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OPQPC Clinical Advisor
OPQC

It takes a village…
OPQC Mission

Through collaborative use of improvement science methods, reduce preterm births & improve perinatal and preterm newborn outcomes in Ohio as quickly as possible.

*Obstetric and Neonatal Focus*
The Ohio Perinatal Quality Collaborative

**Obstetrics**
- 39-Week Scheduled Deliveries without medical indication
- Steroids for women at risk for preterm birth (24/7 - 33 6/7)
  - Done → Transition to BC Surveillance

**Neonatal**
- Blood Stream Infections:
  - High reliability of line maintenance bundle
- Use of human milk in infants 22-29 weeks GA
  - OCHA NAS in 6 CH’s

**Progesterone to Reduce Preterm Birth Risk**
- Increase Birth Data Accuracy & Online modules
- Spread to all maternity hospitals in Ohio

**Neonatal Abstinence**
OPQC = Population Health

105 (of 107) Maternity Hospitals

54 (of 54) Level II and III Nurseries

Pilot: 25 Outpatient OB Clinics
ANTENATAL CORTICOSTEROIDS

ANCS Project
ANCS Baseline Ohio

- Ohio Birth Certificate: 66%
- Vermont Oxford Hospitals: 80-84%

Births 24 0/7 – 34 0/7 weeks
ANCS Retrospective Chart Review

- 15 Hospitals 8/5/10 - 1/6/11
- 473 deliveries 24 0/7 – 34 0/7
  - 19 inadequate data
  - 5 fetal death before admission
  - 2 lethal anomalies
  - 1 delivered before arrival
- 446 deliveries analyzed
  - 399 (89.5%) received at least one dose
  - 47 (10.5%) received none
    - 50% delivered within 2 hours
    - 65% within 4 hours
Abstractor Challenges

• Variation in location of ANCS documentation
  • Outpatient chart
  • Inpatient chart
  • Referring hospital chart

• ANCS nomenclature
  • Generic
  • Brand names
  • Unique abbreviations
Prospective ANCS

- 19 of 20 OPQC Charter members 11/11 – 6/13
- Monthly webinars
- Hand collected data
Global Aim: Assure that all infants born between 24\(\frac{0}{7}\) and 33\(\frac{6}{7}\) weeks’ gestation receive appropriate antenatal corticosteroid treatment to reduce perinatal morbidity and mortality.

**SMART AIM**
To increase the percentage of infants born in Ohio at 24\(\frac{0}{7}\) to 33\(\frac{6}{7}\) weeks’ gestation who receive pre-delivery ANCS to >90%, by June 2013

**Key Drivers**
- **Documentation System**
- **Identification of Appropriate ANCS Candidate**
- **Identification of Appropriate Time for ANCS Administration**
- **Optimal and Efficient Administration of ANCS**
- **Awareness of Benefits and Risks**

**Interventions**
- Create an integrated system of recording ANCS administration among prenatal care sites and delivery sites encompassing all levels and acuity of care.
- Standardize birth certificate documentation of ANCS administration.
- Choose an ANCS Strategy or Guideline for your site.
- Promote consistent use of common algorithm of ANCS administration for Betamethasone & Dexamethasone:
  - Practitioners
    - Prescribing
    - Care Giving / Administering
  - Hospitals
    - Link to maternal transfer & tocolysis
  - Pharmacies
  - Distributors
  - Pharmaceutical Manufacturers
- Promote public awareness of benefits of ANCS
  - Education of parents & non-perinatal providers
  - Link to maternal transfer & tocolysis
  - General risks and benefits
Percent of women between 24 0/7 wks and 34 0/7 wks who received any ANCS prior to delivery
## CSI: Corticosteroid Investigation

<table>
<thead>
<tr>
<th># of patients who did not get ANCS</th>
<th>170 (April through March)</th>
</tr>
</thead>
<tbody>
<tr>
<td># of patients with “CSI”</td>
<td>149</td>
</tr>
</tbody>
</table>
| Reasons for not receiving ANCS prior to delivery | 108 = Short Interval from Presentation to Delivery – interval < 2 hrs  
  2 = ANCS not given at referring hospital  
  15 = Admit Dx not expected to deliver but condition rapidly changed  
  6 = Not ordered, or ordered but not given (Systems Failure)  
  7 = Infant delivered at 32-34 wks and mom with PROM  
  8 = Prenatal Dx of lethal anomaly  
  3 = ANCS held for Medical reasons |  |
| # of patients with missing Information | 21 |
Births at 24-33 completed weeks receiving any antenatal steroids, by quarter, Aggregate results for 19 OPQC charter sites

Source: Ohio Department of Health, Vital Statistics
Births at 24-33 completed weeks receiving any antenatal steroids, by quarter Ohio

Source: Ohio Department of Health birth certificate file..
EARLY ELECTIVE DELIVERY

OPQC 39 Week Project Expansion.
“The focus of healthcare for women and infants over the next century depends on the quality of the data collected by those who fill out the birth certificates.”
OPQC OB 39 week Project

20 Charter Hospitals
49% of Ohio Births
39-Weeks Charter Project
Kick-off: September 2008

15 Pilot Sites
17% of Ohio Births
39-Weeks Pilot Dissemination and Birth Certificate Accuracy Project
Kick-off: March 2012

~80 Remaining Maternity Hospitals
32% of Ohio Births
39-Weeks Dissemination and Birth Certificate Accuracy Project
Kick-off:
Wave 1: February 2013
Wave 2: May 2013
Wave 3: July 2013
Rates of labor induction without medical indication are overestimated when derived from birth certificate data

Jennifer L. Bailit, MD, MPH; for the Ohio Perinatal Quality Collaborative

FIGURE
Rates of nonmedically indicated induction of labor that were calculated by birth certificate data vs chart abstracted data

OPQC: Decreasing births < 39 weeks gestation without medical indication and **improving birth registry accuracy project**

**Aim**

In 9 months, improve birth registry accuracy so that focused variables** will be transmitted accurately in 95% of records

(** Pre-pregnancy and Gestational Diabetes; Pre-pregnancy and Gestational hypertension; Induction of Labor; ANCS; OB estimate of GA)**

**Key Drivers**

- Strong communication between clinical team and birth data staff
- Trained clinical and birth data teams
- Audit Process for data verification
- Appreciation of the Importance of the Birth Registry information
- IPHIS (BR) fields include essential and specific information/definitions
- Identification and spread of best practices for data entry and verification

**Interventions**

- Identify a key clinical contact for birth data team
- Identify all sources of birth data
- Identify process for flow of data into the birth registry (IPHIS) system
- Ensure birth data team has access to necessary clinical data
- Utilize ODH and OPQC online education modules for training of birth data and nursing staff
- Ensure clear understanding of birth registry variables
- Ensure clear understanding by birth data team of medical terminology related to birth registry variables
- Coaching/reinforcement by OPQC and state quality coordinators
- Use medical record to IPHIS quality review feedback to identify gaps
- Continuous monitoring of Birth Registry data reports
- Clarify IPHIS definitions and instructions
- Group and individual webinars and 1:1 support by state quality coordinators to identify key changes

Revised: 1.31.13
Goal: Assure that all initiation of labor or caesarean sections on women who are not in labor occur only when obstetrically or medically indicated

In 9 months, reduce to 5% or less, the number of women in Ohio of 37.0 to 38.6 weeks gestation for whom delivery is scheduled in the absence of appropriate medical indication

Aim

Key Drivers

- Awareness of risks & expected benefit of scheduled delivery prior to 39.0 weeks by patients and other consumers
- Awareness of risks & expected benefit of near-term delivery by clinician
- Dating criteria: optimal estimation of gestational age
- Hospital and physician practice policies that facilitate ACOG criteria
- Culture of safety and improvement

Interventions

- Inform consumers of risk/benefits of deliveries < 39 weeks
- Communicate to patient/clinic/hospital ultrasound results
- Promote need for early dating to practitioners and consumers
- Public awareness campaign
- Promote need for early dating to practitioners and consumers
- Promote sonography < 20 weeks to establish dates
- Document criteria used to establish EDC
- Appropriate use of fetal maturity testing
- Empower nurses/schedulers to require dating criteria
- Identify a specific contact for authorization dispute re: dating
- Provide patient with hard copy results of ultrasound
- Empower nurses/schedulers to require dating criteria
- Document rationale and risk/benefit for scheduled deliveries at 37.0 to 38.6 weeks gestation
- Document discussion with patient about the above
- Both patient and MD sign consent statement for scheduled delivery between 37.0 and 38.6 weeks
- Physician awareness campaign: what are the reason(s) for scheduled delivery?
- Maximize access to Delivery and OR for optimal scheduling
- Facilitate scheduling policies that respect ACOG criteria
- Prenatal caregivers receive feedback from postnatal caregivers about neonatal outcomes of scheduled deliveries
- Ensure complete and accurate handoffs OB/OB and OB/Peds
- Document discussion with patient about risk/benefits of near-term delivery
- Promote need for early dating to practitioners and consumers
- Continuous monitoring of data & discussion of this effort in staff/division meetings.
- Project outcomes posted on units and websites.
- Develop ways to include staff and physician input about communications and handoffs
- Connect with organizational initiatives on safety and use existing approaches as possible
- Empower nurses/schedulers to require data criteria

Revised: 1.31.13
Project Details: Wave 1, 2013

Monthly Action Period Calls from 12 noon - 1pm
- May 20th  Kick Off Webinar/Action Period Call
- June 17th and individual hospital call
- July 22nd and individual hospital call
- August – individual hospital call and August 26 Learning Session in Columbus
- September 23rd
- October 21st
- November 18th
- December 16th
## Bakers Dozen

<table>
<thead>
<tr>
<th>Variable</th>
<th>IPHIS Tab</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Total number of Prenatal visits</td>
<td>Prenatal</td>
</tr>
<tr>
<td>2. Pregnancy Risk Factors: pre-pregnancy and gestational diabetes</td>
<td>Pregnancy</td>
</tr>
<tr>
<td>3. Pregnancy Risk Factors: pre-pregnancy and gestational hypertension</td>
<td>Pregnancy</td>
</tr>
<tr>
<td>4. History of prior preterm birth</td>
<td>Pregnancy</td>
</tr>
<tr>
<td>5. Induction of Labor</td>
<td>Labor &amp; Delivery</td>
</tr>
<tr>
<td>6. Augmentation of Labor</td>
<td>Labor &amp; Delivery</td>
</tr>
<tr>
<td>7. Antenatal corticosteroids (ANCS)</td>
<td>Labor &amp; Delivery</td>
</tr>
<tr>
<td>8. Antibiotics received by the mother during delivery</td>
<td>Labor &amp; Delivery</td>
</tr>
<tr>
<td>9. Birth weight</td>
<td>Newborn</td>
</tr>
<tr>
<td>10. Obstetrical estimate of gestational age</td>
<td>Newborn</td>
</tr>
<tr>
<td>11. Abnormal conditions of the newborn:</td>
<td>Newborn</td>
</tr>
<tr>
<td>Assisted ventilation after delivery and NICU admission</td>
<td>Newborn</td>
</tr>
<tr>
<td>12. Congenital abnormalities of the Newborn</td>
<td>Newborn</td>
</tr>
<tr>
<td>13. Breast feeding at discharge</td>
<td>Newborn</td>
</tr>
</tbody>
</table>
Births induced at 37-38 weeks with no apparent medical indication for early delivery, by month, 2006-2014
Aggregate of Ohio maternity hospitals

Source: Ohio Department of Health, Vital Statistics
Percent distribution of Ohio births, by gestational age and month
January 2006 to September 2014

Since OPQC inception, 46,350 expected births <39 weeks have shifted to ≥39 weeks.

Baseline averages were calculated from the initial 24 months, January 2006 to December 2007.
Percent distribution of Ohio births <39 weeks gestation, by month
January 2006 to September 2014

Baseline averages were calculated from the initial 24 months, January 2006 to December 2007.
IPHIS (Birth Certificate) Updates 2015

- 12 New Variables Including
  - Gestational Age
    - Ultrasound before or after 20 weeks or none
  - Previous cesarean
    - Incision type
  - IUGR (by ultrasound)
  - Renal disease (maternal)
  - Cholestasis
  - Blood group alloimmunization
  - Non pregnant uterine surgery
  - HIV

2014 ADDITIONAL IPHIS VARIABLES

Twelve new additional variables have been added to Ohio’s IPHIS Database. Each is listed below with the corresponding tab and tips for accurate data entry. Enhanced clarification of a number of key existing variables is also described. These variables are important to an understanding of prenatal health and will assist us in improving health outcomes for women and babies in Ohio.
Resources

• www.opqc.net
• ANCS Tool Kit coming soon
• IPHIS (Birth Certificate) Video Modules
• Key Driver Diagrams
STEAL SHAMELESSLY
SHARE SEAMLESSLY