Reduction In Unit-Acquired Pressure Ulcers
Leonida Lacdao, RN, Nurse Manager and the 6E Nursing Staff
6 EAST Cardiac Care Unit (CCU)/Open Heart Recovery (OHR), St. Luke’s - Roosevelt Hospital Center, New York, NY

Background/Problem
• Patients in the CCU and OHR are at greater risk for pressure ulcers due to underlying disease processes and limited mobility related to existing cardiac conditions.
• The CCU population frequently consists of patients who are:
  - acute stroke patients
  - post-interventional cardiac procedure patients (cardiac catheterization and balloon pump) requiring strict bedrest for prolonged periods of time
  - cardiac arrest patients on hypothermia protocol requiring both intra-vascular cooling and immobilization due to their unstable condition
  - unstable cardiac patients on strict bedrest due to existing arrhythmias and medication management
• The OHR population frequently consists of patients:
  - receiving multiple isotropic medications contributing to decreased perfusion to skin
  - with prolonged immobility due to unstable condition
  - requiring CRRT (Continuous Renal Replacement Therapy) and intra-aortic balloon pumps at the bedside limiting mobility
• In 2010 the National Database of Nursing Quality Indicators (NDNQI) pressure ulcer prevalence data was collected cumulatively for both CCU and OHR and showed that in the 1st and 3rd quarters of 2010, the incidence of unit-acquired ulcers was above the median range for teaching institutions.

Objectives
• High risk for complications exists in the compromised cardiac patients admitted to the CCU and OHR; therefore 6E will continue efforts to prevent pressure ulcers throughout 2011 and 2012.
• Weekly rounds on our high risk patients will be conducted to assess for the development of unit-acquired pressure ulcers.
• The incidence of unit-acquired pressure ulcers (Stage > II) on 6E will decrease to 0% during Q3 and Q4 2011.

Methods
The following steps will be taken to reduce the incidence of pressure ulcers in patients admitted to the CCU and OHR:
• Initial skin assessment or admission to unit will be performed to identify patients at high risk for skin breakdown.
• Skin Care/Pressure Ulcer Documentation Sticker (used as a communication tool between the nurse and provider) will be placed upon:
  - initial skin assessment on all patients
  - assessment of high risk patients
  - skin breakdown present upon arrival
  - any changes in status, condition, and treatment
• Nurses will ensure that nutrition assessment is completed and followed.
• Nurses will communicate with physicians to ensure appropriate treatment is ordered and documented in accordance with the SLEHC Pressure Ulcer Algorithm and any recommendations for nutritional support.
• Protective moisture barrier cream will be applied to all patients.
• Patient education: Skin Saver brochure will be provided and reviewed with patients who are able to communicate and/or to family members. Posted at each bed side.

Algorithm for Pressure Ulcer & Treatment Guidelines

Conclusions
• In the first quarter of 2011, 21.4% of patients surveyed had a unit-acquired pressure ulcer (Stg > II). This was attributed to:
  - Post cardiac arrest & post open heart patients who are hemodynamically unstable, thereby limiting turning & positioning
  - Hypothermia protocol patients who have decreased perfusion to skin
  - Inability to change regular beds to specialty beds due to life-saving equipment that is attached to patients
  - Nutritionally compromised patients
• Due to interventions implemented, there has been significant improvement in the incidence of unit-acquired pressure ulcers during the 2nd – 4th quarters of 2011.
• We reached the NDNQI comparative benchmark of 0% in the 4th quarter of 2011.

References