

STANDARDIZED TRAUMA ANESTHESIA SET UP AND ITS RELATIONSHIP TO PREPAREDNESS AND CONFIDENCE OF THE PROVIDER

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PURPOSE

- The goal of this DNP project is to assess the confidence of the provider to care for an emergent trauma case, compliance, and satisfaction of an implemented checklist for a standardized trauma anesthesia set up as well as an updated trauma medication box.

BACKGROUND & RESEARCH

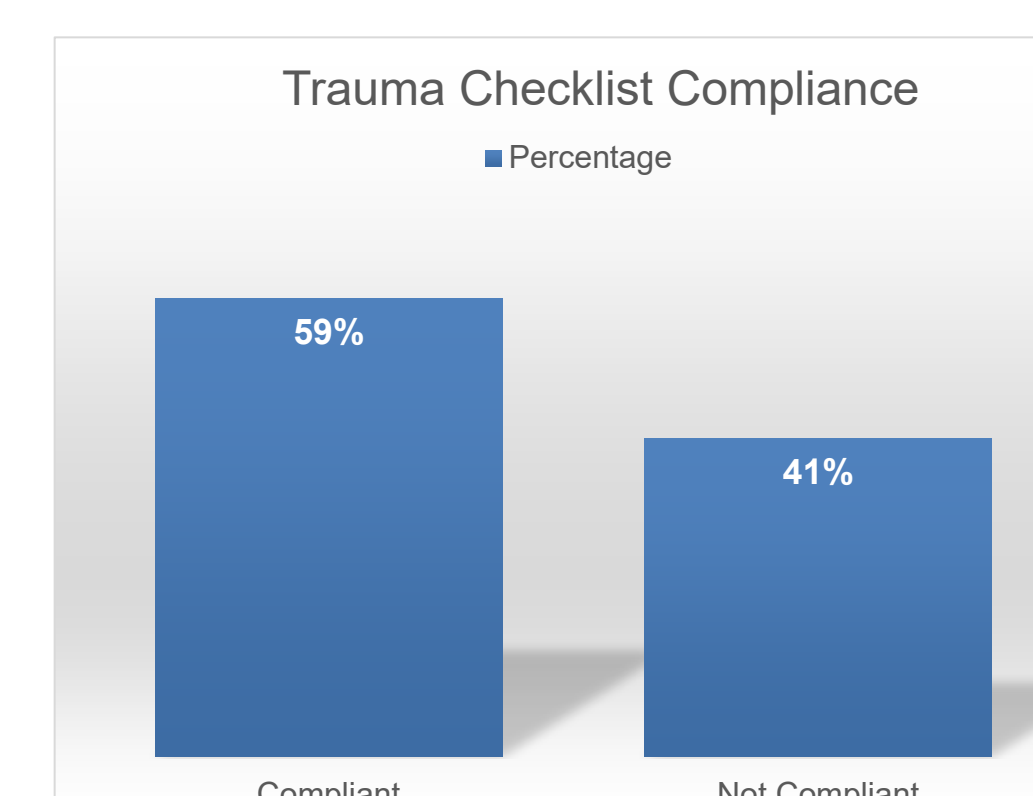
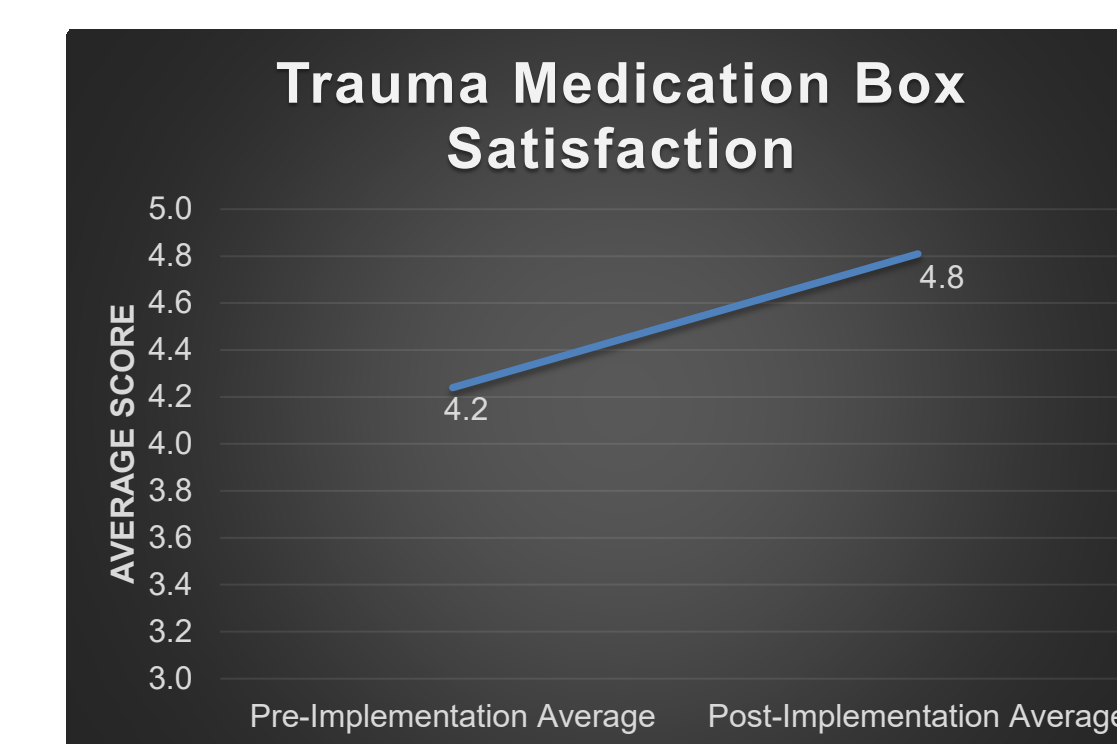
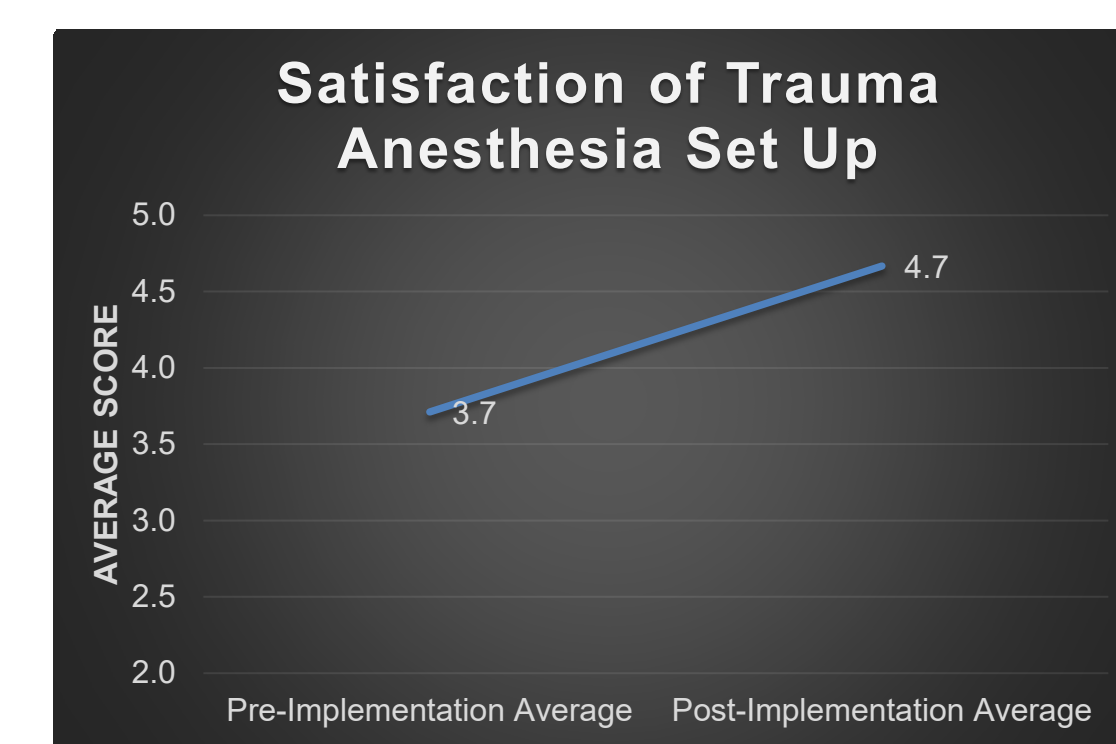
- Trauma anesthesia can be extremely unpredictable and have some of the most critically ill patients.
- This patient population requires quick interventions and demands many resources from the providers and the facility.
- A delay in care can be detrimental to a trauma patient's outcome (Tobin et al., 2018).
- Missed steps and items in an anesthesia set up are commonly found (Rodriguez et al., 2019).
- The use of checklists and standardization can improve efficiency, prevent human errors, and reduce patient complications (Burgess et al., 2018; Haynes et al., 2009; Jelacic et al., 2019; Shultz et al., 2010; Thomassen et al., 2010).

METHOD

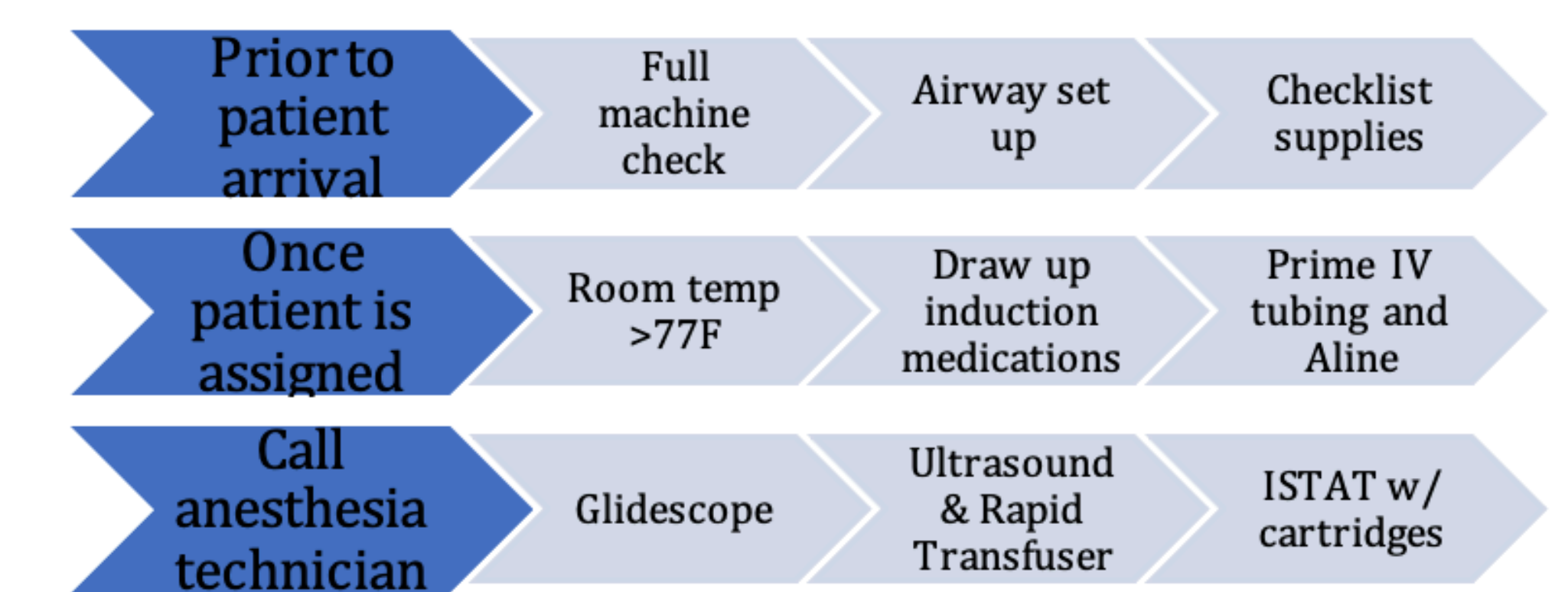
- This quantitative study was performed at a Level-1 trauma center with sampling chosen from convenience.
- The study utilized a pre and post implementation survey a Likert scale and compared the two using a paired t-test as well as a t-test assuming unequal variances.

RESULTS

- Confidence of the providers increased from 77.2% to 92.1%.
- Satisfaction of the anesthesia set up increased from 74% to 94% and the trauma medication box increased from 84% to 96%.
- Compliance of the checklist resulted at 59%



Trauma Anesthesia Set Up Checklist/ Standardization Protocol



Airway Set Up

- Ambu Bag
- Bougie
- Suction on and ready
- Tongue depressor
- Oral Airway (90 and 100)
- 2 handles
- 2 Blades MAC 4 and Miller 2
- ETT with stylet and syringe (7.0 and 7.5)
- Eye and Tube tape
- Esophageal temp probe
- OGT
- BIS

Supplies

- IV and A-line bundle
- Fluid warmer
- Blood tubing
- CVL Kit
- 4 IV pumps
- EKG Monitors & electrodes
- O2 sat, and A line cables
- Underbody and upper body Bair hugger
- Ear sat probe
- 4 bags Plasmalyte or Normosol R fluid

CONCLUSIONS & RECOMMENDATIONS

- A standardized trauma anesthesia set up checklist improves the providers' confidence, satisfaction, and preparedness for an emergent trauma case.
- Implementation of a checklist is successful even in large organizations
- Further research should revolve around cost reduction and improved patient outcomes in the specific trauma patient population with the use of a checklist.

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