Decreasing Opioid Use after Scheduled Cesarean Section

Northwestern Medicine®
HUNTLEY HOSPITAL

Sponsor
Joan Stout

Process Owner
Alyssa Carter

Improvement Leader
Linda Pienschke

Team Members: Candyce Drinkwater, Rachel Varghese

Successfully decreased the use of opioids from 80% to 40% of mothers post scheduled cesarean section at Northwestern Medicine Huntley Hospital. This was accomplished by implementing a new procedure to advance recovery and decrease pain.

BACKGROUND

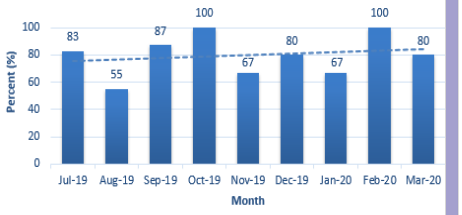
The Problem

- Prescribing opioids is common practice post cesarean section. Opioid use in the United States has greatly risen in the past few years with opioid use disorder increasing 333% among delivered patients.
- This is important because the use of opioids by new mothers can quickly lead to maternal addiction negatively impacting future pregnancies and neonates.

Previous Opioid Use

- Norco 5/325mg 1-2 tablets was routinely prescribed at Northwestern Medicine Huntley Hospital every 4 hours PRN for pain management.
- From July 2019 through March 2020 an average of 80% of mothers used opioids during their hospital stay post scheduled cesarean section.

Figure 1: Percentage of Scheduled Cesarean Section Patients Using Opioids Baseline Data



- The goal of this project was to decrease maternal opioid use of patients post scheduled cesarean section from 80% to 77.5% by June 2020.

METHODS

The Root Causes

- Complacency among obstetric physicians and nurses with maintaining the status quo and current post surgical practices
- Lack of awareness regarding increased opioid use in obstetrics leading to future addiction and abuse in mothers
- Unfamiliarity with potential negative consequences in newborns

Barriers

- Lack of time to investigate the latest evidence-based practice
- Misunderstanding related to benefits of enhanced recovery
- Time needed for physicians and nurses to communicate with patients regarding new pre and post surgical practices

The New Process

- New interventions were implemented after scheduled cesarean sections to enhance recovery of patients
- Improved recovery of patients will reduce pain and lead to decreased opioid use
- Updated procedure implemented including drinking Gatorade, chewing gum, advancing diet as tolerated, scheduled Tylenol Extra Strength, and early removal of Foley catheter with ambulation
- Patient education provided 1-2 days prior to surgery regarding new process
- Checklist created for nursing staff to audit implementation of new interventions to ensure enhanced recovery of patients leading to less pain and decreased opioid use

Figure 2: Enhanced Recovery after Scheduled Cesarean Section Nursing Checklist

Place patient sticker here: Date and Time of Surgery: _____

Pre-Op Checklist:

☐ Drank bottle of Gatorade 3 hours prior to surgery start time

☐ Took Extra Strength Tylenol 1000 mg PO 1-2 hours before surgery
Time took medication: _____

Post-Op Checklist:

☐ Toradol 30 mg IVP given q 6 hours x 4 doses, then change to Motrin 800 mg PO q 8 hours

☐ Chewed gum during the 2 hour recovery period

☐ Clear liquids in the recovery room, then advance diet as tolerated

☐ Ofirmev 1000 mg IVPB x 1 dose, then switch to PO Extra Strength Tylenol 1000 mg
(Please be aware that the patient may have taken ES Tylenol 1-2 hours prior to surgery)

☐ Sat up at bedside and dangled feet within 6 hours after surgery

☐ Ambulate and up to chair by 8-12 hours after surgery

☐ Remove foley catheter by 8-12 hours after surgery

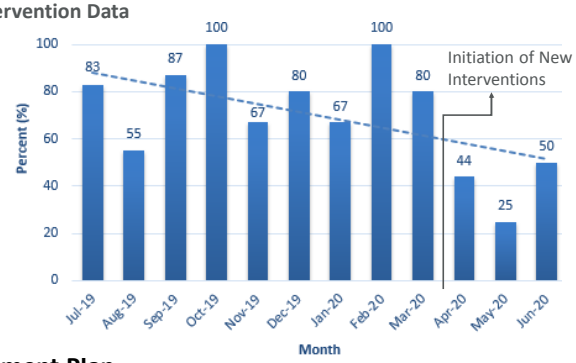
Did patient receive Norco or any other narcotics while on post-partum?

☐ Yes ☐ No

RESULTS

- By June 2020 the average percentage of mothers who used opioids during their hospital stay post scheduled cesarean section decreased from 80% to 40%.
- Decreased opioid use was evident among unscheduled cesarean section patients as well. From July 2019 through March 2020 an average of 81% of mothers used opioids during their hospital stay post unscheduled cesarean section which decreased to 48% by June 2020.

Figure 3: Percentage of Scheduled Cesarean Section Patients Using Opioids Post Intervention Data



Sustainment Plan

- OB Patient Outcomes Council will uphold these efforts by continuing to implement and monitor this process
- Monthly auditing of opioid use among scheduled cesarean section patients

CONCLUSIONS

- Patients along with OB physicians, nurses, and techs were receptive to education and alternative measures for enhanced pain control
- Education of patients and OB staff resulted in enhanced recovery ultimately leading to decreased opioid use in patients on the unit
- Recommendation to create handout that can be distributed to patients in the OB office explaining the new process being utilized for scheduled cesarean sections

REFERENCE

(1) Valentine, A., Carvalho, B., Lazo, T., & Riley, E. (2015). Scheduled acetaminophen with as-needed opioids compared with as-needed acetaminophen plus opioids for post-cesarean pain management. International Journal of Obstetric Anesthesia, 24(3), 210-216. doi:10.1097/01.aoa.0000482647.00882.aa

(2) Ituk, U., & Habib, A. S. (2018). Enhanced recovery after cesarean delivery. F1000Research, 7, 513. doi:10.12688/f1000research.13895.1

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