

### **Reducing Elective Inductions to Improve Infant Health**

*Massachusetts Perinatal Quality Collaborative*

Massachusetts Department of Public Health

#### **Summary**

In 2009, Massachusetts had the tenth lowest preterm delivery rate in the United States at 10.1 percent. However, the state did not have a focused plan on how to curb existing preterm and early term deliveries. The Massachusetts Perinatal Quality Collaborative was formed to address ongoing perinatal safety and quality issues in the commonwealth, including that of early term elective inductions. The collaborative aims to reduce the amount of early term elective inductions in Massachusetts by having member hospitals use a “hard stop” approach, a method proven to significantly reduce elective inductions and improve infant health.

The Massachusetts Perinatal Quality Collaborative is comprised of members of the Massachusetts Department of Public Health (MA DPH), the Massachusetts section of the American College of Obstetricians and Gynecologists (ACOG), the March of Dimes, and health providers (including physicians, community health workers, midwives, labor and delivery nurses, and quality improvement staff) from 44 of the 47 maternity hospitals in Massachusetts. The collaborative was formed in May 2011 to improve pregnancy and birth outcomes throughout the commonwealth. The MA DPH has an active steering committee with regional representatives.

The rate of early term deliveries (births occurring between 37 and 38 weeks) has increased by 34 percent in Massachusetts since 1997. In 2010, early elective inductions—elective delivery rates in the early term, prior to 39 weeks—were as high as 40 percent in some Massachusetts hospitals. Infants induced at 37 or 38 weeks have a greater risk of developmental issues, respiratory morbidities, and sepsis, and are more likely to be put in a costly neonatal intensive care unit (NICU) shortly after birth.

#### **Role of State Health Agency**

As a key partner in the development and implementation of the collaborative, MA DPH has been the main communicator of the group, inviting interested and relevant organizations to participate in the collaboration. MA DPH also provided the group with data showing Cesarean section rates throughout the state, leading the group to pick early term elective inductions as the “low-hanging fruit” to rally around at their initial summer 2011 meeting. Before tackling the issue of how to decrease early term elective inductions, the collaborative first needed to define early term elective inductions for the group. After several meetings in 2011, the collaborative came to a consensus and decided to use hospital safety nonprofit Leapfrog Group’s definition of an early term elective induction: a planned delivery prior to 39 weeks without a medical or obstetric indication for delivery.

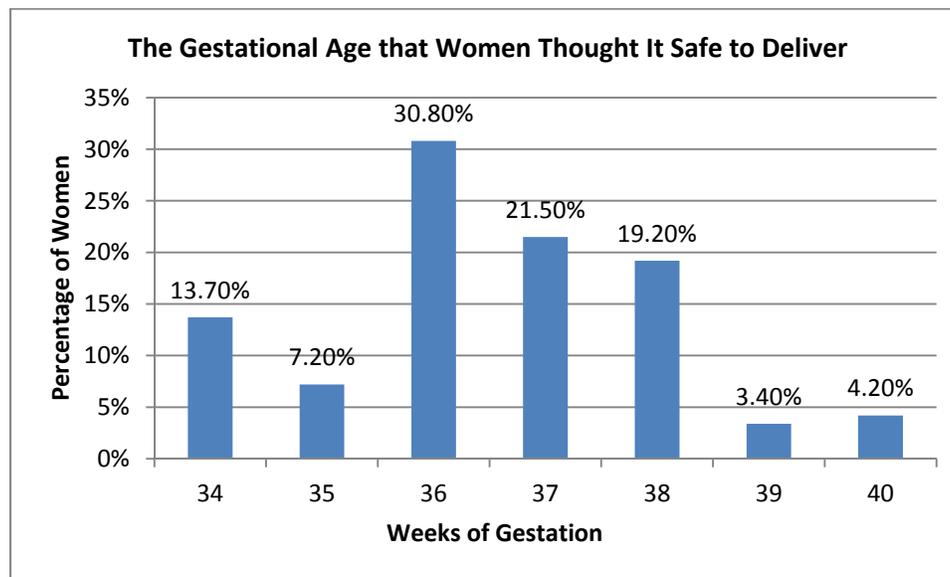
The collaborative also prepared reports for each birth hospital that provided data on rates of non-medically-indicated C-section deliveries among women and rates of all early term deliveries (both medically indicated and not). The collaborative is currently trying to determine the best way to collect data on the number of early term elective inductions taking place within Massachusetts hospitals, as well as deciding who should collect that data and where the data should be stored.

The collaborative has also concluded that a “hard stop” approach to elective inductions is the best way to decrease early term deliveries and improve infant health. Hard stop approaches consist of hospitals mandating a specific, formal policy (in this case, performing no medically unnecessary inductions prior to a gestational age of 39 weeks) and hospital staff strictly enforcing it. A 2010 study published in the *American Journal of Obstetrics and Gynecology*, “Reduction in elective delivery at <39 weeks of gestation: comparative effectiveness of 3 approaches to change and the impact on neonatal intensive care admission and stillbirth,” showed that the hard stop approach could potentially decrease the number of admissions into neonatal intensive care units by 16 percent and save \$1 billion if adopted nationally.

### Key Partners

The March of Dimes, a member of the collaborative, recently started their “Healthy Babies Are Worth the Wait” campaign in Massachusetts, which informs Massachusetts communities of the dangers associated with early term elective inductions, just as the collaborative’s initiative delivers the same message to hospitals and practitioners. The communications campaign will provide education on why births earlier than 39 weeks can be dangerous to infants and how to prevent these preterm and early term births from taking place. As depicted in Figure 1, recent data show that 31 percent of pregnant women believe that it is safe to deliver their babies at just 36 weeks.

Figure 1



\* Goldenberg, R.L. et al. “Women’s Perceptions Regarding the Safety of Births at Various Gestational Ages.” *Obstetrics and Gynecology*. 2009. 114:1254-1258.

### Future Opportunities

At the Massachusetts Perinatal Quality Summit in 2011, the attending hospitals publicly agreed to address the issue of early term elective inductions and vowed to find the most effective way to do so. A hard stop approach to early term elective inductions seemed the most logical and beneficial for both infants and hospitals. With an active steering committee made up of regional representatives, they are

also looking to modify definitions of indicators for elective deliveries to avoid potential health risks for pregnant women.

The collaborative's next goal is to determine how early term elective induction data should be collected and who should collect it in the commonwealth; that is, whether data should be collected retrospectively and whether hospitals should report immediately upon booking/intake of patients. The collaborative's goal is for the hard stop approach to reduce early term elective induction rates up to 15 percent across the commonwealth after at least a year of implementation.

### References

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