Consisting of nursing staff, physicians, occupational therapists, physical therapists and key decision makers, this team should:

- Source effective patient safe handling equipment that adequately meets the hospital or care center's needs
- Create a No Lift Policy that meets the needs of the patients while addressing safety concerns of the staff
- Design an ergonomic assessment protocol for patient care
- Define patient handling criteria and decision-making models that empower medical staff on an SPHM program's use

Not only have each of these aspects been shown to have a statistically significant impact such as a program's effectiveness, they have also had an impact on [healthcare workers' view](#) of the program overall.



# 11 states

have enacted safe patient handling laws, and more SPH legislation has been introduced at the federal and state levels.

# Conclusion

Implementing a [safe patient handling and mobility](#) program is a large undertaking for any hospital, medical center or care facility, but it is one that is necessary for the safety and well-being of both patients and staff. Not only are costs covered by significant savings in workers' compensation claims, and lost time and productivity, patient outcomes are dramatically improved due to proper handling and support during therapy.

Unfortunately for hospital administrators and safety directors, there is not a one-size-fits-all SPHM program on the market. Selecting the right equipment, training and procedures is dependent on the needs of the individual facility and its patient population. Investing the time to evaluate the needs of that facility as well as the needs of its staff will only pay dividends, both financial and practical, in the end.



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