

HCA Midwest Quality Indicator Project

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OBSTETRICS

Neonatal and maternal outcomes associated with elective term delivery

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OBJECTIVE: To quantify adverse neonatal and maternal outcomes associated with elective term delivery at less than 39 completed weeks of gestation.

STUDY DESIGN: Prospective observational study conducted in 27 hospitals over the course of 3 months in 2007.

RESULTS: Of 17,794 deliveries, 14,955 (84%) occurred at 37 weeks or greater. Of term deliveries, 6562 (44%) were planned, rather than spontaneous. Among the planned deliveries, 4645 (71%) were purely elective; 17.8% of infants delivered electively without medical indication at 37-38 weeks and 8% of those delivered electively at 38-39 weeks required admission to a newborn special care unit for an average of 4.5 days, compared with 4.6% of infants delivered at 39 weeks or beyond ($P < .001$). Cesarean delivery rate in women undergoing induction of labor was not influenced by gestational age but was highly

influenced by initial cervical dilatation and parity, ranging from 0% for parous women induced at 5 cm or greater to 50% for nulliparous women at 0 cm.

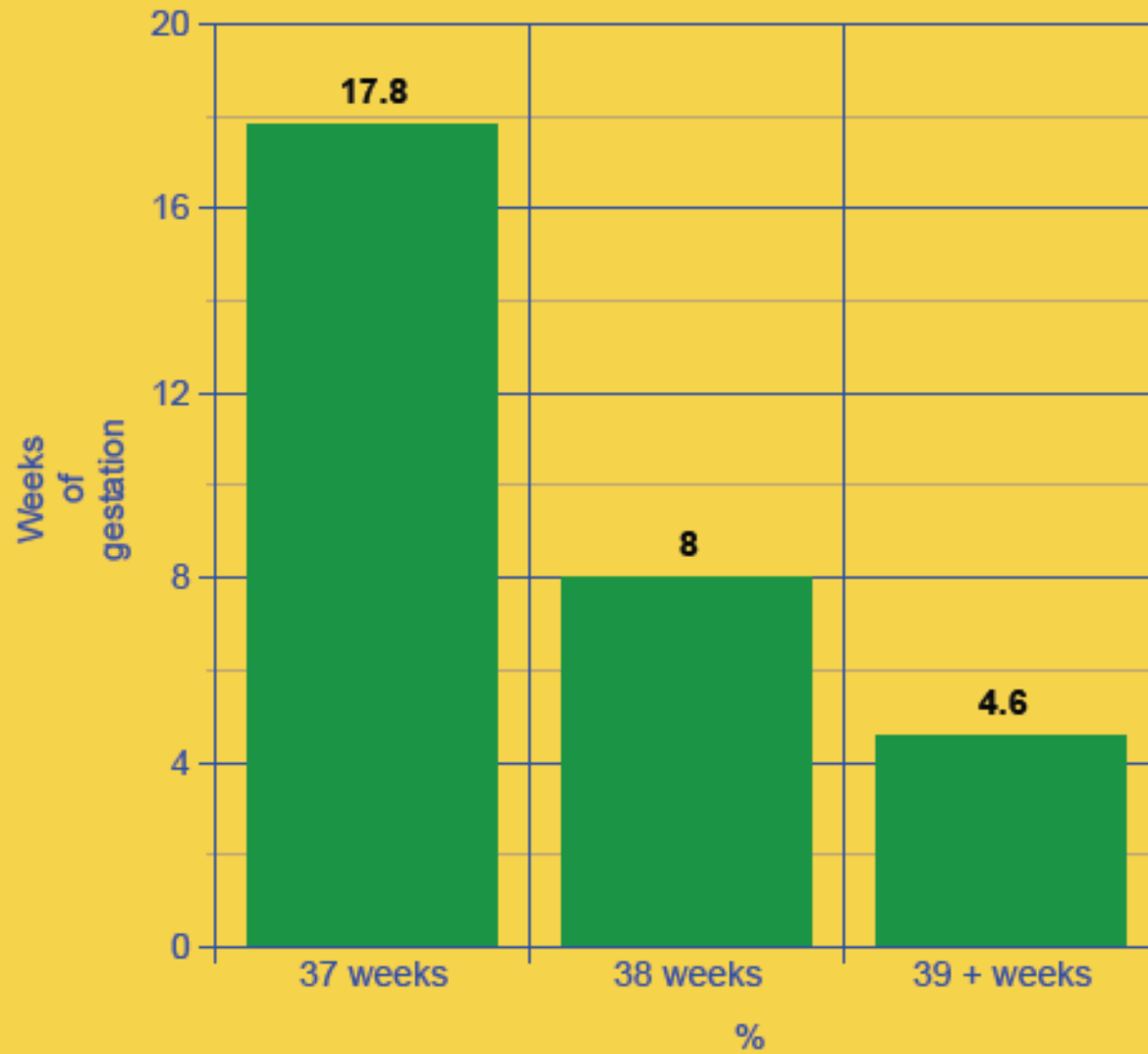
CONCLUSION: Elective delivery before 39 weeks' gestation is associated with significant neonatal morbidity. Initial cervical dilatation is highly correlated with cesarean delivery among women undergoing induction of labor in both nulliparous and parous women. Elective delivery before 39 completed weeks' gestation is inappropriate. Women contemplating elective induction at or beyond 39 weeks' gestation with an unfavorable cervix should be counseled regarding an increased rate of cesarean delivery.

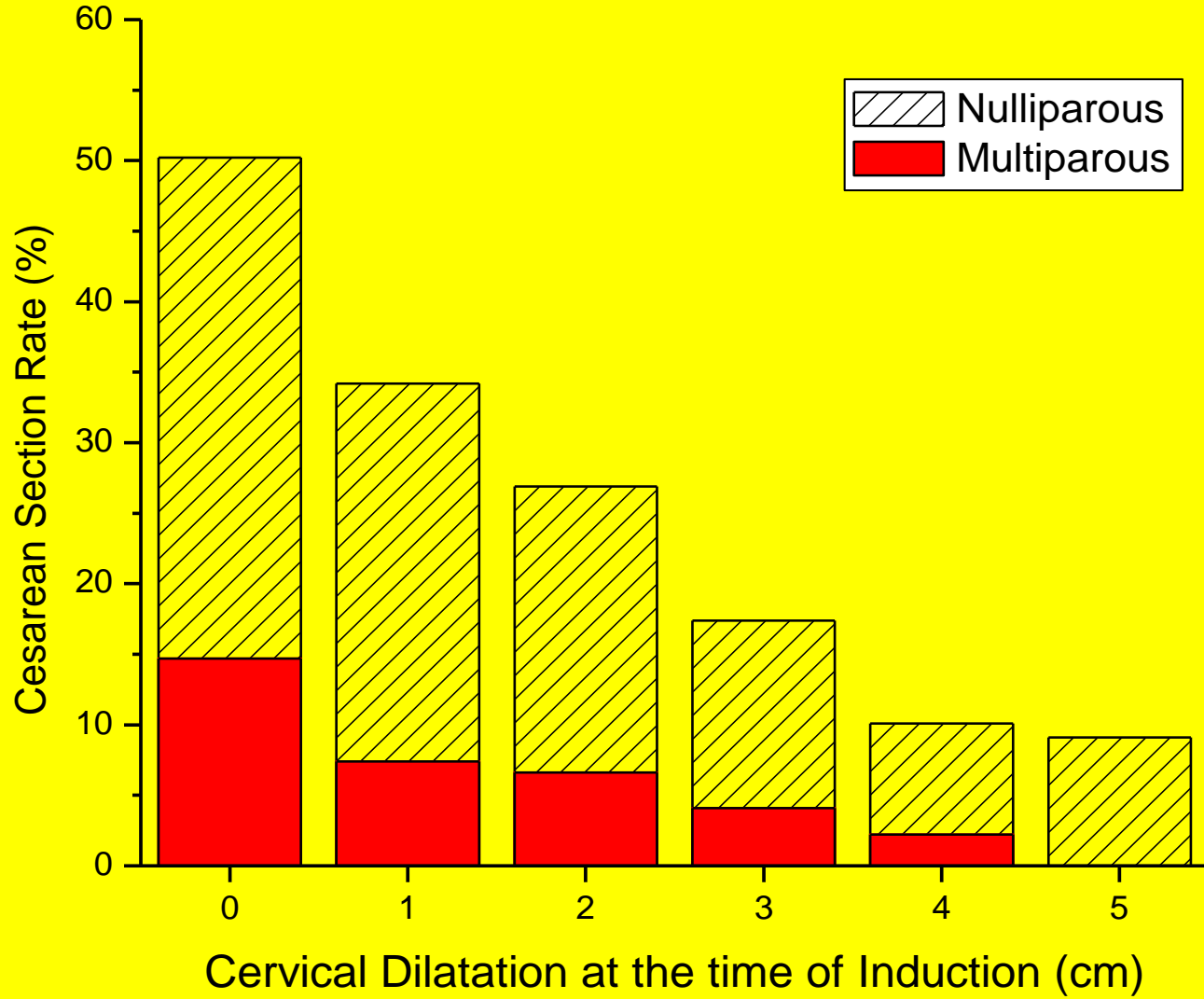
Key words: elective delivery, induction of labor, repeat cesarean delivery

KEY RESULTS

- 10 -15% of all deliveries in the United States are performed electively and before 39 weeks
- Substantial morbidity results

ELECTIVE TERM DELIVERY AND NICU ADMISSION





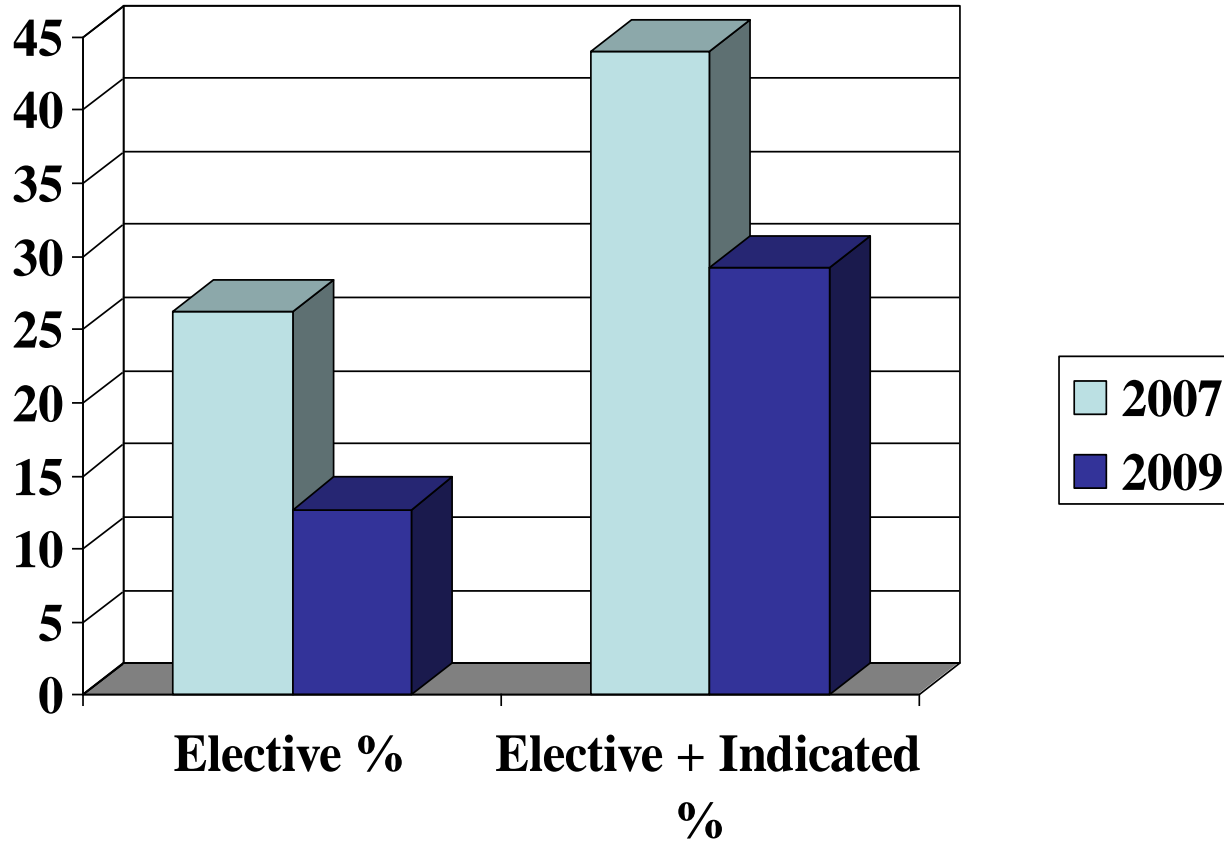
ELECTIVE TERM DELIVERY

Part II (Clark et al AJOG 2010)

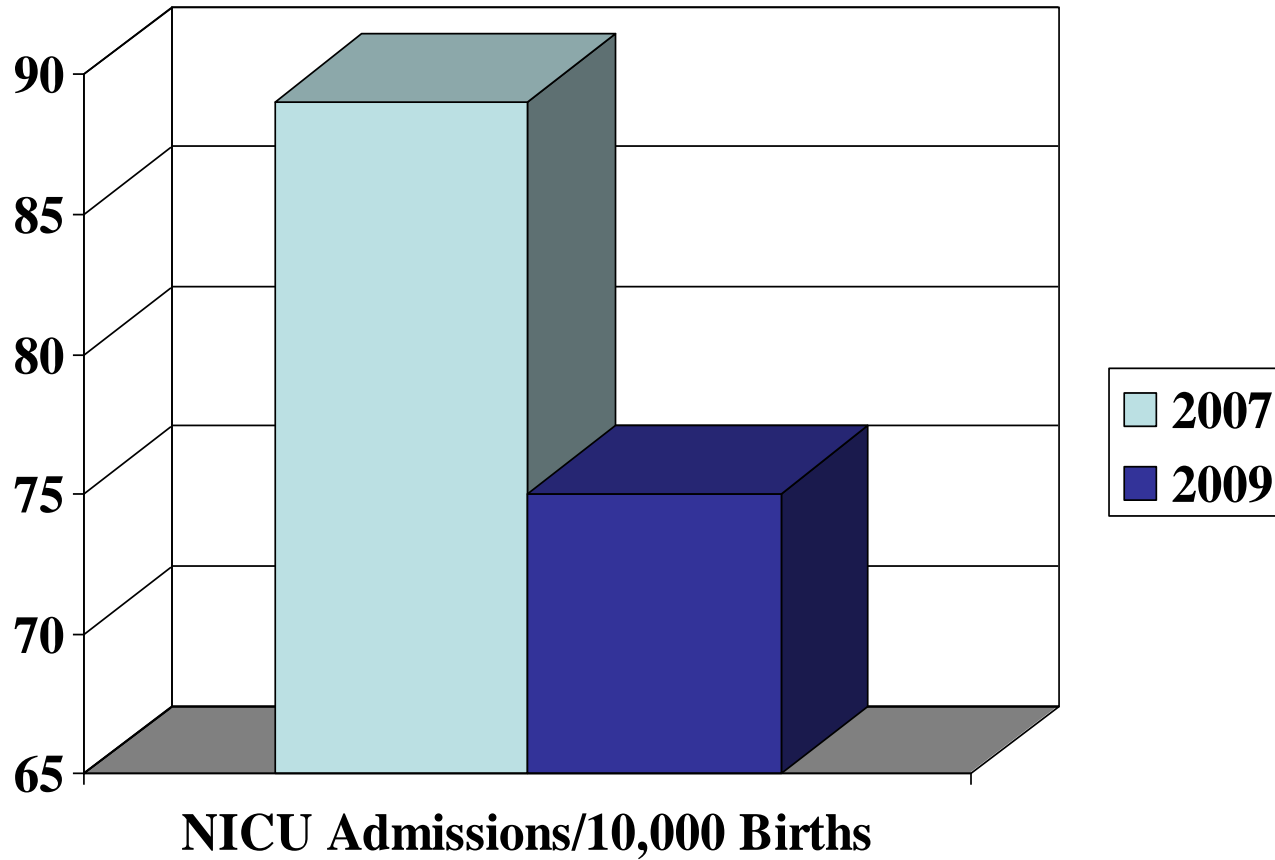
- A repeat of the previous study after 2 years of educational efforts/policy changes
- 2007 vs. 2009
- Same facilities/same months of the year
- We do not employ our obstetricians
- We do not have a captive insurance group
- Change possible only through education/persuasion/leadership

TERM DELIVERIES

HCA Pilot Facilities



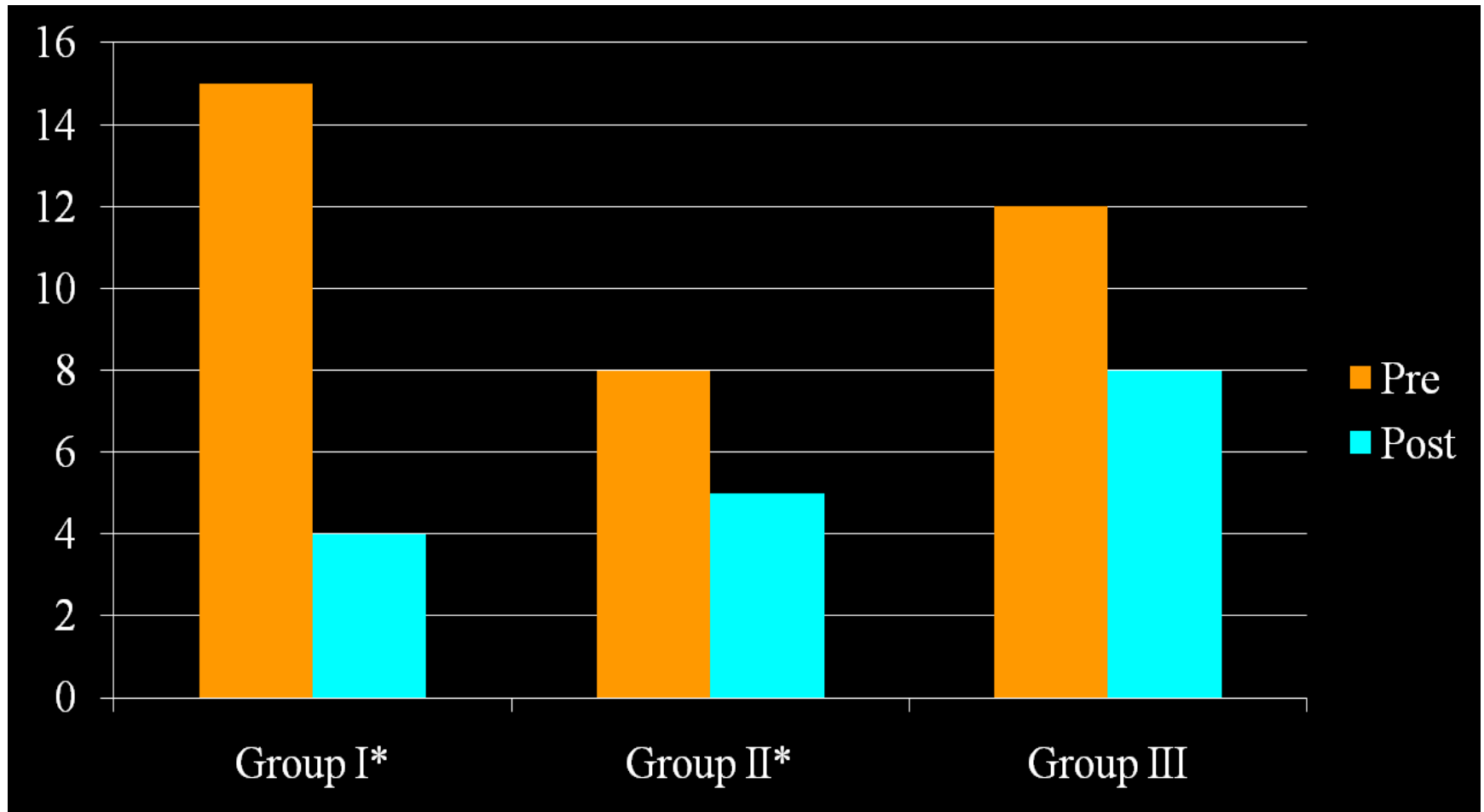
TERM NICU ADMISSIONS HCA Pilot Facilities



OPTIONS

- Not allowed by policy with hospital staff as enforcers
- Not allowed by policy but M.D. may do it if they want – all exceptions go to Peer Review
- Allowed at M.D. discretion but discouraged by intensive education

Reduction in Elective Delivery



**Morbidity associated with
elective pre-39 week
deliveries**

A hospital acquired condition