Letters to the Editor

Neonatal Outcomes After Implementation of Guidelines Limiting Elective Delivery Before 39 Weeks of Gestation

To the Editor:

We read with great interest the article by Ehrenthal et al.,1 in which the authors report an increase in stillbirth after implementation of guidelines to limit elective deliveries before 39 weeks of gestation. They raise concern that earlier delivery might have produced different outcomes. However, we caution that postimplementation increases in stillbirths may be due instead to a short observation period and changing demographics, both of which could represent natural, unavoidable fluctuations.

The authors infer that, because the increase in stillbirths resided mainly in the early-term population, these deaths could have been prevented by allowing earlier elective delivery. However, 5 of the 11 stillbirths at 37 and 38 weeks were associated with maternal or fetal complications that place the pregnancy in a higher risk category. Early delivery of such patients would not be considered “elective” in our health care system or according to national guidelines.

We recognize that large population cohort studies show that the ongoing risk of stillbirth increases progressively. However, early-term deliveries have specific medical and obstetric complications that deserve thoughtful consideration. Neonatal mortality and morbidity are increased at 37–38 weeks. Moreover, studies have demonstrated serious long-term concerns, including a 50% increase in postneonatal deaths, lower cognitive ability at age 6, and higher rates of disability in young adults.

Previous, much larger studies have not shown an increase in stillbirth rates after implementation of successful efforts to decrease non–medically indicated early-term deliveries. In Intermountain Healthcare facilities, there has not been an increase in the rate of term stillbirths in the nearly 10 years since the 39-week process was instituted. We found, however, that short time intervals of 1 to 2 years show large fluctuations in stillbirth rates.

We wholeheartedly agree with the authors that it is important to monitor prospectively the outcomes of the intervention for unintended adverse outcomes. However, we strongly recommend that both perinatal and postneonatal outcomes be weighed when considering early-term delivery.

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Neonatal Outcomes After Implementation of Guidelines Limiting Elective Delivery Before 39 Weeks of Gestation

To the Editor:

We read with some concern the report of Ehrenthal et al reporting a nearly fourfold increase in stillbirth at 37 and 38 weeks of gestation associated with a decrease in early-term delivery.1 If confirmed by other studies, this could result in reevaluation of a nationwide effort to prevent iatrogenic neonatal morbidity associated with early-term birth.

Because of this issue, we evaluated our own experience in Washington state using birth certificate data for three consecutive 9-month time periods between 2009 and 2011. Beginning in January of 2011, 44 hospitals have been participating in a statewide quality initiative to reduce elective delivery at 37–38 6/7 weeks. Washington Medicaid has included the 39-week elective delivery indicator as one of five pay-for-performance indicators for 2011.2 Our data set is nearly four times larger than the data published by Ehrenthal et al. In Tables 1 and 2 in this letter, using the same methodology, we show a statistically significant reduction in overall early-term delivery to an even lower level than do Ehrenthal et al (24.7% compared with 26.4%). We also show no stillbirth or low Apgar score increase associated to date with this reduction.

More studies are needed to settle this issue. However, after reviewing our own data, we do not find any data that would give us cause to suspend or reevaluate our efforts to reduce the numbers of non–medically indicated early-term births.

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In Reply:

It is reassuring to see letters from investigators in two regions of the United States who have implemented policies limiting deliveries before 39 weeks of gestation who report no increase in rates of stillbirth. Bendetti et al provideresults from their analysis of data from Washington state’s vital statistics. Oshiro et al presumably studied internal data for their large hospital system, extending what had been reported previously.1

As noted by Oshiro et al, we found that 5 of 11 early-term stillbirths would be considered pregnancies that fall within a high-risk group, and the new guidelines would not preclude earlier delivery.2 Nonetheless, women with the reported high-risk indications are not recommended routinely for delivery before 39 weeks but rather continued surveillance.3 If, as suggested, our findings reflect the outcomes of women who are at an increased risk, a better understanding of how the guideline has influenced their care should be explored. We might expect that the reduction in early-term deliveries would be smaller for women who are a part of a high-risk group, but this level of detail has not been reported yet. Moreover, population-level outcomes in some regions may differ from those where the prevalence of maternal health risks is higher.

In the meantime, we agree with both groups that the current efforts to implement guidelines designed to reduce elective early-term delivery should continue unabated. We encourage the monitoring of neonatal and maternal outcomes in diverse regions across the country, including stillbirths. These data will enable a meaningful discussion of the balance between the risk and benefit of implementing such policies and ensure the goals are achieved.

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REFERENCES


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We read with interest the article by Lee et al demonstrating an increase in U.S.