



Standardizing Handoff from the Anesthesia Provider to the Surgical Intensive Care Unit

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Introduction

Background

- OR-to-SICU handoff is a high-risk transition requiring accurate, timely exchange of information.
- Communication gaps during postoperative transfer can lead to errors, delays in care, and decreased team coordination.
- EPIC go-live improved documentation access, but anesthesia records remain difficult for SICU nurses to retrieve quickly.

Problem

- Frequent omissions reported included blood products, pressors, paralytics/reversal, EBL, patient-specific parameters.
- Inconsistency and incomplete information contribute to staff dissatisfaction and increase risk of error.

Purpose

- To determine whether structured electronic handoff improves clarity, completeness, and perceived quality of postoperative communication.

Methodology

Study Type

- Quasi-experimental, pre/post quality improvement design

Inclusion:

- SICU nurses: full-time, part-time, per-diem, charge
- Anesthesia providers: attendings, residents, CRNAs, SRNAs
- Patients going directly from the OR to the SICU.

Exclusion:

- Staff not involved in SICU postoperative handoff
- Anyone unwilling to complete the anonymous survey
- Patients who went to the PACU before going to the SICU
- Patients arriving to the SICU from NORA locations

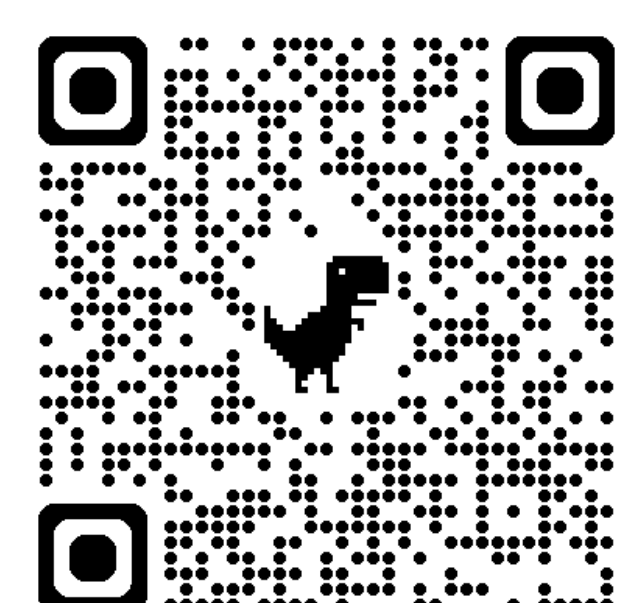
Subject Recruitment

- Recruitment via email invitation and flyers with QR codes
- Survey distributed using REDCap platform

Intervention

- Implementation of a standardized Epic OR-to-SICU handoff tool
- Survey administered pre-rollout and at ~6 weeks post-rollout

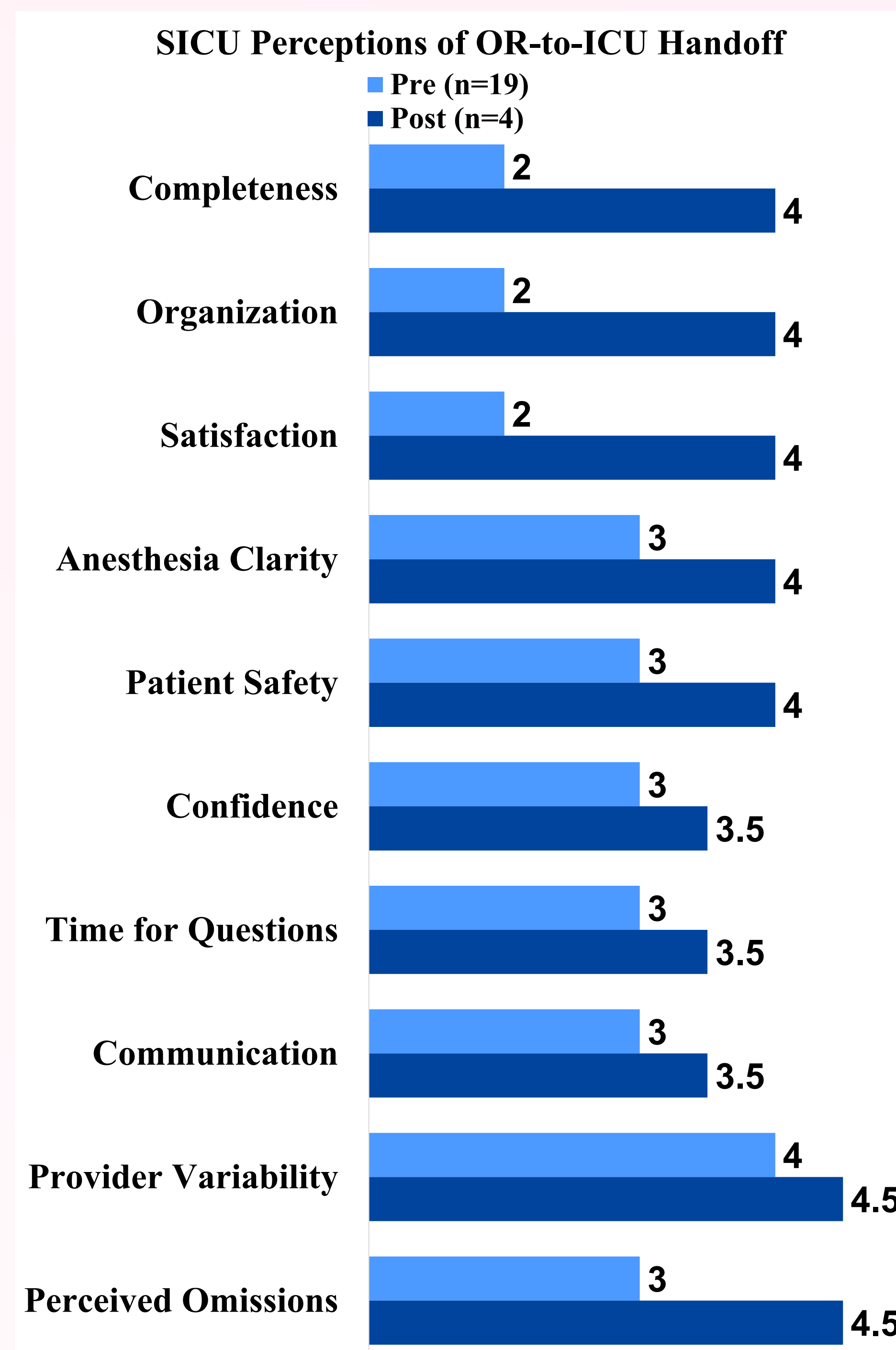
References



Results

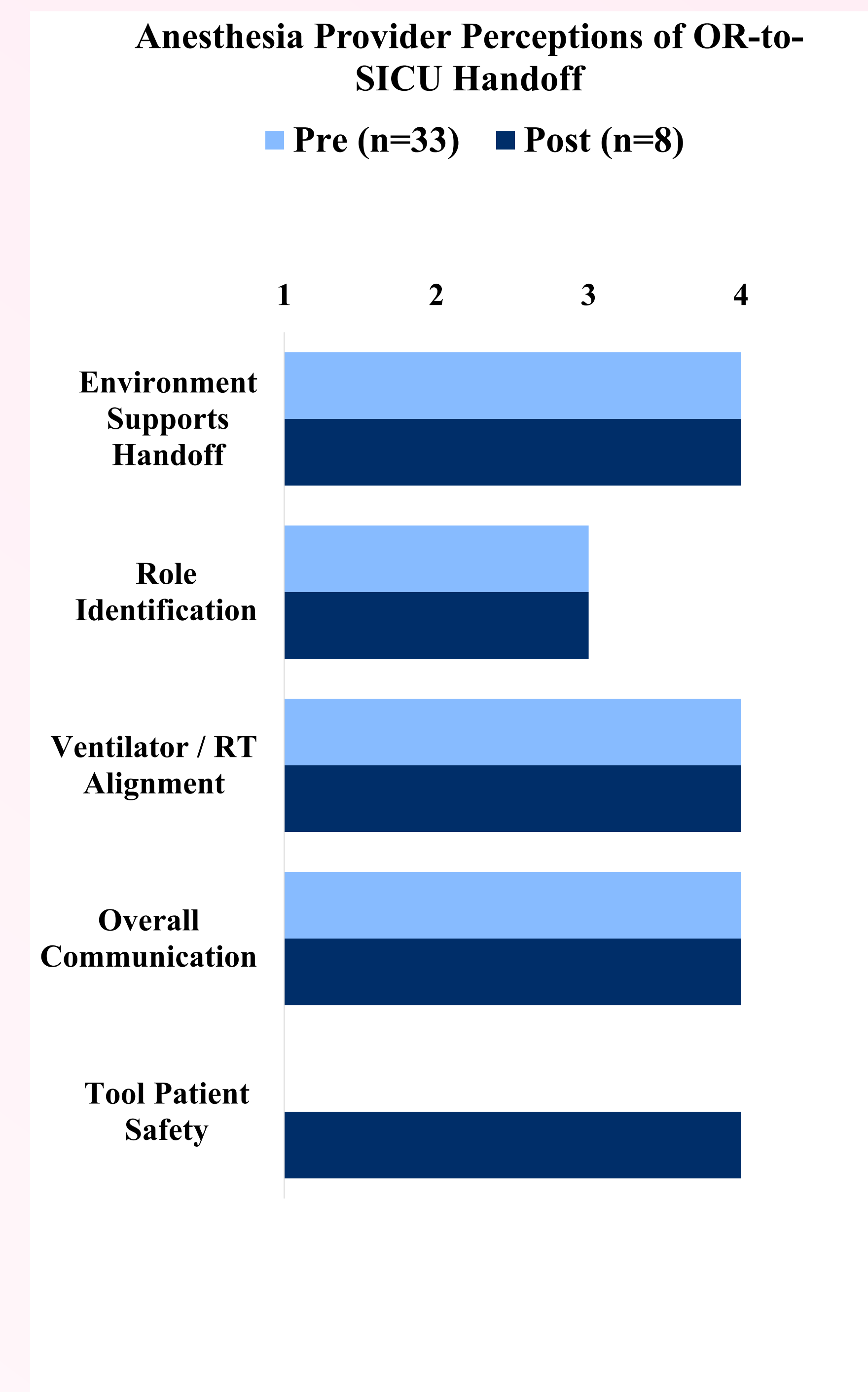
Perceptions of OR-to-SICU Handoffs

| SICU Pre-Implementation | Anesthesia Pre-Implementation |
|---|---|
| Variable satisfaction with OR-to-SICU handoffs | Generally positive perceptions of handoff quality |
| Inconsistent handoff content across cases | Persistent variability in handoff experiences |
| Information dependent on provider presence | Lack of standardized handoff structure |
| Timing challenges during patient arrival | Redundant communication and duplicate questioning |
| Unclear roles during multidisciplinary handoffs | Coordination challenges with respiratory therapy |



Provider Presence During OR-to-SICU Handoff

- Anesthesia attending present in 52%
- ICU attending present in 30%
- ICU resident/fellow present in 35%
- ICU NP/PA present in 26%



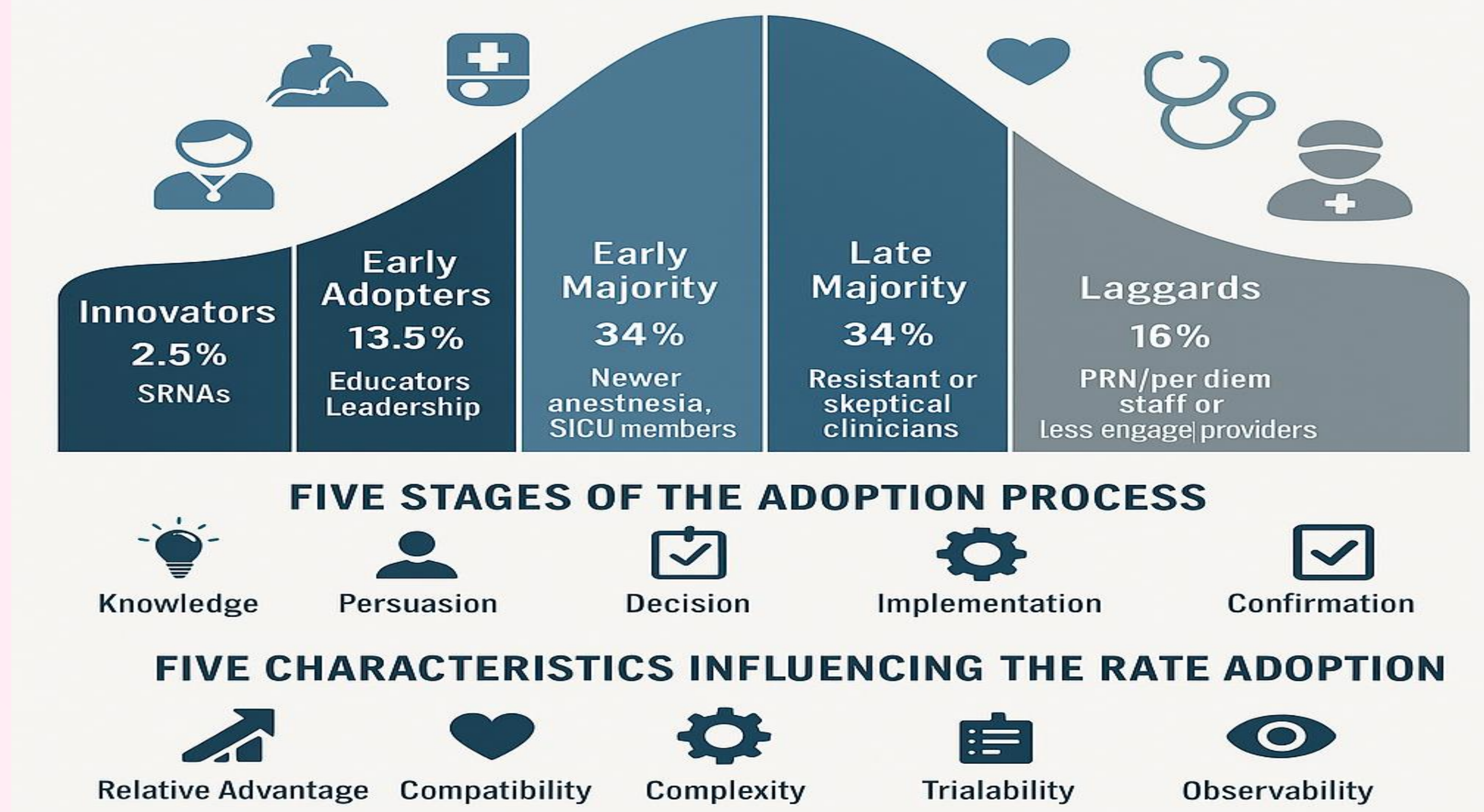
Electronic Handoff Tool Adoption:

42%

Eligible OR-to-SICU Handoffs: 55
Tool Utilization: 23

Theory

ROGERS' DIFFUSION OF INNOVATION



Strengths and Limitations

Strengths

- Interdisciplinary involvement, anonymous survey, low burden on participants.

Limitations

- Low response rate on surveys, short implementation time, short post implementation evaluation window, self reported satisfaction can be subject to bias.

Discussion

- Multidisciplinary findings suggest that **handoff quality depended on provider presence, timing, and workflow**, reinforcing the need for a standardized process independent of team composition.
- Pre-implementation SICU data demonstrated **variable satisfaction and inconsistent handoff content**, reflecting unreliability in postoperative communication rather than absence of handoffs.
- Informal education in December followed by formal Grand Rounds on January 15 likely contributed to **progressive uptake**.
- During implementation, anesthesia providers reported **generally positive but inconsistent handoff experiences**, indicating persistent variability despite functional communication.
- Documentation of 23 of 55 OR-to-SICU transfers (42%) reflects **early adoption during staged education**, consistent with Diffusion of Innovation theory.
- Post-implementation survey results were **generally positive** – but continued issues with omissions and variability **strengthen the need for continued standardization** of the handoff process.