



OPQC OBSTETRICS Charter

Eliminating Elective Near-Term and Late Preterm Births in Ohio Learning Network Charter

Introduction

The Ohio Perinatal Collaborative, an Ohio based network of perinatal care providers working to improve neonatal and perinatal outcomes, will launch a Learning Collaborative (adapted from the Institute of Healthcare Improvement's Breakthrough Series™) to eliminate elective near-term and late preterm births in Ohio. A Learning Collaborative brings together action-oriented teams from multiple healthcare organizations over the course of 12-18 months. Teams attend face-to-face meetings (Learning Sessions) where they examine proven and recommended strategies to perfect care. Most importantly, teams work between sessions to plan and execute iterative tests of change and share learning across organizations.

The Challenge

Rates of preterm birth and associated infant morbidities are unacceptably high in Ohio.

Rising rates of preterm birth in Ohio and the United States since 1990 are due almost entirely to a steady increase in late preterm births. The rate of births between 34^{0/7ths} and 36^{6/7ths} weeks' gestation has risen steadily, from 7.3% in 1990 to 9.1% in 2005. These infants account for about three quarters of all preterm births. Much of this apparent increase is the result of improved obstetrical dating, which has shifted the entire distribution of births to the left, so that the number of births recorded as post-term has declined as near-term (between 37^{0/7ths} and 38^{6/7ths} weeks of gestation) and late preterm births have increased (2).

In addition to the shift in gestational age resulting from improved pregnancy dating, the absolute number of births between 34 and 36 weeks has increased as a result of multifetal pregnancies related to fertility therapies and because of a rise in births that are intentional or *indicated*, i.e., the result of a decision to end the pregnancy for medical or obstetrical reasons (1, 3). The increase in indicated preterm births has been accompanied by declining rates of perinatal (the sum of fetal and neonatal deaths) and infant mortality supporting the wisdom of selective indicated preterm birth (2).

However, despite the decline in perinatal mortality, late preterm and near term infants experience increased morbidity compared to infants born at term (7, 8). Although infants born between 34 and 37 weeks are generally believed to do well, rates of neonatal, infant and lifetime morbidity and mortality are increased. In one study, neonatal mortality rates at 34, 35, and 36 weeks were 1.1, 1.5, and 0.5 per 1,000 live births, respectively, compared with 0.2 per 1000 live births at 39 weeks (4). Five percent of infants born at 34 weeks required neonatal intensive care compared with 2% at 35 weeks, 1.1% at 36 weeks, 0.6% at 37 weeks and 0.5% at 39 weeks in this study. These differences may seem small, but in 2005, 35% of all singleton births in Ohio were between 36^{0/7th} and 38^{6/7th} weeks' gestation. Thus, infant morbidity after late preterm and near term births is a common problem.

Obviously, these births should not occur without good reason. The 1999 American College of Obstetricians and Gynecologists Practice Bulletin on Induction of Labor serves as the basis for OPQC's effort to reduce and eliminate inappropriate elective deliveries.

Unfortunately, the reasons for scheduling delivery are often not well documented in clinical practice and have not been well studied, beyond listing overt medical or obstetrical indications.

Complications of pregnancy commonly associated with late preterm and near term births include preterm labor, preterm ruptured membranes, maternal hypertensive disorders, diabetes, and antenatal hemorrhage 2008 (4, 5).

Decision-making around softer indications such as decreased fetal movement or decreased amniotic fluid volume is less well studied. It is known that elective deliveries are also scheduled to optimize time management for the pregnant woman, her family, or her hospital and doctor, but the relative percentage of deliveries planned for strong versus soft or elective indications is currently

unknown (6). Neonatal and infant morbidity unrelated to medical or obstetrical indications for planned delivery is unacceptable. These births offer an opportunity to reduce prematurity-related morbidity without increasing fetal risk.

MISSION:

OPQC's first neonatal improvement project will develop and test strategies *to eliminate elective inductions* in near term and late preterm births. . This project will focus on creating a obstetrics community in the state of Ohio focused on developing and testing strategies to address non medically indicated elective inductions, and to spread improvements shown to be effective across the obstetrical community and develop a model and infrastructure for collaborative improvement for perinatal care.

AIM:

In one year, reduce by 60%, the number of women in Ohio of 36.0 to 38.6 weeks gestation for whom initiation of labor or caesarean section is done in absence of appropriate medical or obstetric indication (Scheduled delivery). The ultimate goal is elimination of inappropriate late preterm and near term births.

METHODS:

All hospitals providing obstetrical services in Ohio will be invited to participate in the learning collaborative. OPQC leadership including the Center for Health Care Quality (CHCQ) will assist participants in testing changes to the process of care delivery using the "Key Driver" model (see *diagram*). The OPQC staff has identified some of the steps that lead to planned early delivery. The Key Driver diagram lists these steps, along with interventions that might be chosen to achieve the initial goal of a 60% reduction in near term births in the first year of the collaborative. OPQC participants will record the local incidence and outcome of late preterm and near term births and in that process introduce moderate barriers to inappropriate planned births while allowing truly indicated births to occur. This will introduce the importance of the morbidity of late preterm and near term infants and the concept of Change Initiative to each participating hospital. It will also allow collection of site specific data, and put moderate barriers in place to schedule inappropriate near term births.

Roles and Responsibilities

OPQC leadership will provide support to participants through training, the creation of tools and materials, and ongoing coaching and support. Participating obstetrical units will set specific goals for the improvement of care at the level of the individual patient, the unit, and the health care organization and to test specific changes in care delivery. Participating centers will receive continuous feedback and coaching designed to help teams assess the potential value of specific changes.

Role of OPQC and CHCQ:

- Provide evidence-based information on near term and late preterm births
- Teach participating centers how to apply a care model to reduce elective near term and late preterm births
- Teach the Model for Improvement
- Offer coaching to participants about how to implement and sustain practice changes, and how to evaluate the effects of this effort
- Coordinate communication activities to keep participants connected to OPQC leaders and to colleagues participating in the initiative to reduce elective near term births
- Develop a framework for testing changes in care delivery
- Provide tools, forms, and other aids to implement key steps to reduce elective near term birth

Participating organizations and teams are expected to:

- Provide a senior leader or executive leader to serve as sponsor for the team working on the collaborative improvement project

- Send three team members, including the physician champion (a physician leader in your unit who is enthusiastic and committed to this improvement effort), to workshops (learning sessions)
- Provide resources and support to the practice team (including support to attend the workshops, time to devote to testing and implementing changes in the center, and active senior leadership involvement)
- Perform pre-work activities to prepare for the first workshop
- Connect the goals of the OPQC work to the work of the organization.
- Participate in monthly conference calls and the listserv to share with and learn from others
- Make well-defined measurements that relate to their aims at least monthly and share them with the other teams in the collaborative
- Share information with project participants through a monthly report that includes details of changes made and data to evaluate the impact of these changes.
- Use a standardized data collection tool provided by OPQC to track changes in processes and outcomes of care

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Goal: *Assure that all initiation of labor or caesarean sections on women who are not in labor occur only when obstetrically or medically indicated (cite ACOG)*

Key Drivers

Optimal estimation of gestational age

Require scheduled deliveries meet ACOG criteria

Document awareness of risks & expected benefit of near-term delivery by patient and physician

Complete and accurate handoffs (Ob/Ob and Ob/Peds)

Safety culture

Project Aim: *In one year, reduce by 60%, the number of women in Ohio of 36.0 to 38.6 weeks gestation for whom initiation of labor or caesarean section is done in absence of appropriate medical or obstetric indication (Scheduled delivery)*

- Establish early gestational dating as hospital priority
 - Ultrasound to confirm or establish dates < 20 weeks
 - Communicate to clinics and physicians potential schedule delays when dates are not established
- Promote need for early dating to practitioners and consumers
 - March of Dimes and/or Local efforts

- Establish ACOG Dating Criteria as Hospital Policy:
 - Sonography < 20 wks, menstrual Hx, date of + pregnancy test
- Adopt criteria to schedule birth between 36.0 and 38.6 wks:
 - What criteria were used to establish EDC?
 - What are the reason(s) for scheduled delivery?
 - Fetal Maturity testing?
- Use Criteria
 - Empower nurses /schedulers to require criteria
 - Identify a specific contact for authorization dispute
- Maximize access to Delivery and OR for optimal scheduling

- Document rationale and risk/benefit for scheduled deliveries at 36.0 to 38.6 weeks gestation
- Document discussion with patient about the above
- Both patient and MD sign consent statement for scheduled delivery between 36.0 and 38.6 weeks

- Establish protocol for accurate timely transfer of antenatal care data from prenatal team to delivering team, and from prenatal to postnatal caregivers *before delivery*
- Prenatal caregivers receive feedback from postnatal caregivers about neonatal outcomes of scheduled deliveries

- Continuous monitoring of data & discussion of this effort in staff/division meetings. Project outcomes posted on units and websites...
- Develop ways to elicit input from all staff and physicians about communications and handoffs--
- Connect with organizational initiatives on safety and use existing approaches as possible