Enhanced Recovery After Surgery (ERAS) Program Evaluation - Cesarean Section

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Enhanced recovery after surgery (ERAS) 1,2,3,4,5

- Evidence-based care pathways focused on optimizing
  - Pain control
  - Nutrition
  - Fluids
  - Mobility
- The Goal for implementing this evidence-based pathway was to decrease surgical stress and optimize patient outcomes

**Patient Resources**
- Pre/post operative patient education
- Laminated flyers (see Figure 1 & 2)
- Note that some patients may labor prior to cesarean section

**METHODS**

Retrospective Institutional Review Board approved study
- Electronic health record (EHR) review
- Cesarean section deliveries performed in this midwestern hospital setting
  - January 1, 2018, through December 1, 2022
  - ERAS implementation July 13, 2020
- Variables compared
  - Length of stay
  - Foley catheter duration
  - Opioid medication trends pre- and post- implementation
  - Basic demographics for the population will also be analyzed
  - Multiple birth deliveries were included
  - Episodes involving a neonatal intensive care unit (NICU) admission were excluded from this analysis

**RESULTS**

- Overall study population had a mean age at delivery of 30.8 with 1829 cesarean delivery episodes
- NICU admissions (413) were excluded from this analysis
- Focus population (1416) included cesarean delivery episodes
  - Pre/post (739/677) implementation cesarean episodes
  - Implementation date July 13, 2020

**Limitations**
- Single department within the institution
- Retrospective data collection is restricted to documentation present in the EHR
- Other complementary improvement projects may have played a role in the overall reduction of opioid prescriptions and refills
- Note complementary improvements were also present during the pre-implementation timeframe

**Implications**
- Standardizing post-surgery care with the implementation of an evidence-based ERAS process
- Significant impact on:
  - Length of stay
  - Foley duration
  - Opioid medication usage

**Future Recommendations**
- Continue patient and staff education on the ERAS process
- Evaluation of the program to identify areas for improvement
- Investigating patient/staff perceptions of the ERAS process

**Medication Dose**

- Episodes of opioid delivery during stay, opioid prescriptions at discharge, and opioid prescription refills after discharge decreased significantly post-ERAS implementation

**DEMOGRAPHICS**

- Overall study population had a mean age at delivery of 30.8 with 1829 cesarean delivery episodes
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**NURSING IMPLICATIONS**

**Background**

- Enhanced recovery after surgery (ERAS) 1,2,3,4,5
- Evidence-based care pathways focused on optimizing
  - Pain control
  - Nutrition
  - Fluids
  - Mobility
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**PURPOSE**

- Explore pre/post ERAS process implementation associations
  - Length of stay
  - Foley duration after delivery
  - Opioid use trends
  - During stay
  - Prescribing at discharge
  - Prescribing post-discharge

**Analysis**
- Statistical software program R, version 4.2.2
- Statistical Significance p<0.05
- Pearson’s Chi-squared
- Fisher’s exact

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**REFERENCES & MORE INFORMATION**