



## CASE STUDY

### UVA CULPEPER HOSPITAL

# Engagement in the HoverTech HELP<sup>SM</sup> Program and Empowering Staff Assists UVA Culpeper Hospital Develop an Effective Safe Patient Handling Program

## Situation

### *A need to reduce injuries by establishing a comprehensive Safe Patient Handling Program*

UVA Culpeper Hospital is an acute care 70-bed, not-for-profit hospital that is owned by the University of Virginia Health System and is accredited by the Joint Commission. The Leapfrog Group has awarded UVA Culpeper Hospital with a Grade A Hospital Safety Score<sup>SM</sup> for keeping patients safe from preventable harm and medical errors over seven consecutive grading periods.

In 2013, the hospital was looking to improve its processes for safe patient handling (SPH). Improvements began with an employee incident-reporting program that allowed staff to report incidents related to worker safety. All incidents were communicated to the unit director and reported monthly at the Environment of Care Safety Meeting. The Safe Patient Handling (SPH) Task Force began working with the patient falls committee, increasing awareness of worker injury from the bedside to senior leadership. In 2014, work began to improve compliance with SPH best practices by partnering with unit staff to develop standards, evaluate equipment needs and subsequently purchase the equipment that would work best for staff and patients.

## Implementation

### *Engaging staff to develop and communicate a simplified approach to select equipment drives compliance*

In February 2014, utilizing HoverTech's HELP<sup>SM</sup> Healthcare Ergonomic Lifting Program, the SPH Task Force conducted an assessment that highlighted the root cause of injuries within the hospital, as well as facility issues that would impede the use of patient handling equipment. Next, the hospital formed a Safe Patient Handling work group that included senior leadership, unit directors and finance specialists.

In May 2014, the SPH Task Force conducted a Policy and Procedure Workshop, a component of the HELP program, which was well supported by management and nursing staff. There were 22 attendees from eight units. During this session, the task force revised a draft policy that allowed staff to decide what equipment was appropriate for their unit's patient population. To determine equipment preferences, the staff developed criteria including ease of use, storage, effectiveness, weight limits and patient exclusions. Equipment had to be compatible with unit beds and stretchers, as well as fit into bathrooms and patient rooms. The final policy was structured to align with nursing practices and preferences.

The resulting policy and procedure (Care Matrix in Figure 1) now provides a simple framework for assessing patient dependency and pairing it with the right equipment. At the same time, it serves as a communication tool for staff and patients' families who are integral to the success of the overall program. To complete the documentation process, and further improve hand-offs between shifts, the nursing assessment was added to the electronic charting system.

The SPH Task Force developed a three-phase implementation plan, which is expected to take 2-3 years to implement. Each phase will include a unit-specific Care Matrix, equipment review, purchase and training. Phase 1 is complete and included Medical Surgical (MS), Cardiac Step Down (SD), Intensive Care Unit (ICU) and Ambulance (Amb.). Phase 2 is in process and includes the Emergency Department (ED) and Operating Room (OR), where the HoverMatt<sup>®</sup> Air Transfer System will be incorporated to replace slide boards. Phase 3 will entail reviewing the remaining high risk, low volume tasks in remaining units and an ongoing review of metrics, program revision, and training.



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## Results

### *Lateral transfer and boosting injuries and expenses significantly reduced with Phase 1 implementation*

In Phase 1 of the implementation, the hospital saw more than a 90 percent reduction in injuries across all units with only one OSHA-recordable injury in the initial target units (MS, SD, ICU, Amb.). Additionally, from 2012 to 2014, the hospital saw a reduction of lost and restricted work days of 85 percent and 96 percent, respectively, in all units (Figure 2) with corresponding staff injury expenses reduced by 98 percent (Figure 3).

The success of the program is attributed to three factors: 1) nursing ownership of the program's development; 2) ownership of the program at all levels, from bedside to administration; and 3) nurses utilizing their collective experiences.

The Care Matrix provided a straightforward approach to develop the entire process, allowing staff to visualize the project in its entirety from conception to implementation. The Care Matrix is currently posted on the door of each patient room and has been effective at driving compliance.

Figure 1. Care Matrix













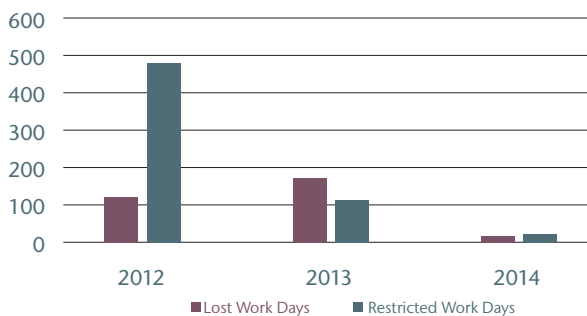
LEVEL OF ASSISTANCE	CONTRIBUTING FACTORS		TRANSFER EQUIPMENT
<input type="checkbox"/> <b>Maximum Assist</b> 	<ul style="list-style-type: none"> <li>Bears &lt;50% of own weight</li> <li>Uncooperative or resistant</li> <li>Cognitive/motor planning deficits</li> <li>Impulsive, unaware of safety</li> <li>Bariatric ≥300 lbs.</li> </ul>	<ul style="list-style-type: none"> <li>Poor balance sitting/standing</li> <li>Serious gait impairment</li> <li>Unable to assist with transfers</li> </ul> <p><b>ALL PATIENTS</b>  Manual handling prohibited</p>	<ul style="list-style-type: none"> <li>Sit-to-Stand: Electric</li> <li>Rollboard</li> <li>Slip/Repositioning Sheet</li> <li>Hovermatt/jack®</li> <li>Portable Lift</li> <li>Maxi Sky</li> </ul>
<input type="checkbox"/> <b>Moderate Assist</b> 	<ul style="list-style-type: none"> <li>Bears 50-75% of own weight</li> <li>May be uncooperative</li> <li>Cognitive/motor planning deficit</li> <li>Bariatric ≥300 lbs.</li> <li>Moderately impaired balance or unsteady gait</li> <li>Requires verbal cueing</li> <li>Orthostatic</li> </ul>	<ul style="list-style-type: none"> <li>PWB / NWB on upper or lower extremities</li> <li>Requires hand-held device</li> <li>Only partially able to assist with transfers</li> </ul> <p><b>BARIATRIC</b>  Manual handling prohibited</p>	<ul style="list-style-type: none"> <li>Gait belt</li> <li>Walker / cane</li> <li>Sit-to-Stand</li> <li>Rollboard</li> <li>Slip/Repositioning Sheet</li> <li>HoverMatt®</li> <li>Portable Lift</li> <li>Maxi Sky</li> </ul>
<input type="checkbox"/> <b>Minimum Assist</b> 	<ul style="list-style-type: none"> <li>Bears 75-100% of own weight</li> <li>Cooperative</li> <li>Non-bariatric &lt;300 lbs.</li> <li>May require verbal cueing</li> </ul>	<ul style="list-style-type: none"> <li>May require hand-held device</li> <li>Able to fully or partially assist with transfers</li> </ul>	<ul style="list-style-type: none"> <li>Gait belt</li> <li>Walker / cane</li> <li>Sit-to-Stand</li> </ul>
<input type="checkbox"/> <b>Independent</b>	Patient Performs 100% of tasks and does not require assistance		Assist PRN
PATIENT SAFE HANDLING EQUIPMENT			
<b>Sit-to-Stand</b> Manual  Limit: 375 lbs. Electric  Limit: 500 lbs.		<b>Lateral Transfers</b> Rollboard  Limit: none HoverMatt®  Limit: 1200 lbs.	
		<b>Floor-to-Bed</b> HoverJack®  Limit: 1200 lbs.	
		<b>Lifting or Repositioning</b> Portable Lift  Limit: 600 lbs. Maxi Sky  Limit: 600 lbs.	

Figure 2

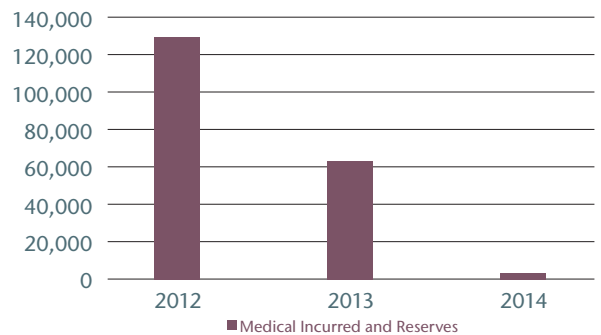
### LOST AND RESTRICTED WORK DAYS 2012-2014



Lost work day reduced 85%  
Restricted work days reduced 96%

Figure 3

### STAFF INJURY EXPENSES 2012-2014



Medical expenses reduced 98%