Lean Six Sigma and Evidence Based Practice: An Innovative Approach of Blending two Methodologies to Decrease Hospital Acquired-Pressure Ulcers

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Background

HAPU Incidences: 2.5 million patients per year.
Cost: Pressure ulcers cost $9.1-$11.6 billion per year in the US. Cost of individual patient care ranges from $20,900 to 151,700 per pressure ulcer. Medicare estimated in 2007 that each pressure ulcer added $43,180 in costs to a hospital stay.

Lawsuits: More than 17,000 lawsuits are related to pressure ulcers annually. It is the second most common claim after wrongful death and greater than falls or emotional distress.

Pain: Pressure ulcers may be associated with severe pain.

Death: About 60,000 patients die as a direct result of a pressure ulcer each year.

After reviewing the Hospital Acquired Pressure Ulcers (HAPU) it was determined that 3 East had a high incidence of HAPUs. The top contributor to skin breakdown was determined to be moisture.

Sharp Grossmont Hospital is the largest and most comprehensive health care facility in East San Diego County.

Innovative Changes

Using Lean Six Sigma Methodology and Evidence-Based Practice a team was formed to change practice. During two Kaizen events in October 2015, a root cause analysis, process map with swim lanes, and fishbone diagram were created. Three issues were identified. A new program was developed using “Puddles” and the T³ Program (Turn, Touch, Tidy). The T³ program addressed issues such as practice, linen use and documentation to improve the care provided. The program was launched in November 2015.

- Redesign unit into four teams (3 Nurses & 1 aid)
- Initiate Puddles – (Nurse & Nursing assistant meet at the beginning of the shift to schedule when they will meet to turn patient)
- Initiate the T³ Program (Turn, Touch, Tidy)
- Standardize documentation in the electronic medical records

Outcomes

Hospital Acquired Pressure Injuries 3 East

• Redesign unit into four teams (3 Nurses & 1 aid)
• Initiate Puddles – (Nurse & Nursing assistant meet at the beginning of the shift to schedule when they will meet to turn patient)
• Initiate the T³ Program (Turn, Touch, Tidy)
• Standardize documentation in the electronic medical records

During the “Puddles” - the T³ Team will briefly meet to receive report and to schedule a set time (an appointment) when the patient in their pod will be turned.

“Check-in” - The Charge Nurse will round to check-in at each Pod. Charge Nurse/Resource Nurse will confirm with each Pod that a schedule time (appointment) has been set to initiate the T³ program on their patients.

“T³” Team will turn patient at scheduled time
Primary nurse available/Task Resource of Charge Nurse
Teach patient to assess skin
Use bed survey precautions

“Three T’s” (T³) Program

Turn, Touch and Tidy

• Turn patient
• Touch patient to assess skin
• Tidy survey

Hospital Wide Implementation of T³ Program

> 50% reduction of monthly HAPU Incidence rates by the end of 2016.

Cost from National Average. Cost does not include hospital readmission

If 3 East had continued the trend of 3 HAPUs per month, a loss of $379,767 would have occurred. Implementation of the T³ Program resulted in a cost avoidance savings of $379,767.