Solution: Nursing’s Liftoff

Organization: Anne Arundel Medical Center

Primary Contact: Cathileen Ley, PhD, PMH-CNS-BC, Director, Nursing Quality & Research

E-mail: cley@aahs.org

Type: Acute Care

Phone: 443.481.4824

IDENTIFICATION:
Nurses repeatedly lift, move, transfer, and reposition patients often resulting in debilitating and sometimes career-ending or life-altering injuries. Estimates report that 12% of registered nurses leave the profession annually due to back injuries and greater than 52% complain of chronic back pain sometime during their career (American Nurses Association, 2007). Based on the most recent data provided by the U.S. Department of Labor Bureau of Statistics, nursing aides, orderlies, and attendants had the highest incidence of injuries and illness due to musculoskeletal disorders as compared to other occupations. This rate was seven times the average for other high-risk occupations. Consequently, registered nurses have the 9th highest incidence rate of musculoskeletal disorders, while healthcare workers overall are among the top ten occupations with the highest lost work time due to injury (Bureau of Labor Statistics, 2008).

Nursing staff at Anne Arundel Medical Center recognized a need to reduce staff and patient injuries related to mobilizing and lifting dependent patients. In response to Maryland House Bill 1137-Safe Patient Lifting, a safe lifting program with the goal of reducing employee injury and enhancing patient mobility was initiated. The ceiling lift installation as parcel to the safe lift program at AAMC was recently completed on the Critical Care Unit, and is planned for expansion to all inpatient units within a five-year timeframe. Prior to implementation, baseline data was collected on the number of musculoskeletal injury or claims that were reported as related to patient lifting. These were measured by a lift survey developed by Christiana Hospital in Wilmington, Delaware. Other metrics used to determine patient safety included the percent of hospital acquired pressure ulcers as measured by National Database of Nursing Quality Indicators (NDNQI), and self-reported “not having enough help to lift/move patients on last shift worked” as measured by the NDNQI RN Satisfaction Survey.

PROCESS:
A multidisciplinary committee was created to assess the need for, development of and expected outcomes for a program of this type. Entitled the “Safe Patient Lifting Committee”, the initiative was sponsored by three executive level individuals. The working committee included many disciplines such as staff nurses, patient care technicians, nurse educators, rehabilitation services, risk management, bio-medical engineering and infection control with ad hoc participation from wound care, radiology, employee health, engineering, environmental services. During the pre-implementation period, the committee reviewed the Maryland House Bill 1137–Safe Patient Lifting, to ensure legal compliance, as well as evidence based practice related to safe lifting. An initial assessment was conducted to identify lift equipment currently available for moving dependent patients as well as the staff perception of need. Further, a lift assessment tool developed by an advisory group in collaboration with several healthcare groups (Nelson, 2006) was utilized to conduct a needs assessment throughout the organization for a 5-week period.
The outcome of this survey resulted in determining the types of assistance required to mobilize various dependent patients.

Members of the Lift Initiative Committee, along with the Chief Nurse Executive, went on a site visit to Christiana Hospital in Wilmington, Delaware - the first no-lift hospital in the region. The goals for the visit included a demonstration of ceiling installed lifts and solicitation of feedback from end users. At this time, the staff became cognizant of the extended value of in-room ceiling lifts over mobile lifts for both patients and staff. Following the site visit, many hospital staff caregivers and departments were invited to visit and evaluate the products of three lift vendors. Staff nurses were involved in both trialing and selecting the ceiling lifts. Their goal was to evaluate the ceiling lifts using the Ceiling Lift Feature Survey for Caregivers (Advisory Board 2001) as an assessment tool. Once best product had been chosen by nursing and caregiver staff, calculations were completed relative to return on investment parameters and proposed purchase price. Ultimately, a proposal with written justification for equipment types and purchase was presented to executive leadership.

**SOLUTION:**

With the support of Anne Arundel Medical Center’s executive team, the Lift Committee recommended and received approval for the installation of ceiling lifts. The first phase involved the installation of 32 ceiling lifts on the Critical Care Unit and six beds on a medical-surgical unit. Prior to installation, a detail plan for installation was developed to minimize noise and disruption to patient care. Working closely with vendor partners, installers and charge nurses in the Critical Care Unit, the lifts were installed within 3½ weeks, resulting in minimal disruption to unit activities and patient care. Algorithms were developed by nurse reviewers to assist staff in determining the level of assistance or type of equipment required to mobilize dependent patients. The lift vendor provided mandatory two hour in-service training to staff. “Lift Super-users”, who received four hours of competency training were then designated as “trainers” for over 200 additional staff on the proper use of the lift equipment. Competency was assessed by return demonstration. Further education and training was required once the “Safe Patient Handling” policy was developed and approved by policy committee and as other units received their lift installation.

In the four month period since the installation of the ceiling lifts on the Critical Care Unit there has been a decrease in hospital acquired pressure ulcers (HAPU), a decrease in nursing staff turnover, no reports of musculoskeletal pain related to lifting and repositioning of patients, and overall high satisfaction with the ceiling lifts. In the quarter following implementation, HAPU dropped 50% from the 12-month average prior to implementation. The percent of total nursing turnover was 0% for the first quarter post-implementation, dropping from 16.9% for the 12-month period pre-implementation. Staff satisfaction with the ceiling lifts and related staff education was evaluated 3-months post-implementation. Survey participants included all CCU nursing staff and patient care technicians with a response rate of 52%. The percent of participants who either agreed or strongly agreed to each statement is as follows: easy to use equipment (87%); received adequate training to competently use equipment (91%); have less back and muscular pain (62%); more satisfied with work environment (70%) and more likely to
stay on unit (63%). A patient satisfaction survey is currently being conducted to evaluate
patients’ perception of comfort and safety associated with the use of the ceiling lifts.

Several outcome metrics will be monitored regularly to ensure continued improvement in-patient
and staffing outcomes. Patient outcomes will include quarterly monitoring of percent of HAPU
and monthly review of the average length of stay and percent of patients who were out of bed.
Staffing indicators include an annual review of the frequency of accident claims due to lifting
and repositioning of patients, quarterly nursing staff turnover rate, and annual nursing response
to “had enough help to lift/move” on the NDNQI RN Satisfaction Survey.

References:

Legislative and Regulatory Initiatives for the 110th Congress: Workplace Health and Safety.
Retrieved January 23, 2009 from
http://www.nursingworld.org/MainMenuCategories/ANAPoliticalPower/Federal/legis/SPHM.aspx


Publishing Company.

Nursing Executive Center. (2001). Preserving a Scarce Resource Reducing Nurse Injuries in an