Perinatal Elective Induction Safety

Processes to deliver reliable care with special attention to safety in delivery, which reduces the chances of harm to both mother and baby.

Domain

Patient Care Processes:
Clinical processes that ensure delivery of high-quality care to individual patients

Aims

Safe:
Delivery of care in a manner that minimizes any risk of harm to a patient

Process Attributes

Cost to Implement
The monetary resources required to implement this process

- Minimal: Just the cost of the improvement effort itself

Time to Implement
The amount of time, from months to years, it will take on average to establish this process

- Fewer than 12 months

Difficulty to Implement
The challenges of implementing this process

- Most Challenging: Involves multiple units or disciplines AND requires a substantial shift in culture and/or operations

Level of Evidence
The degree to which the actions in this process are supported by research and experience; based on the Cochrane scale

- Some Evidence: Level III — Studies published with some control included

Details

Elements

- Elective Induction Bundle components:
  - Gestational age greater than or equal to 39 weeks is condition for elective induction
  - Recognition and management of tachysystole
  - Pelvic exam/Pelvic assessment
  - Reassuring fetal status /Normal fetal status (using NICHD 3-Tier System)
- Standard evaluation for labor. Assess and record:
  - Frequency and duration of uterine contractions
  - Documentation of fetal well-being
  - Cervical dilatation and effacement, unless contraindicated
  - Fetal presentation and station of the presenting part
  - Estimation of fetal weight and assessment of maternal pelvis

http://app.ihi.org/imap/tool/#process=cd6ce129-b442-49d6-b0d4-d160ec1f9528

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Outcomes

- **Harm:** Decreased harm to patient (e.g., Harms per 100 patient days, as measured by the IHI Global Trigger Tool)
- **Cost of Care:** Decreased cost per inpatient case

Service Lines and Critical Functions

- Obstetrics

Key Measures

- **Elective Induction Bundle Compliance**
  
  Percentage of times that all four elements of the bundle are in place.
  
  - Numerator: Total number of patients given oxytocin for induction with all four components of bundle in place (suggest weekly sample of five patient records)
  
  - Denominator: Total number of patients given oxytocin for elective induction

- **Percent change in rate of mothers transferred to higher level of care**

- **Percent change in rate of newborns admitted to neonatal intensive care**
  
  - The Joint Commission National Quality Measure PC-01: Elective Delivery
  
  Patients with elective vaginal deliveries or elective cesarean sections at >= 37 and < 39 weeks of gestation completed

Reasons and Implications

Importance for Patients and Families

By following the safest elective induction processes, a hospital care team can reduce the chance of harm for both mother and baby and means that separating mother from infant after delivery is less likely. Oxytocin, used for labor augmentation and induction, has been classified as a High-Alert Medication by the Institute for Safe Medication Practices (ISMP) and proper informed consent should be received before administering this medication.

Requirement, Standards, Policies, and Guidelines

- **Institute for Safe Medication Practices (ISMP)**
  
  Alert: August 9, 2007. Oxytocin was named a high-alert medication.

- **National Priorities Partnership (NPP)**
  
  Safety

- **National Quality Forum (NQF)**

- **The Joint Commission (TJC)**
  Links to perinatal care information and perinatal care measure set.

- **The Joint Commission (TJC)**
  Standard MM.7.10: The organization develops processes for managing high-risk or high-alert medications.

Financial Implications

- Expense reduction can occur due to reduced length of stay in labor and delivery and the neonatal intensive care unit (NICU).

- Revenue reduction can occur due to decreased admissions and length of stay in the NICU.

- Positive returns on investment are reported in the literature because hospitals that have increased the reliability of these components have also reported a decrease in medical malpractice set-asides and expense.

Prerequisites

- Collaboration between nurses and obstetrical care providers in the labor and delivery unit

- Acceptance of standard algorithms for treatment
Additional Resources

- **American Hospital Association (AHA)**
  Hospitals in Pursuit of Excellence – Individual Case Studies
  Reducing Cesarean Rates
  Magee-Womens Hospital of UPMC

- **March of Dimes**
  Elimination of Non-medically indicated (Elective) Deliveries Prior to 39 Weeks Gestational Age Toolkit

- **Association of Women’s Health, Obstetrics and Neonatal Nursing (AWHONN)**

- **American Academy of Pediatrics (AAP)**

- **March of Dimes**
  Article for women thinking about scheduling their baby’s birth and why the last weeks of pregnancy count.

- **American College of Obstetricians and Gynecologists (ACOG)**
  Elective Induction

- **Agency for Healthcare Research and Quality (AHRQ)**

- **US Department of Health and Human Services**
  Partnership for Patients

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