

## 1. What we are trying to accomplish?

The study was done in a 585 bed, level 1 Trauma center located in Dallas. The hospital is located in the south-west area of the city. Patients from several different ethnic backgrounds come to this hospital for care. Not only does the hospital care for trauma patients but also is the home of transplant patients, a spine and neuro institute and heart center.

In fiscal year (FY) 2014, the hospital had a record number of hospital acquired pressure injuries (HAPIs). There were 81 HAPIs hospital wide. This was a 64%increase from the previous year. The Intensive Care Unit (ICU) had the highest number totaling 48 HAPIs in 2014.

Multiple prevention interventions were initiated hospital wide the following fiscal year with a focused intent on the ICU. In FY 2015 the ICU had decreased to 19 HAPIs. By the end of FY 2016 HAPIs had reduced to 10 and at the end of FY 2017 only 4 HAPIs were documented. Hospital-wide reduction varied from floor to floor; how-ever, the ICU had the most significant decrease of 50% every year for 3 years.

Prevention interventions included but were not limited to: Two-hour turning schedule; leadership rounds; usage of turning and positioning system; usage of offloading wedges; usage of hydrocellular foam dressings over high risk areas and bony prominences to reduce friction, Shear and pressure; early mobilization; increase utilization of skin care products and an increase in both formal and informal education of staff, patients and patient's families. In addition, in the ICU, 50% of the nurses during this three-year period became critical care certified nurses.

With the use of these interventions and a multi-disciplinary Approach, HAPIs in the ICU were reduced by 89% and 79% Hospital wide over a three-year period.

### AIM Statement

Our pressure injury prevention program has demonstrated a 50% reduction of HAPIs each year in the ICU for the last 3 fiscal years. By continuing the program in the ICU, we intend to maintain the current level of pressure injuries at the number of no more than 5 pressure Injuries in the next fiscal year.

### 25600

# HAPI Reduction: A 3-Year Story Janice Hughes, RN, BSN, CWON; Margaret Isenberg, BS, RN, CWCN, CCCN Methodist DALLAS Medical Center, Dallas, Texas

### 2. Measure: How will we know if a change is an improvement?



## 3. Change: What changes can we make that will result in improvement? (Plan, Do, Study, Act)

### Plan

Initial placement of multiple treatment modalities:

- Two-hour turning schedule
  Offloading devices
- Turn and positioning system (TAPs)
- Foam dressings for prevention
  Early mobilization
- Formal and informal education with the staff, patients and patient's families.
- Leadership rounding including nurse managers, nurse clinical coordinators and charge nurses

### Do

Increase the number of clinical educators from 1 to 2.

Begin the use of turning and positioning systems on a regular basis with specific criteria. Begin the use of foam dressings for prevention on high risk patients.

Formulate a two-hour turning schedule and post in all patient rooms.

Begin patients on early mobilization programs.

Regular leadership rounding performed by the nurse clinical coordinators, nurse managers and WOC nurses.

Bedside education by WOC nurses to include demonstration of product usage and evidence based practices for pressure reduction.

### Study

Use of turning and positioning systems were instituted in the first year (2014):

Systems include:

- Low-friction glide sheet Low air loss absorbent pad Two body wedges
- Initial year a total of 24 systems were purchased and utilized.

The second year, this increased to 27 and 65 systems in the third year.

Use of foam dressings:

- Three layers composed of breathable film, absorbent foam layer and silicone adhesive layer.
- Shapes of foams included heel and multisite

Foam increased from 1035 in the first year, to 2696 in the second to 5147 in the third year for a total increase of 75% in 3 years.

### Act

Transition to new and improved offloading boots and foam dressings. Increase the use of turning and positioning systems within the entire hospital. Integrate improved turning and positioning systems within the ICU.

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### **Concusion**

A total reduction of HAPIs over a three-year period that equaled 88% was achieved. For three years, the ICU reduced its number of HAPIs by 50% of the prior year, to reach a total of 4 in one year.

Sustain the HAPI rate in the ICU with the current multiple treatment modalities to include leadership rounding, education and multiple product usage.

Plans to spread this process through-out the hospital to reduce overall HAPIs.

## Next Steps

Increase hospital wide:

- Turn and positioning system
  Foam dressings
- Education
  Leadership rounding
- Offloading devices

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