Creating a Culture of Safety:
An Evidence-based Safe Patient Handling and Mobility Program

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BACKGROUND

Safe patient handling and mobility (SPHM) program management often relies largely on ***lagging indicators such as employee injury frequency, severity and cost.*** While lagging indicators are an important part of overall program management, they represent past performance so are not useful for real-time program management. Conversely, ***leading indicators such as staff training, appropriate use of SPHM equipment, and evidence-based coaching during actual patient handling*** represent opportunities for real-time program management that can improve the safety of both patients and staff.

We implemented a SPHM program in one hospital which included Mobility Coaches and electronic tracking of patient handling tasks, using both lagging and leading indicators as outcome measures. Additionally, we collected a large sample of acute care mobility data.

OBJECTIVES

1. Measure the program implementation leading indicators of staff training and appropriate use of SPHM equipment.
2. Measure the impact of program implementation on the lagging indicator of employee injury frequency and cost
3. Gather a robust sample of leading indicator data on the types and frequency of mobility tasks most commonly required in acute care that can be used as the foundation for SPHM program expansion.

METHODS

We implemented a SPHM program in one hospital using electronic data collection (Lift Tracking Software) and Mobility Coaches over a 12-month time period (6 months pre/post). Mobility Coaches provided standardized staff training in Five Area Body Exposure and appropriate use of technology-assisted mobility, supported by ongoing real-time coaching and assistance with mobility tasks. Data on staff training and use of SPHM data were collected.

Additionally, convenience sampling was used to collect data on types and frequency of patient mobility tasks for 12 months (January 2019-December 2019) at 4 hospitals in Northern CA. Data were collected by Mobility Coaches using Lift Tracker Software.

RESULTS

Objective 1: 100% staff training was achieved through a skills fair along with ongoing training as new staff were hired. Appropriate use of SPHM equipment over the 12-month implementation period was consistently 80% or over.

Objective 2: There was a reduction in employee injury severity, resulting in an overall cost decrease from $395,240.97 (SPHM program pre-implementation) to $29,596.94 (SPHM program post-implementation).

Objective 3: The mobility task leading indicator sample included a wide range of clinical units, including critical care, medical-surgical, ED, labor & delivery, and procedural areas.

Data on a total of 58,196 mobility tasks were collected, 65% of which were done in ICU requiring moderate to maximum assist. In-bed mobility represented the 89.5% (N=52,079) of the total mobility tasks, which are summarized in Table 1.

Table 1.
Leading indicator in-bed mobility tasks

Task Description	Frequency (%)
Reposition	22,743 (43.67%)
Boost	19,772 (37.96%)
Linen change	7700 (14.79%)
Skin check/Wound Care	1864 (3.58%)

CONCLUSION

Through the implementation of our SPHM program using Mobility Coaches and Lift Tracker software, we were able to achieve high compliance with the leading indicators of both staff training and appropriate use of SPHM equipment. Program success was further supported by the substantial reduction in the lagging indicator of employee injury cost. Staff satisfaction was also high.

The mobility data provides a robust representative sample of acute care SPHM needs. The use of Mobility Coaches and real time leading indicator data has helped to increase our understanding of the most important factors upon which to build an evidence-based SPHM program, and to facilitate the development of meaningful metrics and goals as a basis for an impactful, cost-effective, and sustainable SPHM program that will improve safety for both patients and staff.

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