

STRIVE TOWARDS CALNOC EXCELLENCE: ADOPTING INNOVATION TO IMPROVE BEDSIDE NURSING CARE

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PURPOSE

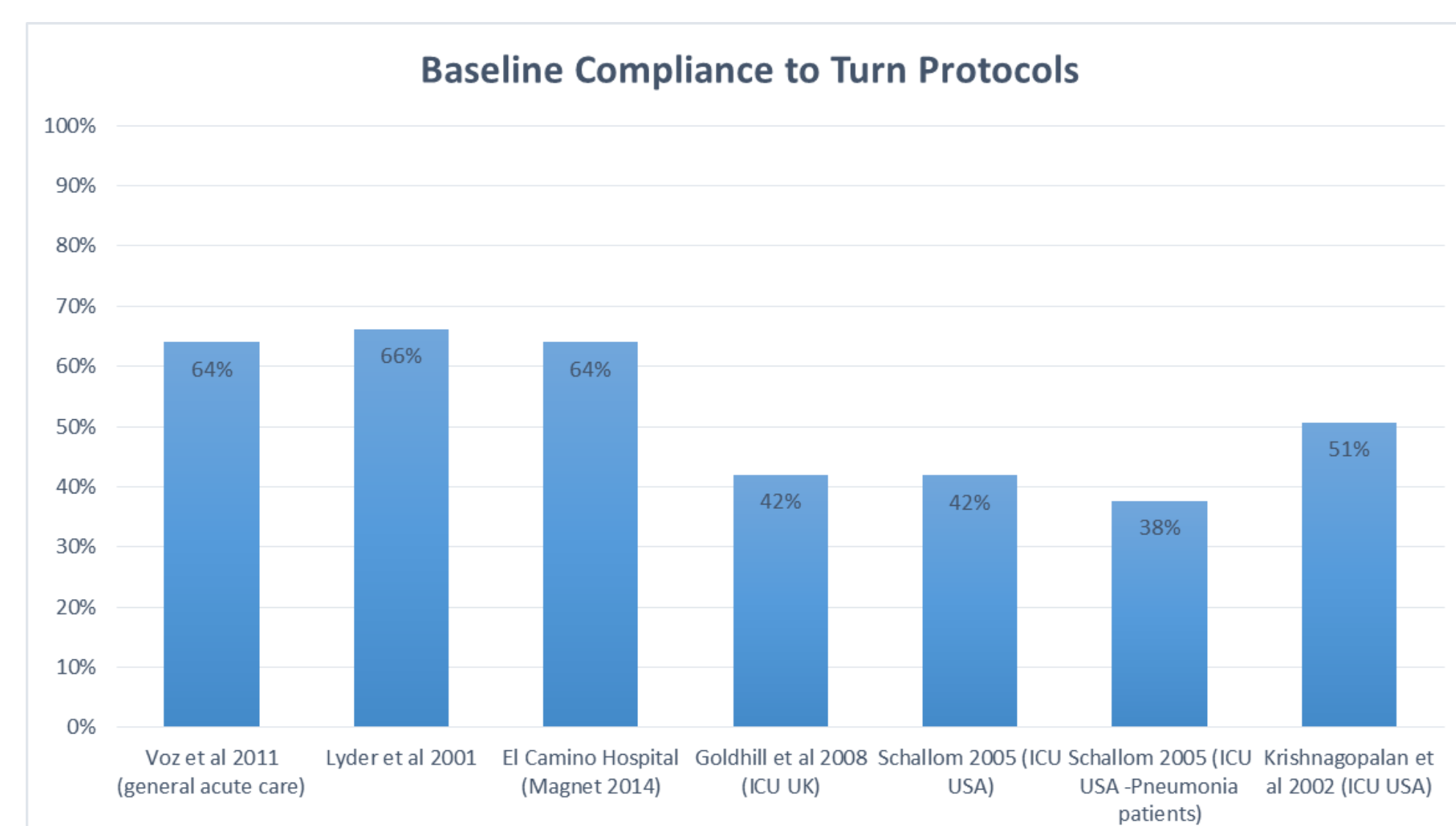
Embodying CALNOC excellence in patient care and nursing practice, the facility's "Heroes" committee sought to improve on-time delivery of patient repositioning in order to improve facility's pressure ulcer benchmarks, including:

- Consistency
- Accuracy and timeliness
- Documentation

BACKGROUND AND SIGNIFICANCE

In addition to preventing pressure ulcers, manual turning has been shown to reduce incidence of nosocomial pneumonia¹⁻², reduce hospital length of stay, reduce number of rental bed days, improve comfort and improve circulatory response.

Although two-hourly turning is considered standard of care for mobility-impaired patients, studies show that compliance to turn protocols in U.S. Acute Care Hospitals is only 38% to 66%.³⁻⁵ Improved turn compliance has been shown to reduce the incidence of hospital-acquired pressure ulcers.⁶⁻⁹



METHODS

A wireless patient monitoring system known to improve effectiveness and efficiency of patient turning efforts was implemented on two 25 bed medical/surgical units.

A total of 138 patients with a Braden ≤ 18 were monitored by the wireless monitoring system. Staff received training on proper patient turning and how to use the system.

Rental bed costs were calculated for the monitoring period and compared with rental costs from same period a year prior.

Compliance with the turning protocols were calculated by shift, unit and facility over the pilot period.



Room	Patient	Time Until Next Turn	Position	Information
2301	M.S.	1:57	L B R	Upright
2302	C.M.	0:14	L B R	
2303	S.S.	Turn Due 0:03 Over	L B R	
2304	M.L.	1:51	B R	Prone



A single patient use sensor was adhered to the patient's chest to automatically monitor patient position and movement and wirelessly communicate status to a dashboard display

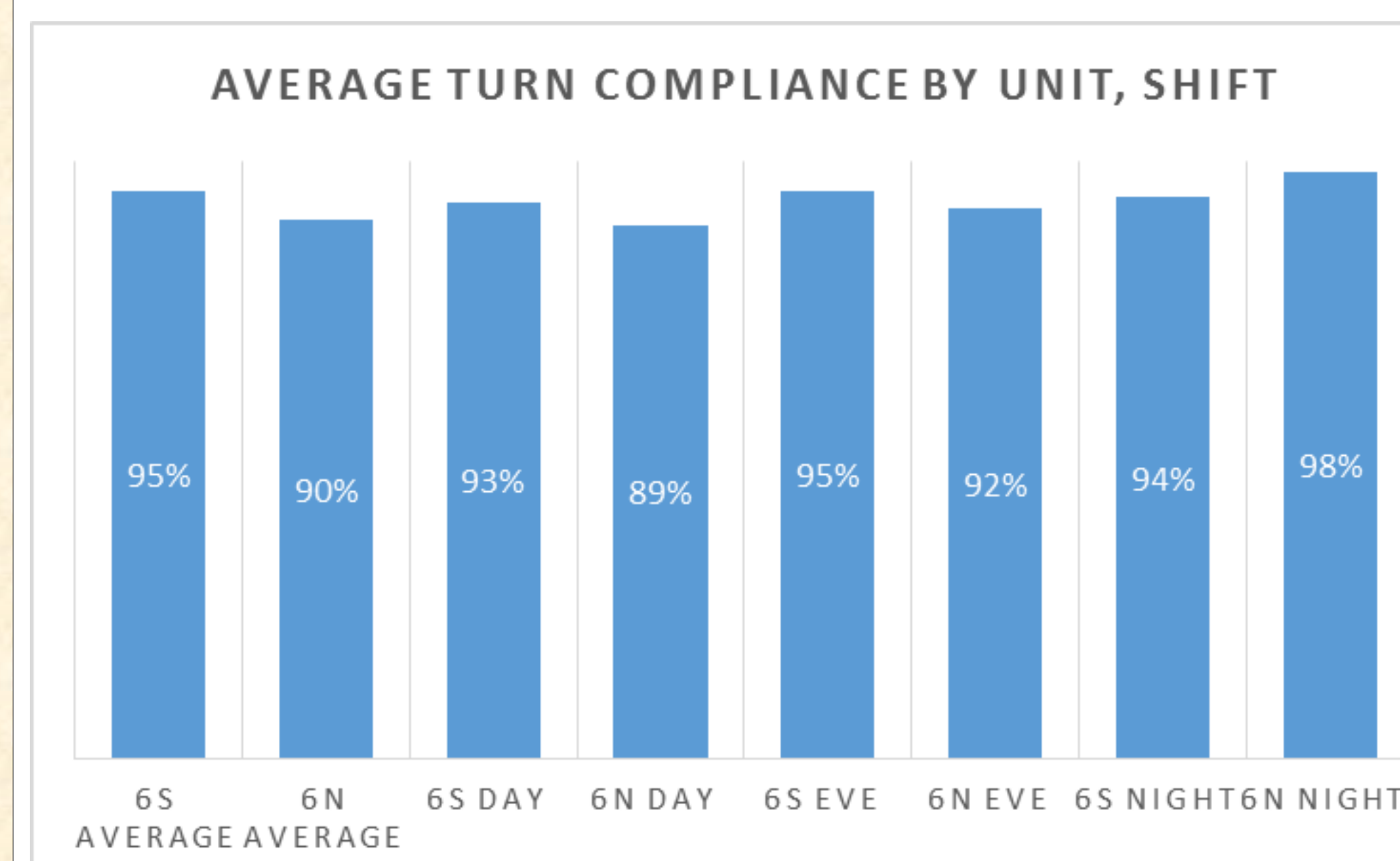
RESULTS

Enrollment Data

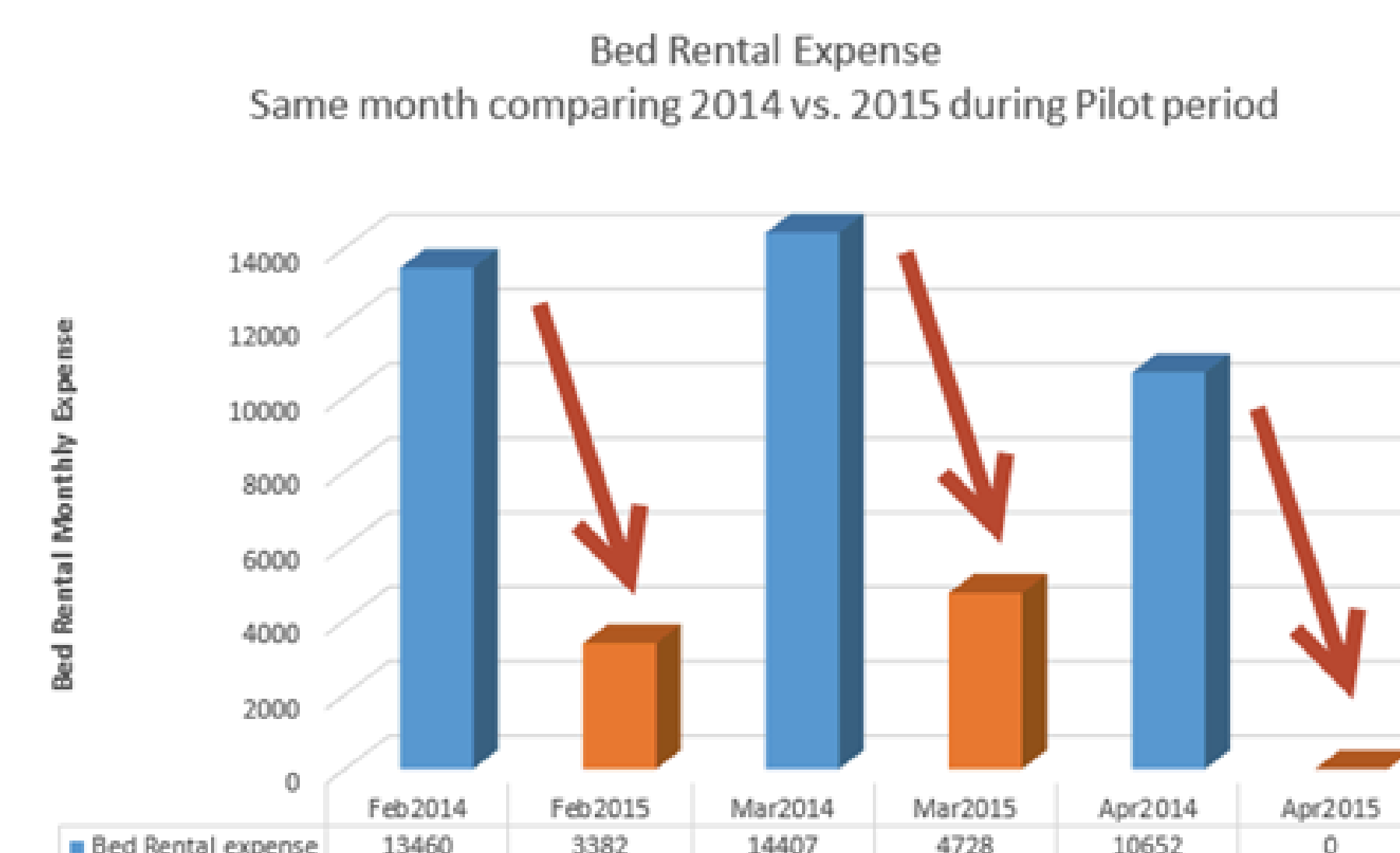
Total Number of patients	138 patients	5550 Hours
6 South	63	2930 Hours
6 North	75	2620 Hours

Total Number of turn alerts	1286
Total Number of Pauses	541
Average compliance to Q2 protocol	93%

- Overall turn compliance for the pilot period was 93%
- Individual shift compliance ranged from 89% to 99%



- Our specialty bed rental costs decreased 79% compared to previous year given improved focus on turning.



- No HAPU's were reported and no wound care skin consultations were required for patients who were monitored by the system.

CONCLUSIONS

Using innovative technology to solve a traditional nursing challenge helped improve on-time care delivery, documentation and teamwork.

The technology holds great promise to improve patient outcomes and reduce non-reimbursable HAPU treatment costs. The system can also reduce specialty bed rental costs, which are sometimes used as a proxy for timely patient repositioning.

"The Leaf device and the monitoring system is so useful. With 19 patients during my shift, it helps to remind me who and when to turn and reposition my patients or ask for resources for timely repositioning."

- Bob B. Patient Care Technician, March 2015

"My husband had serious pressure ulcer before and I really liked the Leaf thing your nurse placed on my husband to remind them to return my husband every 2 hours. That is a good reminder."

- Wife of patient, John D, Patient, May 2015

"No Wound Care skin consultations were needed for any patient who was monitored with the Leaf system."

- Mary O. RN, CWON, June 2015

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