

Playbook for the Successful Elimination of Early Elective Deliveries

NQF MATERNITY ACTION TEAM, 2014

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NATIONAL
QUALITY FORUM

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Playbook Purpose and Overview

Early elective delivery (EED)—defined as a delivery before 39 weeks of gestation without medical or obstetrical indication—is linked to neonatal morbidities and mortalities with no benefit to the mother or infant¹. There has been widespread momentum to curb EED rates across the country in recent years and the results have been significant. According to data from The Leapfrog Group, the national average EED rate decreased from 17 percent in 2010 to 4.6 percent in 2013.² Furthermore, the Partnership for Patients (PfP) initiative reported a 64.5 percent reduction in EED rates across the 1,740 PfP hospitals from 2010 through the end of 2013.³ Many stakeholders have highlighted this as one of the greatest quality improvement successes in healthcare to date, yet despite this significant progress, there are still areas in the country finding it difficult to achieve these results. According to the most recent CMS data, states vary from 2 to 22 percent for EED and even states with overall excellent EED rates have some hospitals with high rates.⁴

The primary purpose of this “playbook” is to provide guidance and strategies to help those struggling to reduce their rates of early elective delivery. The NQF-convened Maternity Action Team and other key informants from across the country developed this resource; thus, it reflects a range of potential solutions that have been successfully applied in various situations and settings. An important context is that EED is a new maternity phenomenon, arising only in the last 20 years. EED gradually increased and became widespread before the neonatal concerns were documented. Therefore, this effort is a return to the standard of care that every maternity professional organization has endorsed. Exhibit 1 provides additional rationale for eliminating EED.

For purposes of this document, the term “maternity care providers” encompasses all providers responsible for labor and delivery, including physicians, certified nurse-midwives, and certified midwives.

This resource is intended to support all who are practicing and delivering care, and provides specific guidance for policy makers, hospitals and hospital systems/networks facing various barriers and challenges in their quality improvement (QI) efforts.

¹ Clark SL, Miller DD, Belfort MA, et al. Neonatal and maternal outcomes associated with elective term delivery. *Am J Obstet Gynecol.* 2009;200:156.e1-156.e4.

² The Leapfrog Group website. Dramatic decline in dangerous early elective deliveries; The Leapfrog Group cautions against babies being born too soon, hits national target. March 2014. Available at http://www.leapfroggroup.org/policy_leadership/leapfrog_news/5164214. Last accessed July 2014.

³ Department of Health and Human Services (HHS). New HHS Data Shows Major Strides Made in Patient Safety, Leading to Improved Care and Savings. Washington, DC: HHS; 2014. Available at <http://innovation.cms.gov/Files/reports/patient-safety-results.pdf>. Last accessed August 2014.

⁴ Centers for Medicare and Medicaid Services (CMS) website. Baltimore, MD: 2014. Available at <https://data.medicare.gov>. Last accessed August 2014.

Exhibit 1. Making the Case to Eliminate Early Elective Delivery

1. **Strong medical evidence** for reduction of neonatal and maternal harm
2. **Strong support from professional organizations**, including the American College of Obstetricians and Gynecologists (ACOG), the Association of Women’s Health, Obstetric and Neonatal Nurses (AWHONN), and the American College of Nurse-Midwives (ACNM)
3. **Transparency**: public reporting by multiple organizations (some required)
4. **Quality Improvement tools and help available**, including state quality collaboratives, Hospital Engagement Networks, COIIN (see [Section VI](#) for additional resources)
5. **Part of Pay-for-Performance** models by CMS and commercial payers
6. **Established ongoing national project** with most hospitals doing well, remaining hospitals are outliers

Section I. Current Landscape for Eliminating Early Elective Delivery

In recent years, an unprecedented number of stakeholders, resources, and programs have coalesced around the issue of preventing EED. A growing body of research indicates that these early deliveries have short- and long-term health and medical consequences that were not previously recognized. As a result, organizations from a wide range of perspectives, including patients, healthcare professionals, hospitals, health systems, the business community, public health agencies, and public and private payers, have called jointly for the reduction of EED.

Partnerships and perinatal collaboratives have formed among a range of organizations uniting patient advocacy groups with business organizations and individuals, and harmonizing policies among public and private insurers to accelerate this drive toward improved perinatal health. For instance, the Association of State and Territorial Health Officials (ASTHO) and the March of Dimes have been partnering to lead states in pledging to reduce preterm birth by 8 percent by 2014. The Health Resources and Services Administration (HRSA) and its partners are working together to support HRSA’s Collaborative Improvement and Innovation Network (COIIN) on Infant Mortality, with a focus on reducing early elective deliveries.

Groups have employed various techniques and levers to foster reductions in—and elimination of—EED, including patient and provider education, public reporting, and “hard-stop” policies that prohibit the scheduling of deliveries before 39 weeks gestation without formal documentation of medical necessity. These have been very successful in the majority of hospitals and in most states. In addition, some states and insurers have moved to adjusting payment policies. States have played a role by acting as a multistakeholder convener (see [Catalyst for Payment Reform case study on South Carolina’s Birth Outcomes Initiative](#)) and by implementing regulatory and payment approaches (see [Issue Brief on Reducing EEDs in Medicaid and CHIP](#)).

Raising Awareness on Mother's Day

In efforts to raise awareness about avoiding EEDs unless medically necessary, the Midwest Business Group on Health partnered with CBS2, NBC5, March of Dimes, Illinois Perinatal Quality Collaborative, Illinois Hospital Association, and the Illinois and Chicago health departments. The Blue Cross Blue Shield of Illinois Tower lit up "39 Weeks" on Mother's Day weekend and public service announcements aired on CBS2 and NBC5.

Source: Midwest Business Group on Health

Another important driver for EED reduction has been the development and widespread adoption of the Joint Commission's NQF-endorsed® perinatal care (PC) measure for EED. The PC-01 Elective Delivery measure has been included in a number of national performance measurement and reporting programs. The PC-01 measure calculates a hospital's rate of elective deliveries, which is the percentage of elective deliveries (scheduled cesarean sections or inductions) among mothers with uncomplicated pregnancies at 37 and 38 weeks gestation. Section III of the Playbook offers guidance related to calculating the PC-01 measure and interpreting measure results. Table 1 outlines three public reporting programs that include the PC-01 measure.

Table 1. Public Reporting Programs for EED using The Joint Commission PC-01 Measure

	Program Parameters for PC-01	Reporting of PC-01 Data
<u>The Joint Commission ORYX® for Hospitals initiative: Perinatal Care Core Measure Set</u>	Mandatory reporting of the PC measure set for Joint Commission hospitals with 1,100 or more births per year. The data is submitted by outside vendors and is audited.	- Reporting hospitals may see their own EED results on Quality Check for data since January 2013. - The Quality Data Download feature is publicly available and shows the performance of all hospitals reporting the PC measures.
<u>CMS Hospital Inpatient Quality Reporting (IQR) Program</u>	Current: Every hospital that participates in the Medicare IQR (Inpatient Quality Reporting) program (virtually all US facilities excluding critical access hospitals) are now required to report the PC-01 measure. If a hospital does not report, there will be a quarter of a percent annual decrease in Medicare payment.	- Hospital-specific data is available on Hospital Compare for Q1, Q2, and Q3 2013; data is compiled on a rolling basis. - Data by quarter can be accessed from http://data.medicare.gov (see <u>Appendix A</u> for instructions on accessing CMS IQR data).
<u>Leapfrog Hospital Survey</u>	Annual voluntary hospital survey available from April through December and includes PC-01 measure. Data is submitted by hospital staff without audit.	- Survey results are publicly reported for all participating hospitals each year. - Data is aggregated per state. - Results from the 2013 survey will be posted in late July 2014.

Several other national programs are planning for the inclusion of EED measures. On April 30, 2014, CMS released the FY15 Proposed Inpatient Prospective Payment rule. In it, CMS proposes to include PC-01 as a quality metric in FY 2017 Value Based Purchasing (VBP), based on data recorded from January 1 to December 31, 2015. NCQA has proposed an EED measure for inclusion in its Healthcare Effectiveness Data and Information Set (HEDIS) for 2015.

It should be noted that the target for EED should not be 0 percent because of imprecision using ICD-9 codes (the basis for PC-01) to identify all of the potential medical indications for earlier delivery. Most reduction projects are looking for rates <3-5%. Many entire hospital systems are currently <3%. Very rare nonmedical circumstances may necessitate EED, such as extreme geographic isolation (though in most cases this can be avoided by temporarily moving closer to the hospital).

In other medical specialties, we have learned a great deal about role of unintended harm for many hospital-acquired conditions. It is every stakeholder's responsibility to hold maternity care to the same standards.

Further detail is presented in this document on strategies employed by hospitals (Sections II-IV), measurement guidance (Section V) and educational, outreach, and training opportunities for providers and consumers related to EED reduction (Section VI). All told, the current momentum for eliminating early elective delivery is unlikely to wane in the years to come, though it may become more of a surveillance initiative to monitor and ensure that EED rates do not increase over time.

Section II. Barriers to Reducing EED and Strategies to Overcome Them

The following section describes common barriers that medical leaders, hospitals, and health systems may encounter in their EED reduction efforts and offers a range of strategies to address these barriers. All of these strategies should be considered within the context of safe and reliable prenatal and intrapartum care with an emphasis on accurate determination of gestational age during the prenatal visits and an appropriate determination of medical necessity for considering a scheduled early delivery. Medical leaders and hospitals each need to assess which strategies or levers will work in their community to foster a sustainable reduction in EED.

The charts below describe “drivers” (i.e., factors that cause a barrier to happen or develop) and “strategies” (i.e., suggested actions for overcoming the drivers).

Provider-Initiated Early Elective Deliveries

Challenges to Preventing the Scheduling of Early Elective Deliveries

Barrier 1. Lack of Effective Policies For Elective Labor Induction or C-Section

Drivers:	Strategies:
- Absence of policies or guidelines for scheduling deliveries - Lack of enforcement of existing policies - Lack of accountability for the scheduling of EED - Unreliable determination and inconsistent charting of best due date (and hence gestational age) in both the prenatal and hospital admission records - Lack of provider knowledge about accepted indications	<i>Hard-Stop Policies</i> - Establish hard-stop policy requiring OB quality committee chair or OB department chair approval to schedule cases <39 weeks without evidence of medical indication on approved list (TJC PC-01 and ACOG resources). - Widely distribute and post the list of TJC indications. - On occasion it will be sufficient to “threaten” a “hard-stop” or to start with a “soft stop” as a beginning step. If follow-up data does not indicate adequate progress, the “hard-stop” can then be implemented. Adapt/adopt EED policies from other hospitals with track records of success. - Empower nursing staff to initiate a hard-stop and refer to medical staff if scheduled delivery does not meet policy requirements. It is important not to put the nursing staff in the middle of a medical issue, but to institute quick referral up the chain of command. - Establish relationships between hospitals with fewer providers and larger hospitals to promote consultation regarding medical indications that may not be considered a usual indication. - Perinatal centers should engage with small hospitals and help with QA when states do not require formal arrangements between hospital and perinatal center. <i>Scheduling</i> - Specify documentation requirements in the medical record for early deliveries (gestational age dating criteria, evidence of medical indication). - Create a scheduling form to track estimated gestational age at time of delivery and indication for deliveries <39 weeks with supporting documentation requirements (sample scheduling forms are available in the March of Dimes/CQMCC toolkit and through ACOG). - Limit how far in advance inductions can be scheduled. - Educate providers and women to encourage labor to begin on its own to reduce the demand for elective induction. - Designate experienced OB nurses as schedulers for inductions and cesarean deliveries. It is best to do this once the structural components have been put into place by the OB team (agreed upon standards for the determination of gestational age, approved medical indications, and chain of command or

Drivers:	Strategies:
	escalation policy for medical review). • Work with office practice schedulers to ensure consistent communication with women in all their interactions with the system (office, hospital, provider, childbirth education).

Barrier 2. Provider Resistance to Change/Lack of Accountability

Drivers:	Strategies:
• Provider perception that EED does not result in worse outcomes • Questioning of evidence that supports elimination of EED • Lack of willingness to question or challenge peers • Provider concerns regarding autonomy of practice • Provider concerns regarding work/life balance • Rotating medical leadership	<i>Provider Education</i> • Hold Grand Rounds with a combination of respected outside leaders combined with local champions. The MOD/CMQCC Toolkit has a great slide set. <i>Champions</i> • Identify one or more physician champions who will adhere to EED standards. • Engage hospital administrators and risk managers. Pediatricians, particularly neonatologists, are natural champions for babies. • Maintain consistent physician champion, not rotating medical leaders. • Clarify expectations of OB department chair/ medical director in upholding EED policy (could be part of their hospital contract) • Engage advanced practice nurses and midwives, especially for small, rural hospitals. <i>Use of Data</i> • Use data to support need for improvement in EED. Especially powerful is a list of 37-38 week infants admitted to the NICU. • Educate providers on implications of EED for CMS, The Joint Commission, and other organizations such as Leapfrog. • Engage with OB Medical Staff Committee to review data and solicit support for elimination of EED and accountability for adherence to EED policy. This includes ensuring that medical indications are consistent with policies and outliers are infrequent. • Have OB department establish EED as a provider-level measure for the mandated every-6-month quality reporting now required by the Joint Commission (OPPE: Ongoing Physician Performance Evaluation). <i>Partnering</i> • Partner with regional medical center for OB peer review for hospitals with a small number of OB providers. • Partner with regional perinatal centers to provide data for

Drivers:	Strategies:
	hospitals with low volume on all babies transferred out, or mothers automatically referred out. - Partner with regional perinatal centers to provide guidance on medical appropriateness of inductions in hospitals with very low volume or very few providers. <i>Other</i> - Establish an OB peer review process for EED cases. - For providers who still perform EEDs, place a letter from the Department Chair or Quality Committee Chair in their medical staff reappointment file. - Publicly highlight providers with both low and high EED rates and share best practices.

Barrier 3. Provider Concerns Regarding Financial Impact of Eliminating EED

Drivers:	Strategies:
Provider concerns that patients will change practices if requests for EED are not accommodated by their prenatal care provider	- Work with all local delivery facilities to implement hard-stop policies for EED to ensure no competitors continue to offer EED (it is now the exception). - Establish state perinatal quality improvement collaborative to enlist state birthing hospitals to work together on this issue.
Provider concerns about lost revenue if women have an unscheduled c-section with another provider or practice and they bill the delivery charge	- Track data for a period of time (e.g., 6 months) to document volume of unscheduled c-sections/unscheduled spontaneous labor vaginal deliveries delivered by other practices after implementing a hard-stop policy. In most hospitals this issue has faded away with experience. - Consider alternate methods of reimbursement for providers. - Work with the state hospital association to find out how many hospitals in the state report having a hard-stop policy and/or EED data. All State Hospital Associations (SHA) and all Hospital Engagement Networks (HENs) are required by CMS to retrieve and report this data from every hospital in the country. The SHA's have this information and can readily retrieve it.

Infrastructure- or Capacity-Initiated Early Elective Deliveries

Challenges to Confirming Appropriateness of the Timing of a Scheduled C-Section and Availability of Anesthesia Coverage.

Barrier 4. Lack of Standardized Scheduling Operating Room (OR) Cases

Drivers:	Strategies:
OR schedule is managed by a central scheduler responsible for posting all OR cases, with no mechanism to confirm the appropriateness of the timing of scheduled c-sections	- Standardize gestational age determination and include with all scheduled deliveries in the hospital's scheduling system (the method of standardization should be approved by the hospital's OB/GYN committee): - Implement a system for the labor and delivery charge nurse (or other experienced OB nurse) to review each scheduled c-section < 39 weeks before it can be posted to the OR schedule using the same standardized scheduling form for all scheduled inductions. - Create a form for the central OR scheduler to use when posting c-sections to document estimated gestational age on the date of the procedure and a medical indication with supporting documentation for any case where the projected gestational age will be less than 39 weeks. - Ensure that appropriate escalation process for review is in place when documentation is not consistent with approved policies for early term deliveries.
Lack of OR availability for scheduled cesarean deliveries/"block scheduling" in hospitals without dedicated obstetrical ORs	- Offer scheduling alternatives to a single block day, such as a second session each week that any provider can schedule when needed. - Offer evening or weekend OR slots. - Establish guidelines for scheduling that limit how far in advance cases can be posted. - Work directly with Anesthesia group to solve OR scheduling issues.

Barrier 5. Lack of 24-hr Anesthesia Coverage

Drivers:	Strategies:
Hospitals without 24-hour anesthesia coverage or dedicated obstetric anesthesia teams have concerns about the potential for an increase in unscheduled, emergent, or after-hours c-sections/epidurals and decreased flexibility in scheduling cases	- Most small hospitals have not seen a significant increase in off-hour cases. - Explore options for expanding obstetric anesthesia coverage such as through the use of CRNAs. (Good for all OB emergencies!). - Define unintended consequences and establish a measurement system to monitor over time and a feedback loop to the OB stakeholders.

Challenges Related to Facility and Administration Engagement

Barrier 6. Lack of Institutional Support and/or Competing Demands Across Multiple Service Lines

Drivers:	Strategies:
Complexity of system and/or competing priorities	- Space out large quality initiatives and plan for intense parts of improvement activities to occur at different times for different initiatives. - Create a perinatal quality/safety nurse position to lead perinatal safety and quality initiatives within the service/unit: - Enlist support of physician champion for the establishment of this position. - Engage a physician champion who is interested in this topic area to build will in the organization. Partner with that physician to plan policies and procedures around the topic in collaboration with nursing leadership. - Support nurse led initiatives that support advocacy for the women and her family. - Build relationships with OB leadership and quality teams. - Incorporate EED measures into hospital dashboard: - Consider physician and senior leadership buy-in before making this a hospital indicator. - Include OB leadership (provider and nursing) on hospital quality committee. - Include EED and other OB measures in QI report to board of directors quality committee.
Lack of commitment of senior leaders to eliminate EED	- Underscore value of elimination of EED for patient safety and quality improvement to change culture across the institution. - Stay connected to emerging national perinatal quality priorities through professional society newsletters, social media, and statewide organizations. - Partner with external organizations to provide support (e.g., March of Dimes, State Department of Health, ACOG chapter, hospital association, Medicaid agency, state perinatal collaboratives, hospital engagement networks). - Recruit outside speaker(s) to educate on EED; contact March of Dimes, ACOG, regional perinatal center, state perinatal quality collaborative for speaker suggestions. - Use national and local data to communicate importance of EED improvements to leadership, providers, nursing staff and emphasize value of accurate process and outcome data to track progress. - Educate senior leaders on future impact of reimbursement changes from CMS and other payers based on EED rates.

Lack of Awareness Among Women of Risks Associated with Early Elective Delivery

Challenges Related to Lack of Women's Awareness of When it is Safe for Babies to be Born and Women's Request for Early Elective Delivery

Barrier 7. Lack of Awareness of Among Women of Risks Associated with EED

Drivers:	Strategies:
• Lack of general awareness among women of risks associated with early elective delivery and benefits of spontaneous labor in healthy women and fetuses • Women's requests for early elective delivery due to lack of general awareness among women of risks associated with early elective delivery and benefits of spontaneous labor in healthy women and fetuses • Women's discomfort at end of pregnancy or desire to schedule delivery at an optimal time for family/work	• Utilize March of Dimes, ACNM, and AWHONN patient education materials on EED, and Childbirth Connection resources on induction and cesarean section (see Section IV for specific resources). • Encourage providers to discuss the risks of EED and benefits of waiting for labor to begin on its own with women early in pregnancy and as the pregnancy progresses. • Educate women early in pregnancy about provider and hospital EED policies, advantages of waiting for labor, and rationale for avoidance of EED. • Educate providers on proven approaches to helping women make informed decisions about EED and spontaneous labor, such as shared decision making. • Develop local materials and/or work with state agencies to produce evidence-based educational materials, PSAs, billboards. • Display EED educational materials (brochures, posters) in prenatal clinics, L&D triage. • Incorporate EED educational content and materials into local childbirth education programs. • Promote http://text4baby.org, a mobile information service designed to promote maternal and child health through text messaging. • Partner with promotoras, doulas, retail pharmacies, public health departments, health plans, community-based or nonprofit organizations, or others to develop and disseminate educational materials. • Seek opportunities to reach women with key messages about the dangers of EED before pregnancy, during pregnancy, and in-between pregnancies through state Title X and WIC programs.
• Women's desire to be delivered by a specific provider	• Educate women early in prenatal care that another provider may deliver her baby. • Encourage women to meet all providers who may be involved in her intrapartum care. • Increase comfort with L&D by tours and meeting staff (if possible).
• Inconsistent use of "term" leads to women's misperception that there	• Use ACOG/SMFM definitions for "early term," "full term," "late term," and "post term":

Drivers:	Strategies:
are no differences in outcome when scheduling deliveries after 37 weeks of gestation	– Early term – 37 0/7 weeks of gestation through 38 6/7 weeks of gestation – Full term – 39 0/7 weeks of gestation through 40 6/7 weeks of gestation – Late term – 41 0/7 weeks of gestation through 41 6/7 weeks of gestation – Post-term – 42 0/7 weeks of gestation and beyond

Section III. Challenges and Barriers to Monitoring Performance and Progress Towards Eliminating Early Elective Deliveries

This section describes challenges, barriers and strategies related to data collection. Three primary barriers are described in this section: 1) multiple demands on staff resources; 2) disconnect between clinical team and quality department; and 3) issues related to data accuracy. The strategies outlined in this section are intended to reduce burden on the workforce, encourage collaboration between clinical and quality staff, and improve data quality.

Challenges Related to Data Collection

Barrier 8. Multiple Demands on Staff Resources

Drivers:	Strategies:
• Data collection is time consuming • Lack of designated person to collect the data • Lack of training/tools results in problems with data collection process and results • Data collection processes are not part of practitioners' workflow in the clinical setting • Lack of understanding and training among staff doing data collection about importance of and best practices for abstracting valid data • Lack of training and quality control in completion of vital records • Staff turnover	• Develop streamlined tool for manual data collection. • Educate data collectors on The Joint Commission Perinatal Care measure set abstraction methods. • Provide one-on-one training for data collectors. • Allow for adequate administrative time for data collection in real time to avoid backlogs. • Purchase perinatal module of approved vendor system to reduce staff time devoted to data collection. • Display "days since last EED" on unit to motivate data collection. • Display data in ways other than just numbers (e.g., "last month 8 infants were electively delivered too early, resulting in a need for O₂, feeding problems, etc.") and post this info with pictures of 8 newborn infants in hospital bassinets; use infographics with babies instead of dots on a graph. • Ensure that data collection responsibility is shared by more than one person to account for potential staff turnover.

Barrier 9. Disconnect Between Clinical Team and Quality Department

Drivers:	Strategies:
• Obstetricians and OB nursing staff may not have experience with quality initiatives or measurement • Limited opportunity for interaction between clinicians and quality staff	• Promote collaboration between clinical and quality staff through regular team meetings for education, training and development/review of data collection plans. • Have clinical and quality staff review and approve data before submitting to outside agency and work together to resolve discrepancies. • Create data report to be shared with OB, nursing, midwives, quality, and executive leadership and staff. • Provide training and education on the disseminated model of quality – the Quality Department is the “coach” and the “keeper of the data”, but all departments are responsible for their own PI and data collection. • Review EED and quality reports in provider and nursing departmental meetings at least monthly.

Barrier 10. Issues Related to Accuracy of Data

Drivers:	Strategies:
• Lack of provider awareness of documentation requirements for coding • Coding issues, incorrect and/or incomplete coding • Inconsistencies in data collection and reporting • Concern that sampling may lead to inaccurate or unstable rates	• Provide education to providers on coding requirements to improve accuracy. • Educate coders on relevant codes for quality measures. • Conduct data validation for chart abstraction and periodic revalidation. • Revalidate data before submission to outside agency to ensure validity and reliability. • Consider benefits of abstracting all cases instead of sampling, such as identification of all issues associated with EED cases and opportunity for in-depth analysis of all EED cases.

Section IV. Key Strategies to Promote “Readiness” for Early Elective Delivery Reduction Activities

The following section describes key strategies to create a culture of safety by engaging senior leadership and changing perceptions and behaviors that support EED reduction efforts. Many microsystems contribute to the overall system failures, which necessitate a system-level view to understand how different factors contribute to goal attainment. It is important to assess the barriers present in a facility in order to develop a work plan to overcome them.



Creating a culture of safety is paramount—leaders must set the vision, establish the rules, model behavior, and build support systems.

Strategies to Engage and Activate Senior Leadership

Early elective delivery reduction is by nature an obstetrical care provider-driven initiative and it is best to have obstetrical leadership at the outset to be successful. However, several sites have created and sustained positive change without early obstetrical leadership by using other levers, such as hospital administrative leadership. Action team members suggest finding a physician champion who is clinically competent, respected by his or her peers, and willing to work on and support the project through words and action. Engage this physician during the process of writing a hard-stop policy and procedure, and to get other physicians on board. Empower nurses early on to enforce the policy knowing that it was written by and with full physician support. View IHI’s Perinatal Community Change Package (referenced in [Section VI](#)) for more related to perinatal leadership.

Policy and Payment Strategies

Ideally the elimination of EED would be addressed through hospital- or provider-led initiatives at the local level. Some states have found, however, that state-level policies—particularly those focusing on payment—can be quite effective. Changing policy can be challenging depending on state culture and politics, but may be necessary when other efforts fail or do not sustain improvement over time. Many approaches to payment reform exist, including financial incentives and/or penalties.

Success in reducing EEDs can be amplified through aligned payment policies on the public and private front. For example, in the state of South Carolina, the simultaneous implementation of no-payment policies by both [state Medicaid](#) and the state’s largest private insurer (Blue Cross Blue Shield of South Carolina), covering 85 percent of all births, led to a dramatic drop in EEDs throughout the state. Texas has also implemented no payment policies for both physicians and hospitals if clinical criteria are not met. In states where one payer or multiple payers that represent a majority of births have attempted payment policies, progress has been more dramatic and rapid than in states where limited or no payment policies exist. Pressure on hospitals from large self-insured employers can also be effective in the reduction of EED.

A Policy Strategy In Action

The Michigan Health & Hospital Association (MHA) Keystone Center, in conjunction with the Michigan Department of Community Health and the MHA, developed a policy that compels hospitals to implement a “hard-stop” on any planned induction or cesarean section for mothers who had not reached a minimum of 39 weeks gestation and to participate in a collaborative effort to reduce the likelihood of an early elective delivery, such as MHA Keystone: OB.

Source: MHA Keystone Center Patient Safety and Quality Annual Report 2013

Managed care plans, both commercial and Medicaid sponsored, are creating new policies and processes for these changes to support implementation of evidence based standards. From a commercial perspective, Anthem Blue Cross Blue Shield included EED as a quality metric since 2012 for its QHIP™ (Quality InSights Hospital Incentive Program) program which allows for an incremental payment increase to facilities based on meeting target goals. It is imperative that all stakeholders are engaged from the beginning of the process. This fosters a more robust foundation for development across all venues such as policy, systems/claims, and reimbursement.

Four suggested strategies related to policy and payment are described in Exhibit 2. When considering one of these approaches, networking with other state leadership to understand what types of policy changes might work in your region is encouraged. Other considerations include your state’s culture/ability to advance legislation around payment policies as well as the quality of claims data from claims or other data sources to tie to payment or policy changes.

Exhibit 2. Four Strategies for Policy and/or Payment Reform

1. Initiate a state-wide hospital collaborative for reducing EED, largely focused on hard-stop implementation
 - a. Oklahoma and Louisiana have engaged voluntary collaboratives
 - b. Michigan passed legislation requiring hospitals to use evidence based guidelines (but no enforcement)
2. Offer modest bonuses to hospitals that meet quality targets (Washington state)
3. Initiate a hybrid approach of collaboratives and legislation
 - a. South Carolina gave hospitals two years to comply, and brought them together with additional help to get there. All hospitals were on board and made the commitment well prior to the regulation.
4. Develop payment legislation around EED reduction (Texas, Georgia, New Mexico, Wyoming)

Catalyst for Payment Reform has made [several resources available](#) related to payment policies and EEDs. The Association of Maternal and Child Health Programs (AMCHP) [developed an issue brief](#) in January 2014 documenting various program approaches for lowering nonmedically indicated deliveries for state Title V programs. Additionally, [another brief](#) offers information related to state Medicaid and CHIP efforts to reduce EEDs.

Section V. Measurement Guidance

The following section provides guidance for calculating The Joint Commission PC-01 EED (NQF #0469) measure, interpreting the measure's results, and tips for hospitals working with EHR vendors.

Calculating the PC-01 Measure

Data Abstraction/Collection Guidance

Many vendors leave the bulk of data collection for the PC measures to the hospital to do to then put into the vendor software. Many small hospitals must do all of the case screenings by chart review rather than by ICD9 screening software. Hospitals that do not report to The Joint Commission may not have ORYX vendors at all. The current and future specifications including all of the ICD-9 codes are available at:

http://www.jointcommission.org/specifications_manual_joint_commission_national_quality_core_measures.aspx

For Hospitals with Joint Commission Vendors

The Joint Commission advises that vendors should have the capability to interface with the hospital's medical records to pull administrative data (i.e., ICD-9 codes, admission date, birthdate, discharge date). Vendors are responsible for identifying the initial patient population, which relies on the following administrative data:

- TJC ICD-9-CM diagnosis code for "pregnancy" present and for the exclusions noted on Tables 11.01, 11.02, 11.03 or 11.04. The current tables are found at: <https://manual.jointcommission.org/releases/TJC2014A1/AppendixATJC.html>
- The patient must be greater than 8 years and less than 65 years of age (determined by admission date minus birthdate).
- The patient must have a length of stay less than 120 days.

Many report that it is easier to screen first for gestational age (i.e. identify all 37- and 38-week births using hospital data) and then only screen those cases for excludable medical complications. The initial measure specifications were designed to take advantage of easy computerized screening of ICD-9 codes—assuming it was harder to calculate gestational age—while in practice some hospitals function in the opposite way. This is very true for small hospitals and will be very important when implementing the PC metrics in hospitals with fewer than 1,100 births.

For Hospitals without Joint Commission Vendors

The Joint Commission advises that even the smallest hospital should be able to have its medical records department run a report to pull cases with ICD-9 codes present on Table 11.01, 11.02, 11.03, or 11.04 for the initial patient population, and also Table 11.07 to exclude those cases if they do not have a vendor. If and when the time comes for hospitals with fewer than 1,100 births annually to report to The Joint Commission, they will then be required to use a vendor. Recall that all but Critical Access hospitals are now required to report this measure following the Joint Commission's PC-01 measure specifications to the CMS Inpatient Quality Reporting system each quarter. If a hospital does not have a vendor, it needs to first determine the initial patient population for PC-01, which is as follows:

- ICD-9-CM diagnosis code for "pregnancy" present on Table 11.01, 11.02, 11.03 or 11.04.
- The patient must be equal to or greater than 8 years and less than 65 years of age (determined by admission date minus birthdate).
- The patient must have a length of stay equal to or less than 120 days (determined by discharge date minus admission date).

Additional Exclusions Beyond ICD-9 List

Whether or not you have a Joint Commission vendor there is a fair amount of chart review to be done on the denominator population after the ICD-9 exclusion list. Additional exclusions that need to be screened by chart review (these conditions do not have ICD-9 codes) include women with:

- Prior vertical cesarean section.
- Prior uterine surgery such as a myomectomy (but not a prior low transverse cesarean birth).

Fortunately, these cases are never induced, so only women having a scheduled cesarean birth need screening. All cesarean births also need to be reviewed individually to determine if labor was present.

Case Review Using Algorithm

After the initial patient population has been determined, the cases should be reviewed according to the algorithm flow. The next version of the Specifications Manual for Joint Commission National Quality Core Measures V2015A effective January 1, 2015 will allow hospitals to use delivery logs or clinical information systems to first identify those cases with a gestational age of 37 to 38 weeks. Once they have identified these cases, the first check in the algorithm is to look for ICD-9 codes on Table 11.07. Hospitals are encouraged to use the "new" approach, because it has the potential to increase the denominator size rather than sampling.

The Joint Commission advised that hospitals should begin at the top of page one of the algorithm, which first determines denominator eligibility. Page two determines whether the case goes to the numerator or stays in the denominator. Each decision point should be evaluated in the order in which it appears in the algorithm. There are four possible categories at the various decision points as the case flows through the algorithm, which are as follows:

- Category B: case is excluded from the measure

- Category X: missing or invalid data which must be added or corrected in order for the case to move forward through the algorithm, otherwise the case is "rejected"
- Category E: case flows to the numerator
- Category D: case remains in the denominator

Hospitals that do not have a vendor should create a data collection tool, which asks the questions in the order in which the decision points appear in the algorithm.

Measure Calculation Considerations for Meaningful Use Program

Differences may arise when manually abstracted quality measures are converted to electronic clinical quality measures (eCQM). For some quality measures, manually abstracted exclusion criteria have not translated gracefully to the electronic world. In other cases, provider and nursing workflows may have been altered in difficult ways. eCQMs may use vocabularies other than ICD-9 to define their value sets under the meaningful use (MU) program. Specifically for PC-01, it may prove challenging to translate all current exclusion criteria to SNOMED codes.

There may also be a “chicken and egg” problem with completing the PC-01 exclusion list in the EHR. Specifically, EHR entries can only be made for patients registered in the system. However, a provider or office calling in to schedule a delivery or c-section may be doing this for an office patient not yet registered in the EHR. Obviously, the “hard-stop” for EED needs to take place before the patient comes to the hospital. For this reason, the “hard-stop” process during scheduling may need to be documented on paper, outside of the EHR. Once the patient is admitted, clearly the MU 2-compliant EHR should be usable to document compliance with 39 completed weeks gestation or the rare exception.

“Cheat-Sheet” for Hospitals to Use when Calculating PC-01 EED Rate

Step 1 — Count the number of patients that delivered babies between 37 and 38 6/7 weeks gestation.

Step 2 — Next, subtract the number of patients that meet exclusion criteria listed in Appendix A, Table 11.07 (found in The Joint Commission Specifications Manual) from Step 1. Then, subtract any patients less than 8 years of age, greater than or equal to 65 years of age, length of stay ≥ 120 days, or enrolled in clinical trials. This is your DENOMINATOR.

Step 3 — Now, take your DENOMINATOR from Steps 1 and 2 and out of these cases, subtract the number of nonelective deliveries. (*Note: Deliveries that do not meet the elective delivery definition are considered nonelective. Elective deliveries are defined as a medical induction of labor or a c-section and all of the following: not in labor or and no history of a Prior uterine Surgery.*) This is your NUMERATOR.

Step 4 — Divide your NUMERATOR by your DENOMINATOR to calculate your EED rate. The difference between the numerator and the denominator is that the NUMERATOR contains only those cases in which the mother delivered electively between 37 and 38 6/7 weeks without a medical indication that is on the list provided in Appendix A, Table 11.07; the DENOMINATOR contains ALL cases in which the mother delivered between 37 and 38 6/7 weeks, either spontaneously or electively, minus the indications on the list in Appendix A, Table 11.07 or other exclusion.

Interpretation of PC-01 Measure Results

Data Differences Across Reports

The primary differences in rates across different reports are caused by the reporting period.

The Leapfrog Group Data

Leapfrog includes rates from the 2013 Leapfrog Hospital Survey posted on its website; results from the 2014 survey will first be posted in late July. Most hospitals that completed a 2013 survey reported on calendar year 2012; some hospitals reported on the second two quarters of 2012 and the first two quarters of 2013. CMS data is available for Q1 and Q2 of 2013. Additionally, Leapfrog requires hospitals to report by individual “brick and mortar” facility, while CMS allows multiple facilities to report under one Medicare Provider Number. In some cases, Leapfrog may have data for three separate hospitals, but CMS has compiled those three hospitals into one reporting entity with one reported rate. Leapfrog uses the specifications created by The Joint Commission for the PC-01 measure. Leapfrog does offer a sampling methodology that hospitals can use to identify a selection of births to include in calculating their rate, or hospitals can use TJC sampling methodology.

Hospital Compare Data

When viewing data related to the PC-01 measure in Hospital Compare, it is important to note that “NA” can mean many things (see Table 2). Stakeholders reported that issues related to small denominators are fixing themselves since the data reported through CMS is rolling data. Hospitals are encouraged to view the “preview” report in QualityNet before the final submission to CMS. For more information, go to [Hospital Compare](#) to view the definitions.

Table 2. “NA” definitions

Data	Definition
NA ¹ “Too few to report”	There were fewer than 11 cases reported. CMS’ privacy policy states that it cannot report data with fewer than 11 cases because of data reliability. This is reported less frequently as data from quarters is rolled together.
NA ⁵ “Results not available”	The hospital may not provide OB services.
NA ⁷ “No cases met the criteria for this measure”	The hospital may provide OB services, but had no deliveries at 37 or 38 weeks.

Tips for Working with Vendors

EHR vendors are acutely aware of the need to alter their software whenever CMS declares a quality measure to be an electronic quality measure (eQM). Much of vendors’ development efforts in the past several years has centered on fulfilling certification requirements for Meaningful Use Stages 1 and 2, including eQMs. Currently, 27 eQMs are available for stage 2 certified EHRs, including Perinatal Care Core Measures PC-01 and PC-05/PC-05a.

On April 30, 2014, CMS released the FY15 Preliminary Inpatient Prospective Payment rule. In it, CMS proposes to include PC-01 as a quality metric in FY 2017 Value Based Purchasing, based on data recorded from January 1 to December 31, 2015. In addition, CMS proposes that the conversion from manually abstracted quality measures to electronic data submission will be complete by 2018, meaning all measures in effect at that time will be reported electronically. For these reasons, careful attention must be afforded to eQMs, including the Perinatal Care measures. CMS also proposed that PC-02 Cesarean Section (NQF #0471) become a MU stage 3 measure in calendar year 2015.

Section VI. Educational Tools, Resources, And Exemplars to Support Early Elective Delivery Elimination Efforts

Patient Resources	Source
Why the Last Weeks of Pregnancy Count	March of Dimes
Late Preterm Brain Development Card	March of Dimes
Precious Time Infographic	VHA
40 Reasons to Go the Full 40	AWHONN
Delivering Your Baby: Why scheduling early delivery is not a good idea	ACOG/AAFP/Consumer Reports Health—as part of the ABIM Foundation’s Choosing Wisely Campaign
Normal Healthy Childbirth for Women and Families: What You Need to Know	ACNM Our Moment of Truth consumer website
ACOG: Five Things Physicians and Patients Should Question	ACOG—as part of the ABIM Foundation’s Choosing Wisely Campaign
What to Reject When You’re Expecting	Consumer Reports
Quick Facts about Induction of Labor	Childbirth Connection
What Are Some Factors Driving Induced Labor in the United States? A Listening to Mothers III Data Brief	Childbirth Connection
Which Due Date Should I Use?	Childbirth Connection/Institute for Healthcare Improvement
Fact Sheet: Maternity Care—Why Maternity Care Matters	The Leapfrog Group

Quality Improvement Resources	Source
Less than 39 Weeks Toolkit	March of Dimes/CMQCC/California Department of Health, Maternal Child and Adolescent Health Division

Quality Improvement Resources	Source
Resources for Induction of Labor	Childbirth Connection
Perinatal Improvement Change Package	Institute for Healthcare Improvement
HEN Improvement	Health Research and Educational Trust (HRET)/ American Hospital Association
Getting Started: EED Education Campaign Checklist for Health Care Professionals	VHA

Clinician Resources	Source
Induction of labor. ACOG Practice Bulletin No. 107. <i>Obstet Gynecol.</i> 2009; 114: 386-97.	ACOG
Non-medically indicated early-term deliveries. ACOG Committee Opinion No. 561. <i>Obstet Gynecol.</i> 2013; 121: 911-15.	ACOG
Medically indicated late-preterm and early-term deliveries. ACOG Committee Opinion No. 560. <i>Obstet Gynecol.</i> 2013; 121: 908-10.	ACOG
Safe prevention of the primary cesarean delivery. March 2014.	ACOG & SMFM
Optimizing Protocols in Obstetrics, Lessons Learned & Implementation Tools: Non-Medically Indicated Deliveries <39 Weeks Gestation. 2012.	ACOG & March of Dimes
Cervical Ripening and Labor Induction and Augmentation (2013) 4th Edition.	AWHONN
www.BirthTOOLS.org	ACNM
Position Statement on Induction of Labor	ACNM

Measurement Resources	Source
Perinatal Care Measures	The Joint Commission
Key Information for Providers—Measures	The Leapfrog Group
Hospital Compare Data Definitions	CMS

Exemplar Strategies and Case Studies	Source
Using Education, Collaboration, and Payment Reform to Reduce Early Elective Deliveries—A Case Study of South Carolina’s Birth Outcomes Initiative	Catalyst for Payment Reform
Prevent Pre-term Births—State Health Policy Options	National Governors Association
Common State Strategies and Emerging Themes to Improve Birth Outcomes Resources	ASTHO
Policy Toolkit to Support Reduction of Early Elective Deliveries	Midwest Health Initiative
Reducing Early Elective Deliveries through Community Partnerships: Shared Actions in the St. Louis MSA and Missouri	Midwest Health Initiative
Louisiana Birth Outcomes Initiative	National Governors Association
Minnesota’s EED Reduction Efforts	National Governors Association
Carolinas Healthcare System and Maricopa Integrated Health System’s Success	NQF MAT April 2014 Public Webinar
Illinois Blue Cross Blue Shield Mother’s Day Initiative	Midwest Business Group on Health
Michigan Health & Hospital Association (MHA) Keystone Center	MHA Keystone Center 2013 Annual Report

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Appendix A. Instructions for Accessing CMS IQR Data

Hospital Early Elective Delivery Rates as Reported to CMS as Part of the Inpatient Quality Reporting (IQR) program

The screenshot shows the Data.Medicare.gov website. The main heading is "Official Hospital Compare Data" with a subtext "Displaying datasets in Timely & Effective Care category." Below this, there's a table of datasets. The table has columns: Name, Popularity, Type, and RSS. The datasets listed are:

Name	Popularity	Type	RSS
Inpatient Psychiatric Facility Quality Measure Data – by Facility The Inpatient Psychiatric Facility Quality Reporting (IPFQR) program currently uses six measures. Psychiatric facilities that are eligible for this program may have their Medicare payments reduced if they do not report.	8,520 views	Table	Yes
Inpatient Psychiatric Facility Quality Measure Data – by State The Inpatient Psychiatric Facility Quality Reporting (IPFQR) program currently uses six measures. Psychiatric facilities that are eligible for this program may have their Medicare payments reduced if they do not report.	7,829 views	Table	Yes
Inpatient Psychiatric Facility Quality Measure Data – National The Inpatient Psychiatric Facility Quality Reporting (IPFQR) program currently uses six measures. Psychiatric facilities that are eligible for this program may have their Medicare payments reduced if they do not report.	7,213 views	Table	Yes
Timely and Effective Care - Hospital Timely and Effective Care measures - provider data. This data set includes provider-level data for measures of heart attack care, heart failure care, pneumonia care, surgical care, emergency department care, preventive care, children's asthma care, stroke care, blood clot prevention and treatment, and pregnancy and delivery care.	190 views	Table	Yes
Timely and Effective Care - National Timely and Effective Care measures - national data. This data set includes national-level data for measures of heart attack care, heart failure care, pneumonia care, surgical care, emergency department care, preventive care, children's asthma care, stroke care, blood clot prevention and treatment, and pregnancy and delivery care.	73 views	Table	Yes

Steps to find results for all of the hospitals in your state:

1. Go to <http://data.medicare.gov>;
2. Select "Hospital Compare";
3. Select "Timely and Effective Care" (see screenshot above);
4. Download file to Excel and open (the file has multiple measure so need to narrow down);
5. Sort by State, and by Measure ID and by Hospital Name.
(The EED measure is called PC-01, and it will be in the middle.)
6. Cut and Paste your state's results to new spreadsheet to make it easier to manipulate.
7. Sort by Score (this puts all of the nonreporting hospitals at the bottom).

Interpretation:

Score=% of EED; Sample=denominator submitted. Many hospitals choose to submit a sample of eligible cases (allowed by the Joint Commission, steward of the NQF Measure PC-01). This puts them at a disadvantage as when the denominator is small, any numerator cases will add up quickly.