Safe Patient Handling—An Untapped Opportunity in Diagnostic Imaging
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Abstract

There are currently nine states with legislation requiring hospitals to implement safe patient handling (SPH) programs for the cessation of manual lifts, transfers and repositioning of patients. Ten other states have legislation pending, and national legislation was introduced for the third time in May 2009. Most of the programs are being implemented in acute care settings for nurses with direct patient care, in order to address the intensity of physical workload recognized among nursing personnel. However, significant exposure to manual lifts, transfers and patient repositioning is a regular, yet often unrecognized occurrence in diagnostic imaging departments and stand-alone imaging centers. Many SPH program coordinators are unaware of the potential hazards that exist in diagnostic imaging and the need for SPH equipment and training. This presentation will provide a financial snapshot of injuries associated with manual lifts and transfers of patients. Learn what you can do to lobby on behalf of your department for being included in the implementation of SPH programs in your facility. A step-by-step approach to documenting the value of SPH equipment in diagnostic imaging will be presented.

Participants will learn to:

1) Evaluate resources available for safe patient handling (SPH) legislation in their state.
2) Understand the potential financial benefits of implementing safe patient handling programs in diagnostic imaging.
3) Approach safe patient handling from a unique perspective that offers improved patient safety as well as work safety opportunities for medical imaging personnel.

Syllabus

“It isn’t that they can’t see the solution, it is that they can’t see the problem.” —Grover Cleveland

It has been well documented that the single most important factor for reducing the risk for back injury among healthcare workers is to eliminate manual lifting of patients. And yet it often goes unrecognized that diagnostic imaging modalities face a variety of patient handling tasks such as transferring patients from a stretcher or wheelchair to an exam table, and then back again. Ultrasound, x-ray, fluoro and interventional radiology also are frequently required to manually reposition patients in order to obtain optimal imaging. It is important to note that most imaging procedures are performed by one technologist, including transporting, transferring, and positioning the patient in order to obtain a
diagnostic exam. Technologists performing after hours or ‘on call’ exams are particularly limited in their access to help in transferring or positioning patients.

Kumar et al reported that 83% of x-ray technologists had back pain in a study published in the International Journal of Industrial Ergonomics in 2003. The pain was aggravated by work activities, with manual lifting of patients from wheelchairs, transferring patients using spine boards, and repositioning cassettes under patients reported as most physically challenging.

In reality, there are no proper body mechanics for the manual lifting and repositioning of patients. In fact, lifting patients has been proven to cause microfractures by exceeding tolerance limits of the spine. Patients who are confused or cognitively impaired can be unpredictable and may suddenly become combative, resist being transferred, or go limp during a transfer, throwing the worker off balance and requiring them to make sudden movements to compensate. These unexpected movements can cause high muscular forces within the supporting muscles of the spine.

Back injuries among healthcare workers are estimated to have direct and indirect costs of $20 billion annually, and more than 75 million lost work days per year. Indirect costs related to staff shortages or burdensome work environments such as decreased productivity and the effects on staff morale and retention can be three to five times the amount of direct costs, and become part of the operational overhead for healthcare facilities.

The more experienced the worker, the longer the duration of their exposure to cumulative trauma in the work environment. Overexertion injuries, such as back injuries from lifting, or shoulder injuries from pushing and pulling peak in the mid-30’s to mid-40’s. The average age of a radiologic technician in the U.S. is currently 43 years, and 68% of sonographers are over 40 years old, with an average age of 45. Sadly, we’re losing the most experienced imaging professionals simply due to the cumulative effects of the physical demands of their jobs.

There are currently nine states with legislation requiring hospitals to implement safe patient handling programs in order to cease manual lifts, transfers and repositioning of patients. Ten other states have legislation pending, and the remainder of the U.S. is expected to follow suit. Most of these programs are being implemented in acute care settings for nurses with direct patient care in order to address the intensity of physical workload recognized among nursing personnel. However, significant exposure is a regular occurrence in diagnostic imaging departments. As radiology administrators, you have the opportunity to lobby on behalf of your staff for implementation of SPH programs in your department.

This presentation reviews two case studies demonstrating the methods and outcomes for implementation of SPH programs in diagnostic imaging. The first project, implemented by the Occupational Health and Safety Agency for Healthcare in British Columbia found that 88% of technologists described their overall work experience as being easier with the use of the portable ceiling lifts. All participants found that lifting patients with the lifts was easier than manually lifting them, with significant reductions in physical discomfort of the head, neck, shoulders, arms and lower back reported. The second project, implemented by Good Shepherd Medical Center, Hermiston, OR used a needs analysis to identify the type of lift equipment needed prior to implementation of the program. In the
year following the implementation of the program, there were no patient handling injuries reported by diagnostic imaging staff.

Assisting patients to and from imaging tables is a physically demanding for diagnostic imaging professionals. Furthermore, tying up multiple staff members for the manual transfer of patients is a poor utilization of resources that decreases productivity and places multiple workers at risk for injury. A management process designed to improve working conditions through implementing ergonomics programs can reduce losses and improve productivity and patient care outcomes for imaging departments through improving the utilization of staff resources. Manually lifting, transferring and repositioning patients have clearly been demonstrated to place workers at risk for musculoskeletal injury, leading to SPH legislation in many states. However, there is little awareness of the risk to diagnostic imaging personnel. Herein lies the untapped opportunity for improving workflow, productivity, quality of patient care and worker safety.

NOTE: The full text of this article can be found in the July/August issue of Radiology Management.