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Enhanced Recovery after Elective Caesarean Section

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Introduction

Enhanced recovery pathways after elective caesarean section (ELCS) aim to standardise perioperative care, reduce length of stay, and improve patients' experiences. There are no national enhanced recovery guidelines for ELCS; however common to all local guidelines is minimising fasting periods, early postoperative oral intake, early mobilisation and early removal of urinary catheter [1]. A baseline audit of ELCS in 2017 demonstrated a need for improvement in these processes. In 2018, we introduced an enhanced recovery pathway using quality improvement methodology (Plan-Do-Study-Act (PDSA)) and aimed to improve care targets by 50%.

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Methods

Baseline measures were collected between October 2017 and February 2018. Measures collected following interventions included preoperative fluid fasting times, and postoperative times for food, mobilisation and catheter removal. PDSA cycles were completed as follows:

PDSA 1: August 2018: Admission location changed from post-delivery ward to delivery suite, dedicated ELCS midwife appointed, staff education, assessment of power and sensation incorporated into routine postoperative monitoring and patient information leaflet produced.
PDSA 2: June 2020: All ELCS moved to morning theatre lists.
PDSA 3: November 2020: Mothers allowed to drink water until being called to theatre.

Results

Care Measures	Baseline audit	PDSA 1	PDSA 2	PDSA 3
Preoperative median **fasting time** for clear fluids	6.5 hrs	3.5 hrs	4 hrs	40 mins
Postoperative median time for **food**	3.5 hrs		2.5 hrs	
Postoperative median time for **mobilisation**	20 hrs	8 hrs	8 hrs	
Postoperative median time for **catheter removal**	19.5 hrs	15 hrs	8.5 hrs	

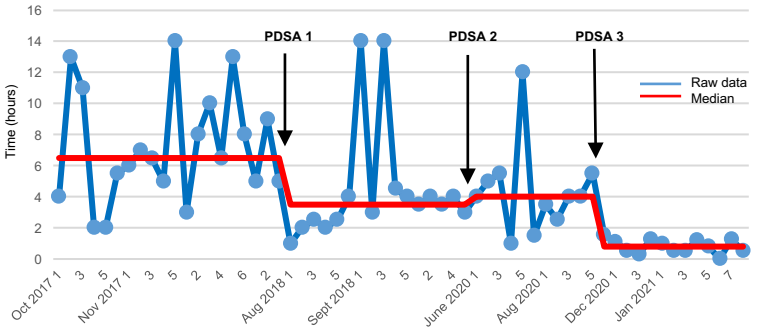
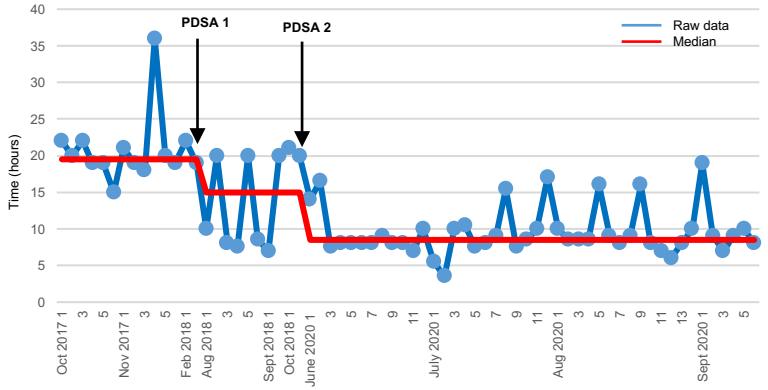


Figure 1: Preoperative fasting time for clear fluids

Median fasting time for clear fluids improved from 6.5 hours to 40 minutes.

Figure 2: Postoperative time to catheter removal

Median time for catheter removal improved from 19.5 hours to 8.5 hours. However, variations in times still exist - ranging from 3.5 to 19 hours.



Discussion

The introduction of the enhanced recovery pathway has improved perioperative care and achieved over 50% improvement in preoperative fasting times and postoperative mobilisation and catheter removal times. However, some variability in times still exists for mobilisation and catheter removal, with longer times recorded if sections occurred in the afternoon. Next steps include:

Update to patient information leaflet → Video of ELCS pathway → Routine dexamethasone given intraoperatively → Mothers to administer simple postoperative analgesia

References

1. Corso E, Hind D, Beever D, et al. Enhanced recovery after elective caesarean: a rapid review of clinical protocols, and an umbrella review of systematic reviews. BMC Pregnancy and Childbirth. 2017; 17: 91