TRANSFORMING PRESSURE ULCER PREVENTION IN THE ICU WITH PATIENT WEARABLE TECHNOLOGY AND NURSING LEADERSHIP

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ABSTRACT

A wearable monitoring system† shown to improve turn compliance was implemented on a 36-bed ICU. The system provides visual turn cues on charting computers based on patients’ individual needs and time since last repositioning.

Methods

A wearable monitoring system† shown to improve turn compliance was implemented on a 36-bed ICU. The system provides visual turn cues on charting computers based on patients’ individual needs and time since last repositioning.

Results

Overall turn compliance for the pilot period was 93.7%. Individual shift compliance ranged from 80% to 98%. This significantly exceed ICU turn compliance benchmarks noted in literature, which range from 38% to 51%.

Hospital Acquired Pressure Ulcers were reduced 85% from 7 to 1, compared to same period last year.

This equals a savings of $71,556 in non-reimbursable treatments costs.

CONCLUSIONS

This pilot project demonstrated that high compliance to turn protocols is feasible and sustainable, and can have a profound impact on reducing pressure ulcer incidence.

When a turn protocol is already firmly in place, repositioning technique is easily amended by simple education. Nursing leadership support is crucial for getting staff nurse buy-in with new technology adoption and for recognizing that proper and timely turning is an important therapeutic tool to prevent hospital acquired conditions.

More data will need to be collected to show statistical significance in HAPU reduction.

ADDITIONAL FACTORS THAT FACILITATED SUCCESSFUL PILOT:

1. Open mindedness of the ICU nursing staff and willingness to try something new
2. Teamwork approach for turning patients
3. Sharing daily compliance data with nursing staff as an ongoing quality metric
4. Adequate ongoing supply of cushions and pillows; collaboration with Materials Management and EVS
5. Hospital Executives’ interest in pilot and patient outcomes

REFERENCES

1 Leaf Healthcare, Inc., Pleasanton, CA.