



The Power of Nurses and Midwives to Influence Change

Enhanced Recovery After Surgery (ERAS)

Annmarie Sliney

Assistant Director of Midwifery and Nursing

The Rotunda Hospital

ERAS

- ERAS is a first of its kind of programme in maternity services in Ireland.
- Patient-centered, research-based, multidisciplinary approach that uses selected preoperative, intraoperative and postoperative interventions to optimize outcomes and the patient's experience
- ERAS has been shown to address the “triple aim”; improving quality of care while reducing cost and increasing patient satisfaction.
- Objective:** to establish and embed a programme to minimise surgical trauma and post-operative pain, reduce complications, improve outcomes and decrease length of stay, while expediting recovery of the mother following an elective caesarean section



ERAS at the Rotunda

- Commenced on 22nd February 2021
- Pilot on PSNT B
- Focused initially on patients undergoing EL LSCS living within CMT catchment area
- Implemented to PSNT A in September 2021; including patients not within CMT catchment area

Aim:

- to embed ERAS pathway on all postnatal wards
- to apply ERAS pathway to some major gynae surgeries and low risk emergency CS

ERAS pathway

Pre-op elements

- Patient education
- Haemoglobin optimisation
- Limit fasting times
- Preoperative non particulate carbohydrate loading

Intra-op elements

- Prevent and treat spinal anaesthesia induced hypotension
- Maintain normothermia
- Optimal uterotonic administration
- Antibiotic prophylaxis
- Intra and postoperative nausea and vomiting prophylaxis and treatment
- Multimodal analgesia
- Delayed cord clamping
- Promote breastfeeding and maternal-infant bonding

Post-op elements

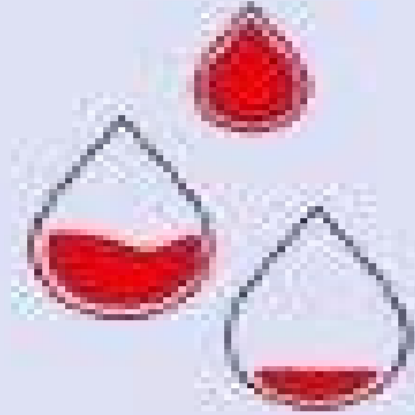
- Promotion of return of bowel function (chewing gum)
- Early oral intake
- Early mobilisation
- Early urinary catheter removal
- Venous thromboembolism prophylaxis
- Facilitate early discharge

ENHANCED RECOVERY AFTER CAESAREAN SECTION PATHWAY

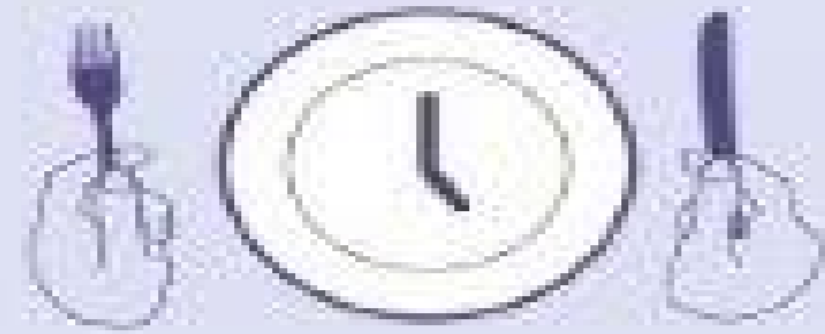
BEFORE THE OPERATION



Patient education of entire pathway (with app/website)



Anaemia prevention



Limit (shorter) fasting times



Carbohydrate drink 2 hours before surgery

DURING THE OPERATION

Minimise surgical trauma



Pre-emptive pain relief/preventative anti sickness medications



Prevent patient temperature loss in theatre

AFTER THE OPERATION



Early bladder catheter removal (within 6 hours surgery)



Early mobilisation (within 6 hours after surgery)



Early oral intake (eating and drinking within 2 hours after surgery)



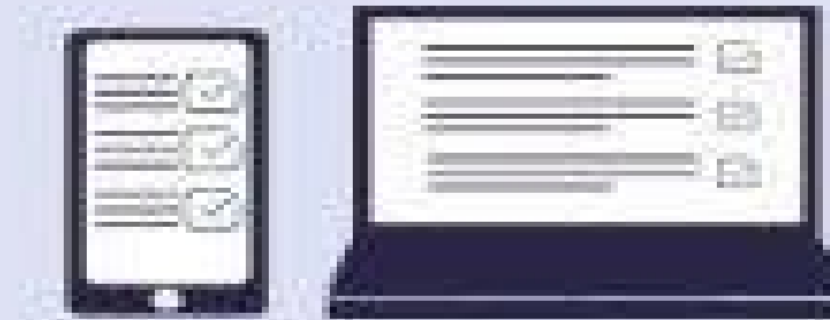
Medical team check-up and baby check-up day 1 after surgery



Early discharge home (by 48 -72hours)



Community midwife follow-up day 24 hours after discharge



Patient satisfaction survey via website

Patient selection/referral

- All women booked for an elective caesarean section delivery can be considered for the ERAS pathway
 - Some patients may not be able to complete ALL parts of it.
- Recruited from Theatre diary or referred from OPD as early as possible
- Followed up by ERAS midwife with phone call +/- face to face meeting
- Information (leaflet/booklet/website) to be given to patient in OPD at next appointment – face to face meeting if possible
- Patient's will need to be residing within the catchment area for CMT follow up (North Dublin & Ashbourne)



Referral Form (Found in each OPD room)

Enhanced Recovery After Surgery (ERAS)

Referral form

(Please complete when booking patient for EL LSCS & ERAS Midwife will follow up)

Referral date: _____ Current gestation: _____

Date of LSCS: _____

Patient's name: _____

MRN: _____

Tel: _____

Reason for EL LSCS: _____

**Completed forms can be placed in Green ERAS folder at nurses station in OPD*

Exclusion Criteria

- Those who may not be suitable for the preoperative carbohydrate drink, such as patients with **pre-existing type I or II diabetes** or **gestational diabetes who require insulin therapy**
- Those who may not be suitable for postoperative early oral intake and mobilisation such as significant postpartum haemorrhage, admission to the high dependency unit or conversion to general anaesthesia
- Many women may not be suitable for early discharge despite all other parts of pathway having been completed such as;
- Patients' residential location not within the geographical outreach for community midwifery care follow-up. (consideration can still be given for early discharge if there is appropriate partner and family support available; this will be on a case by case basis)
- Women in whom significant medical risk continues in the postnatal period, such as those with cardiac disease or severe preeclampsia

Day of LSCS

- Aim for early scheduling
- Limit fasting times (will be advised on fasting times based on probable time of LSCS)
- Carbohydrate drinks taken at least 2 hours prior to surgery
- Further carbohydrate drinks available if required
- Conductive warmer used in Theatre
- Further anti-emetics agents if required
- Chewing gum in recovery period

6 hour care bundle (from time of delivery):

- Light diet within 2 hours
- Analgesia 4 hours post-op
- Early mobilisation (within 6 hours)
- IDC removal (within 6 hours)
- Cannula removal (unless required for IV fluids/antibiotics)
- Regular analgesia to be administered
- Antiemetics to be given as required

ROT Caesarean Section v. ERAS

Surgeon should use the ERAS version of Procedure Note for ERAS patients



Hide Note Details

*Type: C/S Delivery Procedure Note

*Date: 15/03/2021 10:11 GMT

Title: LSCS eras

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ROT Antenatal Admission Note V1 2019	Freetext Note *	Y	Carroll, Ciara 414987 DBA	26/06/2019 14:21:51
ROT Caesarean Section Note 2021	Maternity C/S Delivery Procedure	Y	Shanahan, Ita (Team A) 411469 REG	11/03/2021 08:37:06
ROT Caesarean Section Note v. ERAS 2021	Maternity C/S Delivery Procedure	Y	Scully DBA, Paula	15/03/2021 10:10:43

Impression and Plan

Plan: ERAS care bundle

Early mobilisation and light diet

Urinary catheter out once mobile (aim for within 6 hours).

Check point of care haemoglobin day 2 post-op +/- FBC.

VTE prophylaxis as per Thrombocalc.

Suitable for early discharge with CMT

Postnatal care & Follow up

- Regular analgesia
- Medical check up of mum and baby on day 2
- Early discharge (after 48 hours) if eligible
- Continue Oxynorm until 6 hours prior to discharge
- Regular analgesia advised on discharge
- Honeycomb dressing removed Day 2 and replaced with a Surgipad if wound healing well
- CMT follow up until discharge to PHN/GP (if within catchment area)
- Patients to complete survey to give feedback about recovery experience

KPIs

196 patients have completed the ERAS pathway in 2021 (March – December):

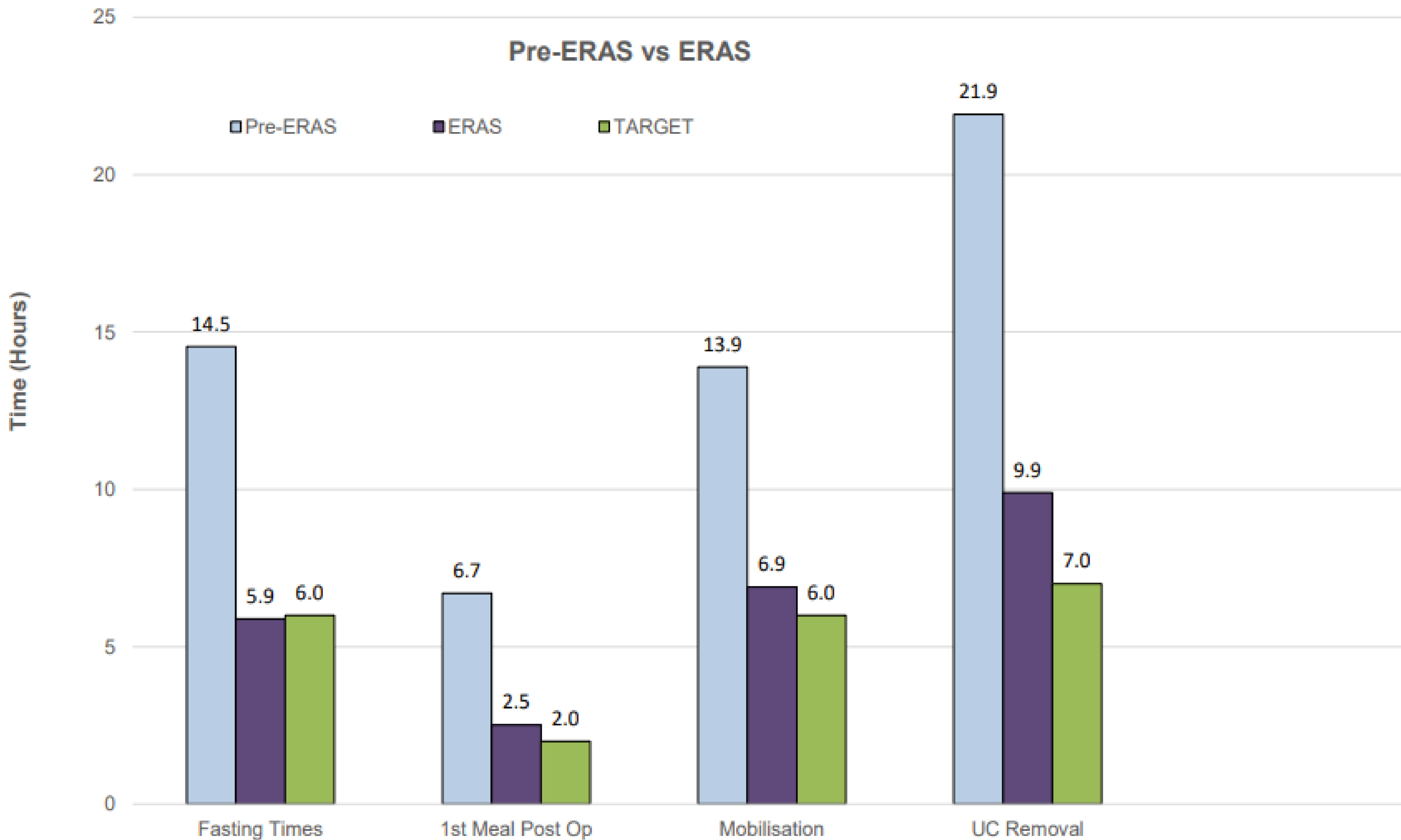
- Pre-operative fasting times reduced from an average of 14.5 hours to 5.9 hours
- Post-operative fasting times reduced from an average of 6.7 hours to 2.5 hours.
- 71 women (36%) were given further anti-emetic agents in OT/Recovery
- 30 women (15%) were given anti-emetics on the postnatal ward for nausea control
- 22 women (11%) required further temperature control measures in recovery (blanket or beir hugger)
- Time of post-operative mobilisation reduced from an average of 13.9 hours to 6.9 hours
- Time to IDC removal reduced from an average of 21.9 hours to 9.9 hours.
- An average pain score of 1 has been reported on day one post-operatively (approx. 24 hours post-operatively). This compares to an average pain score of 1.9 pre ERAS*.

*Comparison data was collected on 100 women who underwent an elective LSCS pre ERAS

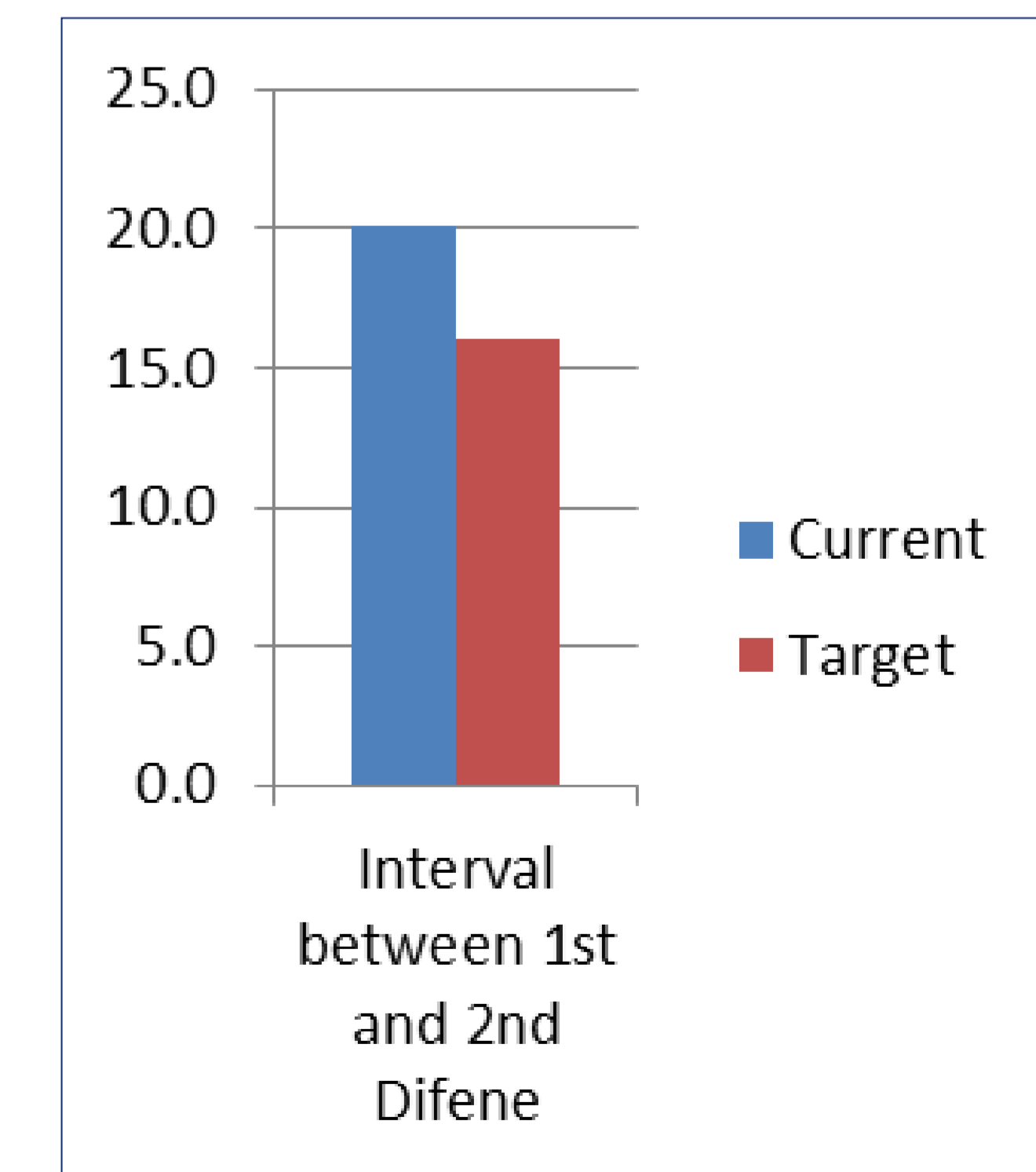
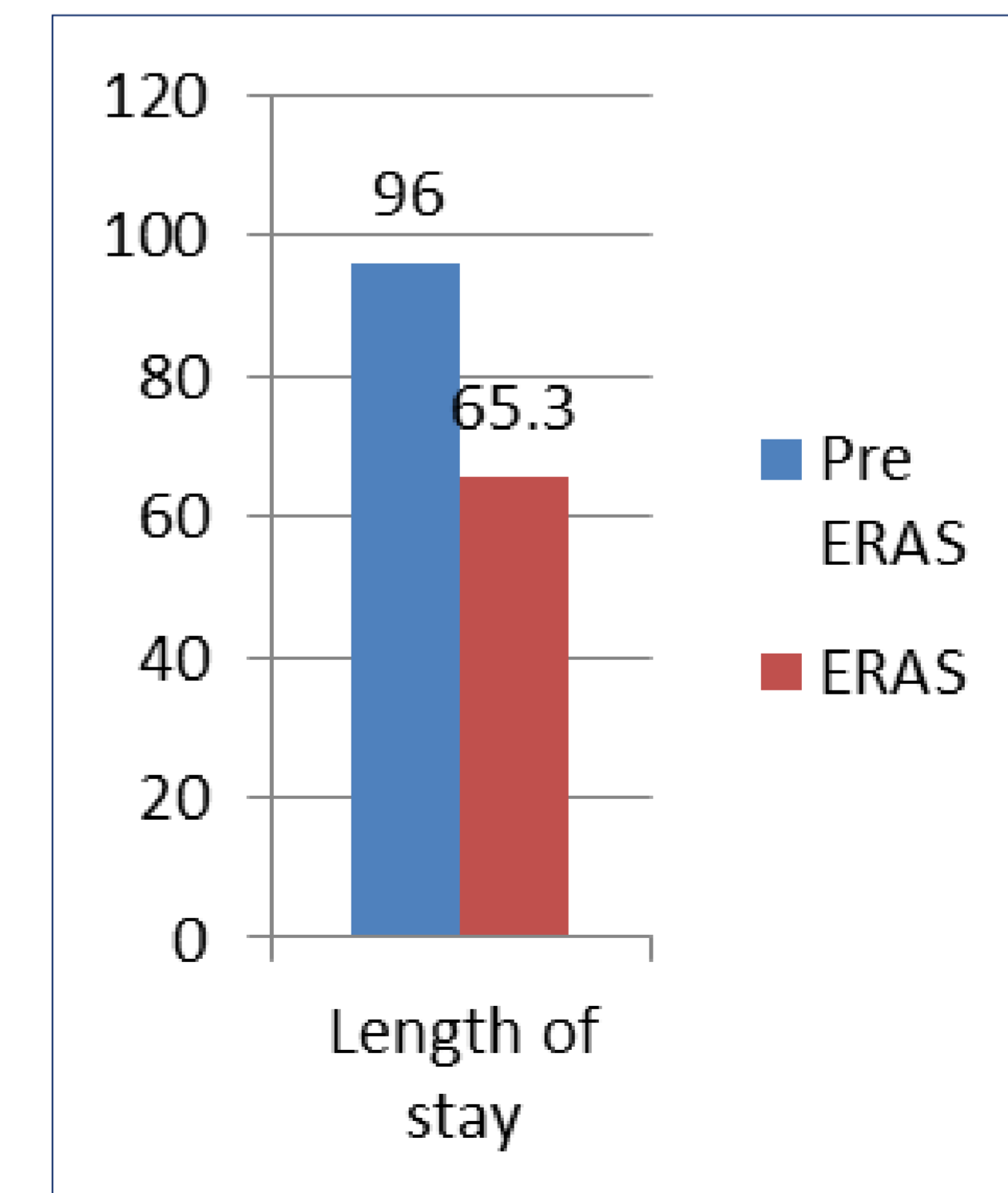
KPI's cont.

- 118 women (60%) have been discharged home on day two.
- LOS for women undergoing elective cesarean section can vary between 72-120 hours (or 3-5 days). Average LOS for women who follow the ERAS pathway is 65.1 hours (or 2.7 days).
- 171 women (87%) followed up with the Community Midwifery Team (CMT) following discharge
- Nine women (5%) had urinary retention, requiring re-insertion of a catheter x24 hours
- Eight women (4.7%) were treated with antibiotics for suspected wound infection
 - Five treated for cellulitis
 - Four followed up in DAU
 - One was treated by their GP
- No cases of ileus
- There have been no readmissions to date
- Patient satisfactory survey sent at 6 weeks post-op

PDSA Cycles & Outcomes



- **PDSA 1.0:** To reduce hospital Length of Stay from 5 to 2 days for mothers having a planned Caesarean Section (CS) by December 2021
- **PDSA 2.0:** Reduce carbohydrate fasting times by providing Nutricia Pre-op drinks
- **PDSA 3.0:** Reduce total length of time of IDC
- **PDSA 4.0:** Expand ERAS to Postnatal ward A
- **PDSA 5.0:** Reduce length of time between 1st and 2nd dose of PR Difene



ERAS expansion

Aim:

- To embed ERAS pathway on all postnatal wards
- To apply ERAS pathway to some major gynaecology surgeries and low risk emergency CS

Involves:

- MDT meetings
- Updating documents (guidelines, information booklet etc)
- Education of pathway (patients and staff)
- Recruiting patients
- Link person for ERAS patients – (included as a positive in patient's feedback)
- Implementation on all postnatal wards
- Implementation for Gynaecology surgeries and low risk emergency CS
- Continuous auditing
- Feedback to staff
- Improving service



Patient feedback

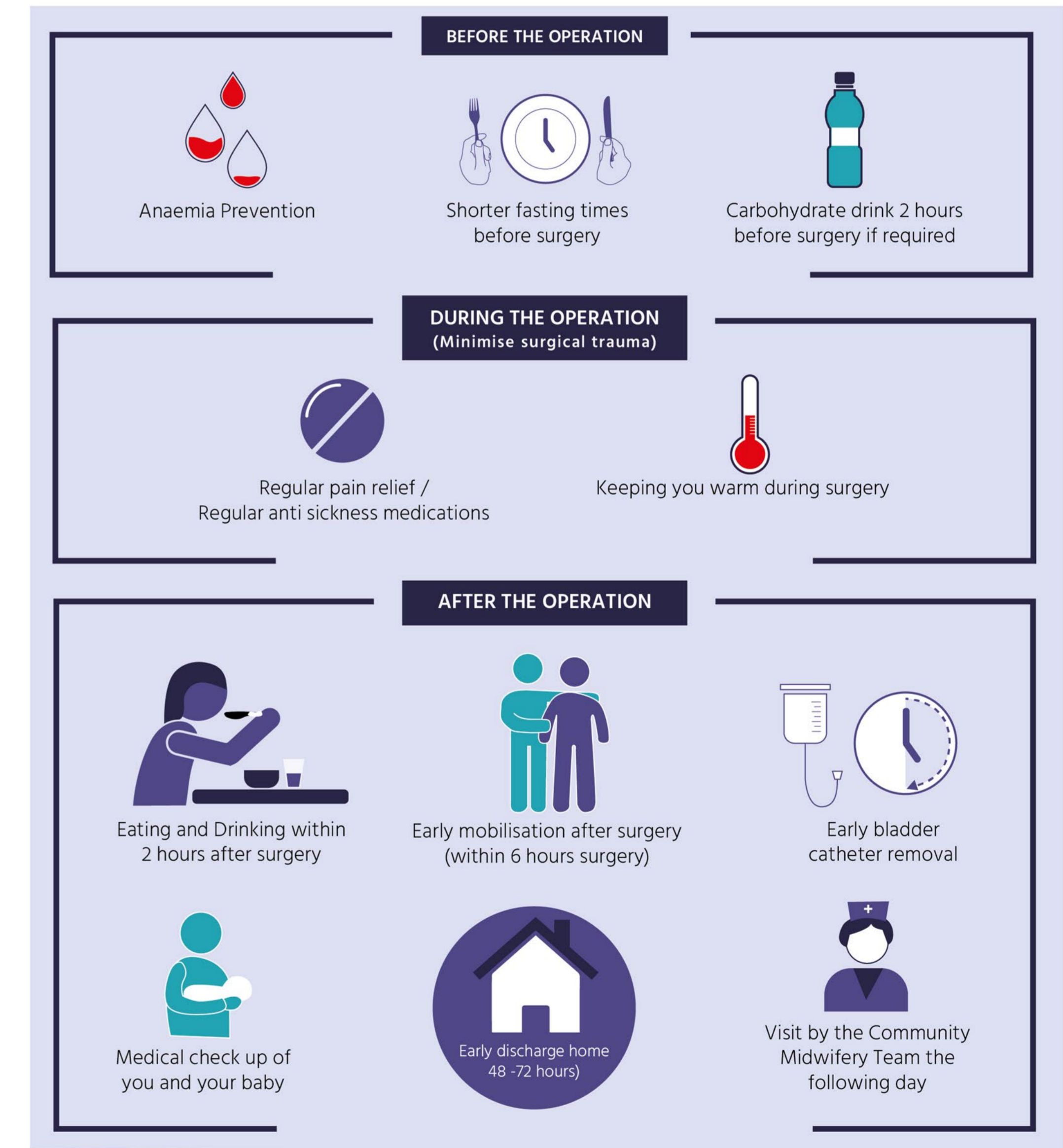
- *“Very positive experience. It was very planned and controlled. Recovery was a lot easier than my first delivery. The midwives were especially helpful and would definitely recommend to family and friends.”*
- *“Myself, my partner and our new baby were looked after so well during all aspects of this programme. Everything was explained to me in detail and in a very personal way. Every person that looked after us, did so with the best care. The programme allowed me to have a bit more control over my own mobility, recovery and medication. [...] I would absolutely do this programme again. Thank you for all your support.”*
- *“Found it very positive. Very little pain at any stage. Very useful to mobilise early on as hospital was very understaffed on post natal ward and had to wait a long time for assistance from midwives, so thankfully I could look after myself and baby. Did not avail of early discharge as I was semi-private patient so would not have support of midwife at home, so I stayed 3 nights in hospital.”*
- *“Really happy with the quality of care I received, everything was explained in advance and on the day. Would recommend the ERAS scheme to others.”*
- *“I have had 2 sections 1 year and a day apart in the Rotunda and both were very positive experiences. All the staff were amazing. I was up and about and had catheter removed so much quicker than my section in June 2020.”*
- *“The program was extremely helpful for me, I felt like I had more control over my section as I made the decision to be in the program and was able to select the aspects of it that I wanted to do. I have had previous surgeries (including open heart surgery) and this was by far the best recovery, I was up moving the fastest and using the toilet/passing bowel movements much sooner than I have in previous operation recoveries. The team was incredibly helpful and supportive, they’re a credit to the hospital. All the documents about the program were informative and easy to follow. The community midwives made the transition home seamless and went above and beyond when I encountered complications out of our control. I cannot say enough positive things about the program and team, hopefully should I have another pregnancy I will be able to avail of this service.”*
- *“Fantastic service speedy recovery. My 3rd c section and by far my best recovery. I also had my tubes ligated with no added pain. Would 100% do it again if I was planning another birth. Many many thanks.”*
- *“This was a completely different and more positive experience to my first cesarean which was an emergency. The quality of information and support provided was excellent. It was great to get home early particularly given the current covid environment. ...A cesarean can be quite a daunting experience but getting back on your feet so quickly, coupled with excellent pain management, almost makes you forget you had major abdominal surgery! Thank you to all the team in the Rotunda...keep up the excellent work.”*

Further information

- Guideline available on QPulse
- Information available at: <https://rotunda.ie/eras/>
- Youtube video: https://youtu.be/mRHSScGB5_8
- E-mail: eras@rotunda.ie
- ERAS phone: 0876532932

ENHANCED RECOVERY AFTER CAESAREAN SECTION

Enhanced recovery is a modern, evidence-based approach that helps people to recover from surgery more quickly. It aims to optimise your experience and facilitate your recovery after surgery, so that you return to your normal level of function as soon as possible, allowing you to be independent sooner.



*Please note: Not all patients will be eligible to participate in this programme. If you do meet the criteria, a member of our team will contact you. For further information, please log on to rotunda.ie/ERAS, or, e-mail ERAS@rotunda.ie.