The past 5 years have seen growing concern within both the obstetric and pediatric communities regarding the outcomes of infants who undergo elective early term delivery (37 weeks 0 days’ to 38 weeks 6 days’ gestation.).\textsuperscript{1-13} Such infants experience increased morbidity, intensive care unit admissions, and neonatal deaths compared with those who are delivered at ≥39 weeks’ gestation.\textsuperscript{1,3-6} In addition, one study estimated that such deliveries result in unnecessary costs that approach $1 billion annually to the US health care system.\textsuperscript{2} On the basis of strong evidence, purely elective early term delivery is now considered substandard by the American College of Obstetricians and Gynecologists.\textsuperscript{9} In addition, organizations such as the March of Dimes have urged abandonment of this practice, and prevention of such deliveries has become a national quality metric that is recognized by both the National Quality Forum and the Joint Commission.\textsuperscript{10-13} Importantly, several health care delivery systems have demonstrated the ability to reduce dramatically the occurrence of elective early term deliveries and the associated neonatal morbidities with the use of a combination of physician and patient education and hospital policies that limit such practice.\textsuperscript{2,7,8} More recently, third-party payers have expressed interest in reducing such practice with financial leverage.\textsuperscript{13} Indeed, because this issue involves both significant human and economic costs, the campaign against elective early term delivery seems to have developed rapidly into a juggernaut the intensity of which has been rivaled by very few practice improvement efforts in recent memory. This campaign has even been embraced by political process, such as the past session of the Texas State Legislature.\textsuperscript{13}

Although most of these efforts are helpful, any revolution may go too far. The position of the Hospital Corporation of America, as a primary driving force behind these changes, and our experience with such care improvement efforts in well over 1 million deliveries during the past 5 years suggest some areas of significant concern in the implementation of this policy and a number of practical remedies. A review of these issues may assist interested parties in helping patients reap the benefits of this practice change, while avoiding the associated perils.

Policy development
It cannot be over emphasized that the campaign to reduce early term deliveries applies only to purely elective procedures. In this discussion, elective refers only to those scheduled deliveries that are performed without a valid medical indication. Many clinical conditions exist in which the well-described risks of early term or even preterm delivery are outweighed by the benefits of delivery to mother or child. Although we have always believed this principle to be self-evident, we are concerned with the number of queries that we continue to receive from physicians and nurses who are both affiliated and unaffiliated with our hospitals regarding the appropriateness of early indicated deliveries of specific complicated pregnancies. Our concern is that a misinterpretation both of our policies and of the nature of our specialty’s opposition to purely elective early term deliveries may result in inappropriate reluctance to deliver women who are at risk for serious complications. Discussions with leaders of other health care systems suggest that such concerns are widespread and not unique to our facilities.

The list of valid indications for early term or even preterm delivery is too long to be enumerated. Further, this list includes both well-defined indications for early delivery such as severe preeclampsia and less well-defined indications such as chronic hypertension in which the judgment of an experienced physician must determine the timing of delivery. Elective early term delivery is of concern in the United States not because it results in a small number of catastrophic outcomes but also because it results in a large number of events of lesser morbidity that have developed cumulatively into a major public health problem.\textsuperscript{1,3} Accepting the risk of such morbidity in

The national movement to eliminate elective delivery at <39 weeks’ gestation has engendered much enthusiasm and is a major step forward in the evolution of perinatal patient safety. Our experience with >1 million births in the past 5 years suggests the existence of a number of potential pitfalls that should be considered in policy development, enforcement, and compliance monitoring. Attention to these details will ensure continued patient benefit from these policies without endangering those fetuses in whom early term delivery is warranted medically.

Key words: early term delivery, elective delivery, patient safety
select individual cases in which the dangers of continuing the pregnancy because of valid medical complications is significant is often the best choice. Thus, it is incumbent on any entity that promotes a reduction in early term delivery to make it clear that the target practice is early term delivery without medical indication, not generic early term delivery, and that occasional indicated early term or preterm delivery remains an important part of good obstetric care.

Policy enforcement

We recently have demonstrated that a hospital “hard stop” policy in which purely elective deliveries cannot be scheduled at <39 weeks’ gestation is the most effective means of reducing early term delivery and its associated morbidity. However, the existence of valid indications for early deliveries that are not amenable to unambiguous definition means that controversy may accompany the institution of any such “hard stop” policy. How close must the blood pressure be to 160/110 mm Hg level to justify delivery at 37 weeks gestation or even before? How poorly controlled must the diabetes mellitus of a noncompliant patient be to justify delivery at 38 weeks gestation? In the absence of hard data to guide the clinician, physician judgment and informed consent will continue to play a major role in such cases. Any facility that uses the “hard stop” approach must have in place the availability of an easy-to-access chain of command 24 hours a day to resolve such issues. Such a chain may terminate properly in the department chair or a local or regional maternal-fetal medicine specialist. Although it is entirely appropriate for a nurse to question an indication for delivery and access the chain of command, it would not be appropriate for a nurse or administrator unilaterally to stop such a delivery when the physician has documented the presence of a medical indication. Such disagreements should be resolved within the applicable hospital medical chain of command structure and ideally are subject to routine peer review.

Monitoring compliance

It is difficult to improve a process unless it can be measured. Hence, health care delivery facilities, third-party payers, and patients all have an obvious and justified interest in monitoring compliance with policies to reduce elective early term deliveries. Monitoring ideally takes the form of a comparison of the performance of individual practitioners or facilities against a known benchmark. Unfortunately, several issues currently complicate the assessment of benchmark performance.

First, many publications that have described achievable reductions in elective term delivery have used different denominators and, in some cases, different numerators in the calculation of their compliance rates. An elective early term delivery rate of 5% with the use of “all deliveries” as a denominator may be the equivalent of a 20% rate when the denominator includes only deliveries at 37-39 weeks’ gestation. Thus, when the performance of any individual or facility is being evaluated against a published rate, it is important to be certain that the same definitions are used. We recommend that, in any future description, research, or discussion of this issue, the definition that is used by the Joint Commission be adopted.

Second, although benchmarks that are published by organizations such as the Joint Commission may be worthwhile in the evaluation of individual facility performance, such benchmarks must be viewed with caution, because reporting is voluntary. It seems far more likely that institutions with low rates of complications or high rates of compliance with established procedure would report their data voluntarily than would those institutions whose performance is poor. Such reporting bias is likely to make performance benchmarks based on voluntary reporting appear significantly better than the actual national average.

Third, it is critical to realize that, because the Joint Commission definitions for indicated early term deliveries are based on diagnosis-related group (DRG) codes and because many valid indications for early term delivery exist that do not have such a code, the rate of “elective” early term delivery for any institution will never be and should never be consistently zero. There is no code for a multiparous woman whose most recent labor lasted 10 minutes and who lives 1 hour from the hospital. Yet, when that patient is seen at 37-38 weeks’ gestation with a cervix that is dilated 4 cm, delivery is clearly indicated, not elective. Similarly, there is no DRG code for “history of a classic cesarean section delivery,” yet such women should be delivered routinely at <39 weeks’ gestation. Numerous other examples exist.

Finally, although we are convinced that third-party payers can play an important role in promoting these and other best practices, such entities face unique challenges in promoting good policy in this specific arena. Although a retrospective review of early term deliveries with nonpayment for those without a valid indication has been proposed, the aforementioned discussion suggests that this is a particularly bad idea, with the potential to promote bad practice and catastrophic outcomes. Obstetrics is unlike any other specialty, given the dual nature of the mother-fetus pair and the dynamic nature of both physiologic systems. The need for delivery therefore may be as dependent on how things have changed from yesterday as on the absolute status of things today. Further, no evidence exists to validate the appropriateness of off-site, post-hoc reviews to determine payment when dealing with deliveries that possibly were elective. Because of these factors, retrospective chart review will be inaccurate in a sizeable number of cases, even if the review is conducted by an experienced, board-certified maternal-fetal medicine specialist with expertise beyond that of most individuals who historically has conducted such reviews for third-party payers. Knowledge of the potential for such oversight error and its associated financial penalties establishes for the clinician and facility a perverse incentive to delay delivery when delivery may be in the best interest of the mother and baby, with potentially catastrophic results. Such decisions often are difficult enough, without the added concern of incurring unjustifi-
Financial penalties for a well-reasoned decision that is based on sound clinical judgment.

A far better path for such oversight involves the use of national or regional benchmarks that have been established by payers based on DRG coding. Physician and facility compliance is then judged on longitudinal performance with respect to the established benchmark. Under this system, a bonus for all deliveries might be offered for the coming contract period to individuals and facilities that exceed the national quality norm by 2 standard deviations. Similarly, a penalty for all deliveries might be enacted for performance at <2 sigma. Such a system would encourage good care and allow conscientious clinicians to proceed with the occasional subjectively indicated early term delivery, secure in the knowledge that their overall good practice patterns will keep them well within accepted benchmarked limits.

The recent elucidation of the real human and financial cost of elective early term delivery and the documentation of our ability to rapidly and effectively address this problem is one of the most important advances in perinatal patient safety in the past decade. The proper elimination of this practice has been shown markedly to reduce neonatal morbidity and cost, with no increase in stillbirth rates.\textsuperscript{2,5,14,15} A misapplication of this policy, however, has the potential to introduce significant morbidity in complicated pregnancies that require early term or preterm delivery for valid medical indications.\textsuperscript{16} The observations presented here do not represent any weakening of our commitment to the elimination of elective deliveries at <39 weeks’ gestation. Rather, our intent is to emphasize the proper interpretation of existing evidence-based guidelines. Careful attention to proper policy development, enforcement, and rational compliance monitoring will assure the perinatal community that such policies can achieve their potential promise while avoiding catastrophic outcomes that might imperil the entire movement.

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