

INTRODUCTION

- Local Anesthetic Systemic Toxicity (LAST) is a rare but life-threatening complication of regional anesthesia. Despite its preventability, communication breakdowns in the perioperative period contribute to incorrect dosing, documentation errors, and increased risk of adverse events.
- Aim: To implement and evaluate the impact of a SBAR based handoff form for increased handoff consistency regarding local anesthetic administration
- PICO: In surgical patients receiving local anesthetics, does implementation of the SBAR handoff for, compared to current practice of non-standardized handoff, affect communication of local anesthetic administration among perioperative providers within three months

METHODS

- Design: Quality Improvement Project
- Framework: Plan-Do-Study-Act (PDSA)
- Setting: 626-bed facility, 18 ORs, 40+ blocks/week
- Target Population: adult, noncardiac surgical patients receiving peripheral or truncal blocks by an anesthesia provider
- Participants: Anesthesia providers, preop nursing staff, and PACU nursing staff
- Tools: SBAR-based handoff tool, Handoff Clinical Evaluation Exercise (CEX), Pre- and post-surveys on communication quality
- Outcomes: The primary outcome for this project was improved communication regarding local anesthetic administration during the handoff process utilizing the Handoff CEX tool
- Data Collection: Initial two-week pre-implementation survey of current practice followed by ten weeks of SBAR handoff form implementation
- Statistical Analysis: Descriptive analysis was completed for sender scores, receiver scores, and satisfaction scores. Median scores were similar across all perioperative care phases, indicating non-normal distribution leading to the use of non-parametric testing

Figure 1: Eval Satisfaction Receiver

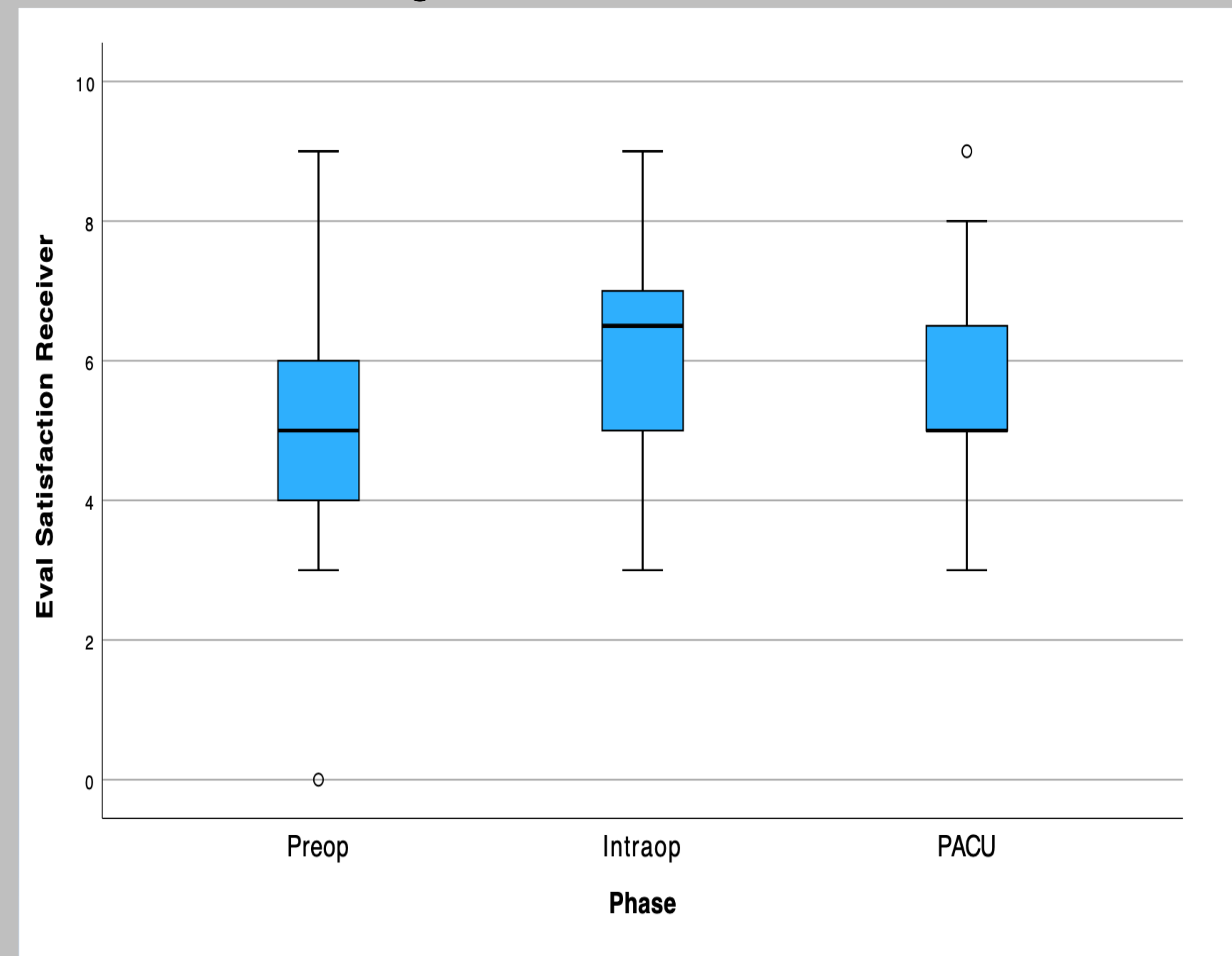


Figure 2: Sender Total Score

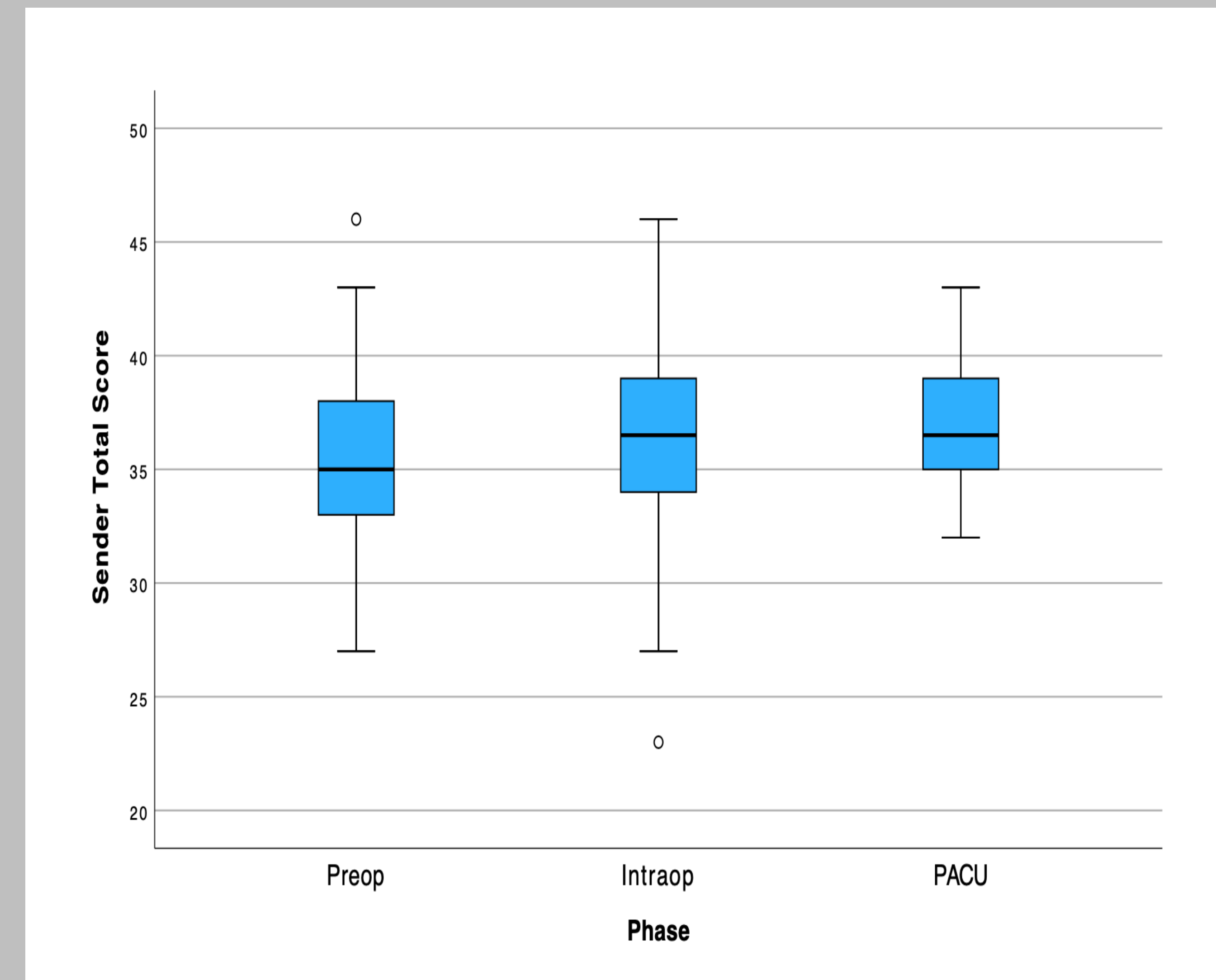


Figure 3: Receiver Total Score

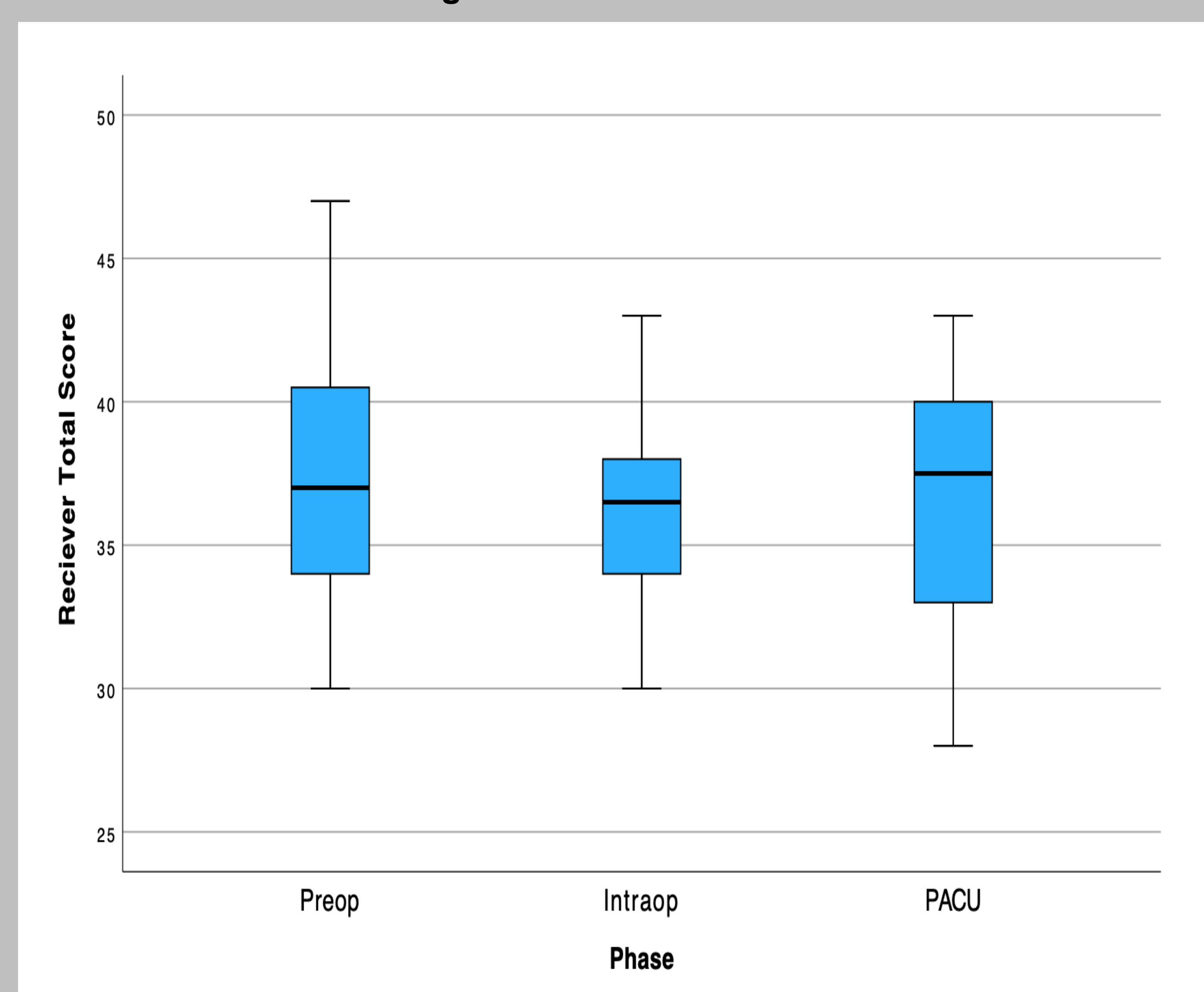
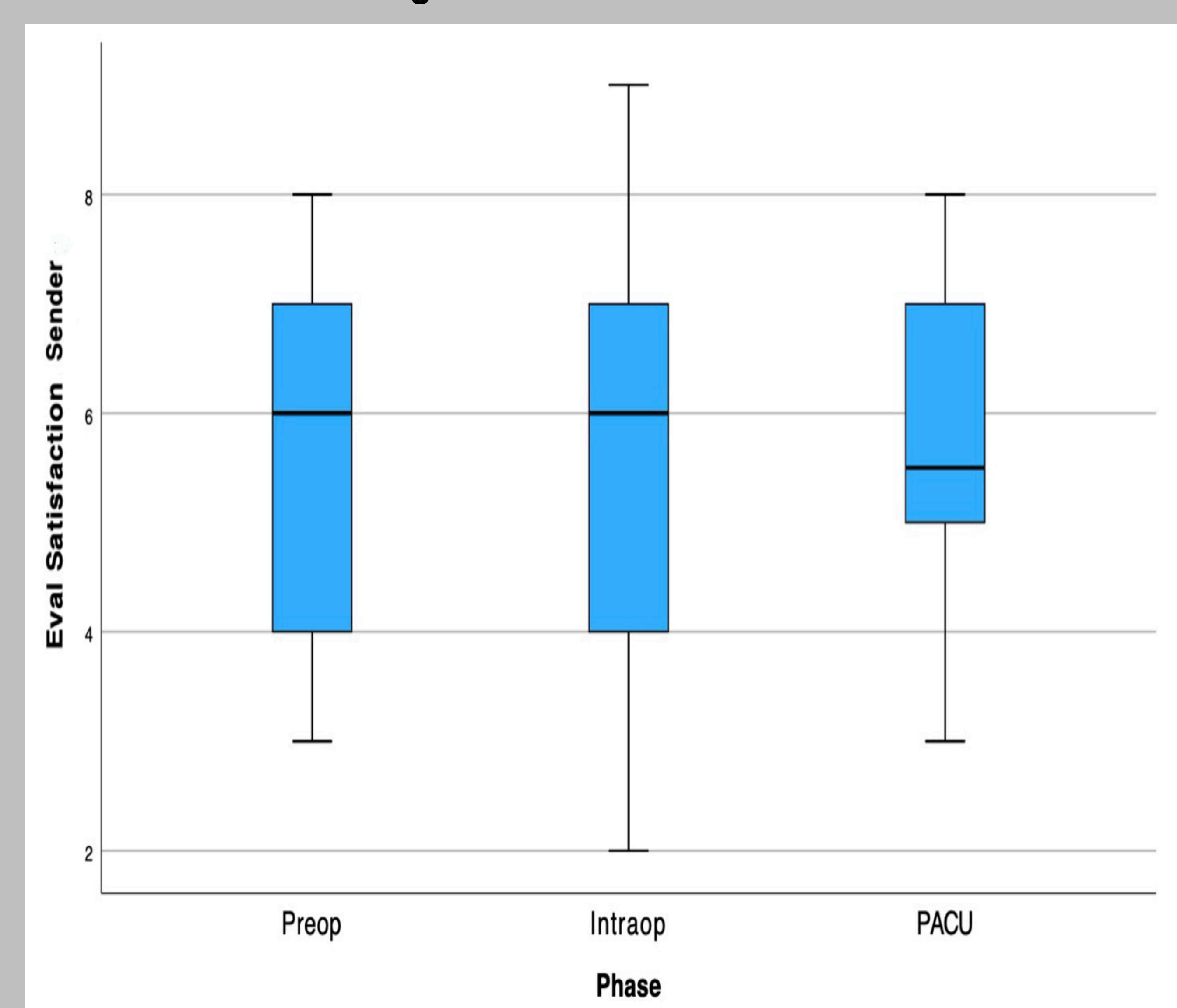


Figure 4: Eval Satisfaction Sender



RESULTS

- Total scores averaged 36 points in the Handoff CEX scoring across perioperative phases
- Median satisfaction scores varied from 5-7 across perioperative phases
- Kruskal-Wallis testing demonstrated no significant differences across perioperative phases for sender scores, receiver scores, or satisfaction scores (all with $p > 0.25$), indicating consistent performance and satisfaction
- Wilcoxon Signed Rank Testing demonstrated no significant differences between sender and receiver evaluations of the same handoff event (total score: $p = 0.612$; satisfaction: $p = 0.831$), indicating consistency in handoff quality perception

DISCUSSION

- Limitations: Implementation was limited by staff resistance related to lack of baseline data and a modest sample size ($N = 144$).
- Benchmarks: Published Handoff CEX success thresholds (total scores 42–50; satisfaction 7–8) indicate opportunity for continued improvement.
- Outcomes: SBAR handoff implementation produced consistent communication and satisfaction across perioperative phases, with strong sender–receiver agreement.

IMPLICATIONS FOR ADVANCED PRACTICE NURSING

- This project highlighted that handoff consistency can lead to improved communication and satisfaction with the handoff process, supporting to need for standardized communication
- This handoff can be adapted to better fit differences in surgical departments to promote further interdisciplinary collaboration while supporting clear and concise communication
- Standardized handoffs reduce handoff variability to ultimately enhance patient safety with their adoption

