



PREMIER HOSPITAL ENGAGEMENT NETWORK

REDUCING NON-MEDICALLY INDICATED  
EARLY ELECTIVE DELIVERIES:

# Change Readiness, Implementation Phase, and Measurement

*Frequently  
Asked  
Questions*

*May 2013*

# Reducing Non-medically Indicated Early Elective Deliveries (NMIED)

## FAQs: Change readiness, Implementation phase, and measurement

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**Reducing Non-medically Indicated Early Elective Deliveries (NMIED)**

**FAQs: Change readiness, Implementation phase, and measurement**

**Prior to implementation (Change readiness)**

1. **What professional organizations support the overall reduction of EED rates and elimination of NMIEDs?**

- ACOG has advocated against elective inductions for almost 20 years. [ACOG Practice Bulletin #107](#) is ACOG's induction practice guideline. It recommends, among other methods, confirmation of term gestation via ultrasound measurement at less than 20 weeks gestation to support gestational age calculation of 39 weeks or greater prior to induction. It also recommends testing for fetal lung maturity; however, mature fetal lungs before 39 weeks gestation is not clinical indication for delivery.
- As part of the [Choosing Wisely campaign](#), professional medical societies identified practices within their own specialties that patients should avoid or question carefully. The American Congress of Obstetricians and Gynecologists (ACOG) and the American Academy of Family Physicians (AAFP) have [joined the campaign](#), drawing national attention to the overuse and misuse of induction of labor. ACOG and AAFP are telling women and their maternity care providers not to schedule non-medically indicated deliveries before 39 weeks gestational age.
- ACOG's president released [this statement](#) in support of avoiding NMIEDs prior to 39 weeks gestation.
- [ACOG recommends](#) that pregnant women plan for vaginal birth unless there is a medical reason for a cesarean, saying maternal-request cesareans are especially not recommended for women planning to have several children, nor should they be performed before 39 completed weeks of pregnancy.
- Suspecting a large baby is not a medical reason to deliver before 39 weeks, according to recommendations issued jointly by [ACOG and the Society for Maternal-Fetal Medicine](#) and [ACOG's April 2013 Committee Opinion](#).
- [ACOG District II](#) (New York) partnered with the March of Dimes to eliminate NMIEDs in hospitals within their district.
- [AWHONN](#) supports ACOG's position and provides education for pregnant patients, encouraging them to "Go the Full 40 Weeks."
- A study examining the benefits of induction policies and the significantly greater risk for cesarean section related to induction of labor, "[A Systematic Review of Implementing an Elective Labor Induction Policy](#)," was published in JOGNN in 2012.
- No professional organization advocates NMIEDs in light of increasing scientific literature demonstrating various increased risks to the infant and increased cost of care. NMIEDs exist only because the culture of a healthcare practice permits them and because of reimbursement incentives related to the scheduling of deliveries to fit provider's schedules.

## 2. What other entities support the elimination of NMIEDs?

- The Centers for Medicare and Medicaid Services has the Strong Start program. This initiative is a joint effort between the Centers for Medicare & Medicaid Services (CMS), the

Health Resources and Services Administration (HRSA), and the Administration on Children and Families (ACF). The Strong Start initiative supports reducing the risk of significant complications and long-term health problems for both expectant mothers and newborns. [Included in the Strong Start strategies is a public-private partnership to reduce early elective deliveries.](#)

- Several state Medicaid agencies, which cover more than 40 percent of births in the U.S., are now developing policies to reduce NMIEDs. Similarly, the National Quality Forum's [National Priorities Partnership](#) has made reduction of preterm births via NMIEDs and reduction in the number of cesarean sections into national goals.
- The [Leapfrog Group](#), a coalition of public and private healthcare purchasers, supports reducing NMIEDs, and reports that 2010 hospital rates of early elective deliveries ranged from less than 5 percent to more than 40 percent. The 773 hospitals from around the country that voluntarily provided Leapfrog with information on this measure reported more than 57,000 early elective deliveries by cesarean section or induction during the reporting period. Leapfrog provides [extensive resources](#) to support change.
- Though Leapfrog remains the only organization reporting rates by hospitals, others are working to educate women, providers, and hospitals about the importance of reducing these high-risk births. Groups including [Childbirth Connection](#), Institute for Healthcare Improvement, the March of Dimes, Catalyst for Payment Reform, the Joint Commission, and Partnership for Patients have brought national and regional attention to the pressing healthcare issue.

### **3. Are there examples of other successful projects which reduced the rates of NMIED?**

- There are several national, state, and healthcare system-level projects focusing on the reduction or elimination of NMIEDs. State projects include [Washington](#), [Tennessee](#), [Ohio](#), and [Florida](#). These websites provide insights into the different types of education and overall approaches to instituting improvements aimed at reducing NMIED rates, and include resources to measure the success of the interventions.
- The [California Maternal Quality Care Collaborative](#) (CMQCC) resources are perhaps the most robust, because CMQCC partnered with the March of Dimes to make the <39 Weeks Toolkit available to participating hospitals, as well as the public at large. Their website includes improvement stories from several of the hospitals which may be instructive.
- In this [article](#), Banner Health describes the process they went through to develop and standardize their policy to reduce NMIED rates across the 19 hospitals in their system.
- In this [article](#), the NMIED reduction projects at Seton Family of Hospitals, Woman's Hospital of Baton Rouge, and Sinai Health System are described.
- A [study by Oshiro et al](#) of deliveries at Intermountain Healthcare showed the baseline prevalence of early term elective deliveries was 28 percent of all elective deliveries before

the initiation of their program. Within 6 months of initiating the program, the incidence of near-term elective deliveries decreased to less than 10 percent, and after 6 years continued to be less than 3 percent. A reduced length of stay in labor and delivery occurred with the introduction of the program, and there were no adverse effects on secondary clinical outcomes. Conclusion: With institutional commitment, it is possible to substantially reduce and sustain a decline in the incidence of elective deliveries before 39 weeks gestation.

- A study published April 2013 in *Obstetrics & Gynecology* found early elective deliveries plunged 83 percent in one year at a group of hospitals that implemented policies guiding when labor should be induced or cesarean sections performed. The elective delivery rate for babies at 37 week to 38 weeks fell from almost 28 percent to less than 5 percent at the 26 participating community and academic hospitals.

#### **4. What baseline metrics do I need to establish right away?**

- It is important to first establish your hospital's rate of all elective deliveries (regardless of gestation), and the rate of early elective deliveries, with and without a medical indication, in order to establish a baseline. By doing this, you may find you are coding poorly and/or there is variation in the birth certificate information, or if there are patterns to the medical justifications given for EEDs.
- Look at the percent of elective deliveries with medical indications to see if there are any trends showing issues to first focus on, such as the deliveries are occurring mostly with cesarean sections or mostly with inductions.
- Provide confidential benchmarking on these sub-measures to your improvement team, and link your quality improvement action steps to these sub-measures.
- The resources on the [CMQCC website](#) include detailed and helpful resources and tools covering data collection, selecting quality measures (including examples), measure specifications and guidelines, and data collection for quality measurement. It includes a table of various data sources and ranking of their reliability, a sample QI collection form for scheduled inductions and cesarean sections, and the Joint Commission work flow for PC-01.

#### **5. What are the clinical and administrative considerations prior to getting started?**

- Some hospitals have found it helpful to survey their providers to determine their knowledge base and practice patterns. [Here is an example of such a survey.](#)
- Consider assigning a current staff nurse, or hiring a nurse to fill the role of [perinatal safety nurse](#). The primary responsibility of the perinatal patient safety nurse is to promote safe care for mothers and babies by keeping patient safety as a focus of all unit operations and clinical practices. A [2006 study in the Journal of Obstetrical Gynecological Neonatal Nurses](#) described one professional liability company's initiative to promote safer perinatal care and decrease costs of malpractice claims, including the development of the perinatal patient safety nurse role.

- Sample role description: The perinatal safety nurse specialist serves as a resource to staff on clinical care by mentoring others in areas such as competency, documentation, equipment use, plan of care, national patient safety goals, and participation with in-service education. Conducts safety projects as requested by management, including audits and education of staff regarding perinatal safety initiatives. Provides technical nursing care and interventions to designated patient populations.
    - Requirements: Charge nurse experience within L&D required; Graduate of a school of nursing with current state RN license; ADN, Diploma, or foreign equivalent; Computer literacy required; Must possess strong interpersonal and communication skills.
    - Preferred: BSN preferred; Computer skills to include Microsoft Word Excel and PowerPoint; Public speaking skills.
    - Licenses: Current state RN license; BLS healthcare provider card; Current NRP/ACL Card; Inpatient Obstetric and Electronic Fetal Monitoring Certification.
  - Consider hiring employed or contracted hospital-based OB [laborists](#) for in-house 24/7 coverage. The laborist model of obstetric care is similar to the hospitalist model and emphasizes closer patient monitoring, standardizing practice, and boosting patient safety. [Studies have shown](#) staffing changes that offer continuous coverage in obstetrics can make a cost-effective difference in labor and delivery outcomes.
  - Convene department and interdepartmental meetings to influence culture, gather buy-in, and support the implementation of change to accomplish your improvement goal. Include representation from physicians, nurses, clerical staff, quality staff, and leadership. Meetings should be frequent at first, moving to less frequent as changes are maintained.
  - Has your hospital implemented a hospital-wide patient safety program? If so, consider how you might implement your EED policy/protocol and how it should be integrated.
  - Does your hospital have a “Just Culture of Safety?” If not, work with leadership on implementation. Here is an AHRQ [primer](#) regarding Just Culture, a [toolkit](#), and free [training](#).
  - Do you need to secure funding for data collection, meetings, education, staff and leadership time?
  - Consider any other competing projects in the unit or the hospital when deciding on your timeline for process changes.
- 6. How can I educate my C-suite/leadership about the risks of NMIED and the financial incentives of lowering overall EED rates to “make the business case” for the EED project?**
- Baptist Medical Center in Florida has posted a resource outlining their [cost estimates of complications from non-medically indicated repeat cesarean sections](#).

- The March of Dimes partnered with the National Perinatal Information Center (NPIC) to publish [average length of stay and hospital charges for infants at various gestational ages](#) admitted to special care nurseries in NPIC member hospitals, which can be used to demonstrate to leadership the positive financial impact reducing EEDs can have on operational costs.
- Senior leadership should be educated about the rapidly changing reimbursement landscape.
  - Be aware of the significant shift in the way Medicaid reimburses hospitals for deliveries prior to 39 weeks without medical indication and the proper documentation they require-if they are reimbursing at all (non-reimbursement for NMIEDs has already occurred in states such as Texas).
  - CMS has mandated that every hospital in the US must report using the Joint Commission metric beginning January 1, 2013, which will be used for pay for performance as of January 1, 2013. The Joint Commission has issued five Perinatal Core Measures. The measure for elective inductions (PC-01 Elective Delivery) states: “Patients with elective vaginal deliveries or elective cesarean sections at >37 and <39 weeks of gestation completed.”
  - In addition, there are a variety of payment alternatives being discussed to align incentives for providers and hospitals for adhering to evidence-based practices. The group [Catalyst for Payment Reform](#) (CPR) has put together an [Action Brief](#) for maternity for a healthcare purchaser that provides both an overview of the payment reform opportunity and the steps purchasers can take to begin implementation.
- Read more about the growing cost of maternity care in a report issued by [Childbirth Connection](#), CPR, and the Center for Healthcare Quality and Payment Reform, in their report: [The Cost of Having a Baby in the United States](#).
- Premier Insurance Management Services has prepared a high-level summary of the EED costs and risks relevant to senior leadership and hospital Board members. A link to this document “Premier Insurance Management Services: Early Elective Delivery Executive Summary (for use with hospital leadership)” is on the [AEIX RRG website](#).

## **7. What other critical success factors are there for our improvement project?**

- Not only do the type and ability of team leaders affect outcomes, the success and visibility of the initiative throughout the organization is dependent upon having leadership champions, especially a physician champion.
- A multidisciplinary structure of teams allows members to identify each step from their own professional practice perspective, anticipate and overcome potential barriers, allows the generation of diverse ideas, and allows for good discussion and deliberations.
- Teams need to be prepared and enabled to meet the demands of the quality initiative with ongoing education, debriefings, review of problems solved and principles applied, and ongoing monitoring and feedback opportunities.

- The assumption should not be made that senior staff or leadership does not need training or education. Education and training of both staff and leadership about the issue, quality improvement tools, and the planned changes in practice are critical.
- Training is an ongoing process that needs to focus on skill deficits and needs to be revised as lessons are learned and data is analyzed during the implementation of the project.
- If the improvement team has no experience with the quality tools or successfully creating change, consider an additional resource, such as a consultant or someone to facilitate the advanced knowledge involved in implementing and managing quality improvement techniques.

(Source: [Patient Safety and Quality: An Evidence-Based Handbook for Nurses.](#))

## **8. Having a “physician champion” for a clinical project is vital, but what are the characteristics of an effective physician champion and who should it be?**

- There remains a significant gap between clinical research, evidence, and practice. As a profession, physicians may struggle to remain current with knowing, understanding, and implementing newer evidence-based guidelines. Physicians gain knowledge and learn from others they trust. Having another physician who champions the change, has already implemented the change, and is willing to share the knowledge eases the transition and narrows the gap between evidence and practice.
- If the physician champion is unable or unwilling to engage in the variety of tasks required to be effective, the role is not clearly defined, or the prospective champion only has a narrow sphere of influence, the physician champion will not be able to fulfill the expectations of the organization, the change may not be thoroughly implemented, or the change may not be sustainable. Therefore, when choosing a physician champion, his or her title or role within the organization isn’t necessarily as critical as the physician’s credibility among peers and willingness to confront those peers when variations from the NMIED elimination policy are identified.
- While still in the selection phase, discuss the importance of the physician champion to the success of the project, and watch for hesitation from any candidate for the role. Be careful of just assigning the role based on title or criteria such as Medical Director or Department Chair. Listen for comments like these from physicians who are uncomfortable with their role as the gatekeeper for deliveries that don’t meet the scheduling criteria, because it may indicate the physician is not willing to engage peers on the necessary level to be an effective champion:
  - “As Chair or Medical Director, I am uncomfortable with telling another physician what they can or cannot do with their patient.”
  - “Am I responsible if something bad happens to the patient if she is not delivered according to her private doctor’s desires?”
  - “What will my malpractice carrier say?”

- This is a [checklist for selecting a VTE physician champion](#) which can be used to develop your hospital's checklist for this NMIED reduction project. The tool can be used to identify the physician who has the greatest potential for leading a quality improvement project to achieve and sustain success. It provides a snapshot of some key roles, responsibilities, and tasks that are often lacking in support of hospital quality improvement efforts. This is also a checklist of personal and interpersonal characteristics that have been demonstrated to result in more effective interactions to keep the project moving forward.
- More information regarding the characteristics and role of physician champion can be found [here](#).

### **9. Who else should I have on my improvement team?**

- [This API Snapshot](#) recommends a mix of physicians (community and employed if appropriate), nursing staff, front-line administrators, NICU clinical staff, physician leadership, operations analysts, quality and patient safety analysts, and executive leadership. A few hospitals around the country are also experimenting with including volunteer patient advocates or representatives from the community to assure patient care is being addressed.

### **10. How can pediatricians and neonatologists help make the case for improvement?**

- The engagement of the hospital NICU or nursery director should be an early step and can be a key factor in success for many hospitals, because they can highlight the adverse health impact of NMIED's and EEDs. Some hospitals have found it is much harder for delivering practitioners to challenge the neonatologists' reasons for eliminating non-medically indicated deliveries than even the reasoning of fellow obstetricians.
- Pediatricians and neonatologists can bring powerful data to the efforts to establish and institutionalize the policy improvements necessary to drive down NMIED rates. Historically there has been a trend toward the delivering practitioner not being aware of the subsequent care provided to the infant, which has sometimes resulted in those providers' lack of appreciation of the potential for harm. The pediatricians and, more often, neonatologists who see these babies in the NICU can tell compelling stories to back up the studies showing increased neonatal adverse events with NMIED.
- This [study published in Pediatrics](#) discusses the increased rate of adverse outcomes in early deliveries of neonates with congenital heart disease.
- [This study published in Neonatology Today](#) also discusses adverse outcome rates from EEDs.

### **11. Could implementing the NMIED project reduce potential malpractice claims against the hospital and/or the provider(s)?**

- You may find that translating the need for a culture change into malpractice risk helps some members of the improvement team and hospital leadership understand the need from a different perspective. Studies such as the [Ohio closed claim study](#) show that OB claims typically cost more to defend, and result in the highest settlements and verdicts--often 2 times to five times higher than the average cost to resolve or defend other medical malpractice claims. Therefore, providers should encourage clinical practices which lower the risk of suffering an obstetrical claim. Liability issues typically fall into two basic categories: Whether NMIEDs increase the risk of liability exposure, and whether lowering harm to patients will result in fewer medical malpractice lawsuits.
- The level of sophistication of national claim or lawsuit data is not sufficient to allow analysis of the rate of claims arising from NMIEDs. However, several hospital studies and reports on quality initiatives in obstetrics have found that, as the rate of harm decreases, the rate and/or costs of lawsuits also decreases. For example:
  - A [study by Clark, et al](#) reported the outcomes of an HCA comprehensive perinatal safety improvement project in 2008. Although not limited to only reducing or eliminating NMIEDs, this showed improvements in patient outcomes and a “dramatic decline in litigation claims.”
  - [Kathleen Rice-Simpson, et al](#) published the results of a perinatal safety improvement project at Catholic Healthcare Partners in 2009, which showed reduced perinatal harm, number of claims, and costs of claims.
- Other efforts to reduce non-medically indicated early elective deliveries and cesarean sections have likewise shown a reduction in lawsuits. In light of the high cost of perinatal claims, a reduction in the risk of incurring lawsuits could save significant costs for a provider over time, by way of lowered claims costs and lower insurance premiums.
  - A [study](#) was done to estimate the association between professional liability insurance premiums for obstetricians and early elective induction rates in Illinois. It showed rising premiums are associated with increased frequency of early elective inductions among women with singleton gestations.
  - Premier launched the [Perinatal Safety Initiative](#) in 2008 and a grant from AHRQ in 2010 extended the initiative through 2013. The Premier Perinatal Safety Initiative has strengthened safety and reduced liability claims as hospitals developed, implemented and measured best practices that lead to more reliable clinical quality and better patient outcomes in labor and delivery. Read more in this [Premier white paper](#).
- Another consideration is the increased liability exposure to healthcare providers who fail to get a thorough informed consent from the mother acknowledging the risks of earlier delivery. When an injury occurs or is claimed, it can be much easier for a patient to win a lawsuit alleging she was not adequately informed of the risks of early delivery, rather than trying to prove the medical care provided was negligent. Since there are already doctors involved in the various published studies who would testify in court that NMIEDs result in higher rates of harm, a sympathetic jury may be more likely to return a verdict for the plaintiff.

- There are several endorsed lists of medical indications justifying EEDs. Because of this variability, the relative strength and validity of the documented medical indication could become a focus of litigation in the event of an adverse outcome following an EED. Your improvement team must determine the medical indications which are appropriate exceptions for an EED, and document them in the scheduling form. Be certain the indications are supported in the literature or through endorsement by professional organizations such as ACOG, and that providers and staff consistently apply those indications.

## Implementation phase

### 12. How can I educate the delivering practitioners about the risks of EED to the baby?

- Educating the delivering practitioners is of utmost importance. A study at Magee Women’s Hospital published in the [Journal of Obstetrics and Gynecology in 2009](#) examined the effects that medical staff education and a new process for scheduling inductions had on decreasing inappropriate inductions. Medical staff education and the development and enforcement of induction guidelines contributed to a decrease in inappropriate inductions, a lower cesarean birth rate for electively induced nulliparas, and a lower elective and overall induction rate.
- In 2011, ACOG District II, in collaboration with the New York chapter of the March of Dimes, embarked upon a clinical quality improvement initiative to provide training and education to eliminate NMIEDs prior to 39 weeks gestation. ACOG published a “Special Edition” of [Optimizing Protocols in Obstetrics](#) as a culmination of methods, clinical considerations, and recommendations employed by best practice hospitals to optimize the management of NMIEDs. Because of the potential credibility brought by their own professional organization, this could be a good place to start with some obstetricians.
- *Optimizing Protocols in Obstetrics* also suggests:
  - OB department memos to all labor and delivery physicians and nursing staff.
  - OB department meetings, including monthly and/or quarterly meetings between the OB chair and all delivering practitioners on staff.
  - Grand rounds (may be interdisciplinary with the NICU chair presenting, or as part of monthly mandatory maternal mortality/morbidity rounds).
  - Daily interdisciplinary rounding.
  - Workshops, with a particular focus on leadership.
- The Florida Perinatal Quality Collaborative (FPQC) developed this useful [“literature e-bulletin”](#) for their providers, which lists recent literature on the issue of demonstrating the increased risks of harm from EEDs (as of the time of its development; we recommend updating it as the literature is quickly evolving).
- FPQC also has a useful [summary of selected annotations on adverse outcomes of NMIEDs](#), which includes annotations for studies looking at respiratory and infectious complications, feeding problems, and impact on NICU admission rates.

- Dr. Stephen Clark’s 2009 article in [American Journal of Obstetrics and Gynecology](#) concluded EED is associated with significant neonatal morbidity. Initial cervical dilatation is highly correlated with cesarean delivery among women undergoing induction of labor in both nulliparous and parous women. He clearly stated EED before 39 completed weeks gestation is inappropriate.

### **13. What considerations should be given to the education of the nursing and clerical staff?**

- The same educational resources provided to the delivering practitioners regarding the risks to the baby with EED can be provided to your nursing and clerical staff, with appropriate changes in terminology to meet educational levels of staff. In addition to education, consider providing hospital staff with the AWHONN and/or the March of Dimes resources for educating the patients and community (below). These resources include t-shirts and buttons for the staff to wear that include slogans supporting the cause. This engages them in the process of educating providers, patients, and visitors, and improves the staff enthusiasm for the change. The resources also include posters and cards to serve as visual reminders of the reasons, such as promoting mature fetal brain development, to “go the full 40.”
- Provide education regarding the policy to every new hire in a formalized process, with documentation of the staff participating in the training. Some hospitals rely on the preceptor process. Although this can be effective, it does not allow for adequate documentation, and sometimes education, of the staff.
- If your hospital uses an operating room, include the scheduling staff and OR nurses in your training around your EED policy.

### **14. How can I educate the patients and community about the risks of EED to the baby?**

- A [study published in 2009](#) showed many women believe that full term is reached before 37 weeks of gestation, and most believe full term occurs before 39 weeks of gestation. Nearly half believe it is safe to deliver before 37 weeks of gestation, and almost all believe it is safe to deliver before 39 weeks of gestation. The data reported here suggest that many women believe that term is reached early and that a safe delivery does not require waiting to 39 weeks of gestation. The results of this study underscore the importance of educating expectant mothers on the risks associated with elective deliveries prior to 39 weeks in order to reduce neonatal complications.
- Add an [educational module](#) to your hospital’s childbirth education classes, and consider including the Lamaze video [“Let Labor Begin on its Own.”](#)
- Consider working with your media relations and IT departments to offer education on your hospital’s website. [Intermountain Healthcare](#) provides a good example.
- [AWHONN provides free patient education materials](#) for download, which are also translated into Spanish.

- Consider working with your local [March of Dimes](#) chapter to access educational materials and to coordinate any public outreach, such as hospital representation at March of Dimes events. The March of Dimes has patient and community education materials available for a fee on their website, but by working with your local chapter there may be funds available for resource dissemination.
- AHRQ provides [free resources developed to educate patients](#), including a pamphlet called *Thinking about Inducing your Labor: A Guide for Pregnant Women*. Also, if you are building out your hospital's online patient education, AHRQ provides the coding to link to their patient resources on your web site.
- Give providers [tools to guide discussions with their patients](#).

### **15. What other stakeholders should I consider educating?**

- It is important to educate the delivering practitioners' office staff regarding the risks of EED to the baby, and about your hospital's policy and procedure for scheduling inductions and cesarean sections. Some hospitals have found education of the office staff to be particularly challenging. You may find that providing letters to your providers for them to use with their staff is helpful. You may also find that a nurse leader or educator from the hospital will need to take the time to travel to each provider's office to get the point across—and of course, gifts of food can help to get office staff attention too! Bring the office staff packets of the forms which are being used and a checklist with ordering information for all forms.

### **16. Are there resources for developing and/or improving our hospital's policies, scheduling forms, and consent forms?**

- If you have an existing EED policy, you may need to modify it to maximize safe patient care. The policy should be consistent with [ACOG's indications](#) for induction of labor and [dating criteria](#).
- The Illinois [Healthy Babies, Healthy Moms](#) initiative developed the following hospital elective delivery policy domains to consider when reviewing an existing policy or developing a new policy:
  - Informed decision making
    - Medical indications clear; indications are appropriate to include in the scheduling form, not listed within policy.
    - How to determine gestational age; confirmation of gestational age built in.
    - Form is used to document that all requirements are met.
    - Documentation of patient education of potential risks and consent to procedure.
  - Scheduling process

- Policy for scheduling needs to be separate from induction policy.
  - The timing with which the decisions to schedule elective delivery or cesarean section-e.g., whether after the patient is already admitted or if it is at the time of scheduling.
  - Have a scheduling form, or process using EMR, that is referenced to and based on the ACOG safety checklists, with reference to what to do to escalate the case when criteria are not met.
  - Prioritization of what happens when you cancel procedures when it is too busy.
- Clarity of policy
  - Indication of clear chain of command for escalation of problems.
  - Has effective date and date of last review.
  - Name of policy is clear as to what the policy is about.
- Authority for policy
  - Has references listed.
  - Signed by nursing and physician representatives.
- In addition to policy review and improvement, develop delivery scheduling forms which will trigger elevation to a higher level of authority if an inappropriately timed delivery is requested, while capturing the data necessary to monitor compliance with your EED policy.
- The Midwest Health Initiative Hospital Innovators Council partnered with the Maternal Child and Family Coalition in Missouri to create this [Policy Toolkit to Support the Reduction of Early Elective Deliveries](#). It includes draft policy components, sample scheduling forms, and sample consent forms which can be adapted to fit your clinical culture.
- Some hospitals require submission of an ultrasound to support gestational age at the time of scheduling. Ultrasound measurement at less than 20 weeks of gestation is required to support gestational age of 39 weeks or greater (confirming LMP). Ultrasound-established dates should only take precedence over LMP-established dates when the discrepancy is greater than 7 days in the first trimester and 10 days in the second trimester. When scheduling a delivery, the provider is required to provide the scheduler with the information electronically, or via fax of a hard copy of the ultrasound.

**17. What are the medical indications justifying early delivery according to ACOG, Leapfrog, NQF, and TJC?**

- CMQCC has provided a table comparing the national specifications for medical conditions that may justify a scheduled delivery prior to 39 weeks gestation. In the [CMQCC toolkit's](#)

[data collection/QI measure section](#), on page 42, there is a comparison of the criteria cited by ACOG, the National Quality Foundation and Leapfrog, and The Joint Commission.

- Caveats: The Joint Commission list was developed for ease of data collection utilizing ICD-9 codes. If there is not an ICD-9 code for an indication, they did not list it (e.g. prior classical cesarean section). Everyone understands that there are cases in which earlier delivery is indicated, but the indication may not be on the list; however, these should be uncommon. No one is reasonably expecting a zero EED rate.

## 18. How is gestational age computed and what are the critical definitions?

- Current ACOG recommendations for determination of term gestation:
  - Ultrasound at less than 20 weeks gestation supports gestational age of 39 weeks or greater.
  - Fetal heart tones have been documented as present for 30 weeks by Doppler ultrasonography.
  - It has been 36 weeks since a positive serum or urine human chorionic gonadotropic pregnancy test result.
  - *Sources: ACOG Practice Bulletin: Ultrasonography in Pregnancy. Number 101, February 2009; ACOG/AAP: Guidelines for Perinatal Care, 7<sup>th</sup> Ed. 2011*
- [ACOG's ReVITALIZE Project](#) is in the process of refining the computation for gestational age and the definition of "term." The ReVITALIZE Project should be monitored for necessary provider and hospital input, and final outcomes.
- The [Joint Commission defines the gestational age data element](#) as "the number of weeks that have elapsed between the first day of the last normal menstrual period (not presumed time of conception) and the date of delivery, irrespective of whether the gestation results in a live birth or a fetal death."

## Performance improvement/Outcomes monitoring phase

### 19. Why is accurate data collection critical?

- Data collection is a critical component to successfully track implementation of progress of any protocol or policy. Data can be an important tool to inform and motivate hospital staff as well. Baseline data helps to contextualize a situation and identify areas for improvement, while potentially improving the accuracy of the medical indication documentation for delivery.

### 20. What are the best processes and outcome measures to collect and monitor specific to eliminating NMIEDs?

- There are various ways to collect data, including via the scheduling form (which means your scheduling form should be developed with the idea of using it to collect data), a data

collection/audit form, log books, and/or electronic medical records.

- The [CQMCC toolkit's Data Collection/QI Metrics section](#) outlines process and outcome measures specific to eliminating scheduled deliveries prior to 39 weeks gestation. It also highlights national quality measures which tend to dictate reporting to outside entities.
  - The toolkit also includes a sample scheduling form and QI Data Collection form which can be used to assess implementation progress and calculate chosen measures. Nearly all of the data fields on the QI Data Collection form can be populated using data collection on the scheduling form.
- Consider selecting two or three quality measures that will inform and support driving change. Identify measures that fit the capabilities of your team, and add new measures as the initial goals are achieved. For example: percentage of patients with a scheduled induction/cesarean delivery and a medical indication, and percentage of inductions between 37 0/7 and 38 6/7 weeks that are elective.

## **21. How can we determine the process gaps in need of improvement in order to meet our goals?**

- Obstetric performance committees (or the equivalent) within your hospital can be helpful in the review process. Use the data to identify medical records for review to look for trends in care and documentation. Examine specific factors which may cause certain patterns to exist, such as an inconsistent process or key stakeholders who are not educated about the process. For example, one hospital had a strong scheduling process for inductions which were scheduled by labor and delivery staff, but had failed to educate the OR scheduler about the policy, so cesarean sections were being scheduled prior to 39 weeks without a medical indication.
- Be aware that most hospitals also find administrative coding errors as they first begin to look at their outcomes closely. This is another good reason to audit medical records to determine if there is an educational opportunity for physicians and coders which will allow them to more accurately portray the outcome measures you are tracking.
- Use of the PDSA (Plan-Do-Study-Act) process can be helpful to guide small tests of change, testing possible solutions to the improvement opportunities you may identify. [Appendix C of the CMQCC toolkit is a perinatal PDSA tool](#) which includes sample action items and details to address.

## **22. Are there other helpful tips for data collection?**

- ACOG District II [Optimizing Protocols in Obstetrics](#) suggests:
  - Designate a data manager.
  - Identify data to be collected, how it will be captured, by whom and how often.
  - Collect at least 2-3 months of baseline data. This can be done retrospectively through a chart review or prospectively as other parts of the plan are being established.
  - Track progress and communicate the results with team members regularly.

### **23. How can I educate my delivering practitioners and nursing staff regarding our improvement efforts and outcomes?**

- After educating the delivering practitioners, nursing, and clerical/scheduling staff about your goal to reduce EEDs, and your plan to achieve that goal, it is important to keep all stakeholders informed regarding your progress. Consider posting the data you are collecting in a graphic format that is easy to quickly assimilate, including your hospital's non-medically indicated induction and primary cesarean section rate, as well as NICU admission rates. Results can be posted in OB sleep rooms, as well as physician and staff break rooms. If you have the capability, posting the data on your hospital's intranet is also an efficient way to keep everyone aware of improvements, as well as of any developing negative trends which will require more attention. Consider what other avenues you may have to communicate, such as department and staff meetings, newsletters, and email blasts.
- Look for opportunities to reward and congratulate the providers and staff when certain milestones are met and again when they are maintained.
- If it is appropriate in your hospital, educate the rest of the hospital with a poster about your project and results in the cafeteria or other visible areas. This is important for staff, but also for education of visitors and other "future parents."
- Develop and use individual physician scorecards. Physicians tend to respond to data about their practice and those of their peers. The March of Dimes' "Healthy Babies are Worth the Wait" campaign developed a sample physician scorecard, a copy of which can be found on the [AEIX RRG website](#).

### **24. What sources should I monitor to maintain awareness of changing regulations, reporting requirements, and reimbursement rules for EEDs?**

- Starting in July 2013, [Medicare](#) will require hospitals to report their NMIED rates (NQF #0469), and facilities may be penalized starting in 2015 if their rates remain high. The [National Perinatal Information Center \(NPIC\) website](#) is a good resource for links to reporting requirements and perinatal core measures.
- Patients and families will be able to see and compare hospitals' NMIED and breastfeeding rates at <http://www.qualitycheck.org/consumer/SearchQCR.aspx> as of 2013. During the first year, the publicly reported rates will come from the 160 hospitals that are already using the perinatal core measure. In 2014, the website will include the hospitals with more than 1,100 births that are required to take part in the perinatal core measures.
- State [Medicaid/SCHIP](#) programs are also taking steps to avoid NMIEDs. For example, Arkansas, Florida, [South Carolina](#), Georgia, Texas, [Michigan](#) and [Minnesota](#)'s Medicaid or other state public payer systems have stopped reimbursing providers for early elective deliveries, and Medicaid programs in New York and New Mexico are considering similar

steps at the time of this writing. Private insurers such as Blue Cross/Blue Shield and [HealthNet](#) are following suit.

- However, some programs have taken the opposite approach. Instead of penalizing hospitals for NMIEDs, Washington State's Medicaid program implemented an incentive program in 2011 that offers a 1 percent bonus to hospitals that reduced their NMIED rates. Similarly, United Healthcare began rewarding hospitals that take successful steps to limit early deliveries.
- Therefore, if your hospital's payor mix has not changed its approach to early elective delivery in some way yet, you can assume such a change is inevitable and your efforts now will pay off when the mandatory change does come. Meanwhile, monitor your state public payor's website for announcements, and ask your billing department to let you know immediately of any notifications received.
- Ultimately, one of the greatest levers to improve maternal care may be comprehensive payment reform. Be aware that, with growing pressure to improve outcomes and control costs, payors may also begin to push for such fully bundled payments for maternity care, regardless of the type of delivery, neonatal admissions, or other outcomes. This document from the [Illinois Maternity Care Payment Summit](#) is a good background of the issue and approaches to maternity care payment reform under consideration. [Childbirth Connection](#) also has resources on maternity payment reform.