

Development, Implementation, and Impact of a Proning Team During the COVID-19 Intensive Care Unit Surge

Jacqueline Hardman, RN, BSN, CCRN
Beth Israel Deaconess Medical Center - Boston

Introduction/Problem

- > Prone positioning is frequently used to improve oxygenation in critically ill patients with acute respiratory distress syndrome (ARDS).
- ➤ After the surge began, it was recognized that many intensive care units (ICUs) did not have the resources, education, or experience to prone critically ill patients.
- > The MICUs were familiar and comfortable with the procedure of proning, but many ICUs were not.
- Additionally, the process required several members of the patient care team, which took them away from other tasks, and was time consuming, taking more than 40 minutes from start to finish.

Aim/Goal

To develop a proning team composed of nurses who were skilled in prone positioning to maximize efficiency, use resources effectively, and ensure patient safety.

The Team

- Sharon C. O'Donoghue, DNP, RN > Jennifer Sarge, BSN, RN
- Meghan Church, DPT
- Kristin Russell, BSN, RN
- Michael N. Cocchi, MD
- > Ari Moskowitz, MD

- Jennier Sarge, BSN, KNSusan DeSanto-Madeya, PhD, RN, FAAN
- > Jacqueline Hardman, BSN, RN, CCRN
- Margaret M. Hayes, MD, ATSF
- > Kelly A. Gamboa, DNP, RN, CNOR

The Interventions

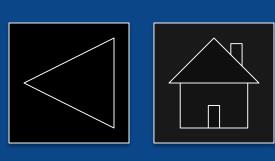
- A proposal for the development of an ICU proning team was submitted to HICS
- 2-hour educational sessions for redeployed OR nurses included an introduction to the proning protocol and a preproning checklist to reduce the risk of adverse events
- Three education sessions were held and supplemented with an e-learning module
- > A standard work document was created to detail the role and expectations
- > The proning team began working within 1 to 2 weeks of training sessions
- > 12-hour shift support was provided from 8 AM to 8 PM, 7 days a week
- The proning team kept a list of patients and would round in the ICUs daily to assess and discuss proning needs with the ICU nurses

Elements of Proning Team Education and Training

Content	Trainer	Time
Introduction to Proning Team	MICU RN director	10 min
Donning and doffing PPE	MICU RN educator	10 min
General ceiling lift training	SPH team	45 min
Proning training with ceiling lift and practice	SPH team	45 min

For more information, contact:

Jacqueline Hardman, RN, MICU Unit Based Educator, jhardma@bidmc.harvard.edu



Development, Implementation, and Impact of a Proning Team During the COVID-19 Intensive Care Unit Surge

Jacqueline Hardman, RN, BSN, CCRN
Beth Israel Deaconess Medical Center - Boston

Preproning Checklist

Adequately sedate and potentially chemically paralyze Eyes lubricated and taped shut

Perform mouth care & subglottic suctioning

Set up end-tidal CO2 and monitor while prone

Change ECG leads to back

Remove the Foley securement device

Ensure the endotracheal tube is secured with tape

Apply barrier cream to the area around the mouth and under the nose

Evaluate central and peripheral lines/infusions

If possible, flush and cap the arterial line

Place foam dressings on bony prominences and pressure areas

Prone toward the ventilator; position all tubing to ensure a safe turn

Results

- > The proning team assisted with 3 to 30 patients per 12-hour shift
- ➤ By having a dedicated role for proning, this maximized efficacy and the proning team was able to complete the proning and supinating maneuvers in 3 minutes or less
- ➤ Between March 5 and May 31, 2020, the proning team assisted with at least 142 turns to the prone position and 169 turns to the supine position.

Lessons Learned

- ➤ If a proning team is to be formed again, the standard work document must be updated to reflect expectations and clearly define roles to avoid the perception of "power struggles"
- The proning team assisted in additional tasks and should be outlined in the standard work document
- Additional training regarding the preproning checklist, management of the airway, and proper head positioning would be necessary for another surge
- Wound care staff should in-service proning team members regarding recommendations for positioning, support surfaces, and placement of foam dressings to prevent pressure injuries in the prone position