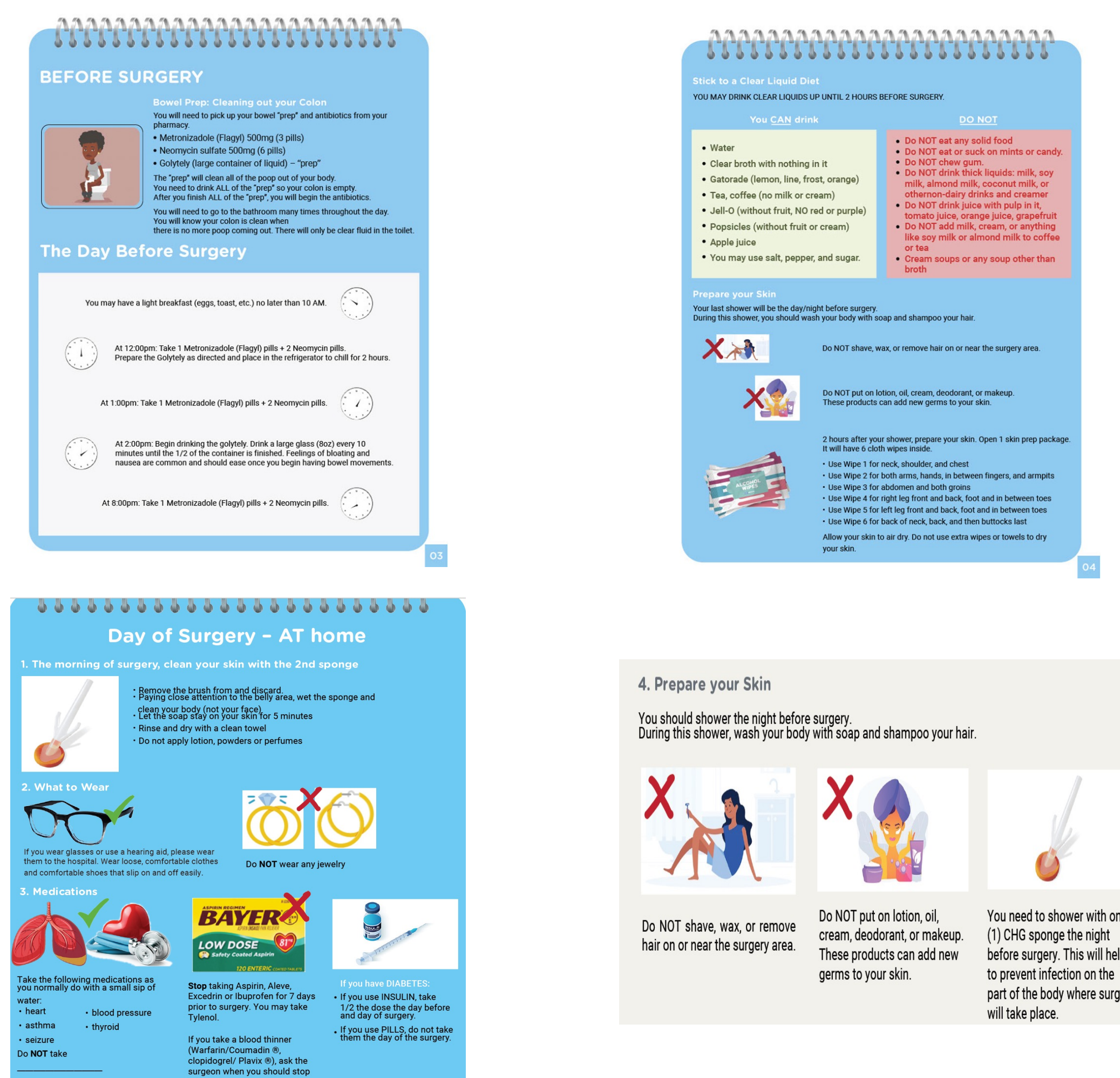


Background & Significance

- Over 90 million individuals in the U.S. are affected by poor health literacy
- Poor health literacy has been linked to increased costs, delays in care, and increased rates of hospitalization
- Clinicians often rely on verbal or printed educational material with advanced terminology and inappropriate reading levels for specific patient populations
- In the surgical setting, lack of understanding of preoperative instructions affects quality of care and patient safety
- Visuals and graphics communicate key points and increase understanding of instructions
- Illustrated patient education booklets have the potential to improve patients' comprehension, and thus, increase adherence with preoperative surgical instructions
- The Enhanced Recovery After Surgery (ERAS) Program is an evidence-based initiative to improve surgical outcomes and recovery
- As part of the ERAS initiative at an academic medical center in New Jersey, it was noted that there was a need to improve adherence with preoperative instructions in patients undergoing colorectal surgery.

Clinical Question

- For colorectal surgery patients, does the use of illustrated patient education booklets compared to previous practice increase adherence with preoperative instructions after 8 weeks?

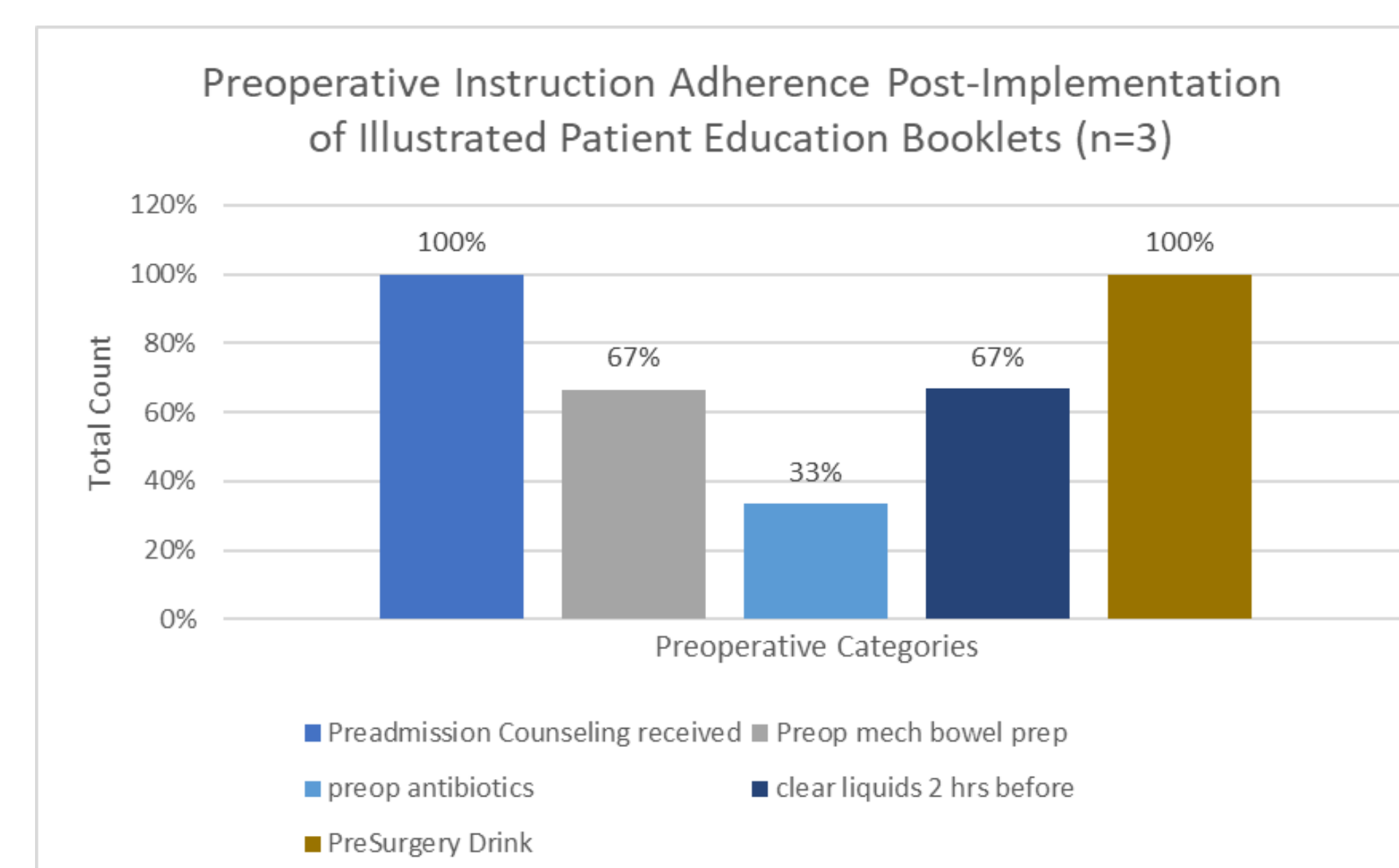
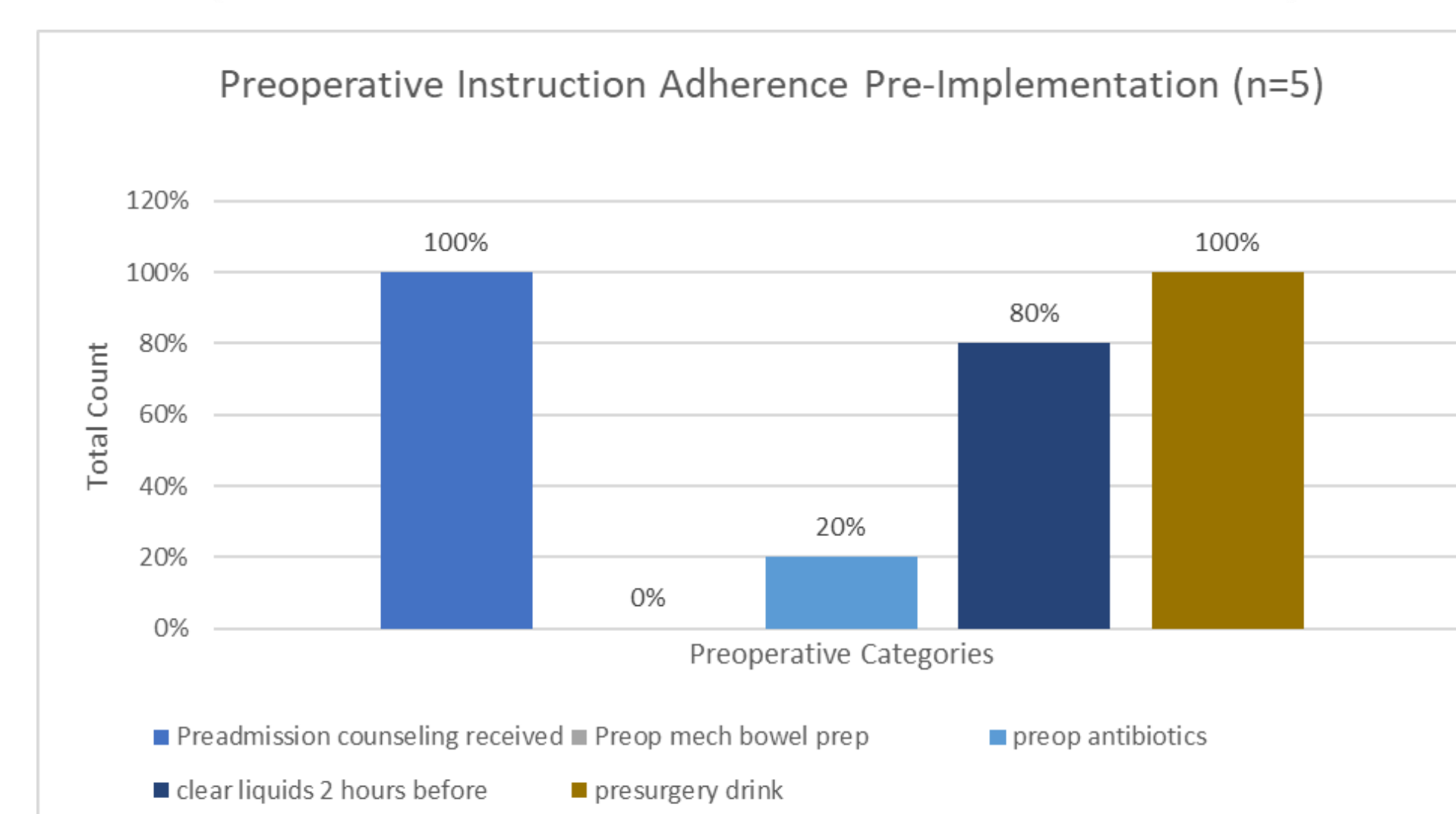


Methods

- Design:** Quality Improvement Project
- Setting:** Acute care hospital in New Jersey that conducts approximately 100 colon surgeries annually
- Inclusion Criteria:** Patients 18 years or older undergoing elective colon surgery
- Sample Size:** Purposeful sample of 30 charts reviewed; 8 charts met inclusion criteria and were used for data collection and analysis
- Intervention:** Illustrated patient education booklet created and given to patients who met inclusion criteria
- Evaluation Measures:** Chart review of ERAS patients undergoing colorectal surgery over a 16-week period. Data divided into 8-week pre-implementation and 8-week post-implementation period

Results

Demographic	Subcategory	Frequency (%)
TOTAL: N=8		
Age (years)	20-49	2 (25%)
	50-69	4 (50%)
	70-99	2 (25%)
Gender	Male	5 (62.5%)
	Female	3 (37.5%)
Race	BLACK/AFRICAN AMERICAN	2 (25%)
	OTHER RACE	6 (75%)
Ethnicity	NO, NOT SPANISH/HISPANIC/LATINO	3 (37.5%)
	YES, OTHER SPANISH, HISPANIC, LATINO	3 (37.5%)
	YES, CENTRAL/SOUTH AMERICAN	1 (12.5%)
	YES, MEXICAN, MEXICAN AMERICAN, CHICANO	1 (12.5%)



Data Analysis

- Two-sample t-test compared means of the the preoperative adherence rates before and after implementation of the illustrated PEB
- There was not a significant difference in the score for adherence pre-implementation ($M=60, SD=14.14$) and adherence post-implementation ($M=73.33, SD=23.09$) rates; $t(6)=2.45, p=0.34$
- The implementation of the illustrated PEB did not influence the pre-operative adherence rates

Discussion

Preoperative categories that showed increase in adherence rates:

- Preoperative mechanic bowel preparation
- Preoperative oral antibiotic prophylaxis

Preoperative categories that showed decrease in adherence rates:

- Clear liquids up to 2 hours before induction

Preoperative categories that remained unchanged with implementation of illustrated PEB:

- Preadmission counseling
- Consumption of calorie-rich pre-surgery drink

Limitations:

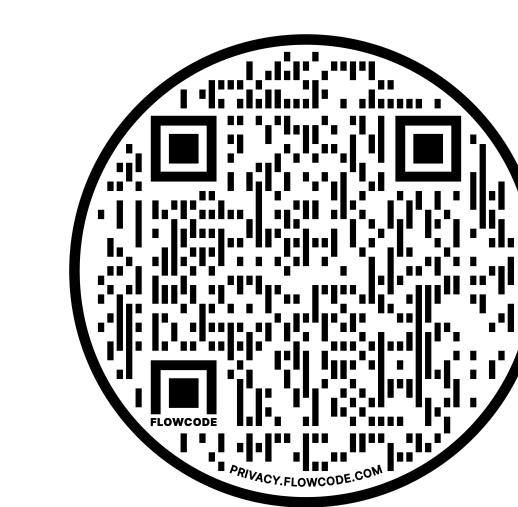
- Small sample size
- Elective surgeries postponed due to COVID19
- Short time frame for implementation
- Incomplete nurse documentation

Implication and Recommendations

- Use of illustrations can increase patients' understanding of health information
- Illustrated patient education booklets can be used as standard of care within the hospital
- Standardized instructions can increase rates of adherence to preoperative instructions
- Reducing health literacy gaps is one component of creating a patient-centered approach

Contact information

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References

