

Non-medically Indicated (Elective) Early-Term Deliveries

What are non-medically indicated early-term deliveries?

Non-medically indicated early term deliveries are cesareans and inductions performed without a medical indication under routine conditions at 37⁰/₇ to 38⁶/₇ weeks. These types of deliveries occur for various reasons, including: physician or patient preference for scheduling of deliveries, incorrect belief of patients that it is safe to deliver as early as 36 weeks, a high intervention culture in hospitals, and fee-for-service payment models.^{1,2}

Why is it important to measure non-medically indicated early-term deliveries?

Non-medically indicated early deliveries increase the risk of admissions to neonatal intensive care units, prolonged hospitalizations, increased health care costs, and neonatal and infant morbidities.³⁻⁸ The American College of Obstetricians and Gynecologists (ACOG) have long-standing recommendations against non-medically indicated early-term deliveries.⁹⁻¹¹ Reducing these deliveries will likely minimize the occurrence of infant morbidities and decrease health care costs. Hospitals, health care organizations, and states have implemented quality improvement efforts to reduce high rates of non-medically indicated early-term deliveries.¹¹⁻¹⁵ Monitoring these deliveries can provide clinicians, hospitals, and health care organizations with a quantitative basis for quality improvement initiatives that will positively impact health care outcomes for mothers and babies.

How are non-medically indicated early-term deliveries measured?

Non-medically indicated early-term deliveries are measured using birth certificate data linked to maternal and infant inpatient data. The measure is restricted to term births presumed to be at risk for a non-medically indicated early-term delivery.¹⁶ Medical indications that might require early delivery are selected from The Joint Commission's List of Conditions Possibly Justifying Elective Delivery Prior to 39 Weeks Gestation.¹⁷ The medical indications are identified from either the International Classification of Diseases, Ninth Edition, Clinical Modification (ICD-9 CM) codes on the maternal inpatient data or from birth certificate elements.

$$\text{NMI Deliveries} = \frac{\text{NMI deliveries } 37\frac{0}{7} \text{ to } 38\frac{6}{7} \text{ weeks}}{\text{Live births } 37\frac{0}{7} \text{ to } 41\frac{6}{7} \text{ weeks}^*}$$

*Live births include spontaneous, medically indicated, and NMI births within the specified gestational age.

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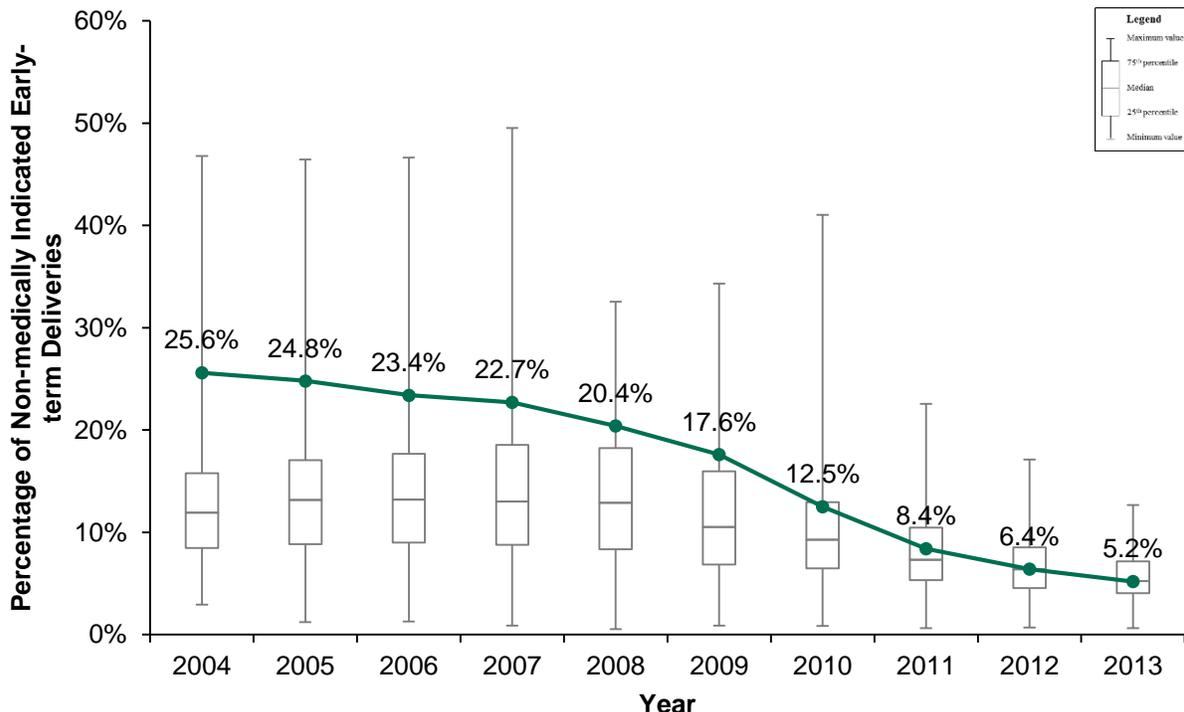
What are the limitations with using birth certificate data linked to maternal and infant hospital data to measure non-medically indicated early-term deliveries?

Birth certificate data linked to maternal and infant inpatient data are more accurate than using birth certificate or inpatient record data individually.¹⁸⁻²¹ Still, some medical conditions may be misclassified or underreported, while some indications or reasons for early delivery may not be captured at all. Additionally, the quality of data reporting may vary by hospital. The reported percentages either reflect on clinical practice or the quality of hospital reporting, or both. Non-medically indicated early-term delivery estimates from linked birth certificate to inpatient record data are higher than from clinical data. While these estimates may be higher, linked birth certificate to inpatient record data are useful in monitoring the time trends of non-medically indicated early-term deliveries and comparing percentages across hospitals.

How can we improve quality based on this indicator?

Reducing non-medically indicated early-term deliveries can be attained through quality improvement initiatives. These initiatives have proven effective in reducing morbidity when they involve a multidisciplinary team involving clinical practitioners and administrative leaders within the organization and connect the implementation of best practices with effectiveness and optimal care provision.¹² Experience shows education and protocols with an enforced policy can reduce non-medically indicated early-term deliveries.^{12,14,22,23} Monitoring the rate of non-medically indicated early-term deliveries will help determine if quality improvement initiatives are effective in reduction efforts.

Figure 1. Rates of non-medically indicated early-term deliveries - Hospital X, 2004-2013.



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Figure 2. Rate of non-medically indicated early-term deliveries by delivery type - Hospital X, 2013.

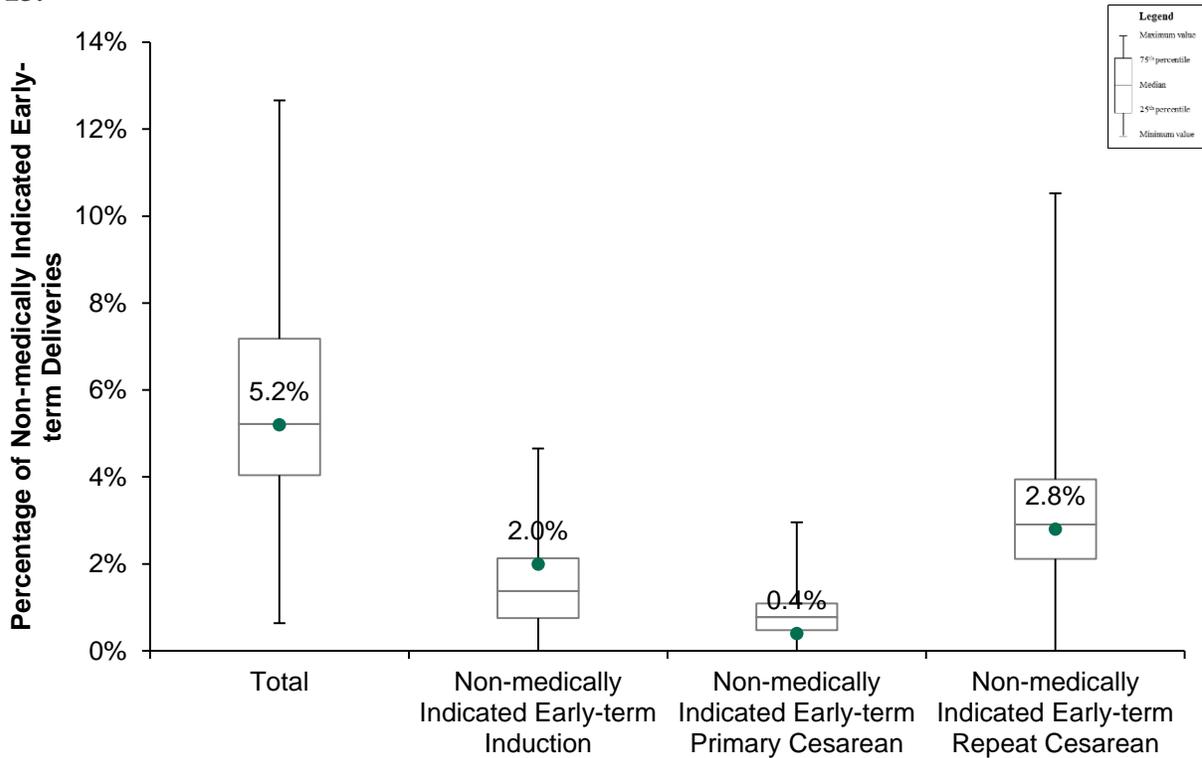
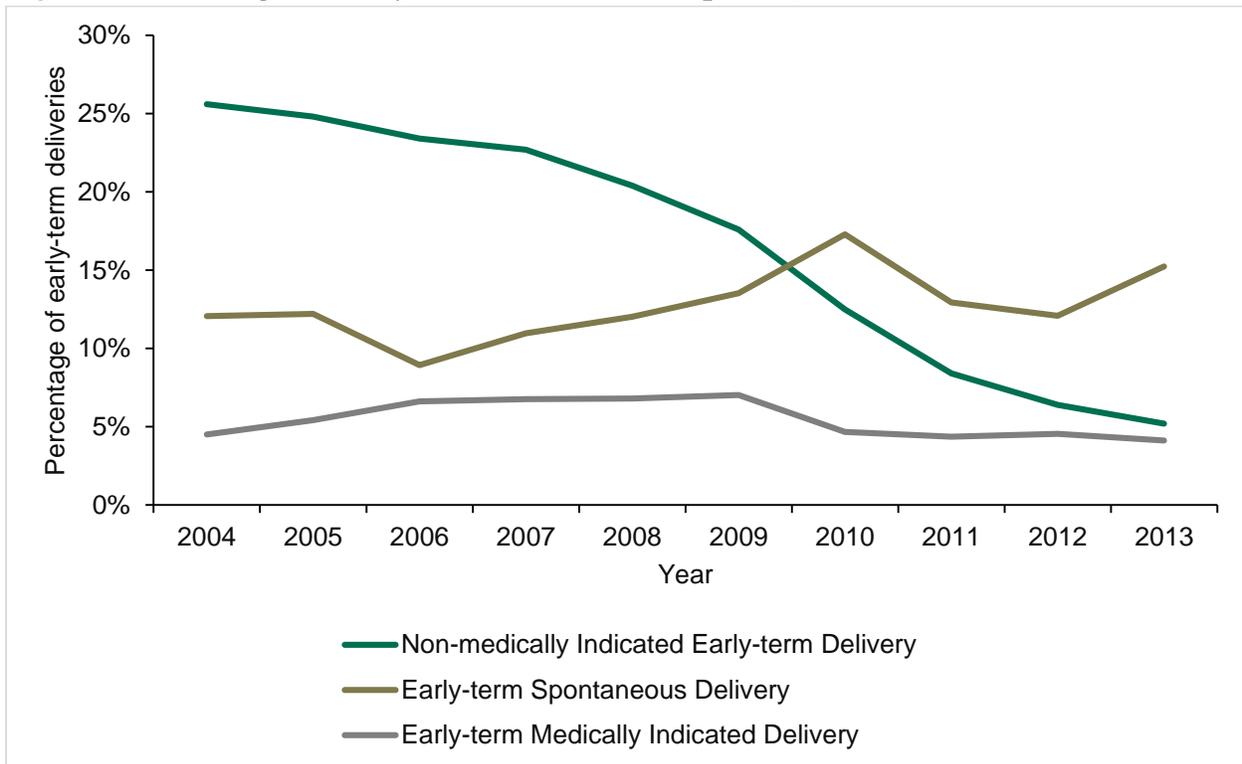


Figure 3. Percentages of early-term deliveries - Hospital X, 2004-2013.



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