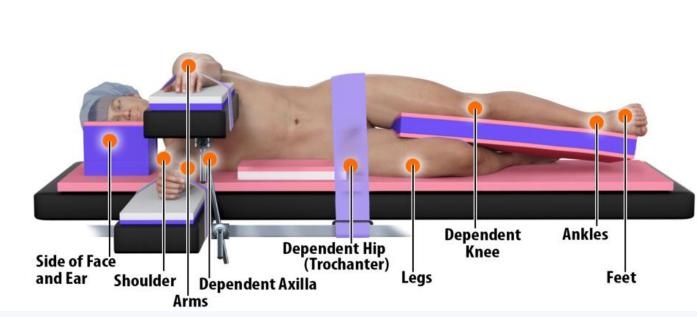


Improving Patient Safety Outcomes and Staff Satisfaction in Lateral Surgery Positioning

Virtua Health

Tiffany Morris BSN, RN, CNOR, Danielle Wert, CST, Michelle Weston MBA, BSN, RN, NPD-BC, CNOR

Problem



In the Virtua Marlton Operating Room, patients undergoing thoracic procedures such as Video- Assisted Thoracoscopy were sustaining stage 1 pressure injuries with current positioning equipment. At that time, the OR Team was using the following positioning equipment:

- Bean bag
- Gel pads or egg crate under the dependent leg
- Gel strips between patient and the bean bag
- Pillows between the patient's legs
- Absorbent foam dressings on the outer aspects of the patient's knee, hip, and ankle on the dependent leg

After a patient developed compartment syndrome in the dependent leg that required a fasciotomy, a gel pad overlay was added to cover the bean bag.

In addition to the serious safety events that our patients were suffering, the OR team recognized other concerns with their current process. Patient positioning was inconsistent depending on the staff assigned to the room. Some staff did not put enough padding on boney prominences or did not have enough pillows to adequately support the patient's legs when the bed was flexed.

Intervention

The OR Team of Dr. Puc, Dr. Boris, Danielle ST and Tiffany RN sought to create a better solution that would create a standard of care for thoracic surgery patients. After an educational in- service on proper positioning and utilization of positioning kits, Tiffany and Danielle thought a lateral positioning kit could be a potential solution to their problem. Danielle and Tiffany spoke with their Advanced Nurse Clinician, Michelle, about trialing products to make a lateral pack. Michelle contacted a perioperative positioning kit company to discover how the Virtua thoracic team could create a new positioning kit.

Plan

- Michelle arranged for observations of the current positioning process to understand the thoracic team's needs for improvement.
- The OR Team gave feedback on what they would prefer in the new positioning kit.

Do

- After discussion with the OR team, the company representatives determined new wedges for thoracic support needed to be created.
- The company created new trial kits based on the OR Team's recommendations.

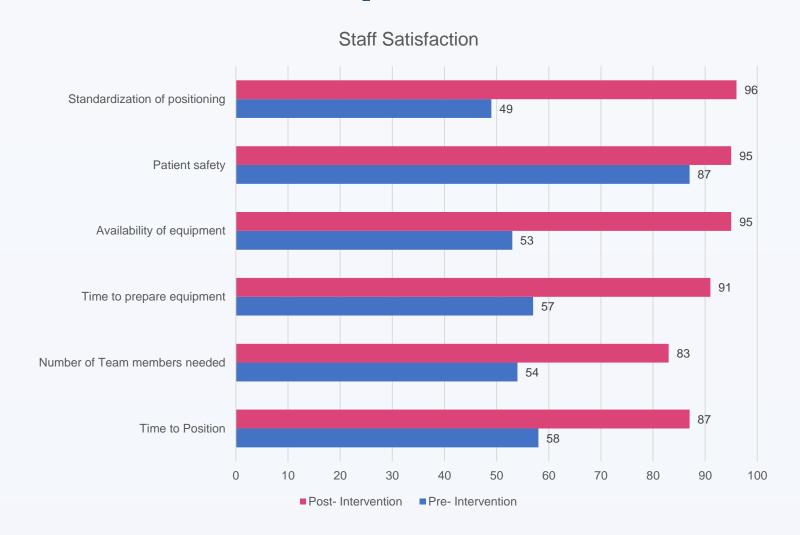
Stud

- Initial trials included patients of average BMI. Later, 2 trials were on patients with a high BMI and above average height.
- During the trials, the team revised the triangle wedges and added extra foam pieces to fill in any gaps between the patient and bed.

Act

- The positioning aide kit company received all of the OR Team's feedback and created the final Lateral Thoracic Positioning Kit.
- The positioning aide kit was officially implemented for all lateral thoracic surgery procedures at Virtua in Marlton in March 2022.

Comparison



Graph shows results of 18 multidisciplinary team members percentage of satisfaction from pre-intervention to post-intervention.

The implementation of the positioning kit for lateral thoracic surgery has improved patient care for multiple reasons.

- Single Use kit
 - Reduced equipment cleaning time between patients.
 - Decreased turnover time.
 - Decreased infection risk...
- Lateral positioning is standardized
 - Reduced time gathering equipment, or additional equipment for larger patients.
 - Reduced time positioning patient.
 - OR team can position the patient in lateral position with only the assigned room team (4-5 Team members).
 - Patients are positioned safely and anatomically correct every time.

Outcome



- Zero Harm: Since the implementation of the lateral thoracic positioning kit, our Operating Room has not had any stage 1 pressure injuries or other serious safety events reported.
- Surgeon Satisfaction: increased satisfaction with the time it takes to position a patient, as well as the standardization in patient care.
- Staff Satisfaction: increased satisfaction with equipment availability and preparation, time and staff required to position and process standardization.
- Since the lateral thoracic positioning kit has become available, other hospitals throughout the United States have trialed the kit and reported positive responses.

References:

Association of Perioperative Registered Nurses (AORN) (2022). Positioning the patient: Lateral Position. *AORN Guidelines* for Perioperative Practice, 2022 ed., 709-751 AORN Inc., Denver, CO.

Association of Perioperative Registered Nurses (AORN) (2020). Prevention of Perioperative Pressure Injury Toolkit. Retrieved from: Prevention of Perioperative Pressure Injury Tool Kit - AORN

