



A Standardised Enhanced Recovery After Surgery Care Pathway Decreases Patient Length of Stay in Colorectal Surgical Patients

Chyi Tho¹, Ram Ganesalingam², Kimberly McNeice³, Craig Boutlis⁴, Andrew Deacon⁵

1 Resident Medical Officer, 2 Department of Surgery, 3 ERAS Nursing Coordinator, 4 Department of Infectious Diseases, 5 Department of Anaesthesiology, The Canberra Hospital, Garran, ACT 2605

Introduction

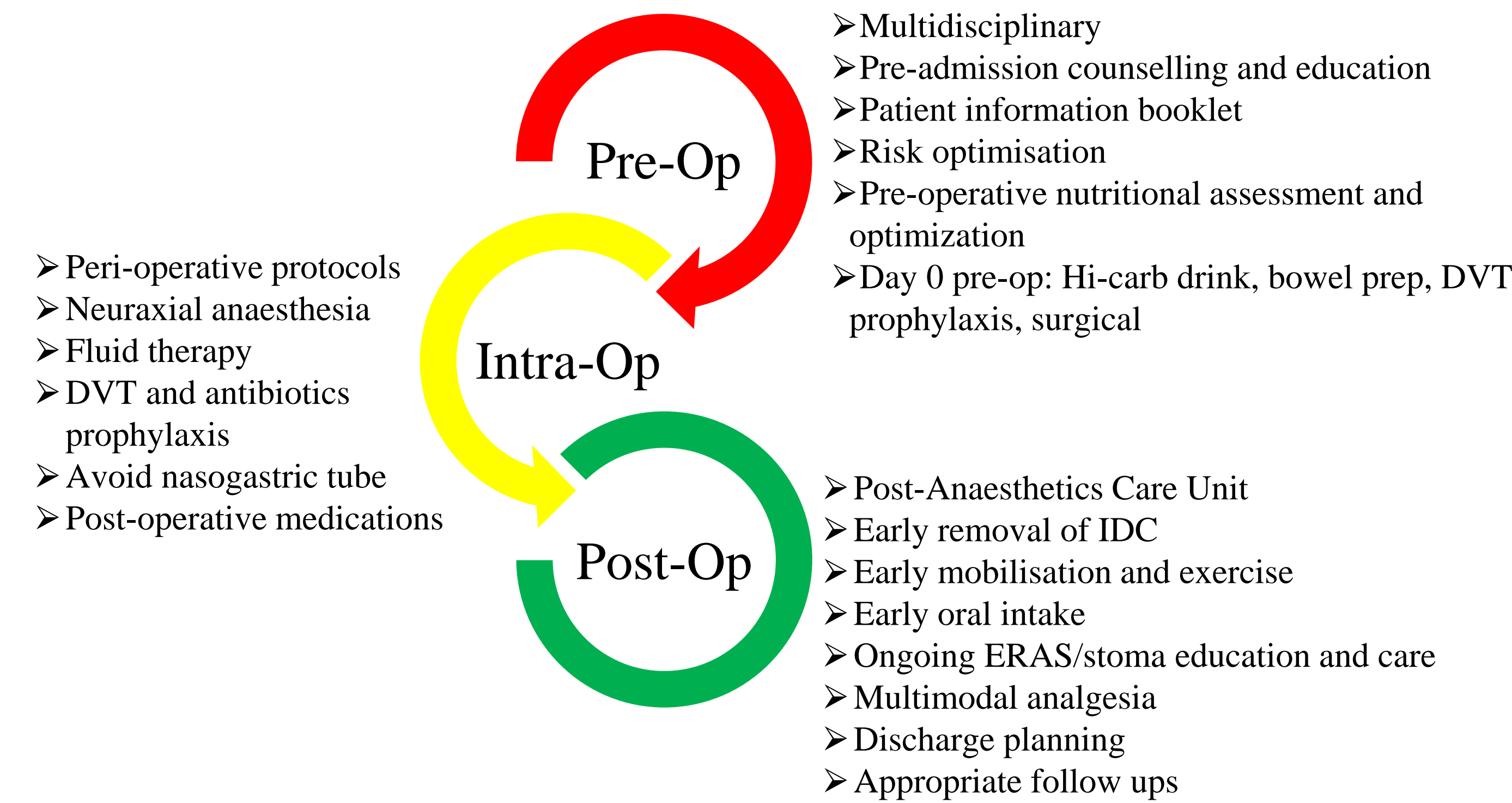
Colorectal surgery is associated with significant surgical and medical complications. Enhanced Recovery After Surgery (ERAS) protocols use a standardized, evidence-based, multidisciplinary care pathway to improve perioperative care, aiming to reduce the physiological stress of surgery and facilitate earlier return to normal function. These protocols have been shown to decrease patient complications and hospital length of stay. We introduced a colorectal ERAS clinical pathway aiming to improve the care of these patients.

Aims

The primary aim of ERAS implementation was to reduce the length of stay of adult elective colorectal surgical patients in Canberra Hospital. The secondary aim was to not increase the 30 day readmission rate.

Methods and Materials

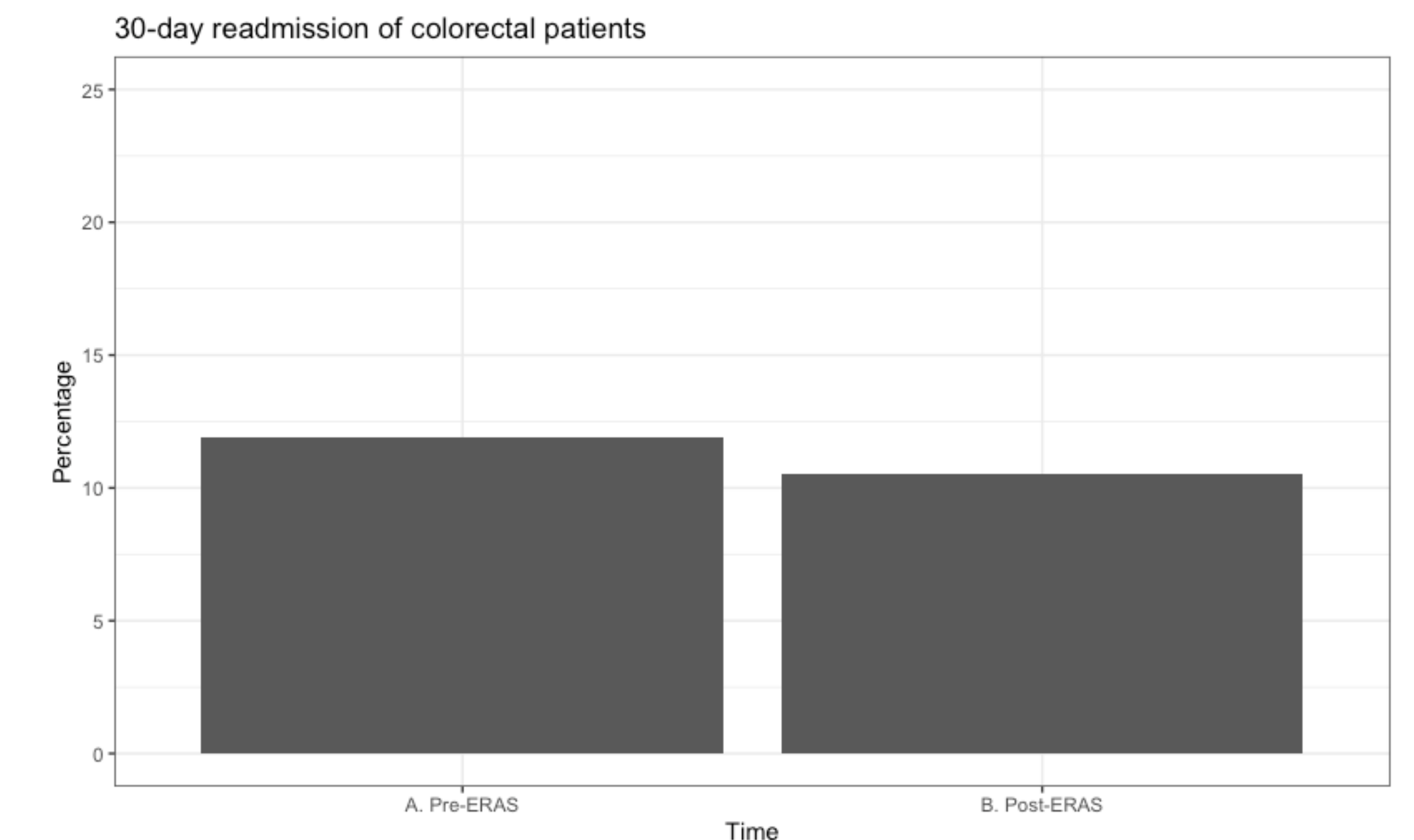
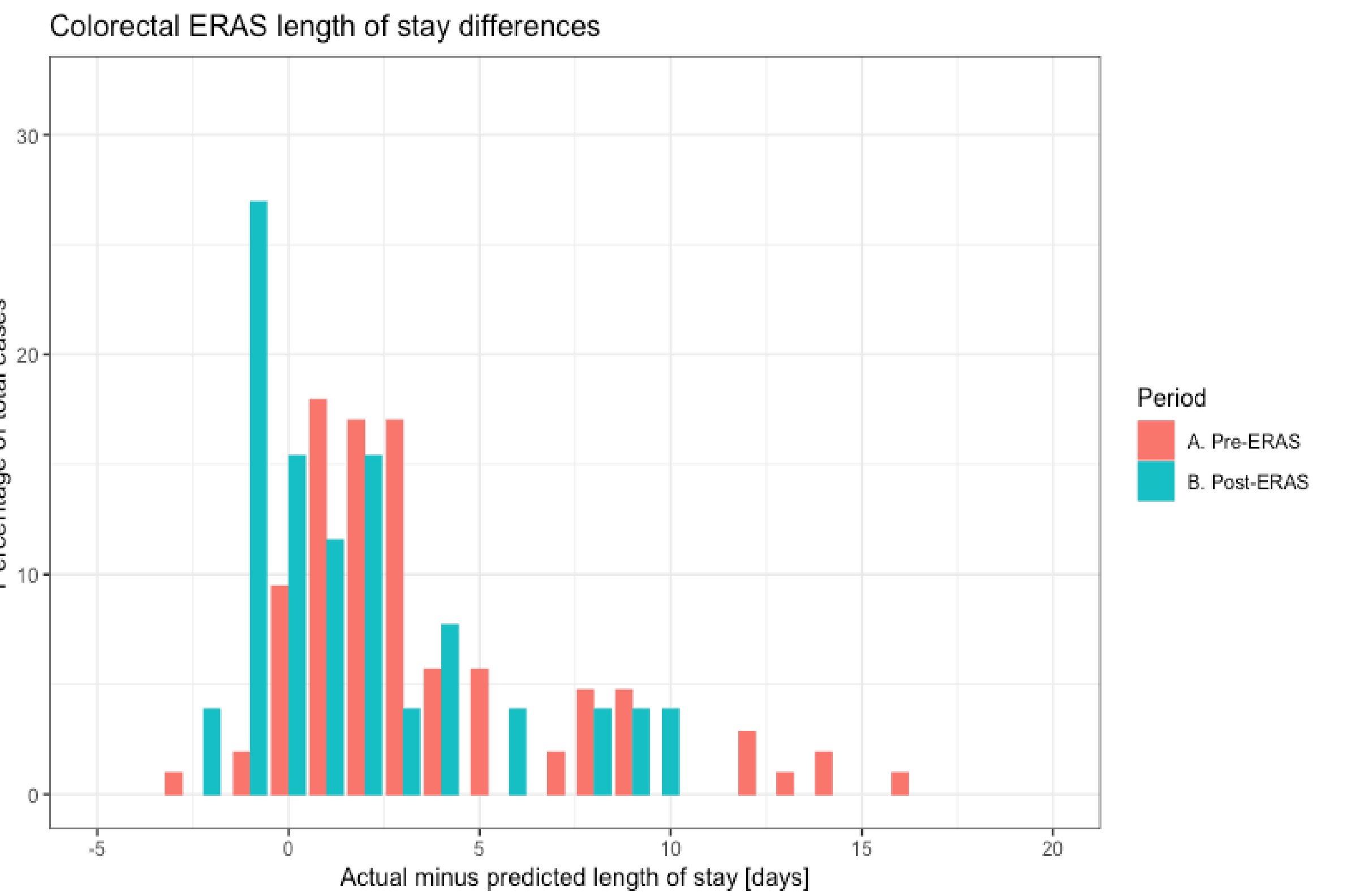
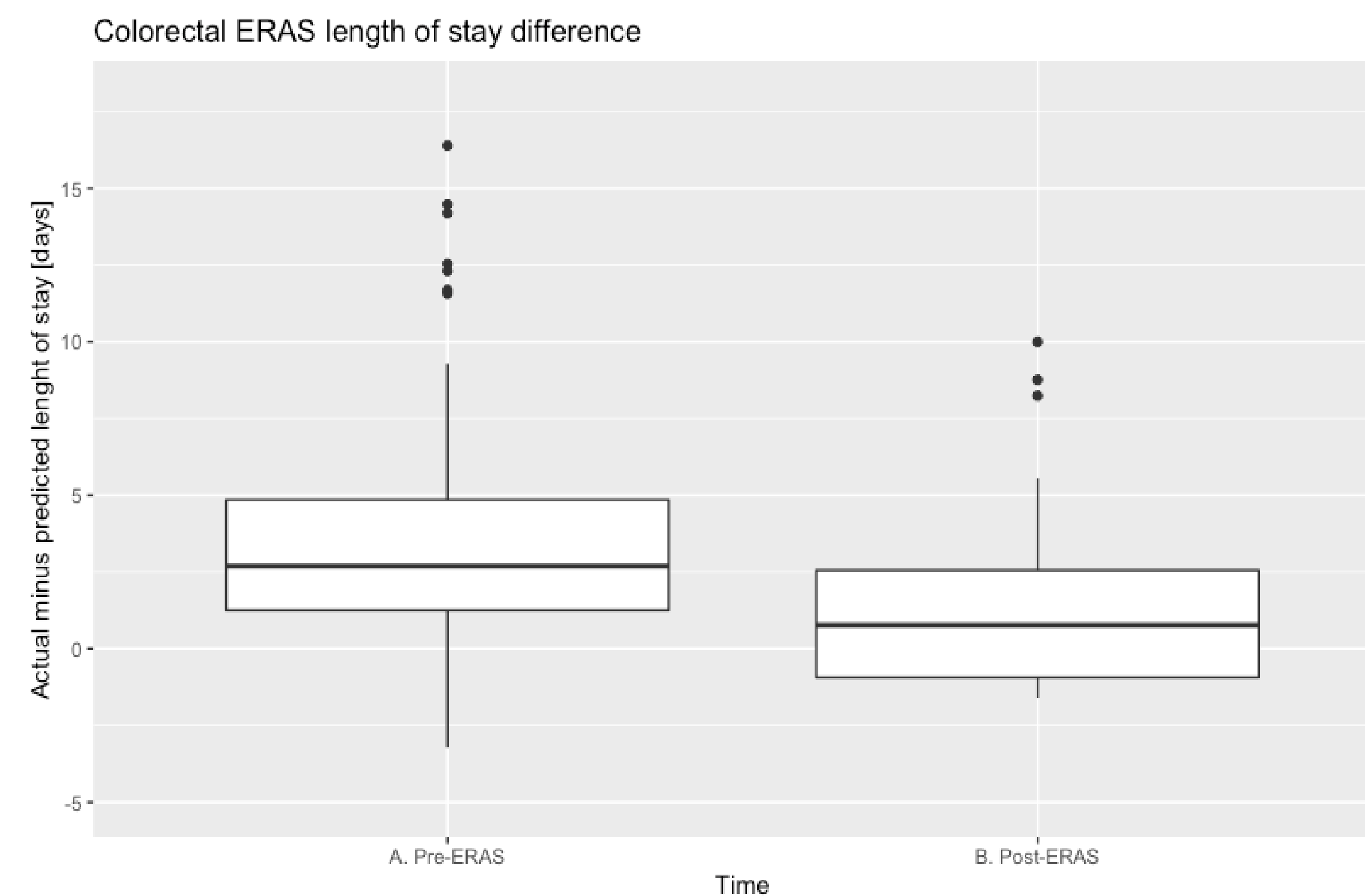
A multidisciplinary literature review identified best-practice management of patients undergoing elective colorectal surgery. A standardized care pathway was developed through collaboration and included changes to patient care pre-, intra-, and post-operatively, the employment of a nursing coordinator, development of a REDCap database, and continual audit. Retrospective data on patients managed for 12 months before the introduction of ERAS on February 15, 2021, was compared to patients managed after introduction of ERAS for 19 weeks, up to June 30, 2021. Actual length of stay was compared to predicted length of stay from the American College of Surgeons Surgical Risk Calculator.



Results

109 colorectal patients managed pre-ERAS were compared to 19 post-ERAS.

- The median difference between actual and predicted length of stay pre and post-ERAS was 2.68 and 0.77 days respectively, representing a decrease of 1.91 days.
- 30 day readmission was similar, with 13 patients (11.9%) pre-ERAS, and 2 patients (10.5%) post-ERAS.



Conclusion

Early data following implementation of a standardised ERAS clinical pathway for colorectal surgery shows a decrease in length of stay without an increase in 30 day readmission. A greater proportion of patients post-ERAS implementation were discharged at or before their predicted day of discharge compared to pre-ERAS.

Significance

The improvement in the care of colorectal surgical patients improves hospital efficiency and is likely to be cost saving. Literature suggests the decrease in length of stay is due to a decrease in patient complications. Ongoing audit will measure this along with pathway compliance to maintain these.