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Good Positioning Can Prevent Unit Acquired Skin Injuries: Operating Room Performance Improvement Project 2010

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Good positioning can prevent unit acquired skin injuries

Operating Room Performance Improvement project—2010

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Because positioning problems can result in significant injuries and lawsuits, knowing what can go wrong with patient positioning and how to prevent it can help eliminate both. Our 2010 Performance Improvement project is preventing unit acquired skin injuries. Quality Variance Reports are monitored for any occurrences that are unit acquired. We then use this data to revise and improve our positioning techniques in order to prevent recurring injuries.

Proper positioning ensures that the surgical team has ready access to the patient and a clear view of the surgical site, while minimizing potential risk to the patient. It reduces bleeding, mostly by avoiding venous congestion, minimizes cardiac and respiratory problems and decreases the risk of pressure-related damage to the skin, nerves, joints, and muscles. Proper positioning techniques, used with proper supportive equipment and devices, contribute to patient safety

according to the Association of Perioperative Registered Nurses (AORN, 2008).

Positioning the anesthetized patient must be done with more diligence because these patients cannot make others aware of compromises due to excessive pinching, shear or friction caused by improper positioning or lack of sufficient padding.

There are many factors to consider in planning how best to keep patients safe. In addition to knowing what type of procedure is scheduled, how long it will last, and what type of anesthesia will be administered, the team needs to determine whether any equipment that could affect positioning will be used—and to identify patients at high risk. We note the patient's age, height, and weight. Obese individuals face a greater likelihood of nerve and pressure point skin injuries while older people tend to have less flexibility and decreased peripheral circulation than their



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Patient in lateral position for Thoracic Surgery. Proper anatomical alignment is extremely important.



Patient leg secured to gel-padded leg holder.



Hand holder pads and holds securely upper extremity while in prone position.

younger counterparts, making them more susceptible to nerve injury (Rothrock, 1999).

There are many devices on the market to aid in safely positioning patients and the surgical team must have a working knowledge of what is available and how it is used. Ideally, any materials used for positioning, especially padding, should be able to absorb compressive force, redistribute pressure, prevent excessive stretching, and provide support for optimum stability. Studies suggest that positioning devices should maintain normal capillary interface pressure of 32 mm Hg or less (Rothrock, 1999).

After positioning patients about to undergo a procedure, the team must take time to evaluate body alignment and tissue integrity. The ulnar bone and the lumbar area are checked because they're especially vulnerable. Tubes and lines are also monitored to assure that they are not causing undue pressure, not just at the beginning, but throughout the procedure. We look at the patient's eyes, ears, and nose to ensure that they're not being pinched.

After the procedure, an assessment is performed to examine any areas that were under direct pressure and to check for signs of skin injury. As soon as the patient is alert, he or she is asked if any numbness or tingling is being experienced in the extremities as this is a sign of possible nerve damage.

All preexisting conditions and postoperative findings are documented by the Circulating RN. Documentation includes nursing assessments and interventions before, during, and after the procedure. Additionally, any alterations in skin integrity are part of the hand-off communication to the PACU RN.

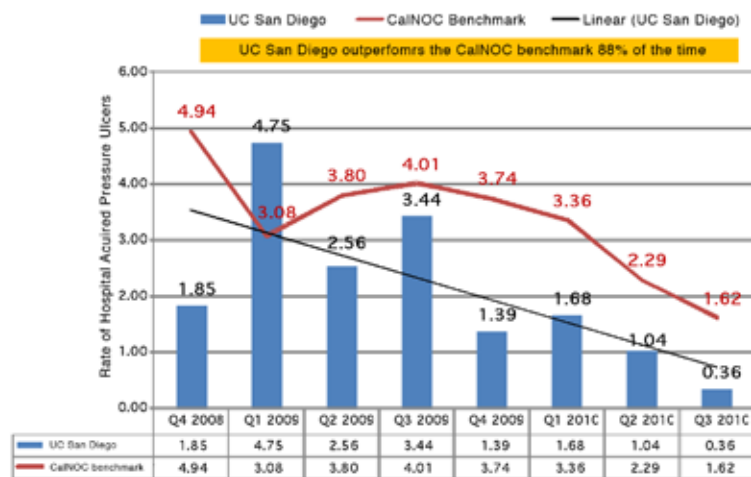
Since 2008 UCSD nurses have been collecting data on hospital acquired pressure injuries. Additionally UCSD participates in the quarterly CalNoc survey which collects data from other like hospitals and compares results.

Figure 1 shows that UCSD data for hospital acquired skin injuries is consistently lower than the CalNoc benchmarks.

References

- Association of Operating Room Nurses. (2008). Recommended practices for positioning the patient in the perioperative practice setting. 2008 standards, recommended practices, and guidelines. Denver: AORN Inc.
- Rothrock, J. C., Meeker M., (1999). Alexander's care of the patient in surgery (11th ed.). St. Louis: Mosby.

Rate of Hospital Acquired Pressure Ulcers UC San Diego Q4 2008 - Q3 2010



Note: The Collaborative Alliance for Nursing Outcomes (CalNOC) is the national comparison database used. The comparative mean of the CalNOC database

Figure 1. Graph showing UCSD data for hospital acquired pressure ulcers to be consistently lower than CalNoc data.