

Enhanced Recovery After Surgery for Cesarean Section: Improved Postoperative Maternal Outcomes

Camille Gae M. Sugay, MD, Zarinah G. Gonzaga, MD, FPOGS, FPSMFM, FPSUOG, The Medical City

INTRODUCTION

Enhanced recovery after surgery (ERAS) protocols have created a paradigm shift in surgical specialties, including obstetrics. It is associated with shorter length of hospital stay, decreased cost, and improved patient outcomes. **Objectives:** The goal of this research was to assess whether an ERAS protocol for cesarean deliveries improved postoperative maternal outcomes.

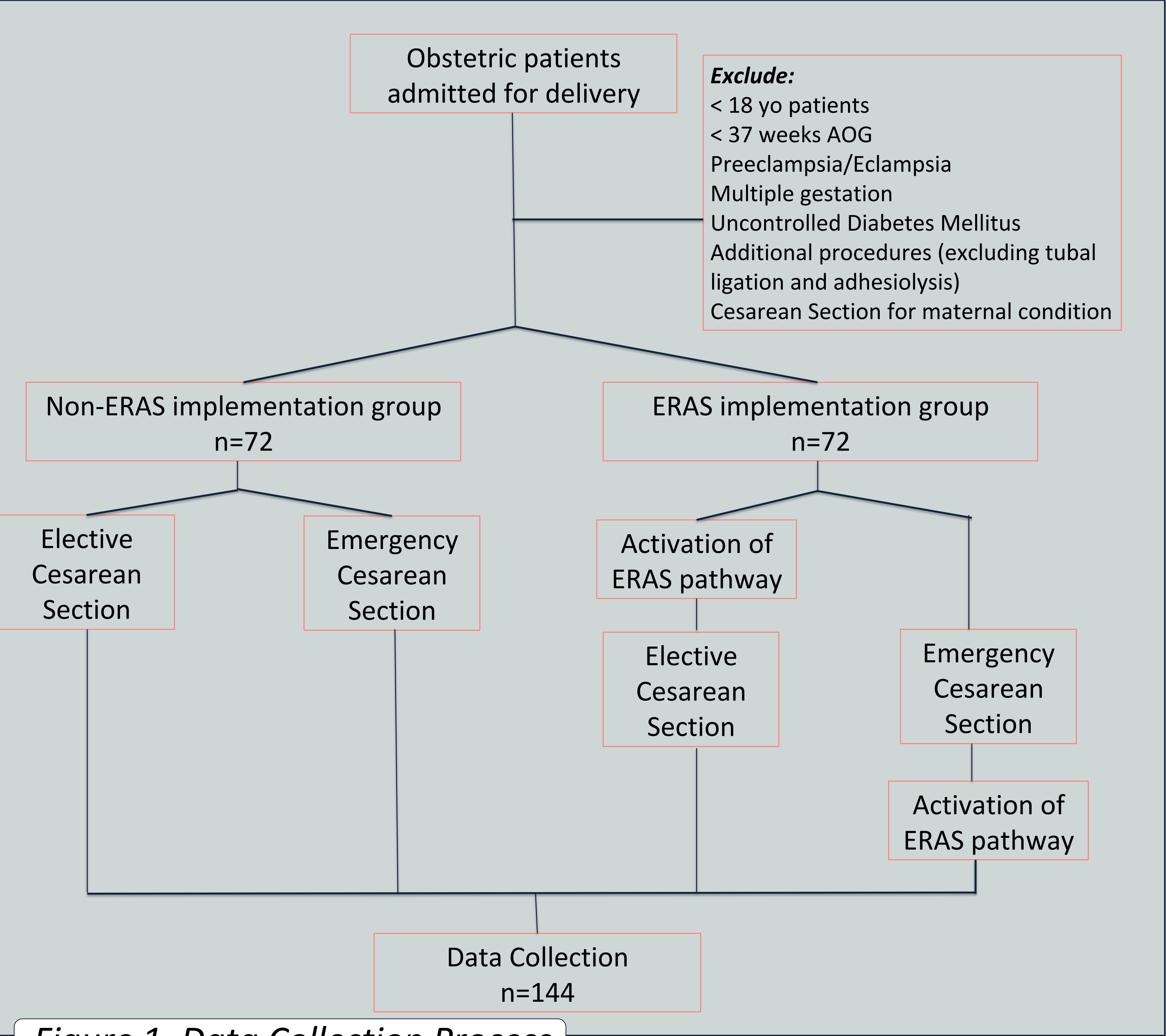


Figure 1. Data Collection Process

METHODS

This is a retrospective pre-post study of patients who underwent cesarean section during the periods prior to and after the implementation of an obstetrics ERAS protocol. The two groups were compared with respect to occurrence of adverse events, length of hospital stay, foley catheter removal, ambulation post operation, and amount of analgesia administered.

RESULTS

A total of 144 patients who underwent cesarean section were included. 72 were managed prior to the implementation of the ERAS protocol and 72 were managed after the implementation of the said protocol. The ERAS group showed earlier removal of foley catheter (Non-ERAS 20 hours vs. ERAS 16 hours, $p < 0.001$), early ambulation (Non-ERAS 34 vs. ERAS 66, $p < 0.001$), and shorter hospital stay (Non-ERAS 3 days vs. ERAS 2 days, $p < 0.001$), with no increase in adverse events. There was a decrease in the number of patients who received opioids alone (Non-ERAS 20 vs. ERAS 13, $p = 0.002$) and an increase in patients who were given combination analgesics in the ERAS group on day 0 postoperation (Non-ERAS 2 vs. ERAS 13, $p < 0.003$). On further analysis, it was found that patients with early removal of foley catheter were able to ambulate earlier ($p < 0.001$) with no significant change in visual analog scale (VAS) score ($p=0.004$).

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CONCLUSION

The implementation of an obstetric ERAS protocol is associated with improved maternal postoperative outcomes, decreased length of stay, and less oral analgesics prescribed postoperatively.

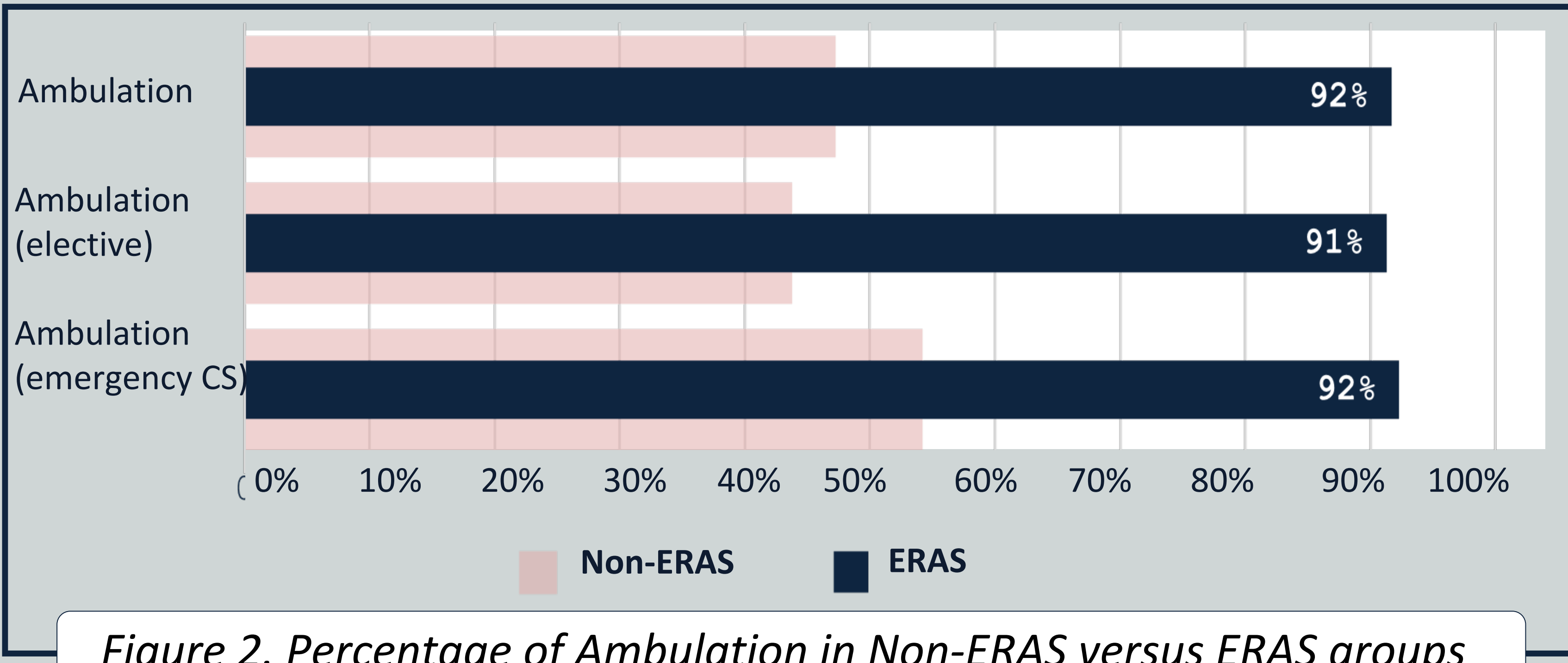


Figure 2. Percentage of Ambulation in Non-ERAS versus ERAS groups

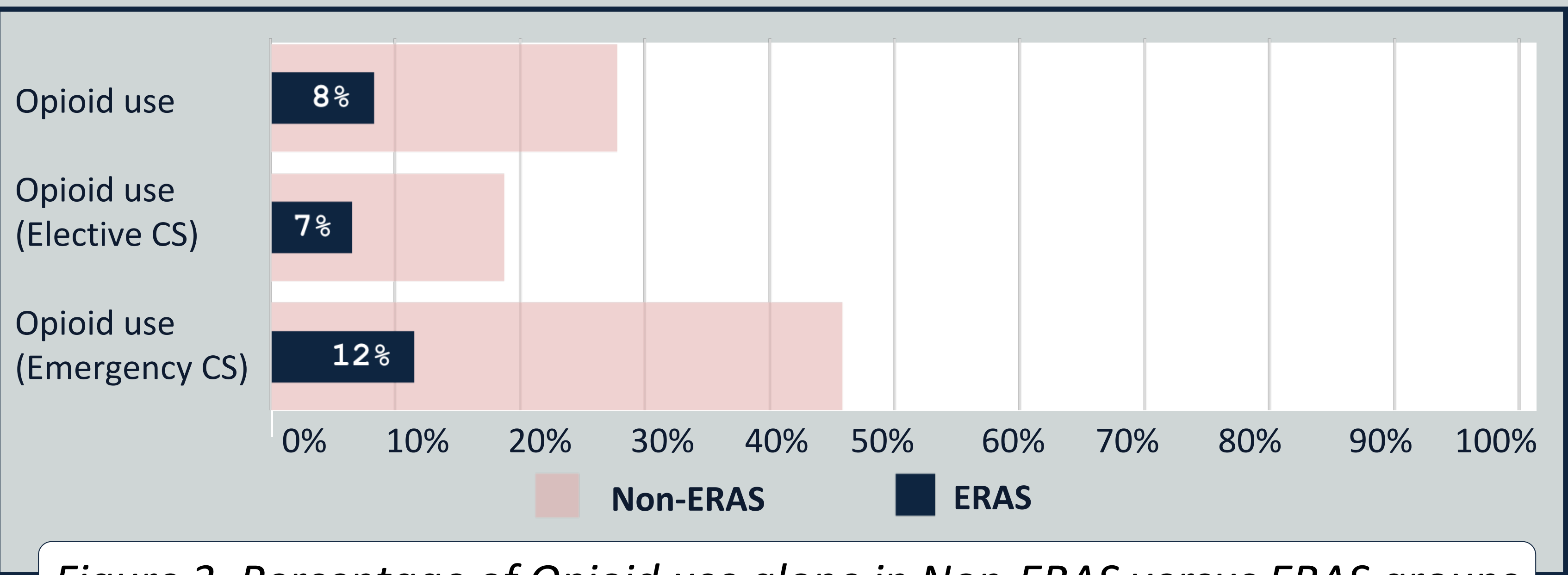


Figure 3. Percentage of Opioid use alone in Non-ERAS versus ERAS groups

16 hours median time to foley catheter removal (ERAS) vs 22.5 hours (Non-ERAS)

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