Implementation of a Cost-effective Practice for Reducing both Pressure Injury and Healthcare Worker Injury during Patient Repositioning

## BACKGROUND

Nurses have more injuries than any other occupation, with the majority of injuries occurring during patient handling.

Recent data support that in-bed repositioning is a significant source of risk for healthcare worker injury (HCWI). These injuries are estimated to cost \$22,500 each, adding $\$ 750 \mathrm{M}$ in annual cost to US healthcare.

Patient care standards for pressure injury (PI) prevention require acute care nurses to reposition patients in bed as often as 6-10 times per shift, a significant source of HCWI risk.

The goal of our project was to:

1) decrease HCWI during in-bed repositioning, and: 2) prevent hospital acquired sacral/buttock PI (SBPI).

## METHODS

We implemented a new patient positioning system (PPS) designed to:

1) decrease the nursing effort required for in-bed
repositioning, and;
2) offload the sacrum and buttocks for PI prevention

The new practice included the use of the PPS for all patients requiring assistance with in-bed mobility.

We compared outcomes beforeaffer implementation, estimated the increase in our annual PPS spent and cost avoidance from expected decreases in HCWISBPI, and calculated our annual return-on-investment.

## RESULTS

Comparison of pre-implementation (2015) to post-implementation (2016) found decreases in both SBPI ( 10.6 to 6.3 per month) and HCWI .

Based on annual admissions, we expected 13 patients/day (25\%) to use the PPS, and found our actual use at 11 patients/day.

Product spent was $\$ 677,272$ and cost avoidance was $\$ 861,000$, providing an annual ROI of $\$ 183,728$.


CONCLUSION
With the Centers for Medicare \& Medicaid Services' (CMS') trend toward value-based purchasing (VBP) which links healthcare quality to payments, hospitals have become increasingly focused on quality.

Overall quality is composed of both cost of care and realized outcomes.

When cost avoidance from improved outcomes exceeds the cost of care, there is improved quality value for both patients and hospitals.

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