

Safe Patient Handling and Mobility Toolkit – Tool 4b

To learn more about Selecting SPHM Technology and Solutions refer to Sections 4 and 7 in the Safe Patient Handling and Mobility: A Toolkit for Program Development 2025 at:
<https://www.nvha.net/safe-patient-handling-and-mobility-toolkit/>

SPHM Program Planning - Tips for Choosing Solutions

When selecting the most appropriate solution(s)

Consider:

A. Effectiveness of the solution - Does the solution eliminate or reduce the risk factors?

Sample Effectiveness Rating Scale

4 = Risk factors/hazard fully eliminated

3 = Risk factors/hazard mostly eliminated

2 = Some risk factors/hazard eliminated

1 = Few or no risk factors/hazard eliminated

For example,

- Using slider sheets to reposition dependent patients in bed does not reduce biomechanical loading of the lumbar spine as effectively when compared to air assist mats or ceiling/overhead lifts (Refer to Section 5 for more information).
- Mobile powered floor lifts require more physical exertion to move when transferring patients versus using overhead lifts. However, using motorized floor lifts can reduce much of this physical effort.

B. Cost

Immediate & on-going costs of the solutions - consider equipment, tools, installation, maintenance, ongoing supplies, etc., and resources (staff time/cost), training costs etc.

versus

The full benefit of solutions to organization, i.e., operational gains (e.g., reduced injury, overall insurance costs and liability; reduced employee turnover and associated costs with recruitment etc.; improved patient and staff satisfaction, quality of care, and regularity compliance etc.)

In addition to the costs noted above, consider the number of high-risk patient handling tasks that a single solution will address.

- For example, overhead lifts require higher costs to install than mobile powered floor lifts however overhead lifts can be used to perform most patient handling tasks with the appropriate sling. They are also ready to use at point of care which can facilitate use by caregivers. Floor lifts are not as versatile and have to be stored in locations that are easily accessible to staff to facilitate use.

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- Choosing disposable patient lift sling and/or in-bed slider sheets systems may appear to be more cost-effective than purchasing and laundering slings and reusable slider sheets. However, long-term use of disposable technology may prove to be more costly. It is important to look at all initial and long-term costs of these devices and to consider other factors such as limitations in styles and/or sizes of disposable slings and landfill implications etc.

Review the Disadvantages and Advantages of various types of SPHM Technology in **Section 5**.

C. Other Considerations

- Time to Implement
 - The time until the problem is corrected
 - Timeliness
 - Is the task/process/physical environment going to change or be eliminated soon? For example, you typically would not want to install overhead lifts at the start of the SPHM program on a unit that is moving to another location or is to be remodeled in the next year or so.
- How many employees perform the task?
- How often is the task performed?
- How serious are the risk factors?
- Is the proposed solution technically feasible?
- Does physical design of the work area hinder safe use or functionality of the proposed solution? For example, ceilings in patient rooms are too low for overhead lifts to be installed and function due to limited lift/vertical clearance.
- How well does the proposed solution facilitate safe, early and progressive patient mobility or assist to meet other clinical needs?
- Will the solution reduce the number of caregivers needed to perform 1 or more patient handling tasks?
- Potential barriers that may limit use of the solution. For example, the ability to leave repositioning slings under non-mobile patients in rooms with overhead lifts to facilitate safe repositioning and transfer activities. SPHM technology that cannot be cleaned and disinfected per the health care organization's protocols for example slings and other lift accessories that are designed to be wiped down between patient use.
- Will the solution be approved by clinical technology and facilities maintenance?

Other factors to consider when evaluating SPHM technology solutions are described in **Section 7** and in **Tool 5a SPHM Technology Purchasing Checklist**.

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To Assist in Choosing a Solution - Plot Solutions on 'Value vs. Cost Matrix' - See below

