



Problem & PURPOSE

The purpose of this project was to implement evidence-based strategies to enhance preoperative readiness in the outpatient surgical center setting to reduce surgical cancellations as well as improve patient satisfaction.

Available Knowledge & Rationale

- ❖ QR codes provide patients with convenient, reliable, and facility-specific education on surgical preparation and recovery, improving readiness, reinforcing instructions, and potentially reducing same-day cancellations.
- ❖ Comprehensive preoperative screening, medication review, and follow-up phone calls by healthcare professionals improve patient readiness, increase satisfaction, optimize surgical workflow, and decrease cancellation rates.
- ❖ Thorough medication reconciliation, particularly for older adults and patients with multiple comorbidities, ensures safe management of medications (e.g., anticoagulants, diabetes, and hypertension medications) before surgery and helps prevent avoidable same-day cancellations.

Methods

Context

- ❖ Setting: An outpatient surgery center located in a rural community in the Midwestern United States
- ❖ Inclusion Criteria: All patients who were scheduled for endoscopy procedures during the intervention timeline
- ❖ Unstandardized communication and inconsistent patient preparedness identified

Intervention

- ❖ Nursing staff and primary care clinics implemented the educational intervention
- ❖ Printed paper containing a QR code that digitally linked to an interactive mobile-friendly version of the preoperative education material
- ❖ Highlights included preoperative anesthesia guidelines per the ASA, the location and directions to the surgical center, and direction on endoscopy preparation
- ❖ Visual aids and printable checklists included

Methods Continued

Study of Intervention

- ❖ Patient satisfaction survey & surgical cancellation rates studied
 - Assessed for four weeks pre-intervention and for four weeks during implementation

Measure

- ❖ The CSQ-4 used a 4-point Likert to evaluate patients' satisfaction
- ❖ Administered to all patients who met criteria and consented
- ❖ Cancellation rates were compared

Data Analysis

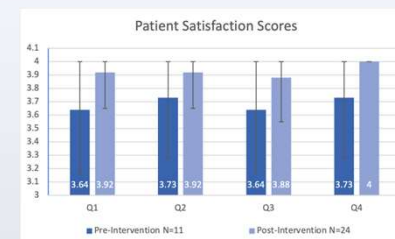
- ❖ Both descriptive and inferential statistics utilized
- ❖ Descriptive statistical analysis including measures of central tendency, variability, and frequency distributions to summarize patient satisfaction scores and cancellation rates pre- and post-intervention
- ❖ Inferential statistical tests determined whether observed differences were statistically significant.
- ❖ Patient Satisfaction Scores
 - Independent samples t-test
- ❖ Cancellation Rates
 - Compared pre- to post-intervention numbers

Results

For total patient satisfaction scores, including all four questions, $t(15.72) = (2.5546)$, $p = 0.015279903$



For questions contact: Caitlyn.micek@methodistcollege.edu



Discussion

- ❖ Results were clinically and statistically significant for patient satisfaction
- ❖ Intervention did not significantly reduce surgical cancellation rates
- ❖ Limitations identified:
 - Small sample size
 - Low baseline cancellation rates
 - Short four-week implementation period
 - Focus on endoscopy patients
 - Self-reported patient satisfaction surveys
 - Variation in patient technology literacy and QR code utilization

Conclusions

- ❖ Standardized pre-operative education improves:
 - Patient preparedness
 - Patient satisfaction
 - Overall safety
- ❖ Promoting workflow efficiency and cost-effectiveness
- ❖ Digital format allows for rapid adaptation and dissemination
- ❖ Findings support incorporating multimodal, technology-assisted education as a standard component
- ❖ Future recommendations include:
 - Larger sample sizes
 - Longer implementation periods
 - Multi-site evaluations

References

