Clinical Alert

Volume 6, Number 3
Winter 2009

Maryland Department of Health and Mental Hygiene

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Healthcare Acquired Pressure Ulcers (HAPU)

Health care professionals know that pressure ulcers cause our patients pain, disability, extended lengths of stay, and death from complications such as bleeding and infection. Yet we seem to be unable to reduce the number and severity of pressure ulcers. According to the National Pressure Ulcer Advisory Panel (NPUAP), the prevalence of HAPU is 10% to 18% in acute care settings, 2.3% to 28% in long-term care facilities, and as high as 29% in home care environments.[1] The Agency for Healthcare Research and Quality (AHRQ) reported in 2008 that HAPU doubled or tripled lengths of stay and costs $16,000 to $20,000 to treat.[2] The Centers for Medicaid and Medicare Services (CMS) has estimated the cost per patient is closer to $43,000 and has included HAPU on its list of acquired conditions for which it will not reimburse.[3]

Due to long-term treatment and disability associated with HAP, any Stage III or IV pressure ulcer or deep tissue injury acquired in a hospital setting meets the definition of a Level 1 reportable event under COMAR 10.07.06, Patient Safety Programs. This definition excludes progression from Stage I or II that are present on admission. From March of 2004 to April of 2009, Maryland hospitals had reported just 10 HAPU. In other states with mandatory reporting of adverse events, this number is much higher since HAPU is the most commonly reported adverse event. The Office of Health Care Quality believes that this is an under-reported adverse event in Maryland. In April of 2009, one medium to large size Maryland teaching hospital closely monitored their HAPU and began reporting their findings to the OHCQ. This hospital has since reported 28 patients who developed Stage III or IV pressure ulcers while inpatients. They have agreed to share their experiences with other health care entities.

Patient Characteristics:

A review of the cases reported revealed some interesting commonalities among patients:

- The average age of the patients was 65.4 years. The patients ranged in age from 32-90 years old.
- All of the patients showed nutritional alterations and were either under- or overweight. Twenty-four of the patients also had low albumin and protein. Sixteen patients had diabetes with unstable blood glucoses.
- Twenty-two of the patients had limited to no mobility.
- Sixteen patients were on routine doses of pain medication.
- Seven patients had an active or previous diagnosis of cancer.
- Nineteen patients were on the medical service. Nine patients reviewed were on the surgical service and had procedures with >/= four hours of immobility.

Initially, the hospital reported 14 cases of HAPU. When they identified an additional 14 cases two months later, they took a closer look at the root causes from the first list of cases and expanded their corrective actions. The following lists of root causes and corrective actions encompass both reviews.

First Review Root Causes:

- Variability in policy compliance re: frequency of skin assessments and documentation.
- Variability in use of Braden scale.
- Inconsistent use of interventions.
- Interventions not well linked to Braden score.

Corrective Actions:

- Automatic ordering of interventions linked to Braden scores entered into the electronic medical record (EMR)
- Delegation of some skin care and prevention duties to support staff.
- Linking PCA orders to increased vigilance and implementation of interventions.
- Use of EMR to guide hand-offs and shift report.
- Education and random documentation audits.

Second Review Root Causes:

- RNs not routinely requesting wound ostomy care nurse (WOCN) and nutrition consults for patients with Stage II pressure ulcers.
- RNs not consistently using the EMR hand-off tool.
- RNs not consistently assigning basic skin care and turning to support staff and not following Maryland Practice Act requirements for ensuring support staff complete delegated activities.
- Transporters and nursing staff not routinely using pressure relieving positioning techniques.
- Hospital has inadequate numbers of support surfaces for chairs and stretchers.
- RNs, MDs, and hospital leadership have not taken ownership of the problem.

Corrective Actions:

- HAPU competency marathon for all staff, including transporters, specialty technicians, etc.
- Assignment of HAPU champions to each unit.
- Policy changed to include mandatory nutrition and WOCN consultation requests for any new pressure ulcers.
- HAPU posters and other visual cues were placed on the units.

Continued

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Clinical Alert
is published periodically by the
Office of Health Care Quality

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- WOCN and Purchasing are identifying and acquiring sufficient numbers of the appropriate support surfaces for wheelchairs and stretchers.
- WOCN, Operating Room leadership, and Purchasing are investigating the appropriate support devices for use during operative procedures.
- IT department is to develop reports from the EMR with Braden score and linked interventions.
- Medicine residents educated regarding on-going skin assessments and hospital policy requirements for documentation of skin assessments (at a minimum) on admission, transfer, and discharge.

To answer the question whether the pressure ulcer was present at the time of the patient's admission, the hospital included emergency department (ED) staff in the HAPU competency marathon and changed the ED assessment policy so each patient receives a thorough skin integrity assessment. Dressings found on the patient's body will be removed and the condition of the skin assessed and documented. Wound assessment and treatment starts in the ED.

Physician involvement is key to successfully managing pressure ulcers. Pressure ulcers are difficult to prevent and even harder to treat. Patient outcomes are often very poor if prevention, assessment, and treatment are not adequately addressed, and a multidisciplinary approach is needed. The physician is ultimately responsible for the patient's care and must be involved throughout the treatment process. HAPU involves swift and coordinated intervention by medical staff, nutrition services, physical therapy, pharmacy, and specialty areas such as radiology. The goal is to increase the team's awareness of this problem, which has the potential to severely affect the patient's quality of life.

The Office of Health Care Quality recommends all health care entities take a close look at the prevalence of HAPU in your patient population and develop a thorough, coordinated program for management. We have developed a Short Form for Reporting HAPU (attached) to make reporting easier for hospitals. The Form includes the basic questions to ask as you examine the circumstances surrounding the formation of pressure ulcers in patients.

1. Cuddigan J, Ayello EA, Sussman C, Baronoski S, eds. Pressure Ulcers in America: Prevalence, Incidence, and Implications for the Future. Reston VA: National Pressure Ulcer Advisory Panel
2. Russo CA, Steiner C, and Spector W. Hospitalizations Related to Pressure Ulcers among Adults 18 Years and Older, 2006. Healthcare Cost Utilization Project. December 2008. Available at: www.hcup-us.ahrq.gov
3. Centers for Medicaid and Medicare Services. Proposed Fiscal Year 2009 Payment, Policy Changes for Inpatient Stays in General Acute Care Hospitals. Available at: www.cms.gov