

Introduction to Safe Patient Handling and Mobility

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Objectives

- Identify how safe patient handling and mobility (SPHM) programs can reduce healthcare worker turnover and improve patient outcomes
- Identify elements of effective SPHM programs from a systems perspective
- Identify resources that can help you implement and sustain a SPHM program

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Session Outline

- SPHM Resources
- Manual patient handling: The scope and cost to caregivers, patients & health care organizations; standards & guidelines
- Benefits of SPHM Programs – Summary of Evidence Base
- Barriers to Implementing Effective SPHM Programs Successful SPHM Programs
- Creating a Culture of Worker & Patient Safety in Health Care: The Precondition to Effective SPHM Programs
- Components of Effective, Sustainable Safe Patient Handling & Mobility Programs
- Review of Common SPHM Equipment & how it can prevent caregiver injury and promote safe early progressive patient mobilization

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Handout Materials & Resources

Safe Patient Handling and Mobility: A Toolkit for Program Development

Freely available for non-commercial use

When: By Nov 1, 2025 at <https://www.nvha.net/safe-patient-handling-mobility/>

Toolkit format and approach to program development based on the: "Oregon Workplace Safety Initiative Workplace Violence in Healthcare: A Toolkit for Prevention and Management." The Oregon Association of Hospitals Research & Education Foundation (2018). Rev. March 2020. <https://www.oahhs.org/safety>




Safe Patient Handling and Mobility: A Toolkit for Program Development

Lynda Enos, MS, BSN, RN, COHN-S, CPE

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Purpose of the SPHM Toolkit

- For new SPHM coordinators/managers - a resource to learn about SPHM programs
- To assist health care facilities to start a SPHM program
- Evaluate an existing SPHM program and individual program practices against current best practices in prevention of healthcare worker (HCWs) and patient injuries related to patient handling activities
- Identify and engage stakeholders and enhance the culture of worker and patient safety
- A suggested framework and strategies to aid program implementation, evaluation and sustainability is offered.



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What Makes this Toolkit Different and Valuable?

- Provides a roadmap of all program elements that are needed to implement a comprehensive SPHM program
- Includes current topic related resources in one location
- Facilitates sharing of best practices and reduce the need to 'reinvent the wheel'



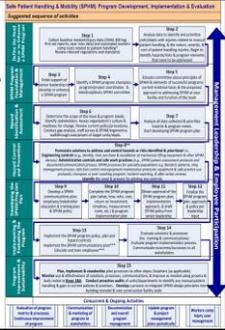
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SPHM Toolkit Contents

'Read this First' - Introduction and How to Use the Toolkit

1. Understanding SPHM
2. Getting Started
3. Hazard Identification & Assessment
4. Hazard Control & Program Plan Development
5. Hazard Control and Prevention - SPHM Solutions
6. Education and Training
7. SPHM Program Implementation
8. SPHM Program Evaluation
9. SPHM Program Improvement & Sustainability
10. SPHM Resources



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The SPHM Toolkit

Is a partner document to other publications such as the:

- American Nurses Association. Safe Patient Handling and Mobility Interprofessional Standards Across the Care Continuum 2nd edition (2021). <https://www.nursingworld.org/nurses-books/safe-patient-handling-and-mobility-2nd-edition2/>
- Patient Handling and Mobility Assessments (PHAMA) (2nd ed.) Matz M, Celona J, Martin M, McCoskey K, Nelson GG. Facility Guidelines Institute (2019). https://www.fgiguidelines.org/wp-content/uploads/2019/10/FGI-Patient-Handling-and-Mobility-Assessments_191008.pdf



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Other Resources

- The International Journal of SPHM - www.sphmjourn.com
- The Association of Safe Patient Handling Professionals (ASPHP) www.asphp.org
- Certified Safe Patient Handling Professionals™ CSPHP.org



<https://www.asphpevents.com/>

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Manual Patient Handling: The Scope & Cost

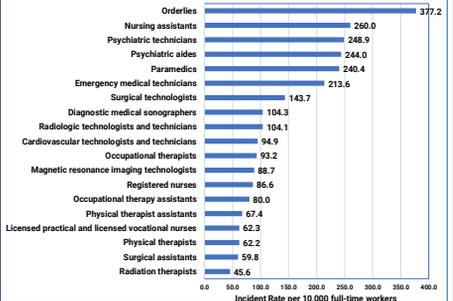


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2021-2022 Top 20 annualized incidence rates for nonfatal occupational sprains, strains, and tear injuries related to overexertion involving days away from work, restricted activity, or job transfer (DART) per 10,000 full-time workers for healthcare occupations, private industry (BLS, 2023)

Numbers likely underreported by as much as 50%.



Occupation	Incident Rate per 10,000 full-time workers
Orderlies	377.2
Nursing assistants	260.0
Psychiatric technicians	248.9
Psychiatric aides	244.0
Paramedics	240.4
Emergency medical technicians	213.6
Surgical technologists	143.7
Diagnostic medical sonographers	104.3
Radiologic technologists and technicians	104.1
Cardiovascular technologists and technicians	94.9
Occupational therapists	93.2
Magnetic resonance imaging technologists	88.7
Registered nurses	86.6
Occupational therapy assistants	80.0
Physical therapist assistants	67.4
Licensed practical and licensed vocational nurses	62.3
Physical therapists	62.2
Surgical assistants	59.8
Radiation therapists	45.6

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The Full Cost of Worker Injuries Related to Manual Patient Handling

Direct Costs (Medical care/time away from work)

Indirect Costs
(e.g. temp and permanent staff replacement costs)

Operational Losses/Costs

- Impact of fatigue, pain, decreased physical abilities, psychological stress, burnout, presenteeism, etc.
 - Increased staffing needs (for bariatric, higher acuity patients, etc)
 - Cost of Compensating Actions (e.g., Body mechanics training)
 - Decreased Regulatory Compliance (worker and patient safety related)
 - Increased insurance & Litigation costs
- Increased sick leave & staff turnover
- Lower quality of care/service (missed nursing care)
- Decreased efficiency
- 'Human' error & accidents

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The Cost of Manual Patient Handling Related Injuries to Health Care Organizations

- 2017 - Workers' compensation losses = \$1.66 billion/year for overexertion related injuries due to manual patient handling *and*
- Accounted for 30.01% of the direct costs of all workers compensation claims with more than five days away from work in the US healthcare industry (Liberty Mutual, 2020)
- Average total incurred cost for back injuries (*All Industries*) = \$39,328 (NSC, 2023)
- Repositioning, managing uncooperative/aggressive patients, and transferring patients to/from a seated position - most frequent workers comp claims avg. claims cost \$21- 25K (ANA, 2021)
- Replacement costs for nurses \$27,000 to \$103,000 or more (OSHA, 2014)

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Consequences of Manual Handling for Patients

- Increase risk of
 - Skin (pressure injuries) and joint damage
 - Falls
 - Pain
 - Combative behaviors
 - Loss of dignity
 - Bowel & bladder dysfunction
- Negative impact on clinical outcomes:
 - Top care tasks often not completed or missed by nurses = ambulation and repositioning in bed especially if patients are larger/uncooperative and/or lack of caregivers available to assist

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Why is Manual Patient Handling So Dangerous?

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Why is Manual Patient Handling So Hazardous?

- Patient & Task Characteristics
 - Weight** (heavy load) and immobility
 - Forceful exertion (lifting, pushing, pulling, supporting, gripping)
 - Shape** (bulky and awkward)
 - Awkward and/or static postures e.g. extended reaches
 - Behavior** (unpredictable, confused, fragile, in pain)
 - Unexpected increased exertion and awkward postures
 - Repetitive** exposure to risk factors over time with lack of rest and recovery

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High Risk Patient Handling Tasks

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Manual Patient Handling: How Much Can you 'Lift' in a Shift?



What's the connection between manually turning 7 patients in a shift and a 400 lbs. Male Silverback Gorilla?

Total weight lifted turning 7 dependent patients in one shift is about 400lbs!

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Why is Manual Patient Handling so Hazardous?

- **Poor Equipment and Facilities Design** e.g.
 - Awkward postures compounded by working in small spaces
- **Poor Work Practices** e.g.
 - Not using adjustments on beds e.g., *bed in low position*
 - Reaching past midline of a patient e.g., *log rolling*
 - Not clearing clutter in a workspace



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The Cumulative Impact of Manual Patient Handling

The maximum weight limit for patient handling is **35lb (16kg)** if the patient is cooperative and load close to the body (which rarely happens!) (Waters, 2007)



The physical effort required to repeatedly lift and move patients manually is greater than the musculoskeletal system can tolerate.

Therefore, there is **No Safe** method to lift and transfer patients manually (Marras, 2008)

Using good body mechanics is not enough to prevent back injuries and other MSDs caused by manual patient handling.

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Other Risks to Caregivers when Manually Handling Patients

Research shows that being close to the patient may increase the risk for injury from intentional or non-intentional physical violence or combative behavior e.g.,

- Grabbing, hitting, pinching, spitting, biting and kicking
- Some evidence that violence by patients and/or co-workers is related to development of MSDs



Or even increases the risk of exposure to body fluids (anecdotal)



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Psychosocial Risk Factors that Contribute to MSDs



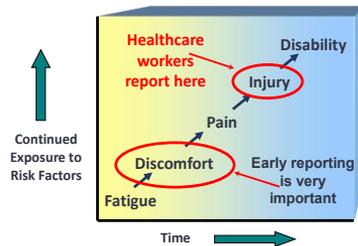
- Work-related psychosocial risk factors in hospital nurses and aides
 - High psychosocial demands—low job control
 - Effort-reward imbalance
 - Low social support/poor collaboration between and support from colleagues
- Moderate, and poor sleep associated with an increase in the risk of LBP

(Anderson et al., 2019; Zare et al., 2019)

(Vinstrup, 2020)

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Cumulative Impact of Manual Patient Handling



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Legislation, Standards & Guidelines

- The General Duty Clause of the United States Occupational Safety and Health Act 29 U.S.C. § 654, 5(a-b) – Federal and State www.osha.gov
- Safe Patient Handling Legislation in 9 states – all variable
- The American Nurses National Safe Patient Handling and Mobility Standards, 2013. 2nd ed. Nov 2021 <http://www.nursingworld.org/handlewithcare>



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Standards & Guidelines

January 1, 2025 - New reporting requirements in CMS Hospital Inpatient Quality Reporting Program (IQR)

CMS 2025 Inpatient Prospective Payment System (IPPS) - age-friendly hospital structural measure

SPHM plays a key role in meeting the requirements of Domain 3 - Frailty Screening and Intervention, related to physical function/mobility

The CMS 2025 Age Friendly Hospital Measure <https://www.cms.gov/newsroom/fact-sheets/fy-2025-hospital-inpatient-prospective-payment-system-ipps-and-long-term-care-hospital-prospective-0>

<https://www.ihl.org/insights/ihl-helps-hospitals-prepare-new-cms-measures-make-care-safer>



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Standards & Guidelines



- ADA: Access To Medical Care For Individuals With Mobility Disabilities *Standard* (2010) – Use of patient lifting equipment in http://www.ada.gov/medcare_ta.htm
- The Facilities Guideline Institute.
 - *Guidelines for the Design and Construction of Health Care Facilities* (2018) – Incorporate Safe Patient Handling & Movement/Design for Bariatric Patient Care
 - Patient Handling and Movement Assessments (PHAMA) : A White Paper (2010 Rev. 2019) <http://www.fjguidelines.org>
- State agency regulations to consider e.g., state/county/city building, electrical and fire codes related to general and/or specific use of powered medical equipment e.g., UL labeling requirements for powered equipment

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Standards & Guidelines Related to SPHM Equipment

- FDA & ISO Standards and Guidelines related to design & manufacturing of medical devices e.g., ISO 10535:2021 Assistive products – Hoists for the transfer of disabled persons – Requirements and test methods, www.iso.org and <http://www.fda.gov/>
- The Joint Commission - Environment of Care Standards e.g. EC.02.01.01 https://www.osha.gov/sites/default/files/2_2_SHMS-JCAHO_comparison_508.pdf
- Joint Commission (2017). OSHA & Worker Safety Handling with Care Practicing safe patient handling EC NEWS August 2017. https://lhatrustfunds.com/assets/uploads/documents/11-Pages_from_EC_N_20_2017_08-2.pdf
- The American Association for Safe Patient Handling and Movement Healthcare Recipient Sling and Lift Hanger Bar Compatibility Guidelines 2016. To be revised 2022 www.hcergo.org

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Benefits of SPHM Programs A Summary of the Evidence Base



Effective SPHM Programs: Evidence-Based Outcomes for Healthcare Workers & Organizations

Reduced:

- Patient-handling workers' compensation injury rates (30-95%)
- Lost workday injury rates (up to 66%),
- Restricted workdays (up to 38%),
- Workers' compensation costs by 30-75%
- Insurance premiums by 50%

Increased job satisfaction

Reduced:

- Number of workers suffering from repeat injuries
- Staff turnover
- Costs related to health care acquired patient injuries
- Reduced length of stay and readmissions

Improved patient experience

Initial investment for purchase of SPH equipment and training costs can be recovered in less than 2-4 years

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Effective SPHM Programs: Evidence-Based Outcomes for Patients: Pressure Injury Prevention

- Patient positioning devices and policies and procedures around use of mechanical lifting devices can reduce the risk of health-facility acquired pressure injury by up to 17% (Gibson, K., et. al 2017)
- 43% decrease in hospital acquired pressure ulcers among patients following the implementation of SPHM (Walden et al, 2013)
- 50% decrease in stage III and IV hospital-acquired pressure ulcers during the first year after SPHM program implementation (Kennedy, 2015)
- Decrease in PI rates in Long Term Care with SRH program and use of sit to stand devices (Gucer et. al, 2013)
- Reduction in HAPI occurrence from 1.3% to 0% (P = .004) when manual repositioning (standard of care) was compared with use of the repositioning system (Edger, 2017)

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Effective SPHM Programs: Evidence-Based Outcomes for Patients

Fall Prevention

- Intermountain Healthcare Salt Lake City, UT: 49% reduction in patient falls related to lift and transfer activities (Joint Commission, 2012)
- Acute care teaching hospital in rural SC: Falls reduced during first year after SPHM program implementation (Kennedy et al, 2015)
- Compliance with safe lifting policies and procedures and use of sit to stand devices associated with reduction in falls in long term care (Gucer et. al, 2013)

Patient Outcomes – General

- Increase in physical functioning and activity level, lower levels of depression, improved urinary continence, lower fall risk, and higher levels of alertness during the day (Nelson et al 2008; Arnold, 2011; McIlvane et al. 2011; Campo et al 2013; Darragh et al 2013; Rockefeller, 2008)

Patient Experience

- Mechanical lifting devices, a suite of ergonomic lift assist devices and patient positioning devices improve patient comfort and safety. (Wicker, P., 2000, Gibson et al., 2017)

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Effective SPHM Programs: Outcomes for Patients & Health Care workers

SPHM & Rehabilitation Goals

- Evidence to support use of SPHM equipment by therapists:
- Functional independence measure (FIM) ratings remained the same or improved when using SPHM equipment. (Harwood et al., 2016; Darragh, 2014; Arnold et al., 2011; Mcilvane et. al., 2011; Campo M, et. al., 2013)
- SPHM equipment has therapeutic applications in rehabilitation, especially for medically complex or bariatric patients. (Darragh, et. al 2013; Rockefeller, K., 2008)

Workplace Violence

- Decrease in combativeness with use of lifting equipment. (Collins et. al, 2006; Risor et. al, 2017; Pihl-Thingvad, et al, 2018, Kurowski & Ghazari, 2019)

Refer to SPHM Toolkit Section 1 for more Information and References

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Barriers to Implementing Effective SPHM Programs What Has Culture Got To Do With It?



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Barriers to Implementing Effective SPHM Programs (or any Safety program) - Organizational Culture

- Leadership style
- Patient safety focus vs. worker safety
- Competing demands - reimbursement, regulatory, resources
- Lack of systems approach to services provided (silos) & to worker safety programs
- Problem solving approach = blame the worker (human error)
- Facilities unaware of full scope & cost of Manual Patient Handling injuries and relationship to patient safety and delivery of care
- Approach to safety is reactive (fighting fires) vs. proactive
- Staff turnover, shortage and qualifications/experience

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Barriers to Implementing Effective SPHM Programs – The Evidence Base

Specific Culture Related Factors

- Lack of engagement /involvement by nursing leadership
- High workload and competing demands
- Unit culture/supervisory support
- Lack of a multifaceted program approach
- Perception that equipment costs too much
- Lack of effective ongoing training to maintain confidence/competency related to SPHM patient assessment & equipment use

SPHM Equipment & Workspace Design

- Insufficient equipment and/or poor access to equipment
- Mismatch of equipment to patient handling task, patient dependency and room/furniture design etc
- Inadequate space to maneuver equipment into patient rooms
- Inadequate equipment management & maintenance

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Barriers to Implementing Effective SPHM Programs – The Evidence Base

Healthcare Worker (Staff) Related Factors

- Myth that good body mechanics and having enough staff to perform a lift is enough/social pressure to perform manual lifting
- A patient that is 120lbs is a 'light weight'
- Perception that using equipment takes too long
- New grads or new hires with no prior SPHM experience
- New nurses/staff want to "fit in"
- Lack of confidence concerning assessment of patient ability & use of equipment
- Therapy beliefs re use of SPHM equipment (LTC)
- Patient comes first (self-sacrificing mentality)

Patient Related Factors

- Perception patient is physically capable of performing the task (assoc. with falls & near miss falls - staff 'caught' patient)
- Patient motivation to be out of bed or to ambulate
- A patient's urgency to use the bathroom
- Patient and family members' fears
- Patient/family preference

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Barriers to Implementing SPHM Programs - Other

- One person responsible for safety and/or ergo & SPHM plus many other programs
- SPHM is inherited or 'given' to a health care professional
- 'End users' not involved in design or purchasing process i.e., employees, patients, visitors and suppliers
- Usability testing not conducted before purchase of new equipment - Simulation and realistic design 'mock ups' not used or viewed by end users
- SPHM/Ergonomics not considered in new build, remodel, device purchase etc.; lack of systems approach
- Purchasing decision of SPHM equipment/slings based on lowest price vs. 'fit' for program and usability

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Creating a Culture of Worker & Patient Safety: The Precondition for Successful Safety Programs



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Health Care Worker Safety = Patient Safety



Safer Together: A National Action Plan to Advance Patient Safety (IHI, 2020)

4 foundational and interdependent areas prioritized as essential to create total systems safety

1. Culture, Leadership, and Governance
2. Patient and Family Engagement
3. Workforce Safety:

- Ensuring the safety and resiliency of the organization and the workforce is a necessary precondition to advancing patient safety; we need to work toward a unified, total systems-based perspective and approach to eliminate harm to both patients and the workforce

4. Learning System

Safer Together: A National Action Plan to Advance Patient Safety, Boston, Massachusetts: Institute for Healthcare Improvement; 2020. www.ihio.org/safetyactionplan

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Workforce Wellbeing

- Institute for Healthcare Improvement
 - Workforce Well-Being and Joy in Work. <https://www.ihio.org/library/topics/workforce-well-being-and-joy-in-work>
 - Safer Together: A National Action Plan to Advance Patient Safety (Includes worker safety and SPHM) www.ihio.org/SafetyActionPlan
- NIOSH
 - Total Worker Health® Program https://www.cdc.gov/niosh/twh/?CDC_AAref_Val=https://www.cdc.gov/niosh/twh/default.html
 - Impact Wellbeing™ Guide 2024 <https://www.cdc.gov/niosh/docs/2024-109/default.html>
- National Academy of Medicine.
 - National Plan for Health Workforce Well-Being, 2022 <http://nap.nationalacademies.org/26744>

Resources for Health Care Worker Well-Being: 6 Essential Elements



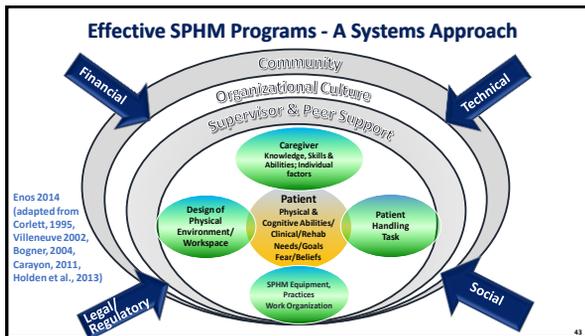
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Components of Effective & Sustainable SPHM Programs



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Components of Effective & Sustainable SPHM Programs

Program Foundation and Management

- A. Management Leadership
 - Ensuring Ownership and Accountability - Just Culture/HROs/Transformational Leadership
- B. Employee Participation
- C. Written SPHM Policy
- D. Program Management
 - i. Program Champion
 - ii. Program/Project Manager
 - iii. Committee/Team (Multidisciplinary)
 - iv. Program Plan (Interdisciplinary)
- E. Communications/Social Marketing
- F. Ongoing Hazard Identification/Analysis & Program Evaluation
 - i. Data analysis
 - 1) Injury/Incident Data Analysis
 - 2) Worker/Patient Surveys
 - 3) Gap Analysis
 - 4) Assessment of Tasks, Work Practices, Physical Work Environment and Patient Population
 - ii. Program Process Evaluation

Multifaceted programs are more effective than any single intervention

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Components of Effective & Sustainable SPHM Programs

- G. Hazard Abatement
 - I. Engineering Controls e.g.
 - o SPHM Equipment:
 - Selection to meet patient's clinical/rehab, physical and cognitive needs; the task performed and physical environment and
 - Sufficient quantity, accessible, user friendly
 - o Sling Safety & Management Process
 - o Infection Control - Cleaning of SPHM Equipment
 - o Maintenance & Inspection/Ongoing Equipment Management
 - II. Administrative and Work Practice Controls e.g.
 - o SPHM safe work practices
 - o Patient Assessment & Communication Protocols (*key for safe and early mobilization*)
 - o SPHM unit-based champions/peer coaches
 - o Clinical expert resource
 - o Lift teams/Techs (*must use SPHM equipment*)
 - o Incident Reporting

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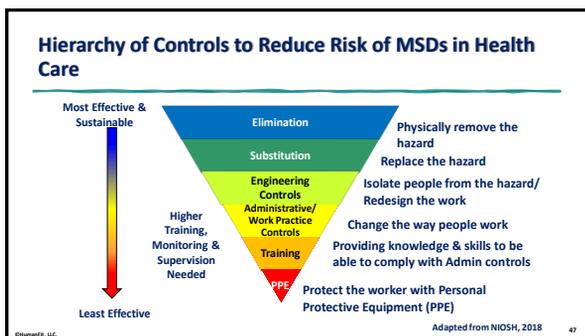
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Components of Effective & Sustainable SPHM Programs

- H. Education & Training (*ongoing*)
 - o Have a plan with clearly defined goals and measurable outcomes
 - o Measure effectiveness of training i.e., can and do staff use skills taught correctly?
 - o Tailor training to staff groups/disciplines, work tasks and roles within the SPHM program
 - o Hands-on competency-based training (+/- CBT/VRT) of equipment & best work practices that is customized to area of use and patient population – essential for safe use
 - o Patient and family education
- I. Ongoing Program Evaluation & Proactive Hazard Prevention including Proactive Design
- J. Post Incident Review (*After Action' review*); Safety Huddles et al Injury Management Inc. Return-To –Work Programs

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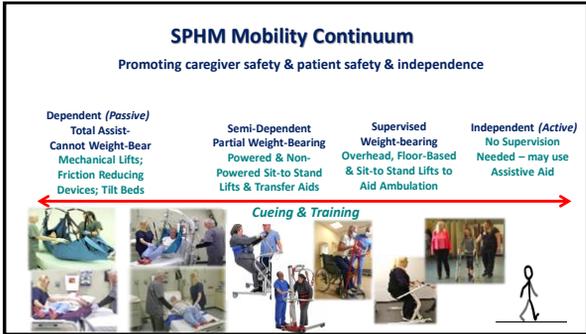
SPHM Program Development, Implementation & Evaluation

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Reducing Risk of Injury to Caregivers and Patients

Risk Factor	Ergonomics Solution
Forceful Exertion	<ul style="list-style-type: none"> Using SPHM equipment e.g., powered ceiling and floor lifts and friction reducing devices (slippery sheets) and mobility aids
Awkward Postures	<ul style="list-style-type: none"> Using best ergonomics work practices to facilitate neutral postures e.g. raising the bed to proper work height and not reaching past mid-line of the patient
Repetition & Duration of Exposure to Risk Factors	<ul style="list-style-type: none"> Consistent use of SPHM equipment and ergonomics best work practices. Culture of worker and patient safety & multifaceted SPHM program

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SPHM Equipment Categories

BASIC SPHM EQUIPMENT CATEGORIES	TASK(S) PERFORMED
<ul style="list-style-type: none"> Ceiling Lifts (fixed or portable) - with appropriate sling (weigh scale option) 	<ul style="list-style-type: none"> All tasks inc. Proning & lift from floor (fall recovery); vehicle extraction
<ul style="list-style-type: none"> Powered floor lifts - low & high base with app. sling Weigh scale option; some allow for ambulation Specialty powered floor lifts for vehicle extraction 	<ul style="list-style-type: none"> Seated transfers Limb holding Proning, lift from floor, vehicle extraction (some models) In bed/lateral supine transfers & repositioning can be challenging
<ul style="list-style-type: none"> Friction Reducing Devices - Single use & reusable <ul style="list-style-type: none"> Air Assist mats (powered) Friction reducing sheets (plastic; nylon/cloth/silicon based); Disposable or washable Roller and slider boards 	<ul style="list-style-type: none"> Repositioning up in bed/chair and Lateral supine transfers Proning Moving legs Roller and Slider Boards - lateral supine transfers only

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SPH Equipment Categories

BASIC SPHM EQUIPMENT CATEGORIES	TASK(S) PERFORMED
<ul style="list-style-type: none"> Powered and non-powered sit-stand assist devices <i>Some use slings/belts (single use or reusable)</i> 	<ul style="list-style-type: none"> Standing (vertical) transfers e.g., bed to chair Some powered devices allow ambulation function
<ul style="list-style-type: none"> Air assist inflatable device e.g. HoverJack™, ELK™ & CAMEL™; Lift platforms & chairs 	<ul style="list-style-type: none"> Lift from the floor
<ul style="list-style-type: none"> Bath and Shower Aids; Powered Toilet Lifters Other 'Low Tech' Assistive Devices (Transfer poles; bed ladders, etc.) 	<ul style="list-style-type: none"> Activities of Daily Living
<ul style="list-style-type: none"> Specialty devices e.g., electric profiling beds with tilt; chair function; therapeutic ergonomics seating & wheelchair movers 	<ul style="list-style-type: none"> Pushing beds and stretchers; wheelchairs; Promote patient positioning & mobility

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Using SPHM to Protect Caregivers & Ensure Early & Safe Mobilization of Patients

- Early Mobility definition:**
Planned movement in a sequential manner beginning at a patient's current mobility status and returning them to baseline (Vollman, 2010)

Importance of Early Mobility

- Decreased time on ventilator
- Decreased length of stay in the ICU and the hospital
- Mitigates the *short-term* complications of critical illness: delirium, deep vein thrombosis, muscular weakness & fall risk, & pressure injuries
- Mitigates the *long-term* disabilities of critical illness: physical, cognitive, and psychological
- Decreased mortality

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Example of Progressive Mobility Activities

- Elevating the head of bed 45 degrees
- Turning and positioning
- Progression from passive range of motion (PROM) to active range of motion (AROM)
- Progressive exercises in supine, sitting and standing
 - Tolerates chair position
 - Sitting at edge of bed unassisted
 - Standing
- Standing transfer to chair
- Ambulation (short then long distance)

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✓ The level of injury risk reduction varies by type of equipment
 ✓ Must match patient's physical and cognitive abilities
 ✓ Not all interventions are created equally!

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Reduce Forceful Exertion & Promote Early & Safe Mobilization: Turning & Boosting

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Reduce Forceful Exertion & Promote Early & Safe Mobilization: Proning

Safe Proning can be achieved with:

- Ceiling
- Floor lifts
- Air Assist matts
- Friction Reducing Devices

SLC Health –Proning Program during Covid with SPHM (PSQH Innovation Awards Winner 2021)

- Total sustained HAPI reduction 70%
- Time between pressure relief turns decreased 47 minutes
- 83% decrease in the time needed to prone (60 to 20 minutes)
- Number of staff to prone reduced to 3 from 6

<https://www.youtube.com/watch?v=E6abHf1w7k0>

Source: Alpha Modalities
 Source: Veterans Health Administration

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Reduce Forceful Exertion & Promote Early & Safe Mobilization: Holding & Supporting

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Reduce Forceful Exertion & Promote Early & Safe Mobilization: Lateral Supine Transfers

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Reduce Forceful Exertion & Promote Early & Safe Mobilization: Seated Transfers

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Reduce Forceful Exertion & Promote Early & Safe Mobilization: Standing Transfers & Ambulation

Source: Alpha Modalities

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Using SPHM Equipment to Reduce Forceful Exertion Fall Recovery

Source: Hovertech Int.

Source: Alpha Modalities

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Using SPHM Equipment to Reduce Forceful Exertion Admission & Discharge by Car or Ambulance

- Powered height adjustable gurneys and powered loading systems
- Ceiling Lifts
- Specialized floor lift systems
- Air assist lift with air assist matt
- Powered sit to stand devices
- Non-powered standing aids & transfer boards

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Important Ergonomics Best Practices to Reduce Awkward Postures - Working in an Upright Posture

Work Height = Hand Position When Performing Work Tasks

Work height = between knuckles to waist (accommodates 90% of the user population)

Work height \neq Bed height

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Worldwide Caregiver Working Position

Working in an awkward posture can increase:

- Force exerted
- Risk of MSDs & other injuries
- Task time
- Risk of error/near miss

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Selected Ergonomics Best Practices to Reduce Awkward Postures - Minimizing Reach Distance



Using Ergonomics Can Save Time!

No reaching past midline of the patient or the bed/surface except when turning patients with spinal precautions.

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An Approach to Creating Sustainable SPHM Programs From the NHA SPHM Toolkit



- Step 1. Review the best practices for preventing patient handling-related injuries and related regulations and standards and collect baseline incident/injury and cost data related to patient handling injuries.
- Step 2. Analyze data collected to identify and prioritize units, departments, and employee groups, with higher risk of exposure to patient handling; and the nature, severity and cost of injuries associated with patient handling. Begin to identify hazards, overall risks & program elements that need to be addressed.

Building the SPHM Program Foundation & Management Structure

- Step 3. Enlist support of senior leadership to develop a SPHM program plan that will support organizational goals related to delivery of safe, quality care to patients and providing a safe work environment for health care workers.

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An Approach to Creating Sustainable SPHM Programs From the NHA SPHM Toolkit



- Step 4. Identify a program champion or executive sponsor, and a program coordinator, and form a multidisciplinary SPHM committee.
- Step 5. Educate the committee about the scope and risk related to manual patient handling in health care, the components of successful SPHM programs, the proposed approach to addressing SPHM at your facility and function of the committee. Develop the program vision and committee mission statements, and a draft project charter.
- Step 6. Determine the scope of the issue & program needs.
- Step 7. Analyze and prioritize survey and site visit data.
- Step 8. Develop solutions to address and control hazards.

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An Approach to Creating Sustainable SPHM Programs From the NHA SPHM Toolkit



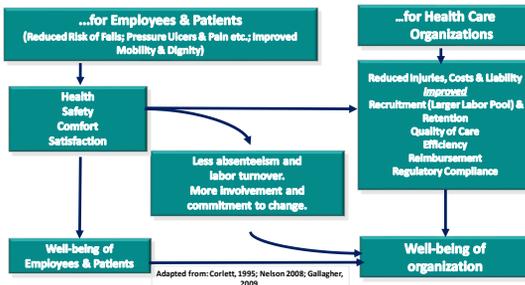
- Step 9. Create a communications plan, education and training plan, and SPHM policy
- Step 10. Complete the draft SPHM program plan
- Step 11. Obtain approval of the SPHM plan and policy from senior leadership
- Step 12. Finalize the SPHM program plan and policy
- Step 13. Implement the SPHM program
- Step 14. Evaluate the SPHM program
- Step 15. Sustain the SPHM program

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Benefits of a SPHM Program (Operational Gains)



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Lessons Learned – Tips for Successful SPHM Programs



- Know your customer
- Do it with data (*accurate data*) & make the business case
- Include patient safety outcomes – *choose one and measure well*
- Choose evidence-based interventions and use existing resources....*don't reinvent the wheel*
- Have a plan, set measurable goals and evaluate them often
- Start small, test pilot and demonstrate successes but make sure to implement

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Lessons Learned – Tips for Successful SPHM Programs

- Plan for program sustainability & to using proactive measures
- Don't forget to involve all stakeholders including patients & families
- Market & communicate the program and your successes (internally & externally)
- Make sure SPHM is visible in all patient-related and worker safety & health efforts
- Learn project management and facilitation skills
- Stay up to date in all things SPHM related and with changes in Health Care delivery
- Get involved in professional healthcare safety, advocacy organizations



.....and practice self-care

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Thank You & Questions



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