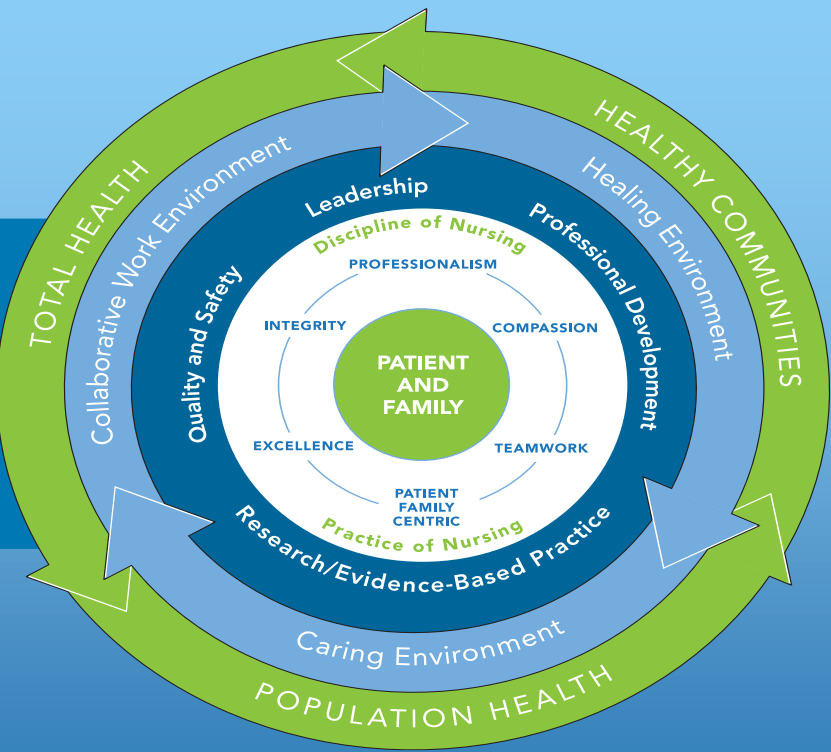


Two Tables, One Goal: Improving Immediate Bilateral Cataract Surgery (ISBCS) Efficiency Through Standardized Dual Table Set-up

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INTRODUCTION

BACKGROUND:

ISBCS Definition: Immediate Sequential Bilateral Cataract Surgery (ISBCS) involves operating on both eyes during a single session.

Benefits: ISBCS offers cost savings and comparable clinical outcomes to Delayed Sequential Bilateral Cataract Surgery (DSBCS)

Evidence from studies:

- Systematic review found no clinical differences between ISBCS and DSBCS, but ISBCS is less costly (Dickman et.al, 2022)
- Cost-effectiveness analysis showed savings of \$3,776 per patient (societal perspective) and \$2,200 per patient (healthcare perspective), with equal effectiveness (Cernat et.al, 2020).

Safety Emphasis: Articles recommend separate instruments and sterile supplies for each eye during ISBCS.

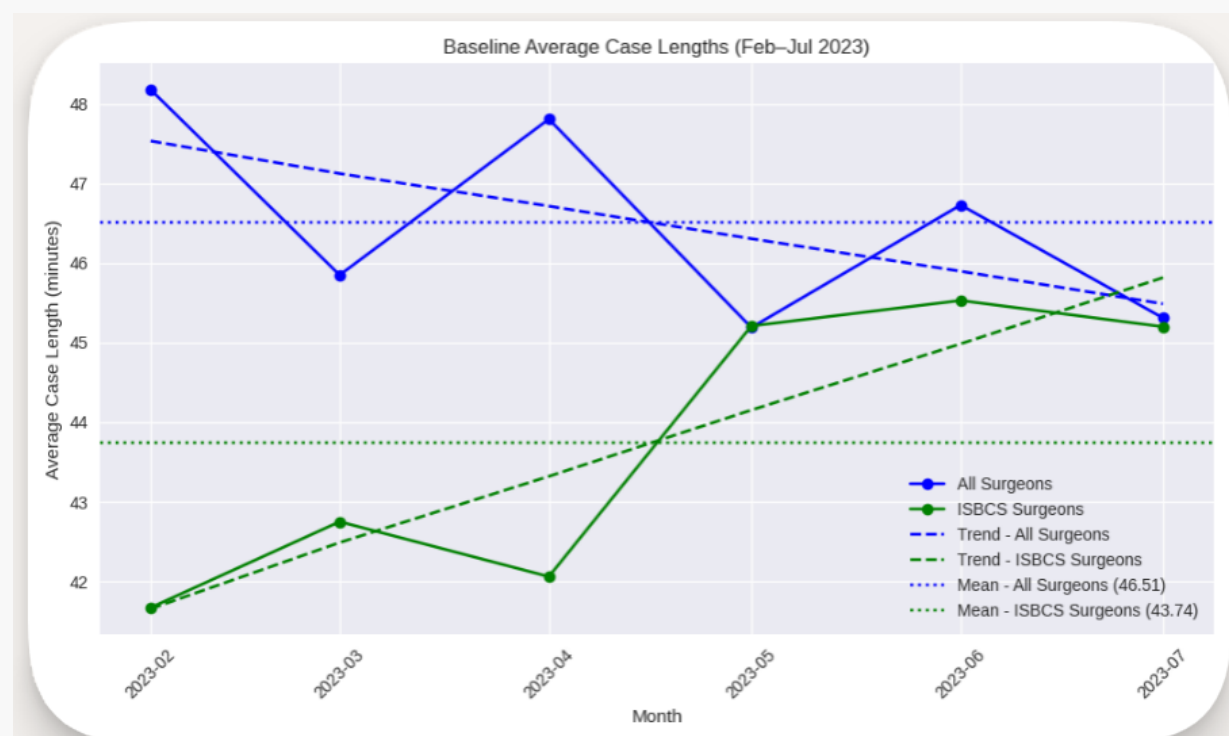
Research Analysis:

- No specific standards or guidelines exist for dual back table setup in the operating room during ISBCS.
- No studies have evaluated time-saving effects or workflow efficiency improvements from standardizing dual-table setup.

KP ESC-RCO Challenges: Kaiser Permanente (KP) Eye Surgery Center, Rancho Cordova, California, implemented this practice in the 1st quarter of 2023, but only six ophthalmologists perform the ISBCS technique. Moreover, there were inconsistent practices and compliance issues among the OR staff regarding the ISBCS dual table setup, thus affecting OR workflow efficiency, OR turn-around time (TAT), and surgeons' productivity.

PURPOSE:

To standardize the dual back table setup during ISBCS, assess its effect on case time and workflow efficiency, and improve turnaround time and enhance the surgeon's efficiency during surgical cases.



INTRODUCTION

METHODS

Design: Process improvement initiative at Kaiser Permanente Eye Surgery Center, Rancho Cordova, California

Team: Multidisciplinary group including an ophthalmologist, perioperative leadership, professional nursing development practitioner, clinical nurses, and scrub technicians.

Gap Analysis:

- Identified non-standardized workflows
- Staff non-compliance with the dual back table set-up
- Longer case time for surgeons

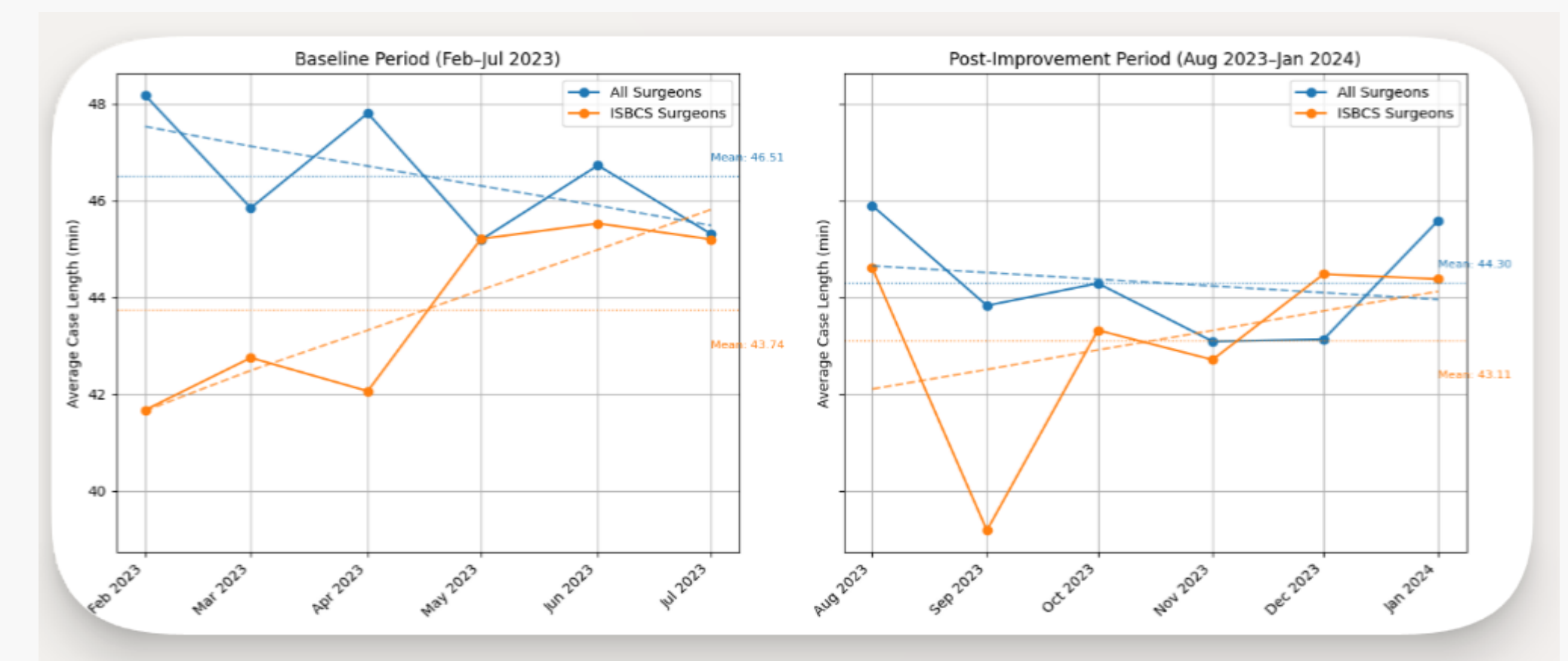
Project Implementation:

- Establish a multidisciplinary team and clinical champions to spearhead the project.
- Process mapping of the ISBCS procedures, observing workflows of surgeons, RN circulators, and scrub technicians.
- OR room survey to establish a standardized set-up for each room to improve efficiency.
- Technique mapping when setting up dual back tables during ISBCS (e.g., 1 Scrub Technician vs 2 Scrub Technicians).
- Create an audit tool to be used by clinical champions to observe practice.
- Create standard guidelines on dual back table setup and sterile techniques.
- Multiple educational sessions, competency validations, and hands-on practice.
- Created visual aids, laminated resources, and a binder as resources.
- Ongoing real-time peer-to-peer feedback by clinical champions.
- Continuous audits for compliance and practice improvements.

Correct method adapted by RCO

- Set up second table, push away toward wall. Tear down scrub.
- Set up first table. Do not go back to second table.
- Only have meds in room for first table.
- Keep second eye meds in sub-sterile with lens.
- Keep sharps container in original location.
- Must re-scrub between eyes
- Do not walk between 2 sterile fields (tables)
- Must use new sterile water for second eye
- Keep tables parallel with second table toward wall (12" kept between)

RESULTS/ CONCLUSION



RESULTS:

- Post-standardization mean average case length: 44.3 minutes for all surgeons & 43.11 for the six ISBCS surgeons
- REDUCTION:** 2.2 minutes per case for all surgeon & 0.63 minutes mean average for the six ISBCS surgeons
- Zero postoperative infections or adverse events through passive reporting by surgeons
- In general, improved turnaround time and surgeon efficiency.

CONCLUSION:

Standardizing the dual-back table setup during ISBCS enhances workflow efficiency, reduces case time, and supports patient safety. Multidisciplinary collaboration and perioperative champions are critical to successful implementation and sustainability.

IMPLICATIONS FOR PRACTICE

The standardization of the dual-back table setup during ISBCS is critical to perioperative practice. First, it enhances patient safety by reducing the risk of cross-contamination between eyes, a key concern in ISBCS procedures. Clear, evidence-based guidelines empower nurses and surgical technicians to maintain strict aseptic technique and prevent adverse events. Second, the initiative improves workflow efficiency, as demonstrated by a measurable reduction in average case length and improved turnaround times, allowing nurses to manage surgical schedules more effectively without compromising care quality. Third, it promotes consistency and reliability in practice by replacing variable, preference-based setups with standardized protocols, aligning care with best practices. Additionally, the project underscores the value of multidisciplinary collaboration, positioning nurses and surgical technicians as essential contributors to surgical innovation and quality improvement. Finally, these outcomes highlight the pivotal role of perioperative nurses and surgical technicians in advancing patient safety, operational efficiency, and evidence-based care.

REFERENCES



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