



**Nevada  
Hospital  
Association**



## **Safe Patient Handling and Mobility: A Toolkit for Program Development**

### **Section 7 SPHM Program Implementation**

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

The **Safe Patient Handling and Mobility: A Toolkit for Program Development** offers comprehensive guidance and resources to assist hospitals and other healthcare organizations in establishing and sustaining effective safe patient handling and mobility (SPHM) programs.

The complete toolkit can be accessed at <https://www.nvha.net/safe-patient-handling-and-mobility-toolkit/>

## **Reproduction and Use of Materials**

Permission is granted to use such copyrighted material solely for non-commercial, instructional, personal, or scholarly purposes with proper citation. The material may be used and incorporated into other workplace safety and health programs on the condition that no fee may be charged for the subsequent use or adaptation of the material. Use of the material for any other purpose, particularly commercial use, without the prior express written permission of Nevada Hospital Association and HumanFit, LLC is prohibited.

This document may contain references to copyrighted material, the use of which may not have been specifically authorized by the copyright owner. Such material is used for educational and informational purposes under the principle of 'fair use'. All copyrighted materials remain the property of their respective copyright holders.

Photographs of SPHM technology used in this toolkit are identified with the names of their manufacturers. They are reprinted with permission from and copyrighted by the manufacturers, all rights reserved.

For further details, please refer to the *SPHM Toolkit Disclaimer, Copyright, Acknowledgements* section.

# SPHM Program Implementation

## Contents

SPHM Program Implementation .....	1
Summary of SPHM Program Activities Completed So Far (Sections 1-6) .....	1
<b>Step 13. Implement the SPHM program</b> .....	2
Managing Implementation of the SPHM Program Plan and Related Activities .....	2
Planning for implementation .....	2
Considerations when implementing the program .....	3
Pilot Testing the SPHM Program.....	4
Considerations when choosing a pilot program .....	4
Considerations when planning and conducting a pilot program.....	5
<i>Figure 7.1 Example of SPHM Implementation Program on a Pilot Unit/Department.</i> .....	6
<i>Table 7.1 SPHM Technology and Essential Standard Operating Procedures.</i> .....	8
Other Program Activities that may be Conducted Concurrently with Pilot program Initiatives ....	9
<i>Table 7.2 SPHM Policy and Procedures for Specific Patient Populations and Patient Handling Tasks.</i> .....	11
Selecting, Purchasing, and Installing SPHM Technology .....	12
SPHM equipment evaluation process.....	13
Considerations when choosing SPHM technology .....	13
Overall considerations when evaluating SPHM technology .....	13
Key factors that influence SPHM technology selection in care settings.....	14
Planning for evaluation of SPHM technology .....	17
Incident Reporting, Response and Management .....	19
Incident and Near Miss Reporting and Investigation Systems .....	19
Facilitating the reporting of incidents and near misses related to patient handling activities .....	20
<i>Incident and Near Miss Investigation</i> .....	21
After Action Reviews.....	21
Safety Huddles .....	22
Injury Management of WMSDs and Return to Work Programs .....	23
Managing Change and Making it Stick .....	24
<i>Figure 7.2 Integrating SPHM into a Health Care Organization's Culture.</i> .....	28
Section Summary .....	29
References and Resources Used in this Section .....	30

### SPHM Program Implementation

#### Summary of SPHM Program Activities Completed So Far (Sections 1-6)

At this point in the development or enhancement of your SPHM program, the following activities should have been completed:

- Defined the need for a program or program enhancement.
- Built the foundation for the successful program implementation and maintenance including ensuring support from senior leadership and key stakeholders.
- Identified program goals, assessed, and prioritized specific hazards, risks, and program needs.
- Identified strategies to address hazards, risks, and program needs based on regulatory requirements, the ANA SPHM standards, and published evidence including best practices, etc.
- Developed an SPHM policy including mechanisms to address accountability.
- Have begun the process of transitioning from a culture of manual patient handling to SPHM.

#### Tools that Support Content in this Section

---

- 7a. Sample program implementation plan**
- 7b. SPHM budget template**
- 7c. Equipment trial evaluation survey**
- 7d. Tips for Root Cause Analysis of WMSDs**

You have also developed an SPHM program plan that details strategies for each program activity that is to be implemented including:

- The roles and responsibilities of stakeholders i.e., committee and others who will implement the plan.
- Prioritization of implementation activities based on severity and importance of the hazards and risks to be addressed.
- Program design and activities e.g., use a pilot approach on one or more units/departments
- Resources needed and available for implementation, and ongoing support of solutions and new processes. These include a draft budget, which will be submitted for approval by leadership after SPHM technology trials are completed and required personnel and time, etc.
- Implementation timelines for each program activity.
- Strategies to evaluate, monitor, adapt the program as needed, together with documentation of solutions and processes implemented (**Section 8**).
- Communication strategies for engaging stakeholder groups and sharing progress of program implementation and outcomes.
- Plans for sustaining the SPHM program. (**Section 9**)
- SPHM education and training plans to help employees learn new practices. *These will be finalized after SPHM technology is chosen.*

## Safe Patient Handling and Mobility – Section 7

---

- Strategies to address barriers and facilitators that consider the organization's culture and readiness to change and thus enable program implementation.

### Step 13

#### Implement the SPHM program

##### Managing Implementation of the SPHM Program Plan and Related Activities

###### Planning for implementation

Once your SPHM program plan is complete and approved by leadership, you can move forward with implementing the tactical elements of the plan.

As mentioned in **Section 4**, it is necessary to trial and select SPHM technology for high-priority units and departments that have been selected to start the program and then finalize the budget for technology and training *before* implementing other program elements (*Refer to Selecting, Purchasing, and Installing SPHM Technology on page 7-12*).

Other program components that will need to be finalized before program implementation on target units/departs include:

- Any physical infrastructure changes that may be needed to accommodate SPHM technology such as ceiling/overhead lifts
- SPHM patient mobility assessment protocols (*Refer to Section 5*)
- Standard operating procedures for storage, cleaning, supply, and maintenance of SPHM technology (*Table 7.1*) and
- Finalizing unit SPHM champion and employee training plans (*Refer to Section 6*).

Implementation strategies can differ based on whether a new program is implemented or an existing program is to be enhanced.

Typically, the program coordinator together with the SPHM committee are responsible for program implementation. However, program implementation also requires planning with all stakeholders, including individuals and departments that will be responsible for various program activities, including those in pilot units or departments. *Pilot testing the SPHM program is discussed on page 7-4.*

Ensure that stakeholders understand their role, the deliverables they are responsible for, and timelines for completion.

Program implementation will only be successful with the support of leadership, middle management, and support service departments.

The SPHM program champion plays a vital role in facilitating implementation activities. The SPHM coordinator, committee and others who are implementing the program can cite champion leadership as evidence of a commitment to cultural change when facing barriers.

# Safe Patient Handling and Mobility – Section 7

## Considerations when implementing the program

- Apply a continuous performance improvement approach when implementing the SPHM program so that strategies to address emerging issues can be adapted based on feedback and results.
- Regularly monitor progress (including the use of budgetary expenses) toward your objectives and respond quickly to information or data that indicates implementation activities are not going as planned. Identify and address the need for any additional resources that are required as implementation occurs.
- Review if strategies used to implement program elements are working. Lessons learned will facilitate roll-out of the program to other units/departments in the future.
- Review the need for subcommittees/work groups to meet frequently when developing specific program elements such as SPHM patient mobility assessment protocols, and SPHM policy and procedures for specific patient populations and patient handling tasks. Developing these program elements requires frequent meetings to meet program implementation timelines. More frequent meetings of the SPHM committee may also be needed to maintain momentum during program implementation.
- Ensure that work overload is avoided for employees who take on new responsibilities during the implementation process.
- Do not forget to communicate proposed and actual changes in program implementation activities to stakeholders including leadership and solicit their input as appropriate.
- The SPHM program coordinator and SPHM committee should periodically step back from reviewing the details of implementing specific activities to view the big picture perspective when monitoring program progress. It is easy to get sidetracked or stuck spending a majority of committee time on implementing one activity.



### Quick Tip

**Successful implementation of any safety program takes time and can be facilitated by applying principles of project management. Find out if your organization, e.g., from Quality or Safety departments, uses any specific project management processes, tools, or templates.**

**Use project management software if available or adapt project planning tools provided in this toolkit.**

- **AHRQ Project Planning and Management**  
<https://healthit.ahrq.gov/health-it-tools-and-resources/evaluation-resources/workflow-assessment-health-it-toolkit/all-workflow-tools/project>
- **IHI Project Planning Form**  
<https://www.ihi.org/resources/tools/project-planning-form>
- **IHI Quality Improvement Essentials Toolkit**  
<https://www.ihi.org/resources/tools/quality-improvement-essentials-toolkit>

**Additional resources are provided in Section 10**

Additionally, when choosing *how* to implement solutions that require a change in behaviors or practice in health care, a combination of various approaches is more effective (RNAO, 2012).

## Safe Patient Handling and Mobility – Section 7

---

- Strategies to address barriers when implementing the SPHM program should have been defined during program planning activities (**Sections 2-4**). However, stakeholders implementing the program should still be prepared to promptly address unexpected resistance to change that may occur during implementation. Unit/department managers should have responsibility for communicating concerns to the SPHM program coordinator and committee and lead efforts to address them.

**Managing Change** is discussed on **page 7-24**. More information about addressing common barriers and resistance to change when implementing an SPHM program is provided in **Section 1**.

### Pilot Testing the SPHM Program

**Conducting a pilot test allows you to:**

- Evaluate SPHM technology solutions and related program processes to identify areas for improvement prior to expanding the program to additional units or departments.
- Consider how chosen SPHM technology and processes work or *fit* with existing care delivery procedures and processes, the physical environment, and work culture, etc.
- Identify if there are any unintended consequences of SPHM related interventions e.g., a technology solution and/or process had a negative impact on patient care or created other safety issues.
- Evaluate how well the proposed intervention(s) will meet desired objectives e.g., to what degree is the risk of caregiver injuries related to patient handling activities reduced and/or controlled; are early mobility programs goals met etc.
- Prevent waste of resources such as money and time.
- Encourage greater employee “buy-in” by soliciting feedback about the intervention thus providing a foundation for culture change and successor of the intervention.
- Minimize disruption of work processes on a large scale within a facility.

### Considerations when choosing a pilot program

Pilot unit(s) and/or department(s) should have been identified during program planning and a draft plan for implementing a pilot program discussed when determining initial program implementation activities (**Refer to Section 3**).

Pilot units/departments are typically the areas experiencing high injury rates associated with patient handling where the effects of the SPHM pilot will be easily visible.

However, to increase the likelihood of program success consider the following factors when choosing a pilot location:

- Leadership and staff must be enthusiastic and committed to participating in the project. Consider units/departments where caregivers are more likely to embrace the opportunity for improvement and adopt new processes more easily. Implementing new initiatives in units/departments with high staff turnover and/or with a manager who is new to the area and who is also to the management role, can be more challenging and time-consuming.

## Safe Patient Handling and Mobility – Section 7

---

- Use lessons learned from other recent efforts to pilot and implement new programs at your facility. This information together with data from the SPHM employee surveys and interviews and the site visits will help to confirm if a pilot location is suitable.
- SPHM unit-champions or coaches have been identified who will be able to provide caregivers support and coaching that will be key during pilot program implementation (**Refer to Tool 4g**). Unit champions are specially qualified to support and coach caregivers during the pilot program. Champions may have been identified during program planning activities. If not, identify them early in pilot program planning activities.  
If SPHM unit champions are not included in the program plan, consider alternative methods for providing on-unit, just-in-time SPHM clinical support for staff during pilot implementation.
- Avoid conducting a pilot test in a work area where other new projects are being implemented that may strain resources and staff time to participate in your pilot.

### Considerations when planning and conducting a pilot program

- Team members from the pilot unit/department should collaborate with the SPHM project coordinator and committee to plan and implement the pilot, ensuring representation from all caregiver roles, employees on the unit, and shifts.
- Provide training/instruction as needed to stakeholders involved in the pilot program before planning begins e.g., managers and supervisors as well as the unit/department pilot implementation team need education about principles of SPHM, the facility SPHM program plan and SPHM policy etc.
- Identify the steps needed to prepare for the pilot program. **Refer to Figure 7.1.** **Tool 7a** provides a *sample implementation plan*.
- Establish a pilot timeframe long enough to ensure integration into operations and enable the collection and analysis of impact data.<sup>1</sup>

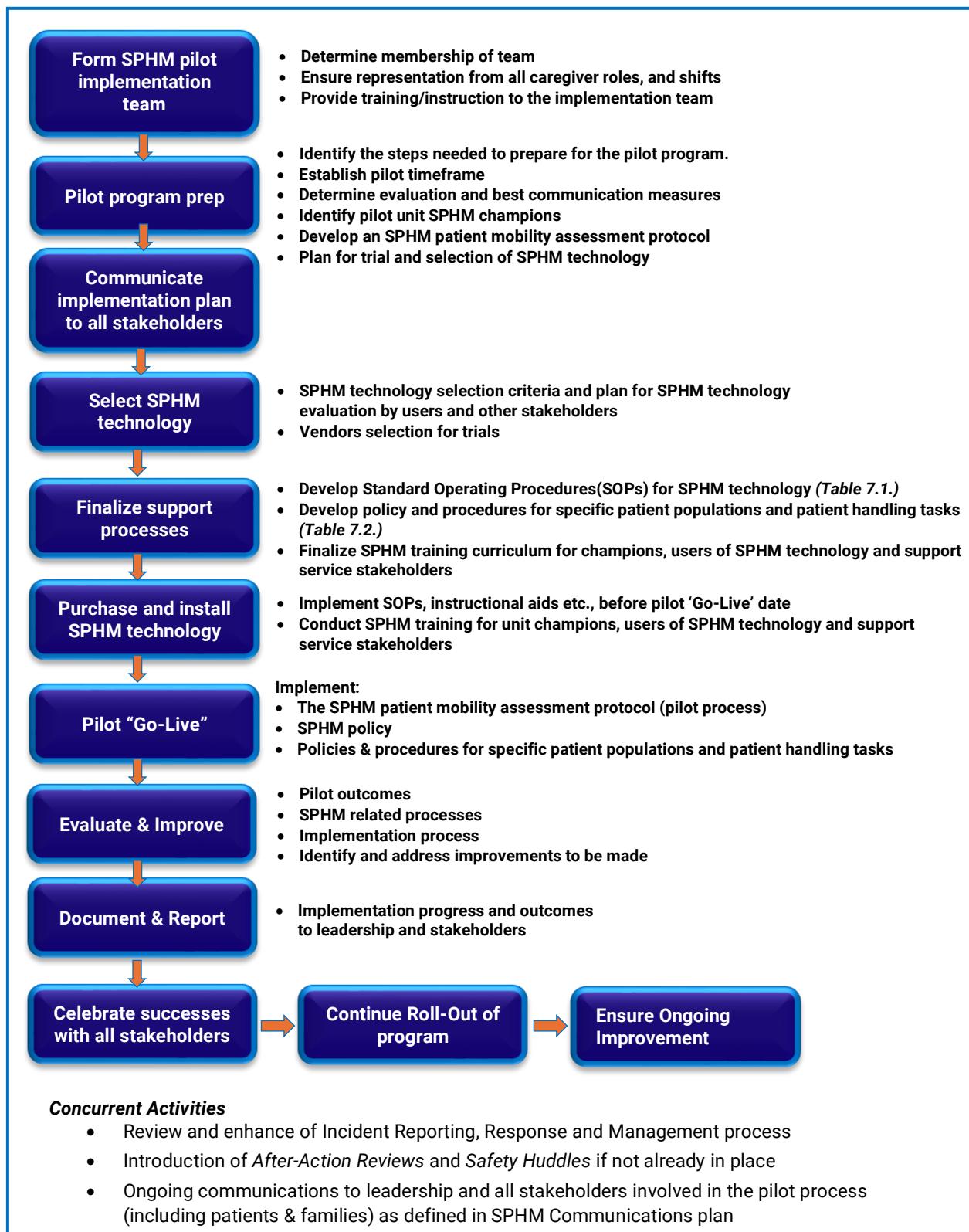
The pilot should be completed within the timeframe unless unforeseen issues arise. When pilot programs are poorly planned and implemented, organizations can get *stuck* in the pilot phase of new initiatives without successfully implementing them on a larger scale.

- Determine how you will evaluate the pilot activities (SPHM technology and processes), i.e., what data will you need to determine whether your interventions are making a difference? (**Refer to Sections 4 and 8**)

Injury and cost data collected in the program planning phase together with survey and onsite assessment data will provide the pre-implementation baseline data for measurement of the pilot.

- Determine the best communication methods for all stakeholders involved. The SPHM communications plan should be used to facilitate this process.
- Communicate the pilot implementation plan to all stakeholders involved and address any concerns.

## Safe Patient Handling and Mobility – Section 7



**Figure 7.1 Example of SPHM Implementation Program on a Pilot Unit/Department.**

## Safe Patient Handling and Mobility – Section 7

---

### Considerations when planning and conducting a pilot program *continued*.

- Identify unit SPHM unit champions or coaches if not yet done.
- Plan for trial and selection of SPHM technology (**Refer to page 7-12**)
- Develop other key SPHM processes, policies, and procedures. These include:
  - A SPHM patient mobility assessment protocol (**Refer to Section 5**)
  - Standard operating procedures for SPHM technology (**Refer to Table 7.1**) and
  - SPHM policy and procedures for specific patient populations and patient handling tasks (**Refer to Table 7.2**)
- After choosing, purchasing, and installing SPHM technology and implementing SOPs, provide training for unit-based champions, caregivers, and relevant support service staff as outlined in your SPHM education plan (**Tool 6a**). Ensure training occurs when the technology is ready to use to support retention of caregiver SPHM skills
- Use employee surveys, interviews, and observations (if appropriate) to solicit feedback during and after implementation of the pilot program. Make sure to talk to and observe employees on all shifts including weekends and nights to ensure the inclusion of all staff. Find out what is working well and what is not, and why, and capture ideas that employees have to improve processes etc.
- Maintain documentation of all activities and outcomes.
- Evaluate outcome data such as the percentage changes in the number, rate, and cost of WMSDs associated with patient handling; employee survey responses; and observed and/or quantified (through ergonomics analysis) changes in WMSD risk before and after pilot implementation (**Refer to Section 8 for more information about evaluating SPHM activities**).
- Evaluate all SPHM-related processes implemented during the pilot and the process used to implement the pilot program. This involves evaluating each step of a process to make sure it is necessary, functional, and effective (**Refer to Section 3 for information about conducting observations of patient handling tasks and Section 6 Hierarchical Task Analysis**).
- Ensure solution(s) did not cause new problems.
- Make necessary changes to interventions based on program evaluation data
- Report outcomes to leadership and stakeholders involved in the pilot program.
- Once the pilot initiative is completed and approval is gained to continue implementation of the program on other units/departments:
  - Have staff from the pilot area share their experience and lessons learned with other units. This will help to engage other employees and get them ready and hopefully excited about implementing the SPHM program in their work area.
  - Continue to assess outcomes on the pilot units/departments e.g., at three, then six months and then annually following implementation
  - Providing visible ongoing support for pilot units/departments after implementation is critical to ensure SPHM becomes a standard of care and caregivers do not fall back to using manual handling techniques.

## Safe Patient Handling and Mobility – Section 7

- In addition to monitoring the predetermined SPHM program metrics (injury data, employee surveys etc.), periodically checking in with managers and employees to assess and adjust program processes as needed, is essential for sustaining culture change and engagement in the program.
- 1. *WMSDs associated with patient handling are not typically caused by a one-time event but develop over time due exposure to a combination of primarily physical risk factors (Refer to Section 1). Therefore, significant reductions in WMSDs may take months or longer beyond the pilot program's end. This should be considered when evaluating the pilot program and discussing results to leadership and other stakeholders including caregivers from pilot unit(s)/department(s).*

### SPHM Technology and Standard Operating Procedures (SOPs)

Once SPHM technology is selected and approved for purchase, SOPs must be developed and implemented before SPHM technology is to be used by caregivers. Manufacturers' instructions and recommendations for use and maintenance of technology must be followed. However, individual facilities/organizations will need to develop their own guidelines and SOPS to address the following:

- SPHM technology cleaning and infection prevention
- Use of SPHM technology in isolation rooms
- Sling management protocols i.e., laundering and/or disposal, inspection, tracking, storage, distribution, and infection prevention
- Equipment preventive maintenance and repair. Process to report and replace non-functioning technology
- Distribution of SPHM technology e.g., par stocking and ordering systems, when technology is needed immediately
- Disposal (when and how) of single-use items such as friction reducing devices (FRDs) such as slippery sheets and air assist mats
- Disposal of SPHM technology if non-repairable or at end-of-life cycle.
- Wound and ostomy approval of lift slings and/or friction reducing devices including air assist mats that may be left under patients (if recommended by the manufacturer) in bed and/or during surgical and/or diagnostic procedures etc.
- Signage for storage areas such as the type and size of slings together with cleaning/laundry/disposal and replacement ordering instructions

**Table 7.1** SPHM Technology and Essential Standard Operating Procedures.

## Safe Patient Handling and Mobility – Section 7

---

### Other Program Activities that may be Conducted Concurrently with Pilot program Initiatives

There are additional program implementation and management activities that should continue during and after the implementation of SPHM technology and elements in pilot units or departments.

These include:

- Securing leadership and stakeholder support to continue implementing the program following evaluation of the pilot program(s). Developing an implementation plan that refines SPHM procedures and training based on lessons learned from the pilot program(s) and outcome data.
- Evaluation of Incident Reporting, Response and Management processes and improvement as needed (**Refer to page 7-19**).
- Ongoing communications to leadership and all stakeholders (including patients & families) as defined in SPHM Communications plan.
- Implementation of the SPHM policy facility wide i.e., determining when and how the policy should be implemented with guidance from leadership. For example, roll-out may be in stages as SPHM is implemented in specific areas.
- Ensuring (with management assistance) that the SPHM policy, expectations, and roles related to the SPHM program are clearly communicated (and posted) to all stakeholders including temporary employees and patients and their families . Facility managers and workers must understand the policy's purpose and its daily impact on care management. Strategies to address non-compliance must also be clearly outlined and communicated.
- Implementation of *education and training* activities as detailed in your SPHM Education and Training plan.
- Reviewing SPHM committee membership once SPHM technology is chosen. Consider:
  - Inviting the technology vendors to be regular or 'ad-hoc' members of the committee and adding
  - Representation from the organization's patient and family advisory group to advise with development of patient education materials, early mobility protocols using SPHM technology, and future program implementation and evaluation.
- Reviewing and modifying the SPHM committee's function, structure, and membership as necessary after establishing the SPHM program.
- Evaluation and reporting program outcomes and implementation progress.
- Providing periodic updates (as agreed to previously) and formal measurement of program outcomes and processes to the leadership group.
- Providing periodic updates to all other stakeholders as identified in your SPHM Program Communications Plan. Communicate program goals, implementation activities and progress using visual aids such as dashboards, which are posted for easy access by stakeholders. Frequent communication fosters leadership and stakeholder engagement, builds trust, provides insights, and boosts participation. Communicate with and address concerns of any key stakeholders who are not participating.

## Safe Patient Handling and Mobility – Section 7

- Documenting progress of program implementation and process improvements or changes you have made to the implementation plan. Note, which implementation strategies were effective, and not effective, and overall lessons learned, to aid with future program management.

### SPHM Policy and Procedures for Specific Patient Populations and Patient Handling Scenarios

The SPHM program policy has been drafted and approved. However, other policies and procedures will be needed to address the SPHM needs for specific patient populations and patient handling scenarios.

These should have been identified during SPHM program planning activities, but some may be identified as the program is being implemented. Develop these policies and procedures as SPHM technology is being chosen so they can be incorporated into the final SPHM training curriculum as needed. Technology vendors and medical providers together with other caregivers who have expertise with a specific patient population should help with this activity. Legal and risk management departments may also need to be consulted e.g., when developing policy to address patient/family refusal to use SPHM technology.

If policies already exist, review them for effectiveness and update them as needed.

Examples of patient-specific SPHM policies needed include:

- Patients of size (bariatric patients)
- Patients with behavioral health challenges and those with cognitive disorders/impairment such as dementia, delirium etc.
- Trauma patients, especially those with spinal injuries
- Labor and delivery/post-partum
- Patients requiring periodic turning to/from supine to prone e.g., those on ECMO
- Perioperative patients <sup>1</sup>
- Orthopedic patients <sup>1</sup>
- Pediatric patients

Other Policies that should be developed and implemented include:

- An SPHM patient mobility assessment protocol including required communication processes e.g., documentation in the EHR; standardized shift-change reporting; in-room communications (**Refer to Section 5**).
- Patient and/or family refusal to use SPHM technology.
- Patients who want to use their own SPHM technology such as a floor lift and/or sling. This is applicable in care settings where patients do not own the SPHM technology.

## Safe Patient Handling and Mobility – Section 7

### SPHM Policy and Procedures for Specific Patient Populations and Patient Handling Scenarios

- A caregiver's right to refuse to lift or handle a patient due to concerns about patient and/or the caregivers' safety and the right not to be subject to disciplinary action by the hospital or any of its managers or employees.
- Fall recovery
- Vehicle extraction e.g., outside an Emergency Department
- The use of SPHM technology in a medical emergency/life threatening situation e.g., a non-mobile patient suffers a cardiac arrest while on a commode or in bedside chair in a room with an overhead lift; or a patient in bed having a seizure.
- Evacuation of patients in case of emergency, e.g., fire
- Early safe progressive mobilization protocols (**Refer to Section 5**).
- In outpatient settings – advanced preparation protocols for patients who need SPHM technology to transfer to/from wheelchair (or stretcher) to exam/procedure table. For example, knowing a patient's ability to mobilize and their need for assistive devices/SPHM technology. Having SPHM technology and staff resources available before the patient arrives for their clinic visit. Addressing how or if, non-mobile patients will be assisted to/from their vehicles.
- Additionally, a process to education patients and their families should be developed if not already completed when developing the SPHM Communications plan (**Refer to Section 4**).
- Related resources and reference materials are provided in **Section 10**.

<sup>1</sup>. The AORN and NAON SPHM handling algorithms can be used as a guide when developing policies and procedures for the perioperative and orthopedic patient populations, respectively. **Refer to Resources for Developing Solutions in Section 4 page 4-2.**

**Table 7.2 SPHM Policy and Procedures for Specific Patient Populations and Patient Handling Tasks.**

## Safe Patient Handling and Mobility – Section 7

### Selecting, Purchasing, and Installing SPHM Technology

The SPHM technology needed to address patient handling related risks was identified through hazard identification and risk assessment activities (**Refer to Section 3**).

However, review and trial of the technology is needed before final section is made to ensure technology meets the needs of patients and caregivers and integrates with the design of the facility and workflow.

Develop a clear set of criteria that will be used to evaluate and select SPHM technology to facilitate caregiver acceptance and use of SPHM technology (**page 7-13**).

If ceiling/overhead lifts are to be selected for specific units/departments, it is advisable to ensure that infrastructure will support installation of lift(s) *before* asking stakeholders to evaluate them. This may also be completed during the problem-solving phase of program planning. Work with your design and construction and/or building engineering depts to determine how to complete this evaluation and if you will need to involve ceiling lift vendors for assistance.

At this stage, it is important to involve your organization's procurement department (if not consulted during SPHM solution development) to identify and select potential vendors for the specific types of technology selected.

The Procurement department can help you navigate the process for purchasing medical devices including requirements to meet group purchasing organization (GPOs) plans. It is important to understand any potential limitations related to SPHM technology vendor selection due to GPO agreements.

Procurement can provide information about vendors from whom the organization may have previously purchased SPHM technology, the organization's request for proposals (RFP) process, and/or if any agreements exist regarding preferred vendors for this equipment.

Ensure that Procurement staff are aware of the potential consequences to patient care if they purchase SPHM technology without consulting with the SPHM coordinator and committee. For instance, buying lift slings that are not compatible with overhead or floor-based lifts, or air assist mats that are incompatible with existing air assist mat motors or blowers. (**Refer to Section 5 for more information**).

They must ensure SPHM technology meets selection criteria developed by the SPHM committee and understand that purchase decisions are based on more than just cost or group purchasing agreements.

Providing SPHM education to Procurement staff before selecting SPHM technology and periodically after program implementation can assist in addressing these concerns.



#### Quick Tip

**Remember having SPHM technology available and providing SPHM training does not always ensure technology and ergonomics work practices will be adopted.**

**Evidence supports that adoption is more likely when:**

- **There is enough technology that is readily accessible**  
**Technology is user friendly**
- **Technology meets the physical, cognitive, and clinical needs of the patient population; the tasks to be performed; workspaces; and the knowledge and skills of the caregivers**
- **Well-defined and communicated processes exist for storage, cleaning, maintaining, and inspecting technology and replacing equipment and components based on their lifespan**

## Safe Patient Handling and Mobility – Section 7

---

### SPHM equipment evaluation process

Involving users when evaluating and selecting SPHM technology is essential. This includes the caregivers and unit/department managers who will use SPHM technology and other stakeholders who are impacted by the SPHM program and play a critical support role in ensuring the successful implementation and use of SPHM technology. These stakeholders include SPHM technology vendors, architects, space planners, interior designers, facilities engineering, maintenance, and biomedical staff, logistics, infection prevention and control, wound and ostomy, and environmental services.

A collaborative approach is emphasized throughout program planning and implementation activities.

It allows for the implementation of SPHM technology and processes from a systems perspective. This perspective considers the health care delivery system as a whole and the interrelationship of all its elements versus addressing isolated patient handling issues (Matz et al., 2019).

It is also important that your SPHM program and technology choices will accommodate the future needs of the organization, such as a changing patient population, staffing levels and mix and service delivery, and building design changes, to ensure maximum return on investment.

### Considerations when choosing SPHM technology

Evaluation criteria may vary depending on the type of technology to be reviewed and its application.

The following information provides a summary of factors to consider when choosing SPHM technology.

However, **Section 5** provides more detailed information including:

- The types of SPHM technology, the patient handling tasks they are used for, the ability to lower biomechanical risk for users, and associated advantages and disadvantages with use
- Space requirements for use and storage of SPHM technology
- Guidance on selecting rooms for overhead/ceiling installation and installation guidelines
- Cleaning and infection control
- Wound and ostomy considerations
- Regulatory requirements for medical devices

**Tool 5a 'SPHM Technology Purchasing Checklist'** provides further information that can be used to guide the selection, purchase, installation, and maintenance of SPHM technology and working with vendors.

Guidance on determining the appropriate quantity of SPHM technology required is detailed in **Section 5**.

**Table 7.1** provides a summary of essential standard operating procedures required for chosen SPHM technology

### Overall considerations when evaluating SPHM technology

- Effectiveness of the device/system – does it fulfill the work-related needs and functions of the caregiver using it (or needs of the user) and clinical goals?

## Safe Patient Handling and Mobility – Section 7

---

- Integration with other medical devices, clinical systems, and physical layouts in various departments if the equipment is used in multiple care and diagnostic areas. Consider the impact of the equipment within the work system 'upstream' and 'downstream' from the point of use.
- Efficiency of use
- Comfort related to the operator's use of the devices
- Acceptance by intended users of the device
- Potential safety or ergonomics related hazards or risk of error during use. Identify the potential for misuse of the device by the user and ensure new hazards are not created
- Needs related to support processes/systems., e.g., training, maintenance, infection control, etc.

### ***Key factors that influence SPHM technology selection in care settings***

- Technology meets regulations and standards for design and use of medical devices e.g., ISO 10535:2021/FDA consensus standard; state and local regulations such as electrical codes for electrical/battery operated devices.
- If the manufacturer's instructions for use, care, and maintenance can be followed to avoid creating safety risks and invalidating warranties e.g., laundry/cleaning requirements for slings and for technology.
- Equipment reliability. This may vary between manufacturers or device models. Past performance information may be available from other users and recall information that can be accessed from the FDA. (**Refer to 'Quick Tip' below**).
- Fiscal feasibility that considers the cost of SPHM technology and supplies such as patient lift slings, installation, and maintenance. **Refer to Tool 7b for information about factors to include in the SPHM technology equipment budget.**
- The patient handling tasks to be addressed e.g., repositioning in bed; lateral transfer from bed to stretcher, vertical transfer to/from bed to chair, bathing, wound care, fall recovery, early ambulation, and rehabilitation tasks etc.
- The proportion of patients who are considered Bariatric, for example those over 300 lbs. and those over 600 lbs. This can help determine how many higher capacity lifts and slings may be needed. **Refer to Section 5 for more information about SPHM technology needs for patients of size.**
- The physical structure and design of the patient care area where a lift(s) is needed including:
  - Sufficient space/clearance to use technology as intended in rooms and work areas where patient handling tasks will be performed e.g., rooms, doorways, bathrooms, hallways etc.
  - Evaluate how overhead lifts and floor-based technology function with existing equipment e.g., performance under beds, around chairs, and lift clearance when loaded, which can be affected by bed height and mattress dimensions. For overhead lifts consider vertical clearance related to ceiling height for vertical clearance, overhead track and lift hanger bar dimensions and lift accessories like scales.

## Safe Patient Handling and Mobility – Section 7

- Obstacles that could hinder safe use of floor-based technology floor coverings, thresholds, ramps, etc.
- Sufficient structural support and functional room coverage for overhead lift tracks e.g., impact of light fixtures, cabinetry, HVAC systems, fire sprinklers etc.
- Convenient storage location i.e., close to point of use, with sufficient space for users to access equipment with minimal effort and electrical outlets for charging powered floor-based technology.
- A conveniently located central storage area(s) with 24/7 access for technology that may be used occasionally and shared between units/departments e.g., an air-assist device used to raise a patient from the floor following a fall and specialized equipment for patients of size etc.
- Environmental considerations such as areas with high humidity, temperature extremes such as a bathroom or pool area.
- Accommodation for transfers between vehicles and facility transport devices e.g., outside Emergency Departments; clinics etc.
- Ease of charging of powered overhead and floor-based systems lifts.
- Easy to clean and comply with infection control requirements.
- Maintenance requirements and costs; anticipated life cycle and product disposal.
- Supply logistics.
- Aesthetics of equipment installation e.g., ceiling lifts and support track.

- **User considerations**

- Technology incorporates basic ergonomics design principles. The device should accommodate a majority of the *user* population's physical, physical, perceptual, and cognitive capabilities to ensure safe, efficient use, patient comfort, and minimize operator errors (**Refer to Tool 5a**). For example, operation or use of technology does not require forceful exertion and/or extreme awkward postures.



### Quick Tip

**Before purchasing SPHM technology, it is imperative to review each product being considered for product recalls and/or safety alerts that have not been resolved. This can be discovered by contacting the product's primary manufacturer and searching for any safety alerts, recalls, and advisories in the:**

- **FDA Recalls, Market Withdrawals, & Safety Alerts.**  
[www.fda.gov/Safety/Recalls/default.htm](http://www.fda.gov/Safety/Recalls/default.htm)
- **FDA – Manufacturer and User Facility Device Experience Database (MAUDE)**  
<https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfmaude/search.cfm>
- **The Medical Product Safety Network (MedSun)**  
<https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/Medsun/searchreport.cfm>
- **Consumer Product Safety Commission**  
[www.recalls.gov](http://www.recalls.gov)

## Safe Patient Handling and Mobility – Section 7

---

- The ability of technology to reduce the magnitude of risk factors for WMSDS. For example, using a ceiling lift with flat repositioning sling reduces the force exerted by caregivers to boost a patient in bed more than a friction-reducing slippery sheet.
- **Patient considerations**

Patient characteristics that should be considered include:

  - Medical condition or diagnoses (physical & cognitive) e.g., surgical (type), orthopedic, neurological, trauma, cognitive deficits e.g., dementia, behavioral health conditions, brain injury etc.
  - Mobility status i.e., the functional mobility level of the patient which includes their ability to sit unsupported, bear weight, and standing balance.
  - Level of postural support required in a sling (e.g., support needs for the head and trunk or asymmetrical body position and the likelihood of unpredictable movement, spasm, or pain during the process; amputees - arm/leg).
  - Demographics groups such as adult, pediatric, bariatrics and associated body habitus (weight, torso width and girth, height and body shape or weight distribution) etc.
  - Sensory deficits or disturbance.
  - Dignity and comfort when using technology. It should not cause or intensify pain for the patient, or contribute to skin damage etc.
  - Attachments to the patient (e.g., intravenous line, catheters, feeding tube, chest tube, tracheotomy; monitors, orthopedic supports such as Halo brace, Thoraco-Lumbo- Sacral-Orthosis (TLSO) brace, traction of extremities).
- **Other considerations**
  - Functionality/versatility. Can one type of SPHM technology allow caregivers to perform multiple patient handling tasks? Multifunction technology can save money, space, and time.
  - Successful use of SPHM technology in units or departments with similar profiles (*in an existing SPHM program*).
  - Future changes to patient characteristics and/or census.
  - Future changes to unit/dept. design.
  - Staffing ratios, mix, and variance.

### Standardizing SPHM Technology

SPHM technology and especially patient lift slings vary in design and operation or application between manufacturers.

Where feasible it is recommended that SPHM technology is standardized within a facility or health care system, i.e., having similar lifts that provide the same or similar functions. For example, installing one model of ceiling lift with one style/configuration of hanger bar for daily use. Slings should also be standardized by function, sizing, and manufacturer.

Key benefits of standardizing SPHM technology include:

- Reduced risk of user error and potential patient harm from user uncertainty in sling selection and lift or device use.
- Reduced training time and increased staff confidence. Standardizing equipment simplifies training processes as staff only need to learn and operate a limited range of equipment types. This consistency leads to greater staff confidence in using the equipment correctly, reducing errors and improving overall efficiency.
- Increased staff compliance. By using consistent equipment and procedures, staff may be more likely to perform patient handling tasks using SPHM technology thus reducing their risk of injury and improving patient outcomes.
- Streamlined maintenance and lower costs. Using a consistent set of SPHM technology simplifies maintenance procedures and spare parts management, potentially leading to lower maintenance costs and minimizing technology downtime.
- Improved materials management. Standardizing SPHM technology facilitates better materials management by reducing the complexity and inventory of different types of equipment and supplies.
- Enhanced operational efficiency. Standardization improves work processes, allowing for smoother and more efficient patient handling and mobility within the facility.

Safety-related considerations when using SPHM technology components from different manufacturers e.g., lifts and slings, are discussed in **Section 5**.

### Planning for evaluation of SPHM technology

Once you have a list of the types of SPHM technology you have determined will address patient handling needs and selection criteria are developed, then collaborate with your procurement team to determine the technology vendors who will be invited to bring their product to the facility for trial and user evaluation.

Factors to consider when choosing vendors to participate in trials are listed **Tool 5a**.

Once vendors are selected you may choose to have them demonstrate their technology at your facility to a small group including the SPHM program coordinator, SPHM committee members including ad-hoc

## Safe Patient Handling and Mobility – Section 7

members such as facilities maintenance, biomed, infection control etc., and managers and SPHM unit champions (if any) of pilot unit/departments.

This allows you to determine what SPHM technology caregivers and other stakeholders will assess and discard devices that do not meet patient handling needs based on your evaluation criteria.

User evaluation of SPHM technology requires careful planning to ensure that key stakeholders are involved across all shifts, trials are designed to ensure technology is evaluated meets selection criteria, and sufficient data is captured for purchasing decisions. Trials should be long enough to accomplish these goals.

There are a variety of methods to conduct user evaluations such as equipment fairs or *play-days* or trials of specific technology in the area where equipment will be used. Equipment fairs allow stakeholders to use the technology, be a 'patient,' and talk to the vendors.

Some facilities may allow trial of a specific type of SPHM technology (with vendor oversight) to be tested with patients by caregivers who are experienced in the use of SPHM technology and are appropriately trained. Consult your program champion and risk management department on the feasibility of this approach.

If you are evaluating technology that is already used in the facility, then the trial period may be shorter. Trials are conducted to confirm that the existing technology is appropriate for the patient handling task(s) and fits with other equipment and room layout.

When evaluating ceiling lift systems some vendors will offer to install a lift in a patient room for trial. Evaluate the feasibility and cost of this option.

Alternatively, ceiling lift vendors may be able to demonstrate lifts use using freestanding gantry systems during an equipment fair (as they do at industry trade shows).

It is important to obtain references from the vendor of other facilities who have purchased this equipment. This is key if a trial period for specific SPHM technology is not possible. Contact should be made with these facilities to obtain their feedback, discuss any concerns, and observe the equipment at their site.

Once SPHM technology is selected and all costs determined then the SPHM technology purchase and training budget can be presented to leadership for final approval (**Refer to Tool 7b**).



### Quick Tip

**It is important to notify managers and caregivers participating in SPHM technology trials if their selected technology cannot be purchased and provide the reasons for this decision.**

**Occasionally despite the best implementation planning and intentions, this can occur for unplanned reasons.**

**Develop a contingency plan for this scenario, including procedures for selecting alternate SPHM technology. Engage caregivers to reduce the risk of resistance due to feelings of being unheard or unvalued.**

### Incident Reporting, Response and Management

#### Incident and Near Miss Reporting and Investigation Systems

Comprehensive incident reporting and investigation systems are a vital component of successful SPHM programs.

When completing hazard identification activities such as Gap Analysis and employee surveys, you should have identified any culture and/or process related factors that hinder early reporting of patient handling related incidents and effective incident investigation.

The SPHM project coordinator and committee should work in conjunction with the employee health and safety departments as well as human resources to determine how the SPHM program activities can assist in promoting early reporting of MSD symptoms, injuries, incidents, and near misses related to patient handling activities.

Underreporting of workplace injuries and illness by employees is prevalent in healthcare. *Underreporting of work-related musculoskeletal disorders (WMSDs) and patient handling injuries in health care is discussed in Section 1.*

Due to the cumulative nature of most WMDS caused by manual patient handling activities, symptoms of MSDs increase gradually over time. Together with the many physical, psychosocial and organizational risk factors that contribute to WMSDs, it can be challenging to determine a specific event or patient handling task responsible for an MSDs-related injury.

Therefore, it is vital that there is an effective system to encourage early reporting of MSD symptoms such as discomfort and fatigue together with a robust process for investigating the root cause of patient handling related incidents and near misses.

Early reporting of MSD Symptoms can accelerate the job assessment and improvement process, helping to prevent or reduce the progression of symptoms, the development of serious injuries and likelihood of disability, and subsequent lost-time claims and associated costs (OSHA ND).

This information helps direct SPHM program activities as well as to guide healthcare providers in making return-to-work and light-duty work decisions. Refer to *Injury Management of WMSDs* on **page 7-23**.

Additionally, a robust process for investigating the root cause of WMSDs using a systems approach is critical to inform prevention activities.



#### Did You Know?

**A study by The National Council on Compensation Insurance (NCCI) demonstrates that workers' compensation claims reported after seven days are significantly more expensive compared to those reported within the first 24 hours. Delayed reporting frequently leads to:**

- **Greater medical severity**
- **More frequent attorney involvement**
- **Longer periods of lost work time**
- **Fewer opportunities for modified-duty assignments**

Source: NCCI, 2015

## Safe Patient Handling and Mobility – Section 7

### Facilitating the reporting of incidents and near misses related to patient handling activities<sup>1</sup>

The following are processes that can facilitate early reporting of WMSDs:

- All employees and temporary/contract staff are aware of the incident reporting system and the expectation and importance of prompt reporting of incidents and near misses including early reporting of MSDs.
- All employees are supported by leadership, management and their peers in reporting safety issues/concerns related to patient handling.
- Incident and near miss reporting systems must be user friendly to facilitate reporting i.e.,
  - Easy and quick to access e.g., through visible QR codes posted in work areas, 1-click access on the organization's intranet platform etc.
  - Quick to complete but designed to capture enough data to inform initial investigation activities e.g.,
    - The location, time, shift, and date of the incident
    - Part of the body affected symptoms and their onset
    - The task being performed such as boosting a patient in bed
    - The number of caregivers performing the task
    - Patient factors (e.g., level of dependency/ability to assist; patient of size, combative behavior etc.)
    - Availability of appropriate SPHM technology and if it was operable
    - If SPHM technology was used according to policy and procedures
    - Whether an SPHM patient mobility assessment was performed



#### Did You Know?

OSHA's final rule to improve tracking of workplace injuries and illnesses states:

1. An employer's procedure for reporting work-related injuries and illnesses must be reasonable and must not deter or discourage employees from reporting
2. Employers must inform employees of their right to report work-related injuries and illnesses free from retaliation
3. An employer may not retaliate against employees for reporting work-related injuries or illnesses

OSHA, 2023.

<https://www.osha.gov/recordkeeping/final-rule>

OSHA Injury and Illness Recordkeeping and Reporting Requirements can be found at

<https://www.osha.gov/recordkeeping>

Coding of patient handling injuries to identify trends related to causes is reviewed in **Section 2** and **Tool 2d**.

- Prompt acknowledgement to the employee filing the report, that the incident or near miss report has been received and investigation and report back to the reporter of the incident will occur within a specified timeframe.

## Safe Patient Handling and Mobility – Section 7

---

- Informing the incident reporter of the investigation results. This shows that their reports help improve the system and prevent future issues, demonstrating the organization's commitment to employee wellbeing.

1. A **near-miss event** is a patient-handling incident that could have resulted in harm to the caregiver and/or patient but did not, either by chance or through timely intervention. Reports of near misses can be used to identify actions and process or systems failures that may prevent similar occurrences and uncover opportunities for improvement.

### Incident and Near Miss Investigation

Having a plan to investigate and assist staff in learning when an injury or near miss occurs is an important element of the incident response and management process.

Incidents and near miss reports should be investigated as soon as possible to determine the system cause of incidents and identify solutions.

Investigation of employee injuries should be viewed with the same importance and thoroughness as investigation of adverse patient safety related events. Processes used to investigate patient safety incidents can also be applied to the investigation of occupational injuries and illnesses.

Root cause analysis (RCA) is a method used to identify the factors that caused an incident. The aim of RCA is to identify work system failures that led to the incident, and implement changes to prevent recurrence, rather than blaming individuals involved.

RCA is usually applied to solve recurring problems, significant incidents, or when a deeper understanding of the cause of an incident is needed. RCA focuses on interventions that have a long-term impact rather than relying on quick fixes (WHO, 2019).

RCA should be conducted by employees or personnel who are competent in RCA techniques and incident investigation processes.

**Tool 7d** provides a sample of the RCA process used to investigate a patient handling related incident.

### After Action Reviews

Unit managers and other employees such as SPHM champions together with the SPHM coordinator should be engaged in post-event incidents and near-miss analysis. Using 'After Action Reviews' (AAR) is a way to achieve this goal.

An AAR is a structured qualitative review of actions taken to respond to a specific event such as a patient handling incident as a means of identifying best practices, lessons, and gaps in response. It relies primarily on the personal experience and perceptions of individuals involved in the response to assess what worked and what did not, why, and how to improve (WHO 2019).

In contrast to RCA, AARs focus on a broader review that analyzes both successes and failures of an event or project, looking for lessons to apply in the future thereby facilitating the process of knowledge transfer. AARs should be conducted immediately after an event or incident, allowing participants to reflect on the experience while it is still fresh in their minds.

As with RCA, AAR is not focused on assigning blame but is a forward-looking process that focuses on learning and improvement.

## Safe Patient Handling and Mobility – Section 7

---

AARs are used in various fields, including military operations, project management, and public health. They have also been adopted by the Veterans Health Administration (VHA) as back injury prevention programs have been deployed throughout their system (AOHP, 2020).

Key questions include:

- What was supposed to happen?
- What was expected to happen?
- What actually occurred?
- What went well and why?
- What did not go well and why?
- What can be improved to avoid the same outcome in the future and how?

Leading a productive AAR usually requires a facilitator to keep the discussion on track towards agreed objectives, to ensure that all voices are heard, and to ensure that key themes are analyzed sufficiently to identify underlying factors.

The results of an AAR can also help to inform a formal investigation/RCA but should not be considered a replacement for these processes.

There should be a process in place (which includes the unit manager) to develop and implement recommendations/actions from incident analysis and AARs.

Lessons learned and corrective action should be communicated to the appropriate stakeholders e.g., caregivers on a unit following an incident or near miss; the SPHM committee, leadership etc.

### **Safety Huddles**

Safety huddles are brief (10-15 minutes), often informal meetings designed to proactively identify and mitigate potential risks and improve safety on a given unit or department.

In the context of patient handling-related incidents and near miss investigations, Safety Huddles are most effective when held immediately or soon after every near miss and include the staff and patient involved if feasible. Each person's input is helpful to get a clear picture of what happened. The information received will aid in making appropriate recommendations to prevent similar incidents in the future (VAH, 2016). The key questions listed for AARs above can also guide discussion.

Safety huddles also offer an effective means for *all* caregivers in a unit or department to learn from patient handling-related incidents and near misses and help prevent recurrence.

Safety Huddles and AARs have been shown to be a highly successful method of knowledge transfer, they:

- Promote inter-professional collaboration.
- Increase awareness of safety issues.
- Create an environment in which information is shared without fear of punishment.
- Contribute to a culture of safety within an organization.

(Ghoul et al., 2025)

Refer to **Section 9** for more information about the role of Safety Huddles in SPHM program sustainability. Refer to **Section 10** For more information on Incident investigation, RCA, AARs, and Safety Huddles.

## Safe Patient Handling and Mobility – Section 7

---

### Injury Management of WMSDs and Return-to-Work Programs

Planning for caregiver recovery and return to work following a patient handling related injury is a key component of a safe patient handling program.

The primary goal of the injury management program is to prevent physical impairment and disability through early identification, prompt, and appropriate treatment of MSDs. Other goals and benefits include maintaining employee morale, productivity, and efficiency, and controlling injury costs.

Early return-to-work (RTW) programs are one of the most effective tools used in case management to rehabilitate workers, keep them connected to the workplace, retain their skills and expertise and reduce high costs associated with absenteeism. RTW programs reduce the need for employees to remain on leave during what is a relatively short window of time in which an injury or illness can transition into a longer-term issue (JAN, ND). Research suggests that the likelihood of an injured worker returning to work drops to 50 percent by the 12th week of leave (Zurich, 2015).

The ANA SPHM Standards 2021, Standard 7 '*Include Safe Patient Handling and Mobility in Reasonable Accommodation and Post-Injury Return to Work*' states: "The employer and healthcare workers partner to establish a comprehensive safe patient handling and mobility (SPHM) program that can help the employer provide reasonable accommodations to healthcare workers who are injured at work" (ANA, 2021).

This goal is achieved through facilitating the safe utilization of injured employees, early return to work following injury, and monitoring caregiver injuries associated with patient handling activities.

Successful RTW programs require collaboration between the employer, injured employee, treating medical provider(s) and the employer's workers' compensation carrier or administrator.

Work with the department responsible for managing employees with occupational injuries and illnesses such as employee health or human resources, to determine how the SPHM coordinator, committee and program processes may be able to help facilitate effective accommodation of caregivers who have sustained patient handling-related injuries. Companies that provide the organization's worker's compensation and/or disability insurance may also be able to provide with expertise in RTW programs.

It is important to be aware that workers' compensation laws related to injury management and return-to-work programs vary from state to state. Additionally, if you are in a union environment, make sure you have the union's understanding and approval for your RTW program.

Injured employees must notify their employer of physical limitations, provide updated medical documentation, comply with the treatment plan, and return to work in a role that accommodates medical restrictions (ANA, 2021).

A structured process is necessary for ensuring that injured employees can return to work while adhering to medical restrictions. This process includes offering modified, transitional, or alternate work to the employee.

With *modified duty* adjustments are made (as reasonable feasible) to the employee's regular job to accommodate their medical restrictions. The use of SPHM technology may be a way to accommodate injured caregivers on modified duty.

For employees with restrictions that prevent them returning to their regular job, *transitional duty or work* allows an injured caregiver to stay safely in his or her present workplace in a modified or alternate capacity until he or she is recovered from the injury and can return to their regular job.

## Safe Patient Handling and Mobility – Section 7

The goal with this type of modification is that the injured worker is constantly transitioned back to their normal work duties.

*Alternate work* is considered to be a temporary work assignment when the injured caregiver is unable to return to his or her regular job ( Gallagher, 2013).

Well defined job descriptions that detail the essential physical job requirements are a key component to effective accommodation of injured workers. They provide a basis for medical providers and the employer to determine if an injured employee can safely perform their regular job or modified/transitional/alternative work duty within the physical restrictions they may have while recovering from an injury.

As discussed in **Section 3**, physical job requirements can be determined during formal ergonomics analysis of job tasks.

Ergonomics analysis can also be used to evaluate injured caregivers job tasks and potential modifications to ensure there is no potential risk(s) that could prevent recovery and ensure safe accommodation. **Section 3** provides tips for finding ergonomics expertise if a facility does not have an ergonomist or appropriately trained safety or health care professional to complete this activity,

Consider implementing a process to provide SPHM refresher training to injured caregivers who have not performed their regular duties for a period of time due to a work-related patient handling injury. Refreshing their knowledge and skills can help rebuild confidence and competency in using safe patient handling and mobility (SPHM) techniques and equipment and potentially reduce their risk of re-injury.

Establishing, capturing, and monitoring RTW goals and metrics should be part of the SPHM program measurement system (**Refer to Section 8**).

More information about injury management and effective return-to-work programs can be found in the references and resources provided in **Section 10**.

### Managing Change and Making it Stick

The change process is a journey (**Figure 7.2**) that must be well managed if the desired change is to be successful and sustainable.

Implementing an SPHM program requires that caregivers and other stakeholders change the way they perform some elements of their work.

Change is required within leadership, management, units, and departments, between professional disciplines such as nursing and rehabilitation, and by individual caregivers and other employees. It also may require change by non-mobile patients (and their families) who are used to being manually lifted and moved. For example, those who have recurrent hospitalization or visits to a clinic and those who reside in a facility such as a nursing home.



This Photo by Unknown Author is licensed under [CC BY-SA](#)

## Safe Patient Handling and Mobility – Section 7

Change is hard and resistance to change is common, so a key component of planning and implementing an SPHM program is anticipating and planning strategies to support stakeholders as they move through the required change process.

Effective change management essential to move from a culture of manual patient handling to one where SPHM becomes a standard of care and is embedded in the work culture at all levels of the organization or 'Just the way we do things around here.'

Change management strategy is a planned approach that helps leaders to successfully guide an organization through change while minimizing disruption and the risk of unexpected consequences.

Key to success is the practice and process of supporting people through change, with the goal of ensuring that the change is successful in the long-term. Change management helps people to change their behaviors, attitudes, and/or work processes to achieve a desired business objective or outcome.

Change management as a discipline includes the processes, tools, and techniques used to manage the human elements of change which are applied at the individual, project, and organizational level before, during, and after the change occurs (PAHO 2022; Sharp Emerson, 2022).

There are several change management models that can be considered when planning, implementing, and sustaining a SPHM program. Each model varies in approach and application. Find out if there is a model that your organization uses when implementing other programs or initiatives.

Change management models often used in health care include:

- Kotter's Change Management Model. [www.Kotterinc.com](http://www.Kotterinc.com)
- McKinsey 7-S Change Management Model. [https://en.wikipedia.org/wiki/McKinsey\\_7S\\_Framework](https://en.wikipedia.org/wiki/McKinsey_7S_Framework)
- ADKAR Change Management Model. [www.Prosci.com](http://www.Prosci.com)
- Lewin's Change Management Model. [Navigating Change with Precision: Unpacking Lewin's Change Management Model.](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10000000/) Majka, M. 2024
- Rogers' Diffusion of Innovation Theory [https://en.wikipedia.org/wiki/Diffusion\\_of\\_innovations](https://en.wikipedia.org/wiki/Diffusion_of_innovations)
- The Iowa Model of Evidence-Based Practice <https://uihc.org/iowa-model-revised-evidence-based-practice-promote-excellence-health-carec>

The following is a summary of effective change management strategies.



### Did You Know?

**Change affects individuals differently and it is important to understand their perceptions both negative and positive about the SPHM program and associated activities. Positive visible results from SPHM pilot initiatives can help reduce resistance and drive change especially with caregivers.**

**Anecdotally, this author has observed acceptance of SPHM in part because staff reported feeling less fatigued at the end of their 12-hour shift and the had more energy to enjoy non-work activities. Additionally, male nurses and aides reported that they like the SPHM technology because they received fewer requests from female colleagues for assistance with lifting and transferring patients.**

## Safe Patient Handling and Mobility – Section 7

The assessment of organizational culture and readiness for change, conducted during SPHM program planning activities in **Sections 2-5**, incorporated key elements of this process.

### Prepare the organization for change

- Apply a structured change management method and integrate it with a project management approach.
- Ensure the required change (i.e., the desired SPHM program) is compatible with the organizational culture and level of readiness within the organization.
- Developing long term vision and goals. Identifying baseline measurements, key performance indicators, and process measurements.
- Define realistic achievable short and midterm objectives that will demonstrate visible results and progress early on to build momentum, keep stakeholders engaged and maintain their enthusiasm for change.
- Identify clear timelines.
- Develop a well-defined implementation plan.



#### Did You Know?

**Change management and project management are complementary disciplines, both with the aim of ensuring organizational success through improvements.**

**Change management focuses on helping employees to manage disruptions during changes, while project management focuses on ensuring projects finish on time and within budget (PAHO, 2022).**

### Active & visible governance and leadership.

- Leaders and managers must "talk the talk and walk the walk". Leadership provides direction, resources, and inspiration to drive the change. Governance provides the framework and oversight to ensure the change stays on track and aligned with strategic goals.

### Stakeholder engagement and support

- Involve key stakeholders in planning and implementation to foster buy-in and ownership.
- Empower employees to act on the program vision and provide them with the necessary resources and support.
- Actively solicit feedback from stakeholders throughout the process. Understand how change will impact them and address concerns throughout program planning, implementation, and maintenance.
- Create a change champion network. Identify and empower individuals who can effectively advocate for the change within their work team e.g., the SPHM champion, SPHM program coordinator, and committee together with unit based SPHM coaches/champions

### Clear communication.

- Ensure frequent open and transparent communication that is customized to address the needs of the stakeholders. Proactively identify and address stakeholder concerns related to the required change.

# Safe Patient Handling and Mobility – Section 7

## Workflow analysis and redesign

- Understand how work is currently performed, identify and prioritize hazards and risks, and determine interventions and processes to address identified hazards and ensure employees possess the necessary knowledge and skills for optimal performance

## Phased and structured implementation

- Include frequent assessment and adaptation of strategies and goals as needed

## Training and education.

- Provide adequate training and offer ongoing support.

## Celebrate successes.

- Reinforce positive behaviors and maintain motivation by recognizing and celebrating milestones and achievements

## Monitoring and evaluating

- Monitor the progress of the change and gather feedback from stakeholders. Learn from experience. Use feedback to refine approach and change management process.

## Resistance Management

- Identify and understand the reasons for resistance and provide support.

Source: Barrow & Annamaraju, 2022; Creasey, 2022; Sharp Emerson, 2022; Miller, 2020; PAHO, 2022; Havard, 2022; RNAO, 2024.

**Section 1. Table 2.** Provides a summary of the barriers or factors within a health care organization that can prevent successful implementation and/ or sustainability of SPHM programs.

**Knowledge transfer** is also a critical element in successful management of change.

When organizations undergo transformation such as the adoption of SPHM technology and the



## Did You Know?

You will notice that the core elements of change management reflect the core elements of OSHA's approach to management of effective occupational ergonomics, safety and health programs and the ANA SPHM standards.

Note: This toolkit outlines the sequence of steps and related activities in accordance with the principles of a change management process.



## Want To Learn More?

Check out the 'The Leading Change Toolkit' (2024), by the Registered Nurses Association of Ontario.

The Leading Change Toolkit is a free, online, open-access evidence-informed implementation resource. It focuses on the uptake and sustainability of knowledge – or evidence – and uses two complementary frameworks to help you accelerate your success including the Social Movement Action and Knowledge-To-Action Frameworks.

The toolkit also includes a section on how to engage persons with lived experience in a change initiative and/or as a member of a change team.

<https://rnao.ca/leading-change-toolkit>

*Additional change management resources and tools are provided in Section 10.*

## Safe Patient Handling and Mobility – Section 7

implementation of new processes, it is essential that employees have the knowledge and skills needed to adapt and succeed in the 'new' environment.

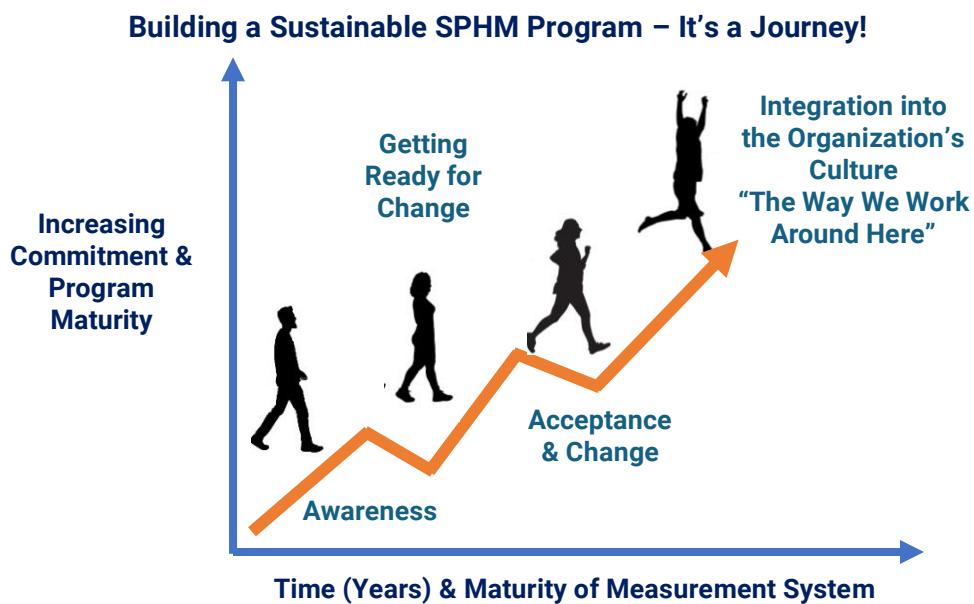
Facilitators of knowledge transfer within an SPHM program include the core elements of any new program or initiative, including written policy and procedures and well-designed training programs that facilitate the transfer of skills learned to daily practice.

Other program components described in Toolkit also play a key role including executing a well-developed communications plan, having a supportive and visible senior leader as program champion, a dedicated SPHM program coordinator and peer leaders or unit SPHM champions.

Evidence supports that unit SPHM champions play a critical role in knowledge transfer. They act as change agents by promoting SPHM practices and serve as resources for their co-workers (Matz et al., 2019).

**Tool 4g** provides more information about unit based SPHM champion programs.

Implementing safety huddles (if not already in place) before starting an SPHM program can also assist to facilitate knowledge transfer. Safety huddles (**refer to page 7-22**) help establish stakeholder participation in program planning and technology selection and prepare them for changes as the program is implemented (Matz et al., 2019).



**Figure 7.2** Integrating SPHM into a Health Care Organization's Culture.

### Section Summary



#### **SPHM Program Plan Implementation**

##### **STEP 12. Implement the SPHM Program**

Implementation has many components and requires careful planning.

Change management principles and a continuous performance improvement approach should guide the implementation process.

Activities that facilitate successful SPHM program implementation include:

- Engaging the support of key stakeholders who will assist the SPHM program coordinator and committee to implement the plan.
- Ensuring roles and responsibilities of all involved in implementation activities are well defined and communicated.
- Developing implementation strategies based on whether a new program is to be rolled out or an existing program enhanced. For example, pilot the program on one or more units/departments or implementing it facility wide etc.
- Giving all caregivers and other employees opportunities to participate in program implementation and ensuring adequate support and resources are provided for success.
- Developing and implementing a structured process to select, and purchase SPHM technology that involves user trials and evaluation.
- Developing and implementing standard operating procedures to support use and maintenance of SPHM technology; SPHM Policy and Procedures for Specific Patient Populations and Patient Handling Scenarios; and a patient mobility assess protocol.
- Implementing a unit champion coaching program
- Education and training all stakeholders who will use SPHM technology or provide support services
- Review and enhancement of Incident Reporting, Response and Management process
- Frequent communication to build stakeholder trust and support
- Ongoing engagement of leadership and managers through frequent meetings and communications
- Regularly monitoring and reporting progress toward implementation objectives
- Documenting progress of program implementation and process improvements and changes made to the implementation plan. Highlighting which implementation strategies were effective, and not effective, and overall lessons learned, to aid with future program management.

Additional references and resources related to this Section are listed in **Section 10**.

## Safe Patient Handling and Mobility – Section 7

---

### References and Resources Used in this Section

ACC6075 Moving and Handling People Guidelines 2012 Accident Compensation Corporation New Zealand.  
<https://www.acc.co.nz/assets/provider/acc6075-moving-and-handling-people-guidelines.pdf>

Agency for Healthcare Research and Quality. (2022, August). System-focused event investigation and analysis guide. Rockville, MD. <https://www.ahrq.gov/patient-safety/settings/hospital/candor/modules/guide4.html>

American Nurses Association. (2021). Safe patient handling and mobility: Interprofessional national standards across the Care Continuum. 2nd edition American Nurses Association; 2021. Silver Springs, MD

Association of Occupational Health Professionals in Healthcare (AOHP). (2020). Beyond Getting Started: A Resource Guide for Implementing a Safe Patient Handling Program in the Acute Care Setting (4th ed.). AOHP. <https://www.aohp.org/aohp/Portals/0/Documents/ToolsForYourWork/BGSpublication/20-06%20BGS%20Safe%20Patient%20Handling.pdf>

Association of perioperative registered nurses (AORN). (2021). eGuidelines+ Guidelines for Perioperative Practice: Safe Patient Handling and Movement.

Bąk, D., & Bąk, S. (2024). Change management in healthcare—a scoping literature review.  
<https://ruj.uj.edu.pl/items/6781cbe5-aa60-4ebd-9f09-020b4942a6a7>

Barrow, J. M., & Annamaraju, P. (2022). Change management in health care. In StatPearls [Internet]. StatPearls Publishing. <https://www.ncbi.nlm.nih.gov/books/NBK459380/>

Barrow, J. M., & Annamaraju, P. (2022, September 18). Change management in health care. In \*StatPearls\* (Treasure Island, FL: StatPearls Publishing). Available from; <https://www.ncbi.nlm.nih.gov/books/NBK459380/>

Buckwalter, K. C., Cullen, L., Hanrahan, K., Kleiber, C., McCarthy, A. M., Rakel, B., Steelman, V., Tripp-Reimer, T., & Tucker, S.; on behalf of the Iowa Model Collaborative. (2017). Iowa Model of Evidence-Based Practice: Revisions and validation. *Worldviews on Evidence-Based Nursing*, 14(3), 175–182.

Campbell, R. (2020). Change management in health care. \*The Health Care Manager\*, 39(1), 50–65.

Creasey, T. (2023, May 26; updated 2025, April 14). Best practices in change management.  
<https://www.prosci.com/blog/change-management-best-practices>

Cullen L, Hanrahan K, Edmonds SW, Reisinger HS, Wagner M. Iowa Implementation for Sustainability Framework. *Implement Sci*. 2022 Jan 4;17(1):1. doi: 10.1186/s13012-021-01157-5. PMID: 34983585; PMCID: PMC8725573.

Dusin, J., Melanson, A., & Mische-Lawson, L. (2023). Evidence-based practice models and frameworks in the healthcare setting: A scoping review. *BMJ Open*, 13(5), e071188. <https://pubmed.ncbi.nlm.nih.gov/37217268/>

Emerson, M. S. (2022, November 18). 7 reasons why change management strategies fail and how to avoid them. Professional and executive development, Harvard. Last updated February 24, 2025.  
<https://professional.dce.harvard.edu/blog/7-reasons-why-change-management-strategies-fail-and-how-to-avoid-them/>

Gabutti, I., Colizzi, C., & Sanna, T. (2023). Assessing organizational readiness to change through a framework applied to hospitals. *Public Organization Review*, 23, 1–22.

Gallagher, S. (2013). Implementation Guide to the Safe Patient Handling and Mobility Interprofessional National Standards. American Nurses Association.

Harrison, R., Fischer, S., Walpola, R. L., Chauhan, A., Babalola, T., Mears, S., & Le-Dao, H. (2021). Where do models for change management, improvement and implementation meet? A systematic review of the applications of change management models in healthcare. *Journal of Healthcare Leadership*, 13, 85–108.

Iowa Health Care. (n.d.). The Iowa Model Revised: Evidence-Based Practice to Promote Excellence in Health Care®. <https://uihc.org/iowa-model-revised-evidence-based-practice-promote-excellence-health-carec>

Job Accommodation Network. (n.d.). Stay at Work (SAW)/Return to Work (RTW). Retrieved from  
<https://askjan.org/topics/return.cfm>

Lachman, P., Linkson, L., Evans, T., Clausen, H., & Hothi, D. (2015). Developing person-centred analysis of harm in a paediatric hospital: a quality improvement report. *BMJ Quality & Safety*, 24(5), 337–344.  
<https://qualitysafety.bmjjournals.com/content/qhc/24/5/337.full.pdf>

## Safe Patient Handling and Mobility – Section 7

---

Lachman, P., Runnacles, J., & Dudley, J. (2015). Equipped: overcoming barriers to change to improve quality of care (theories of change). *Archives of Disease in Childhood-Education and Practice*, 100(1), 13-18.

Matz M, Celona J, Martin M, McCoskey K, Nelson GG. (2019). Patient Handling and Mobility Assessments (2nd ed.); [https://www.fgiguideelines.org/wp-content/uploads/2019/10/FGI-Patient-Handling-and-Mobility-Assessments\\_191008.pdf](https://www.fgiguideelines.org/wp-content/uploads/2019/10/FGI-Patient-Handling-and-Mobility-Assessments_191008.pdf)

McLellan, D., Moore, W., Nagler, E., & Sorensen, G. (2017). Implementing an integrated approach weaving worker health, safety, and well-being into the fabric of your organization. Harvard T.H. Chan School of Public Health Center for Work, Health, and Well-being.

[https://centerforworkhealth.sph.harvard.edu/sites/default/files/10.12.17\\_Guidelines\\_Screen\\_post.pdf](https://centerforworkhealth.sph.harvard.edu/sites/default/files/10.12.17_Guidelines_Screen_post.pdf)

Miller, H. (2020, March 19). 5 critical steps in the change management process. Harvard.  
<https://online.hbs.edu/blog/post/change-management-process>

Muselman, C. (2025, January 9). Managing the return-to-work process during recovery. Workers' Compensation Daily Headlines. <https://www.workerscompensation.com/daily-headlines/welcome-back-a-thoughtful-return-to-work-strategy/>

National Safety Council. (2025). The importance of musculoskeletal disorder and related injury surveillance: An organizational approach. [https://www.nsc.org/getmedia/6c547ba2-4073-4963-826d-3ca899d18e14/nsc\\_msd\\_injury surveillance\\_resource\\_2-20-25.pdf?srsltid=AfmB0ooFLpAvE-\\_OD2Te3vzLafDAh-EQct7jDrv454mcTmcHa1LI-P71](https://www.nsc.org/getmedia/6c547ba2-4073-4963-826d-3ca899d18e14/nsc_msd_injury surveillance_resource_2-20-25.pdf?srsltid=AfmB0ooFLpAvE-_OD2Te3vzLafDAh-EQct7jDrv454mcTmcHa1LI-P71)

NCCI Research Brief. (2015). *The relationship between accident report lag and claim cost in workers compensation insurance*. [https://www.ncci.com/Articles/Pages/II\\_Relationship-Accident-Report-Lag-Claim-Cost-WC-Insurance.pdf](https://www.ncci.com/Articles/Pages/II_Relationship-Accident-Report-Lag-Claim-Cost-WC-Insurance.pdf)

Newnam, S., Goode, N., Read, G. J., & Salmon, P. M. (2020). Closing the research-practice gap in healthcare: The development and usability evaluation of a patient handling incident investigation toolkit. *Safety Science*, 129, 104844.

Nilsen, P., & Bernhardsson, S. (2019). Context matters in implementation science: A scoping review of determinant frameworks that describe contextual determinants for implementation outcomes. *BMC Health Services Research*, 19(1), 1–21. <https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-019-4015-3>

Nilsen, P., Seing, I., Ericsson, C., Birken, S. A., & Schildmeijer, K. (2020). Characteristics of successful changes in health care organizations: An interview study with physicians, registered nurses, and assistant nurses. *BMC Health Services Research*, 20, 1–8. <https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-020-4999-8>

Occupational Safety and Health Administration. (n.d.). Ergonomics: Identify problems.  
<https://www.osha.gov/ergonomics/identify-problems#report-injuries>

Occupational Safety and Health Administration. (n.d.). Prevention of musculoskeletal disorders in the workplace. <https://www.osha.gov/ergonomics>

Pan American Health Organization & World Health Organization. (2022). Change Management in Public Health: Digital Transformation Toolkit Knowledge Tools. <https://iris.paho.org/handle/10665.2/56579>

Registered Nurses' Association of Ontario. (2024). Leading change toolkit (4th ed.). <https://rnao.ca/bpg/leading-change-toolkit>

Registered Nurses' Association of Ontario. (2012). Guide to implementation of best practice guidelines (2nd ed). [https://rnao.ca/sites/rnao-ca/files/RNAO\\_ToolKit\\_2012\\_rev4\\_FA.pdf](https://rnao.ca/sites/rnao-ca/files/RNAO_ToolKit_2012_rev4_FA.pdf)

Safe Patient Handling and Mobility Guidebook. (2016, January). VHA Center for Engineering & Occupational Safety and Health (CEOSH), St. Louis, Missouri. [https://www.stryker.com/content/dam/stryker/education-and-training/focusrn/resources/caregiver-safety/implementation-tools/VA%20SPHM\\_PDF.pdf](https://www.stryker.com/content/dam/stryker/education-and-training/focusrn/resources/caregiver-safety/implementation-tools/VA%20SPHM_PDF.pdf)

Safe patient handling programs are best practices guide for Washington hospitals. Washington safe patient handling steering committee, University of Washington NW Centre for Occupational Health and safety. 2011

Safety huddle in healthcare settings: a concept analysis (Ghoul, I., Abdullah, A., Awwad, F., & Dardas, L., n.d.). <https://pmc.ncbi.nlm.nih.gov/articles/PMC1191700>

Walker, L., et al. (2017). Sharing the lessons: The 10-year journey of a safe patient movement program.

\*International Journal of Safe Patient Handling & Mobility,\* 7(1), 20–28.

## Safe Patient Handling and Mobility – Section 7

---

Wharton School, University of Pennsylvania. (n.d.). After-action reviews: A simple yet powerful tool.

<https://executiveeducation.wharton.upenn.edu/thought-leadership/wharton-at-work/2021/07/after-action-reviews-simple-tool/>

World Health Organization. (2019, September). After action review debrief – Facilitators manual.

[https://extranet.who.int/sph/sites/default/files/document-library/document/D.02%20Facilitators%20Manual%20Debrief%20AAR\\_sept2019.pdf](https://extranet.who.int/sph/sites/default/files/document-library/document/D.02%20Facilitators%20Manual%20Debrief%20AAR_sept2019.pdf)

Zurich. (2015). Early intervention & RTW best practices.