Presented at the 2015 Safe Patient Handling and Mobility Conference, April 20-24, Glendale, AZ

SWEDISHAMERICAN
A DIVISION OF UW HEALTH

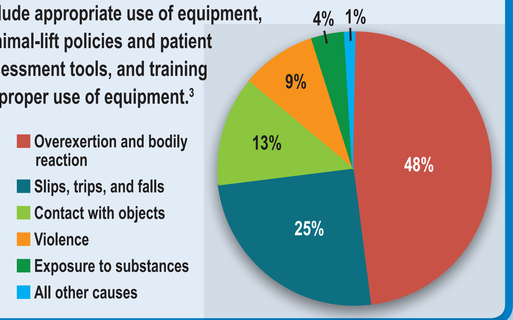
Reducing Healthcare Worker Injury: The Establishment, Implementation, and Results of an Evidenced-Based Protocol for Lateral Patient Transfer

Ruth E. Chance, BSN, RN [a], Karen K. Giuliano, PhD, RN[b] [a]Swedish American Hospital, Rockford, IL; [b]Sage Products LLC, Cary IL

BACKGROUND

According to the 2013 Bureau of Labor statistics, US hospitals recorded 58,860 work-related injuries and illnesses that caused employees to miss work in 2011, with nearly half of these injuries were caused by over-exertion.

- Hospitals are among the most hazardous places to work with 253,700 reported healthcare worker injuries (HCWIs) in 2011.[1]
- The incidence of non-fatal occupational injuries in HCWs was 6.8 per 100 full-time employees compared with 3.5 per 200 in all US industries combined.[2]
- The number of work-related injuries among HCWs surpasses injury rates in construction and manufacturing.[2]
- The average worker's compensation claim ranged from $15,860 to $22,300 per injury.[2]
- The average hospital incurs $0.78 in losses due to workers' compensation claims for every $100 of payroll, equivalent to a total national annual cost of $2 billion.[1]
- Recommendations to reduce HCWIs include appropriate use of equipment, minimal-lift policies and patient assessment tools, and training on proper use of equipment.[3]



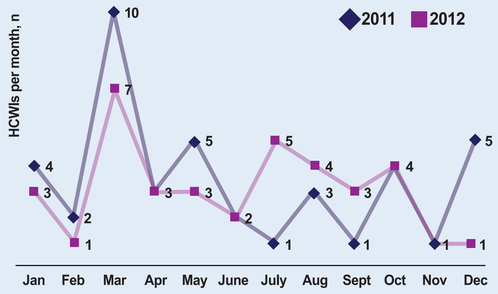
OBJECTIVE

To evaluate the impact of implementation of patient safe-handling protocols and a lateral patient transfer device on HCWI rates

METHODS

- The study was conducted at SwedishAmerican Hospital, a 333-bed, full-service, non-profit hospital located in Rockford, IL.
- Evidence-based procedures were written to address safe patient handling, with these procedures implemented in all clinical units.
- The procedures addressed appropriate methods and equipment to meet patient-specific needs to improve the safety of patients and HCWs during lateral patient transfers.
- The new lateral transfer procedures were incorporated into the policy and equipment guidelines of the hospital and disseminated to staff though education programs supplemented by written and verbal communications.
- Approximately 1,500 staff received training on the proper use of a lateral transfer device.
- Each employee was required to successfully complete a competency assessment to evaluate their knowledge and skills for appropriate use of the patient transfer device.
- HCWI rates were monitored following implementation of the evidence-based procedures and the lateral transfer device.

Figure 1. Monthly HCWI rate prior to implementation of intervention to reduce injuries associated with patient lateral transfers



RESULTS

- Healthcare worker injuries were summarized for 2011 and 2012 to establish a pre-intervention injury rate.
- The total number of HCWIs in 2011 was 41, with 37 HCWIs occurring in 2012 prior to implementation of the intervention of .the lateral transfer device in January 2013.
- The rate of HCWIs declined to 10 in 2013 and 8 in 2014, for an overall reduction in injuries of 76.9% (Figure 2).
- The average number of HCWIs declined to 0.83 in 2013 and 0.67 in 2014 (Table 1).

Figure 2. Comparison of monthly HCWI rates pre- and post-implementation of evidence-based protocol and lateral patient transfer device

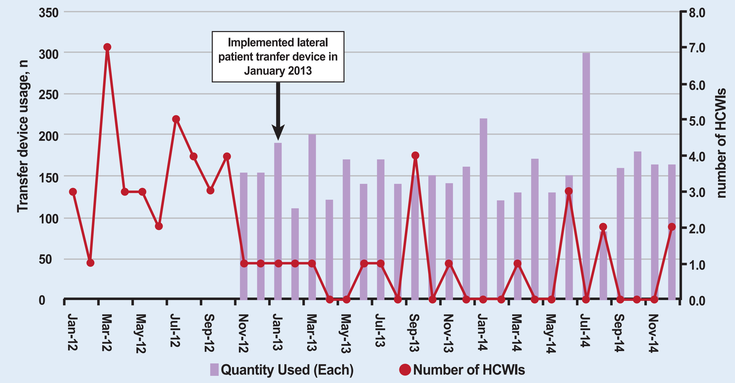


Table 1. Comparison of monthly HCWI rate by frequency of use for the lateral patient transfer device

Device Usage[1]	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Quantity Used 2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Quantity Used 2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	153	153
Quantity Used 2013	190	110	200	120	170	140	170	140	150	150	140	160
Quantity Used 2014	200	120	130	170	130	150	300	80	160	180	164	164
Number HCWIs												
2011	4	2	10	3	5	2	1	3	1	4	1	5
2012	3	1	7	3	3	2	5	4	3	4	1	1
2013	1	1	1	0	0	1	1	0	4	0	1	0
2014	0	0	1	0	0	3	0	2	0	0	0	2

[1]Usage based on ordering history provided by manufacturer. November and December 2012 are based on usage rates for January and February 2013. November and December 2014 are based on usage from January 2014 through October 2014. 2Collected and provided by hospital.

DISCUSSION

- This study demonstrates the effect of an evidence-based educational intervention and use of a device to assist with lateral patient transfers on rates of HCWIs at a single institution.
- Utilization of the device was maintained at a fairly consistent rate in 2013 and 2014, following implementation of the device in January 2013.
- There were two notable spikes in HCWI rates in September 2013 (n=4) and June 2014 (n=3).
- Hospital analysis of these injuries revealed that the September 2013 injuries were due to:
  - One employee did not request assistance or use the lateral transfer device when moving a patient.
  - One employee did not take time to use the lateral transfer device, although it was readily available in the patient's room.
  - One employee was injured when a patient lost their balance while being weighed.
  - One employee was providing care in a home setting and did not have access to the device or assistance from colleagues to move the patient.
- The three injuries in June 2014 were due to:
  - Two employees were injured when a patient lost their balance while being weighed.
  - One employee was shifting the patient's position on the table.
- Comments from hospital staff provide anecdotal support for the intervention, with employees specifically commenting that it was "easier to move patients laterally from one surface to another."
- These results support that an institutional intervention based on staff education, adherence to evidence-based protocols, and use of a lateral patient transfer device resulted in a clinically significant reduction in HCWIs.
- Additional research is suggested to determine the unique contributions of each component of the intervention to the overall reduction in HCWIs.

Disclosures: Program upon which results are based was created and implemented independently by SwedishAmerican Hospital. Poster to summarize program and results was written in collaboration with Sage Products, LLC and funded by Sage Products, LLC.

References: 1. Occupational Safety and Health Administration. Caring for our Caregivers. Facts About Hospital Worker Safety. Available at: https://www.osha.gov/dsg/hospitals/documents/1.2_Factbook_508.pdf. 2. Bureau of Labor Statistics. Case and Demographic Incidence Rates. Accessed March 30, 2015. 3. Aon Risk Solutions. 2012. 2012 Health Care Workers Compensation Barometer.