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NATIONAL ADVISORY BOARD

The Cost vs. the Outcome

Making Dollars and Sense of a SPHM Program

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The Cost vs. The Outcome : Making Dollars and Sense of a SPHM Program

What does it cost? In the safety world, when discussing technology solutions and improvement strategies, the inevitable question will arise – how much does 'it cost'? Does this mean the initial purchase price for equipment? Does it mean the total cost of owning the equipment, which considers its lifespan, up time, additional value, and its maintenance? Perhaps the cost means the continued expense losses which would persist should the solution not be implemented? What about the costs associated with education for the workforce to use technology as intended?

According to many fields of study – business, healthcare, finance – evaluation of cost is essential, however, failure to properly consider all aspects related to cost can doom an otherwise great initiative.

Effective Safe Patient Handling and Mobility (SPHM) programs need to meet financial goals via measurable return on investment (ROI) assessments. A typical ROI measure used in SPHM programs, organizations seek to decrease their expenses associated with worker injury management to a monetary value, at a minimum, equal to the organization's monetary investment in their safety equipment acquisition. In addition to ROI attainment measured via injury management costs, program successes could be measured via other indicators, consider:

- Job satisfaction and employee retention
- Culture change and sustainability
- Reaching specific service targets, such as right-sizing services for persons of size
- Efficacy of a central role to coordinate and execute vertical and horizontal integration of SPHM program and its related investments
- Demonstrating spillover to quality initiatives, such as skin health, fall prevention, delirium reduction
- Successful selection of equipment controls which match targets for facility investments and lifecycle management
- Key patient outcomes, such as increasing mobility, which combats negative hospital-acquired conditions and assists with reducing patient length of stay (LOS)

Legacy Program with An Investment Vision

A large-scale example of successful program exists in the form of the U.S. Veterans Health Administration (VHA) national SPHM Program. With the mindset of investing in people and equipment – the VHA's vision is to achieve zero preventable injuries to staff and veterans. According to National Program Manager, Dr. Tony Hilton, the VHA's SPHM efforts have a coordinated vision with a theme representing key operational synergies which, while distinct,

converge to advance SPHM to better serve its stakeholders – veterans and caregivers. See Table 1 for the key operational synergies. Along with compliance to a 2018 VHA issued revised SPHM directive and using the acronym POSSIBLE to represent the key SPHM program' synergies, the VHS establishes that investment in successful SPHM programs, on a large scale, is achievable.

Table 1 US Veterans Health Services Program Vision Acronym – Key Operational Synergies

P	Policy	specifies local responsibility roles and delineates policy application to ALL service areas where employees handle, mobilize, or assist patients or residents
O	Outcomes	are clinically based; Patient /Resident centered; in alliance with Safety & Quality leadership
S	Safety Officer	ensures SPHM injury investigations involve local Facility Coordinator
S	Screening	of patients / residents to determine technology needs across continuum of care including prosthetics, orthotics, and PM & R
I	Implementation	of unit / department ergonomic and hazard assessments to I.D. risk mitigation needs - for both technology and renovation/construction
B	Build Programs	which are grounded in sound foundational data and provide all indicated resources
L	Leadership	assures presence of and active work of a SPHM facility- based committee for all program oversight
E	Education	provided to improve skills, competencies, and preparation for role responsibilities for: Facility Coordinator, Unit-based Peer Leaders from all shifts annually, direct care employees, stakeholders for the SPHM program

Oversight of Details and Operations

A smart investment of resources to ensure sound fiscal management of SPHM program, is for an organization's leadership to commit to funding a program oversight role. A small table of key responsibilities is seen in Table 2. Each of these essential functions requires investigation, analysis, and interpretation to verify if program operations and actions are consistent, in alignment with the SPHM program short- and long-term goals and guidelines and meet organizational and

network expectations. This perpetual management exercise, which can be attended to by a focused point person, contributes to ongoing evaluation of program costs compared to what program outcomes are achieved.

Table 2 Key Responsibilities of SPHM Program Manager

Ensure adequate resources	For program operations, technology, supplies
Compliance	With organization's overall directive, policy, procedures – comprehensive assessment annually at minimum
Construction & Renovation	Assessing these activities to influence design considering ergonomic design, hazard reduction, and incorporating safety technology into built design
Purchasing Standardization	Whenever feasible; eases consistency in program operations; can provide benefits to organization; reduces irregularity for caregivers
Education & Training	For users, leadership, families to ensure each stakeholder is comfortable with expectations and skills needed
Mentorship & Development	prepare individuals to sustain operations of SPHM program and create culture of progressive development
Planning Future	Monitor program's operation and future needs, infrastructure needs, technology maintenance and replacement plans, stay current with industry's evidence-based guidelines

Stakeholder & Partner Coordination	Interdepartmental synergy and mutual cooperation for SPHM program and organizational goals requires teamwork and building of supportive relationships across departments and administrative silos
Communication & Participation	Initial and ongoing communication and engagement are the fuel of organization's successful SPHM programs – requires time, talent, and dedication

Demonstrating total program value

The Interprofessional SPHM Program National Standards' 8th Standard is "Establish a Comprehensive Evaluation System" for an organization's SPHM program efforts. The standard calls for identification of data sources and measures and the need for data collection and analysis among the 8th standard's recommended evaluation system elements.

How does one undertake demonstrating the full value of a SPHM program approach beyond traditional lagging indicators associated with injury management costs? Which elements and data are up for consideration – which, once organized and analyzed, could demonstrate total program value?

Celona, Driver and Hall discussed applying the principles of Enterprise Risk Management (ERM) to SPHM programs in order to illustrate total program value wherein both value protection (example - reduced injury management costs) as well as value creation (example-increased patient satisfaction) are assessed, and hidden potential values could be recognized. An example of their work at Stanford Hospital and Clinics illustrated that for Stanford, the most impactful value would be found on reducing costs associated with staff turnover, which was unexpected in that their turnover at the time of the analysis was already low. Their high costs of recruiting and onboarding registered nurses contributed to this impact.

Once a total program value analysis has been done and investments in programming agreed to, an organization must also choose its methods of assessing and guiding the SPHM program in real time.

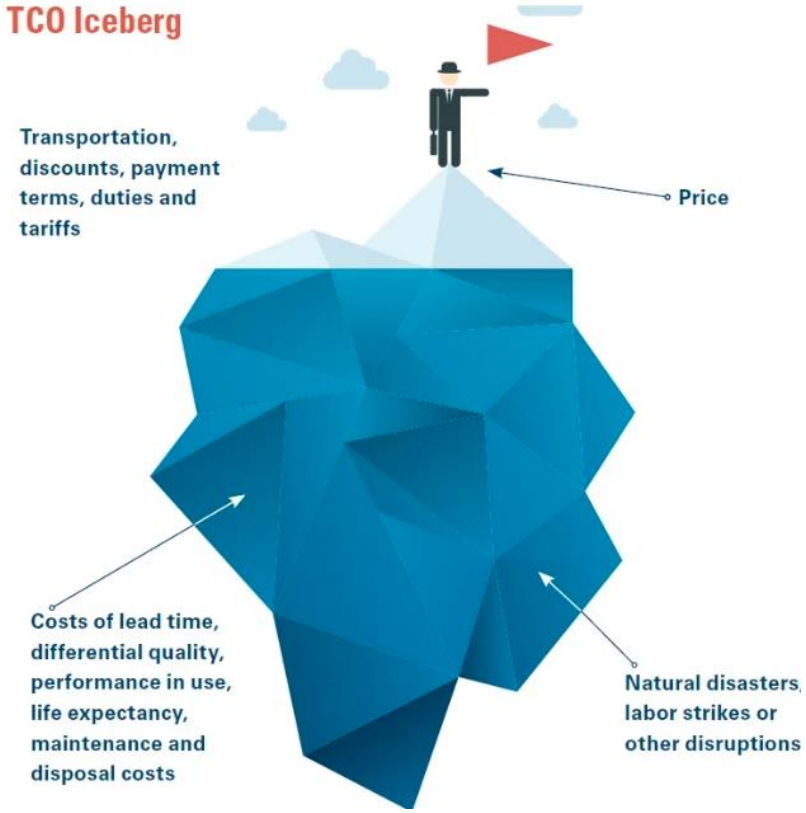
According to Geller, there is superior value of behavior based (culture of safety) programs, yielding better cost and incident reductions than ergonomics or engineering changes approaches alone. This is due to engagement of all stakeholders in the organization. Through in person experiences – rounding and communication where one can leverage just in time activities and reporting which promotes a total organization approach – caregivers, managers, leadership, and patient outcomes can merge, producing notable results.

Direct observation or rounding with best practice audit tools can identify real time indicators, which provide the best and immediate identification and correction of hazards.

Systems approach to management of invested assets

Organizations use procurement or purchasing models to standardize, monitor, and control their purchasing activities. Although procurement of equipment is commonly thought of as the first stage of its life cycle, the first stage actually begins with planning. From first identifying the need for equipment, the process then continues through the equipment's useful life, through to disposal.

Each equipment item or asset has a life cycle that can be partitioned into four key stages: Planning, Procurement/Acquisition, Operation and Maintenance, and Disposal. Planning involves not only the need to identify clinical requirements for equipment, but also includes data gathering to compare future costs of maintenance, lifespan, and other value-based parameters. The Acquisition phase considers the purchase price of equipment, but also the financial impacts associated with parameters discovered in the planning phase. As an example, equipment with a longer lifespan and less maintenance costs and higher up time, would contribute financial benefits that should be considered in concert with initial purchase price.



The United States Veterans Health Service (VHS) is a massive health care system with many billions of dollars of equipment assets under its portfolio across the country. A smaller portion of that large budget is devoted to annual equipment costs. Some annual costs are allocated to new or replacement spending, while other annual spending is on maintenance, support contracts, repairs, or operating expenses. Designating aspects of budgets for varying categories of expenses is part of Equipment Life Cycle Management (ELCM). ELCM is a systematic approach to monitoring, maintaining, and planning for an organization's infrastructure focused on its required equipment that is non-expendable (i.e. not disposable or single patient use). Table 3 outlines key phases and related functions of ELCM.

Table 3 Phases and Functions of Equipment Life Cycle Management (ELCM)

Planning & Assessment	Source / Purchase	Lifetime Operation & Maintenance	Dispose / Renew
•evaluate needs • analyze efficacy of current inventory as well as market available solutions •I.D. gaps •industry research including standards, ratings, experiences • this phase applies to ongoing assessment & maintenance aspects of current inventory performance	• establish specifications • define all requirements •assess potential supplier's match for need •initial investment • fully account for the total cost of ownership •asset acquired & installed	•usually longest phase •track and excecute preventative maintenance requirements • monitor ongoing health of asset • meeting expected needs? • up time maximized?	•cost of repair or continuing with equipment operations exceeds replacement cost • factor the expected lifespan into ELCM program datapoints to proactively budget and plan for replacement •consider regulatory requirements and costs related to disposal or recycling

For entities as large as the VHS, additional systematic, operational and management steps are often required. Examples of additional steps include processes such as: guidelines for clinical teams' decisions and selections; system of contracting officers' procedures; standardization to a defined product supplier across the system; corporate wide contracts; and standard equipment catalog(s) with vetted suppliers.

Summary

It is clear that costs associated with operating a successful SPHM program go far beyond an initial investment in equipment's purchase price. In addition to considering all of the 'under water' expenses, there is sound economic strategy in evaluating the systematic impact of value creation that will derive from investment in a sound program. Furthermore, failure to designate a specific person(s) for working control over SPHM operations will concede disorganization, leading to unnecessary costs.

Health care organizations can operate in a very siloed fashion, each initiative struggling to prove its financial credibility within its own point of focus. The missed opportunity lies in failing to connect the threads that run through many or most of the simultaneous important initiatives. Threads that affect the health and well-being of the workforce typically affect the health and well-being of the patient populations served. Close scrutiny of and fully linking SPHM programs to the overall wellness of patients and caregivers will generate robust financial outcomes and better still, remarkable outcomes for the institution, those served, and its employees.

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