

Implementation of an ERAS Program and a Standardized Closing Tray Reduces SSIs in Colorectal Operations

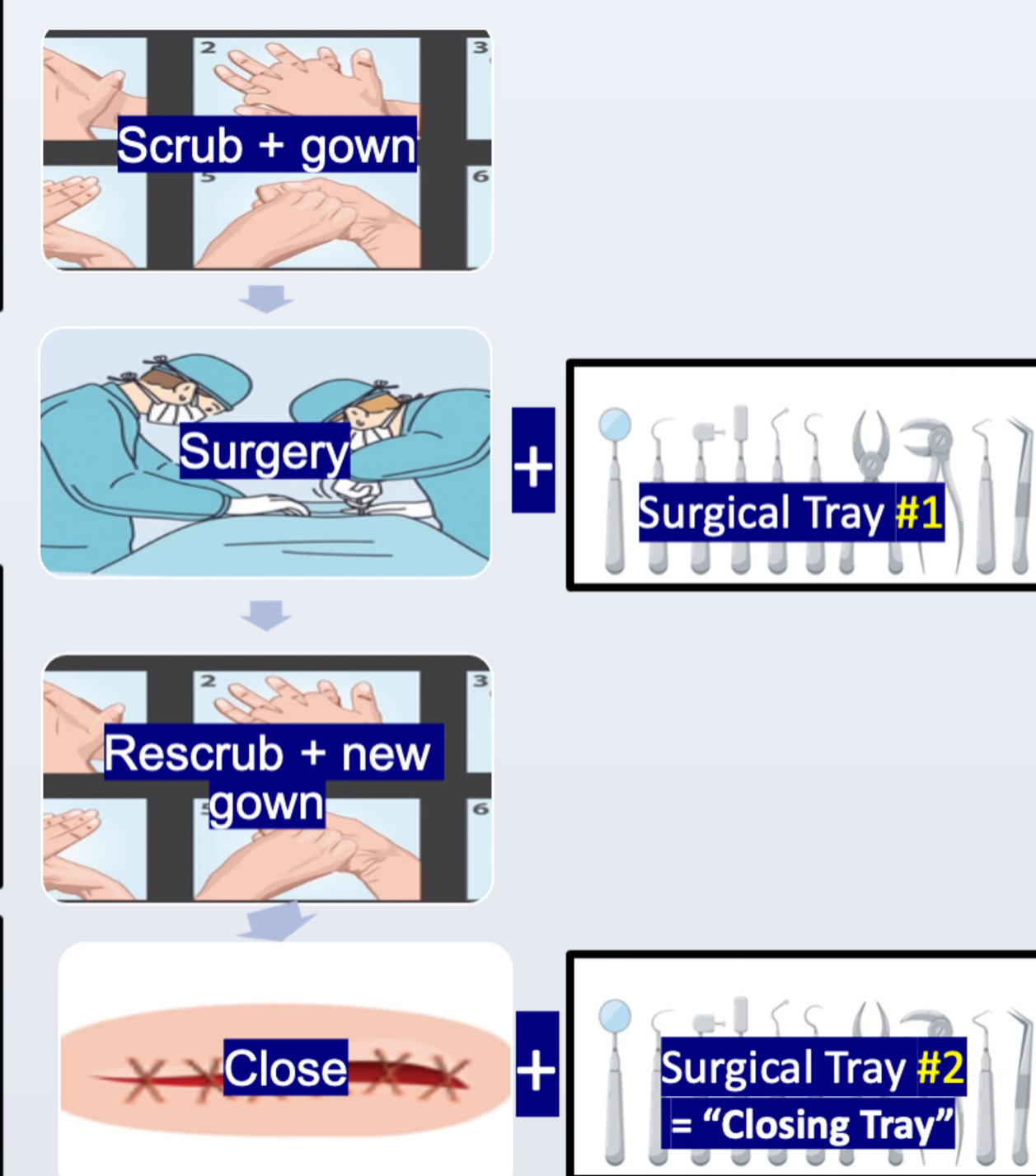
Introduction

- Colorectal surgeries exhibit a postoperative surgical site infection (SSI) rate of up to 30%, surpassing rates in other surgical disciplines.^{1,2}
- Previous studies have emphasized preventative approaches, including multi-disciplinary SSI bundles, to mitigate post-operative SSIs.^{3,4}

AIM: To assess the efficacy of the Closing Tray Protocol and the Enhanced Recovery After Surgery (ERAS) Program in reducing SSIs, addressing the pressing need for effective infection control measures.

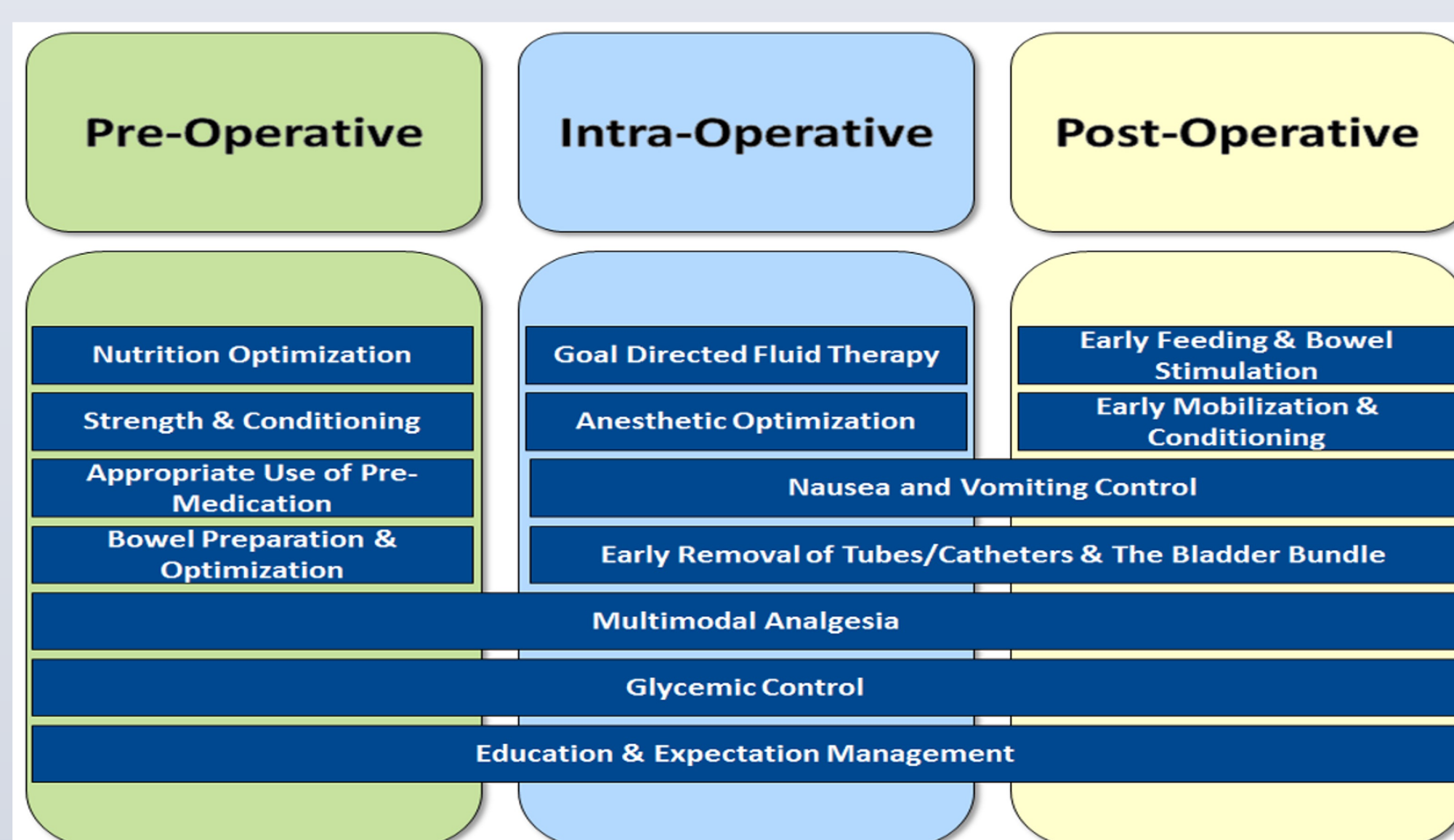
Methods

Standard Closing Tray Protocol



A.

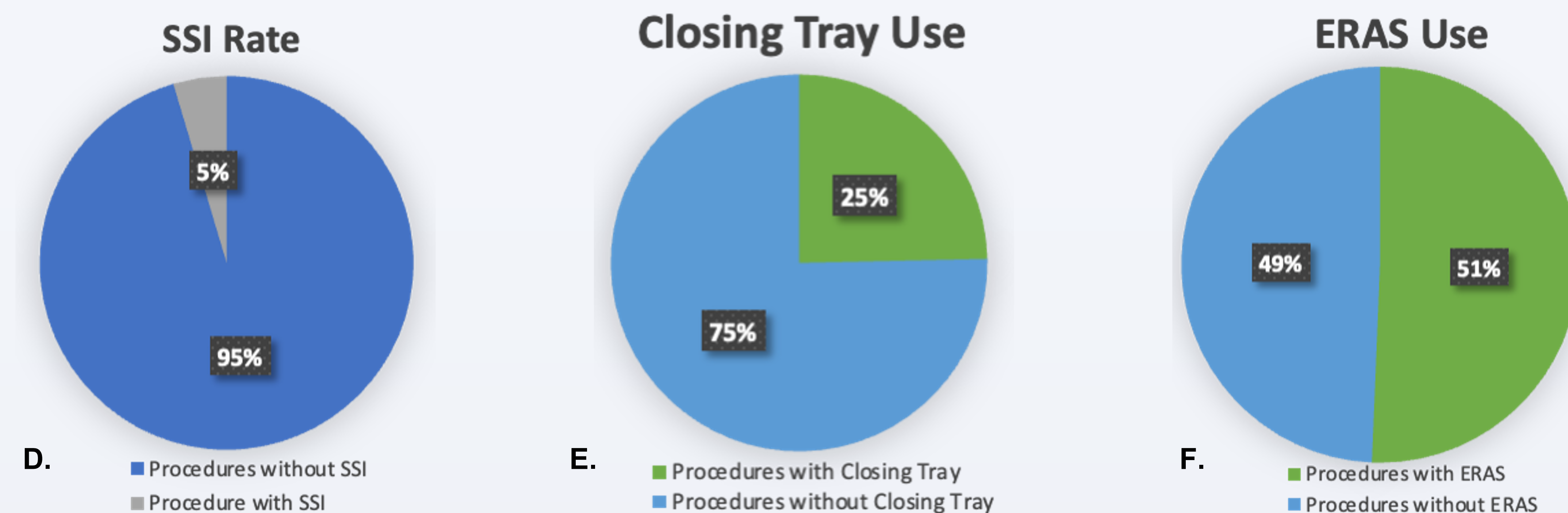
ERAS Protocol



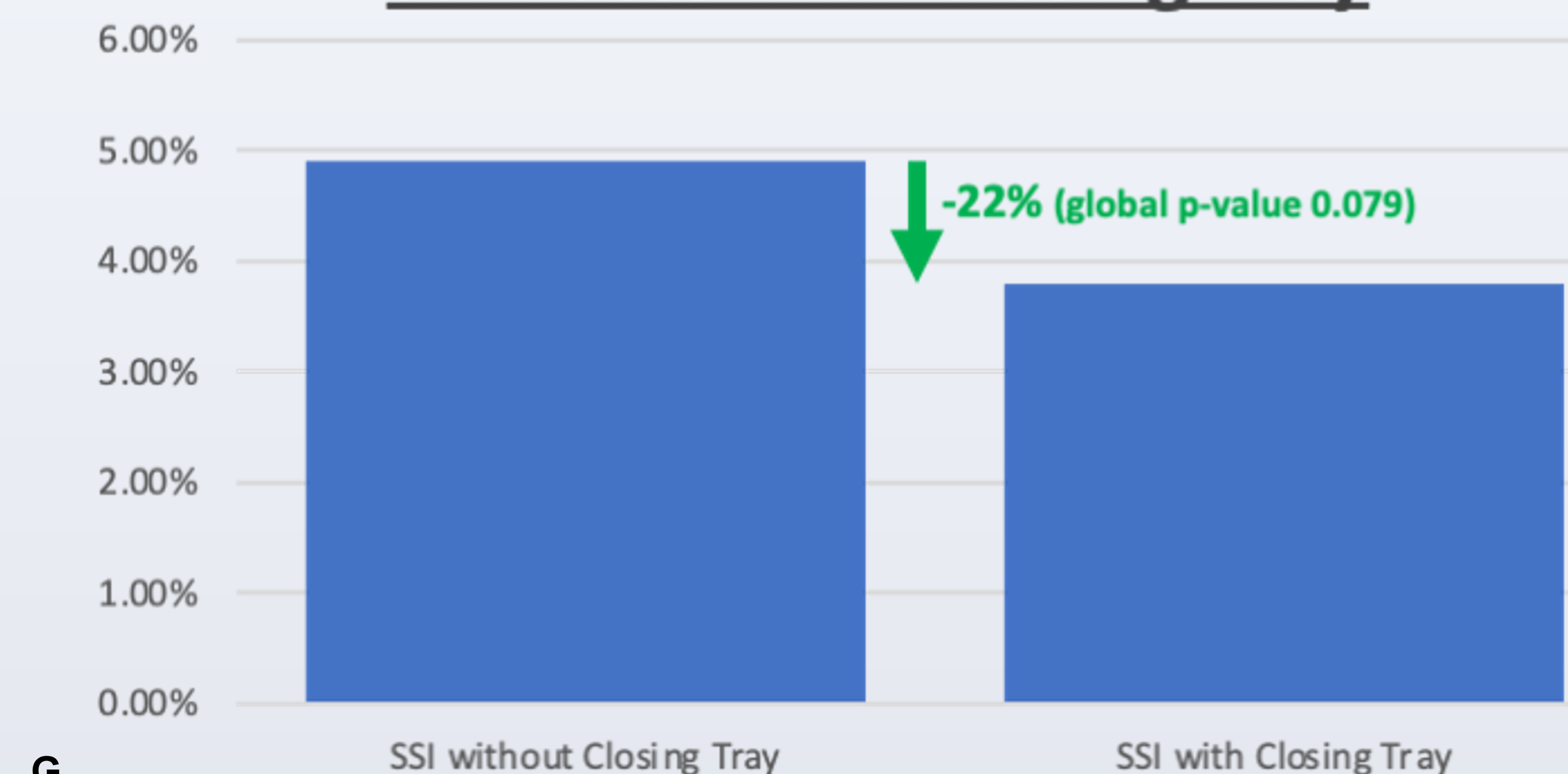
C.

Figure A) Flowchart of patients included in this study; *PATOS= infection Present At Time of Surgery **B)** Standard Closing Tray Protocol. **C)** ERAS protocol for Colorectal Surgeries at Corewell Health William Beaumont University Hospital.

Results

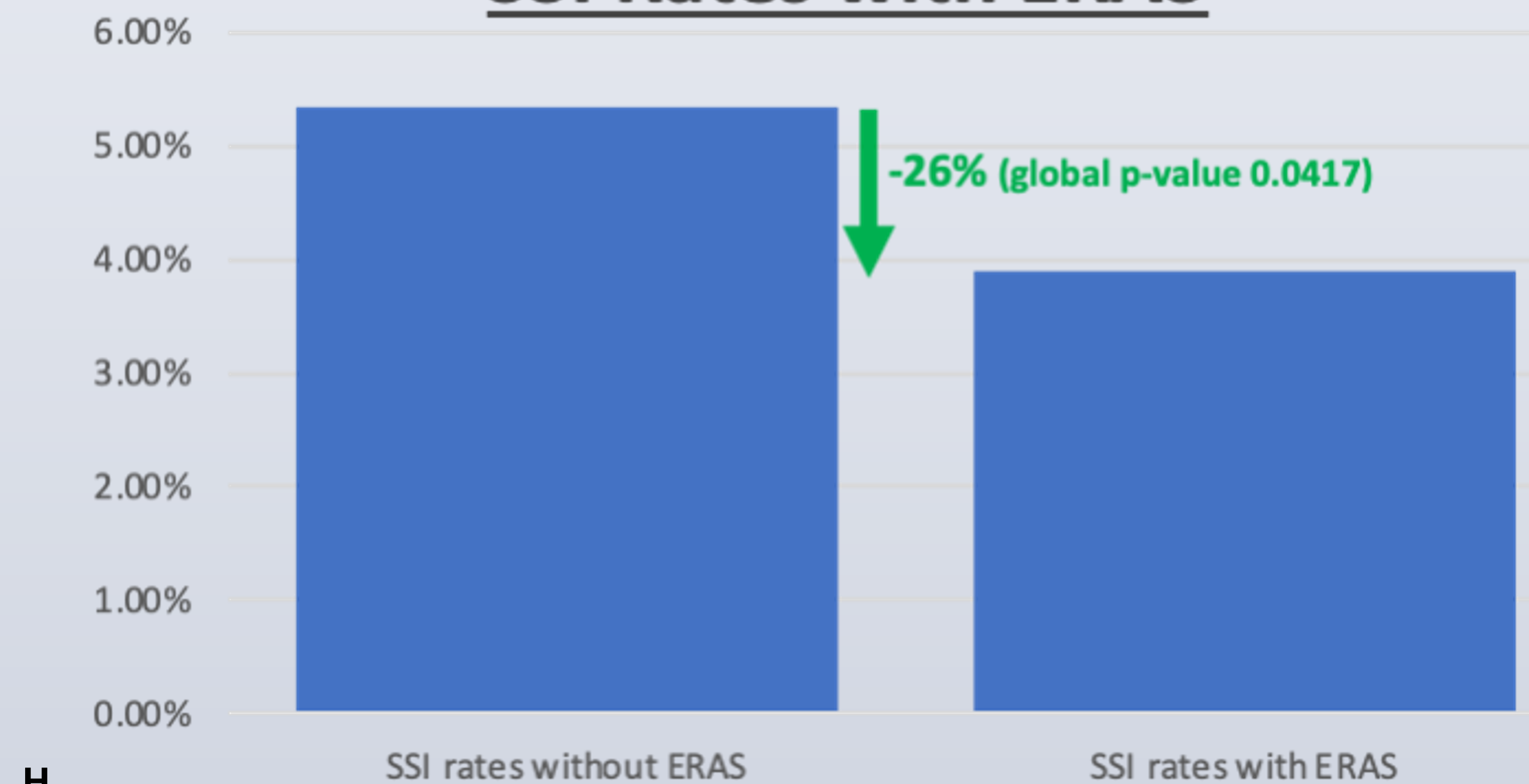


SSI Rates with Closing Tray



G.

SSI Rates with ERAS



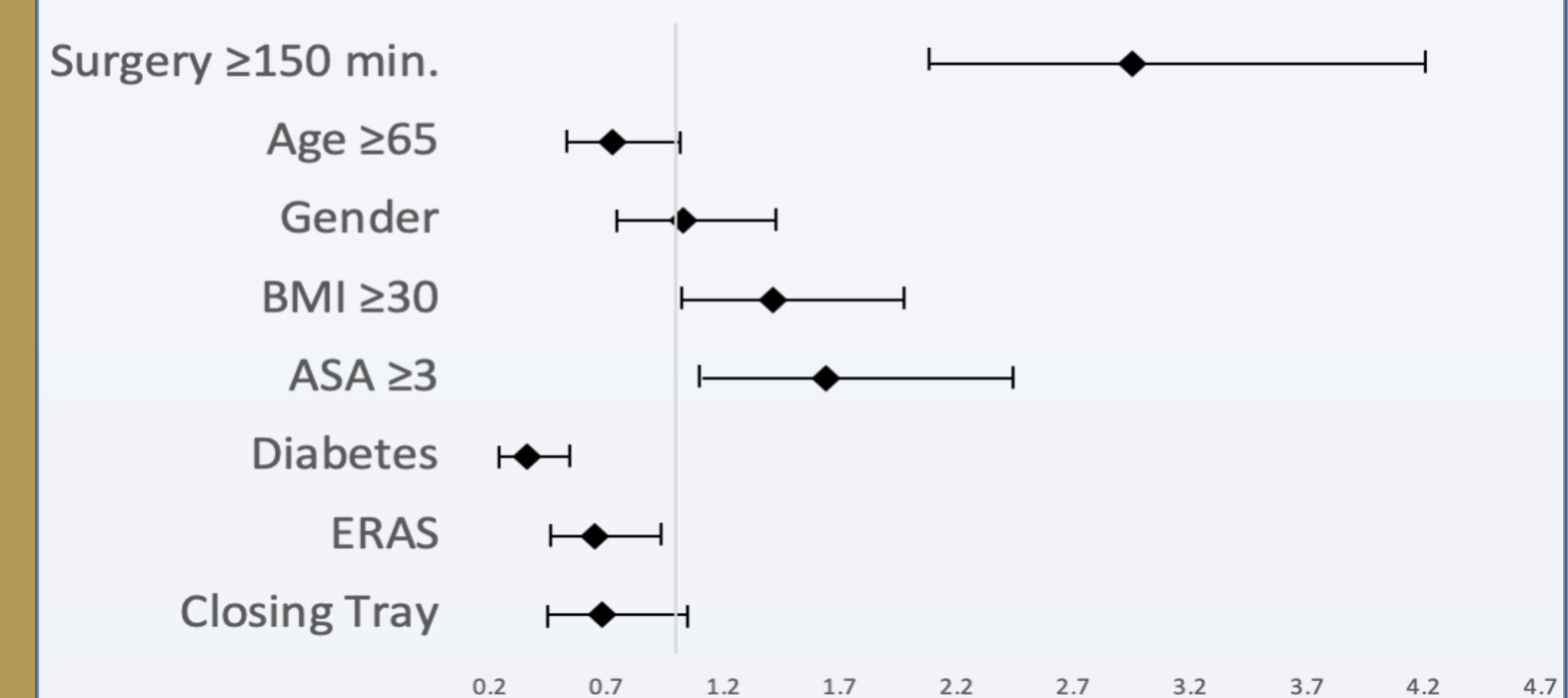
H.

Figure D) Percentage of overall SSIs in selected abdominal-approach colon surgeries from 2016-2021. **E)** Frequency of closing tray usage in selected colon procedures.

F) Frequency of ERAS usage in selected colon procedures.

G) SSI rates without closing tray vs. SSI rates with closing tray. **H)** SSI rates without ERAS vs. SSI rates with ERAS.

Factors Associated With SSI



I.

Figure I) Multivariate logistic regression results.

Conclusion

- ERAS protocols significantly reduce SSIs and enhance patient safety in adult colorectal surgeries.
- Adoption of a standard closing tray protocol improved SSI outcome and should be investigated for further years to come.

References

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