

The Near Term

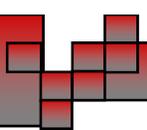
Scheduled, Elective, Convenient Birth

Jay D. Iams MD

Columbus Ohio

Disclosures: None

No Commercial Affiliations, Grants, Speaker's
Bureaus, Consultancies, Stock etc



The Near Term or Scheduled Birth **Objectives**

Participant will be able to:

- List Reasons for the Current Concerns
- Counsel women and families about the risks and benefits of Near Term Birth
- Adopt care practices to reduce inappropriate scheduled births

Percent Change in Gestational Age Distribution 1990 → 2006

Martin JA, Hamilton BE, Sutton PD, Ventura SJ, et al. Births: Final data for 2006. National vital statistics reports; vol 57 no 7. Hyattsville, MD: National Center for Health Statistics. 2009.

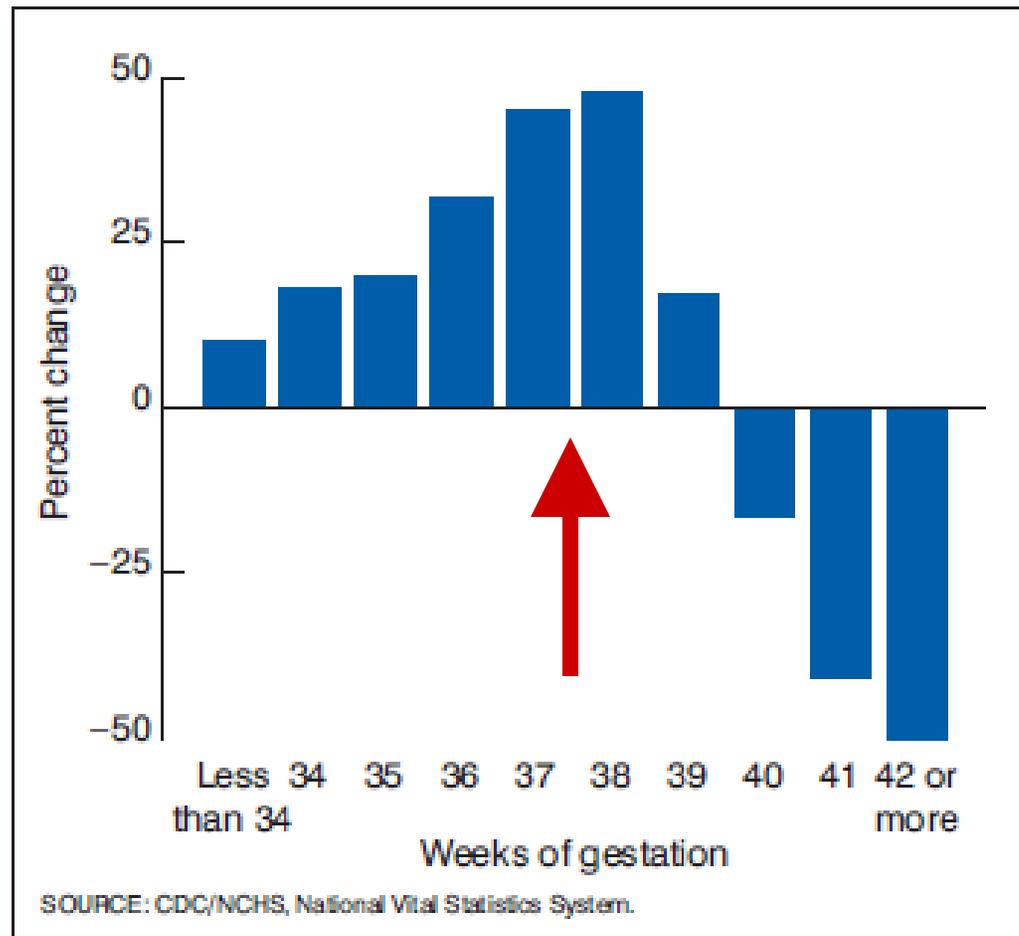
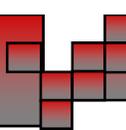


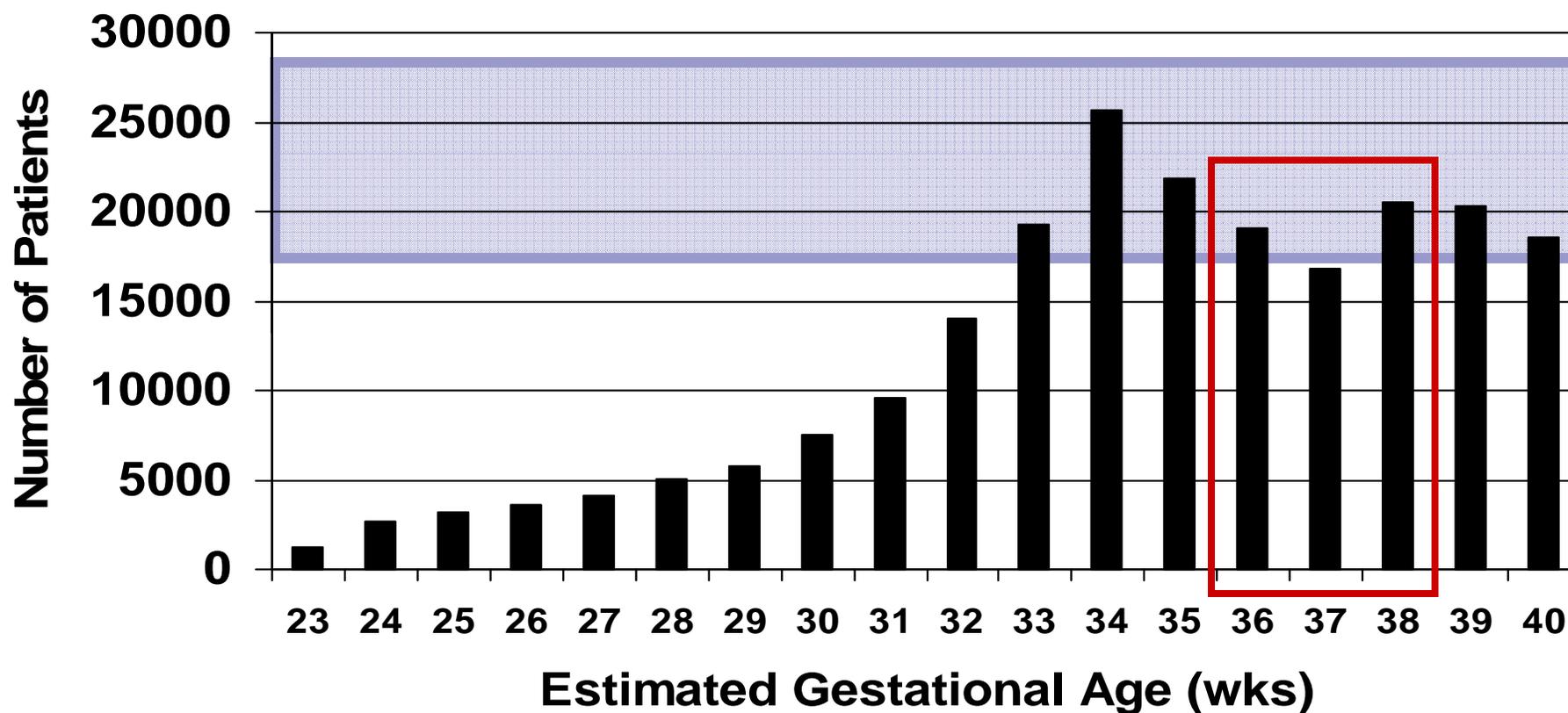
Figure 8. Percent change in the distribution of births by gestational age: United States, 1990 and 2006

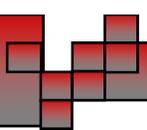


Consequences of The Rise in Late Preterm Birth

- A Culture of Interventional Obstetrics
 - Born of Medical and Obstetrical Benefit
 - **Rising Rates of Scheduled Births After 37weeks**
 - **Rising Rates of Cesarean Births**
- Unhappy Patients and Colleagues
 - Happy parents until they are Unhappy in NICU
 - Unhappy AAP, March of Dimes, others

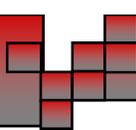
Late Preterm infants occupy most NICU beds,
and Near Term infants are close behind





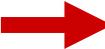
Increased Public Awareness of the Risks of Near Term Birth

- Morbidity at 37 & 38 weeks >> than 39 wk
 - National Conferences – Surgeon General, IOM, NIH
 - Recent Literature – Tita et al, Clark et al in 2009
- March of Dimes
 - State PTB Report Cards – The Nation got a **D**
 - The Brain Card
 - Fertility Care Card
- Health Departments and Hospital Systems

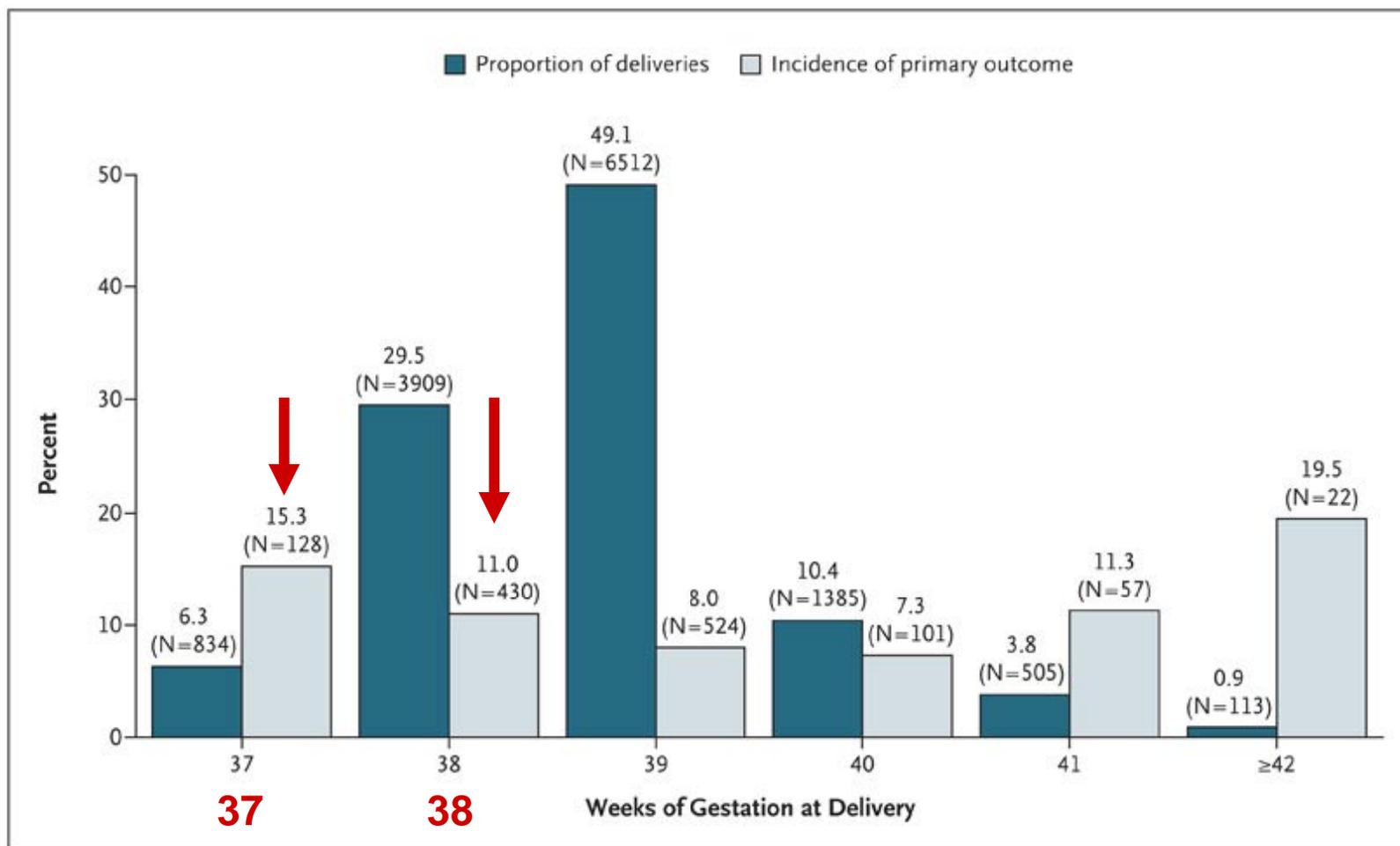


Hospital Performance Public Reporting

Perinatal Measures March 2009 Ohio HB 197

Measure Title	Source
Cesarean Rate for Low-Risk First Birth Women (NTSV CS Rate)	California Maternal Quality Care Collaborative
 Elective Delivery Prior to 39 Completed Weeks Gestation	HCA - St Marks Perinatal Center
Appropriate Use of Antenatal Steroids	Providence St. Vincent's Hospital/Council of Women and Infants' Specialty Hospitals (CWISH)
Infants < 1500g Not Delivered at Appropriate Level of Care	California Maternal Quality Care Collaborative (CMQCC)

Timing of Elective Repeat Cesarean Delivery at Term and Neonatal Outcomes

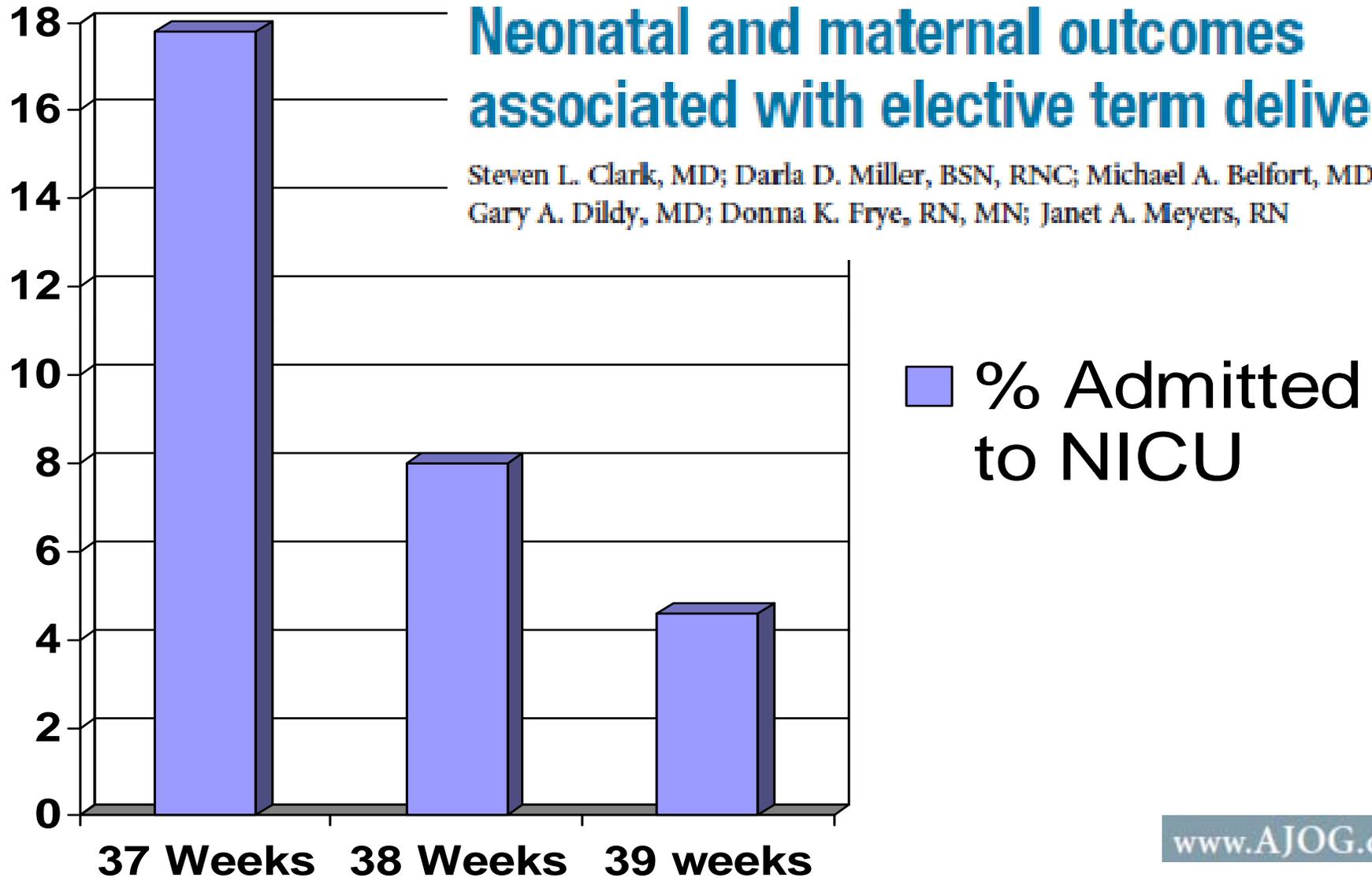


Tita ATN, Landon MB, Spong CY et al for NICHD MFMU

OBSTETRICS

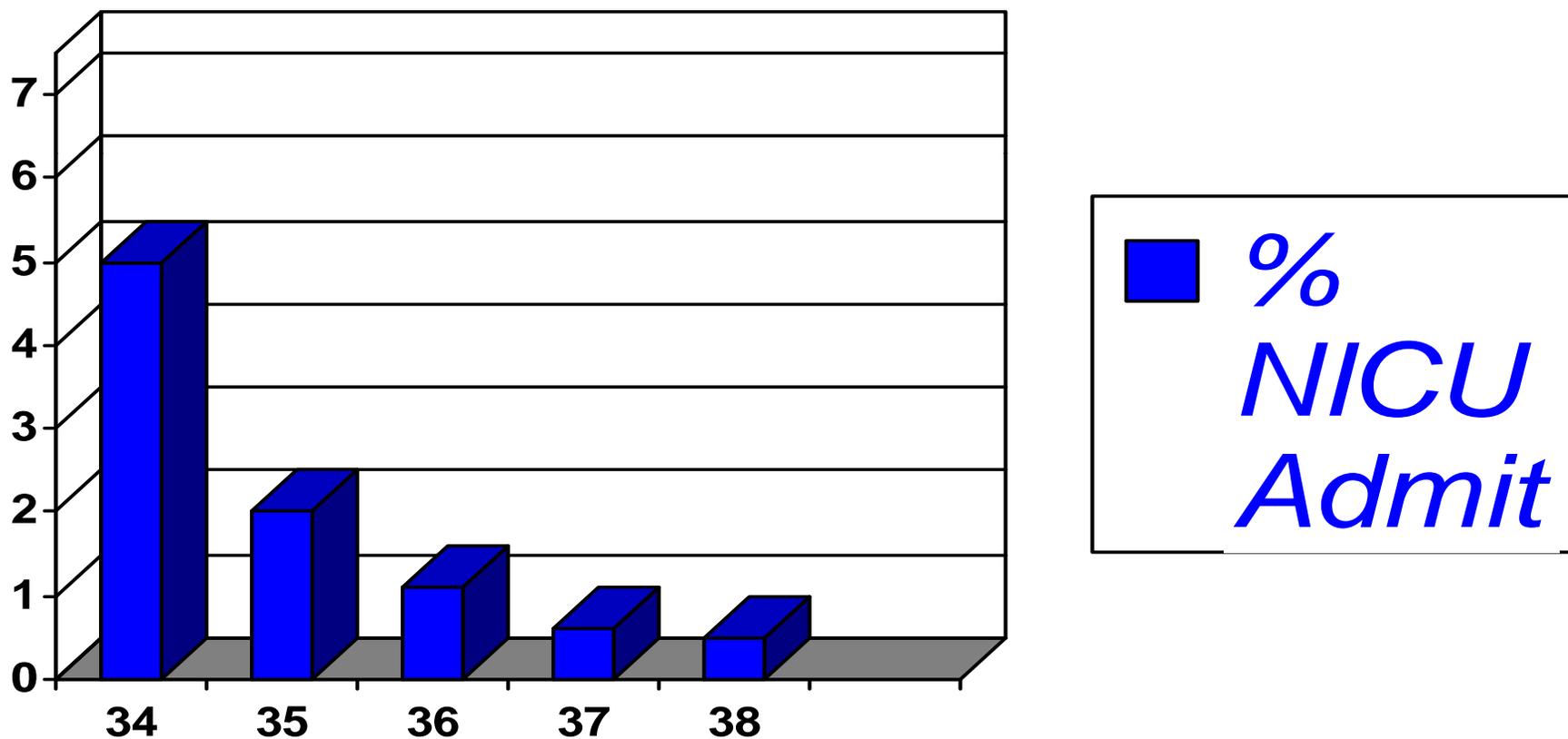
Neonatal and maternal outcomes associated with elective term delivery

Steven L. Clark, MD; Darla D. Miller, BSN, RNC; Michael A. Belfort, MD, PhD; Gary A. Dildy, MD; Donna K. Frye, RN, MN; Janet A. Meyers, RN



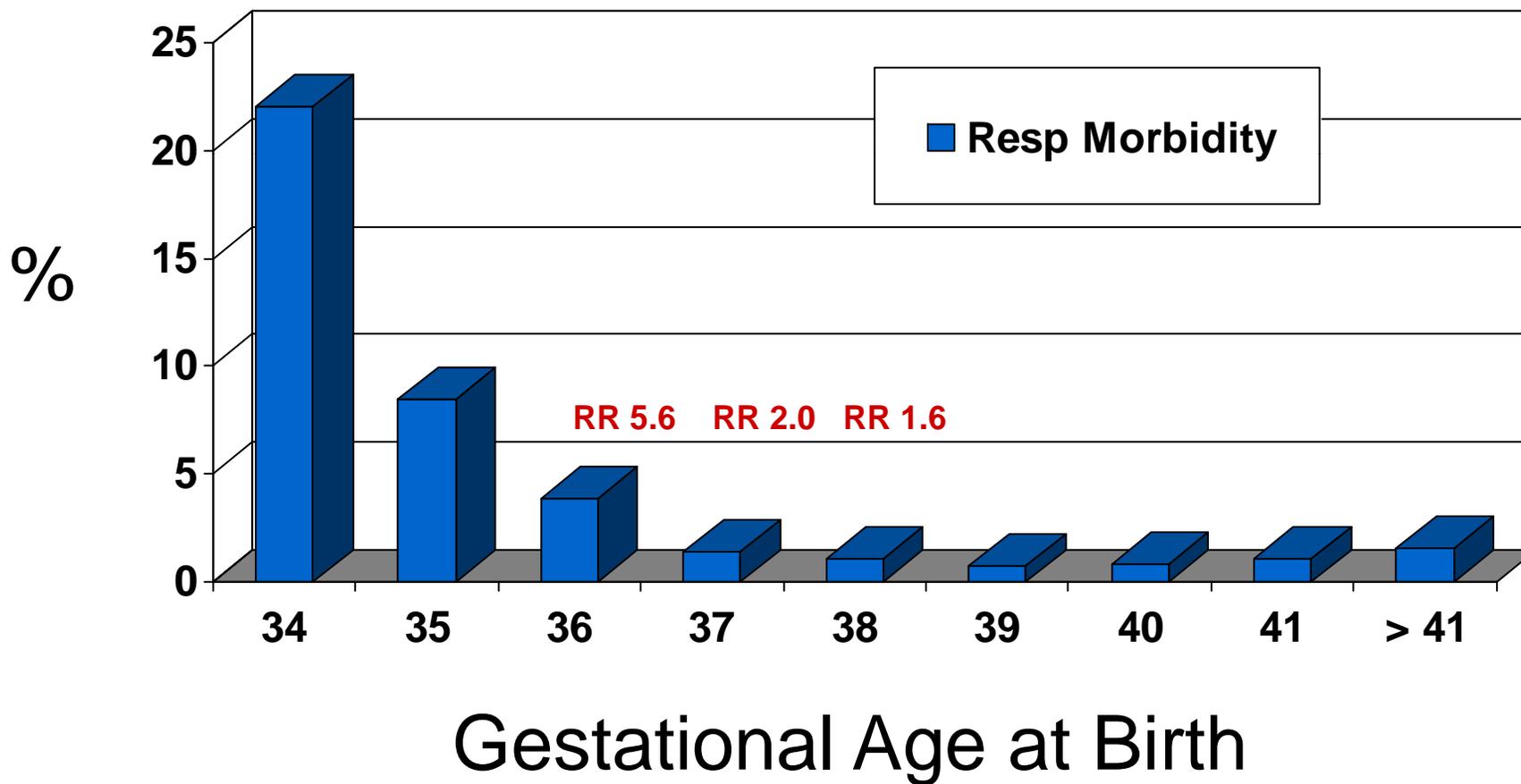
NICU Admission Rate Infants at 34 to 38 Weeks Gestation (No Elective Inductions)

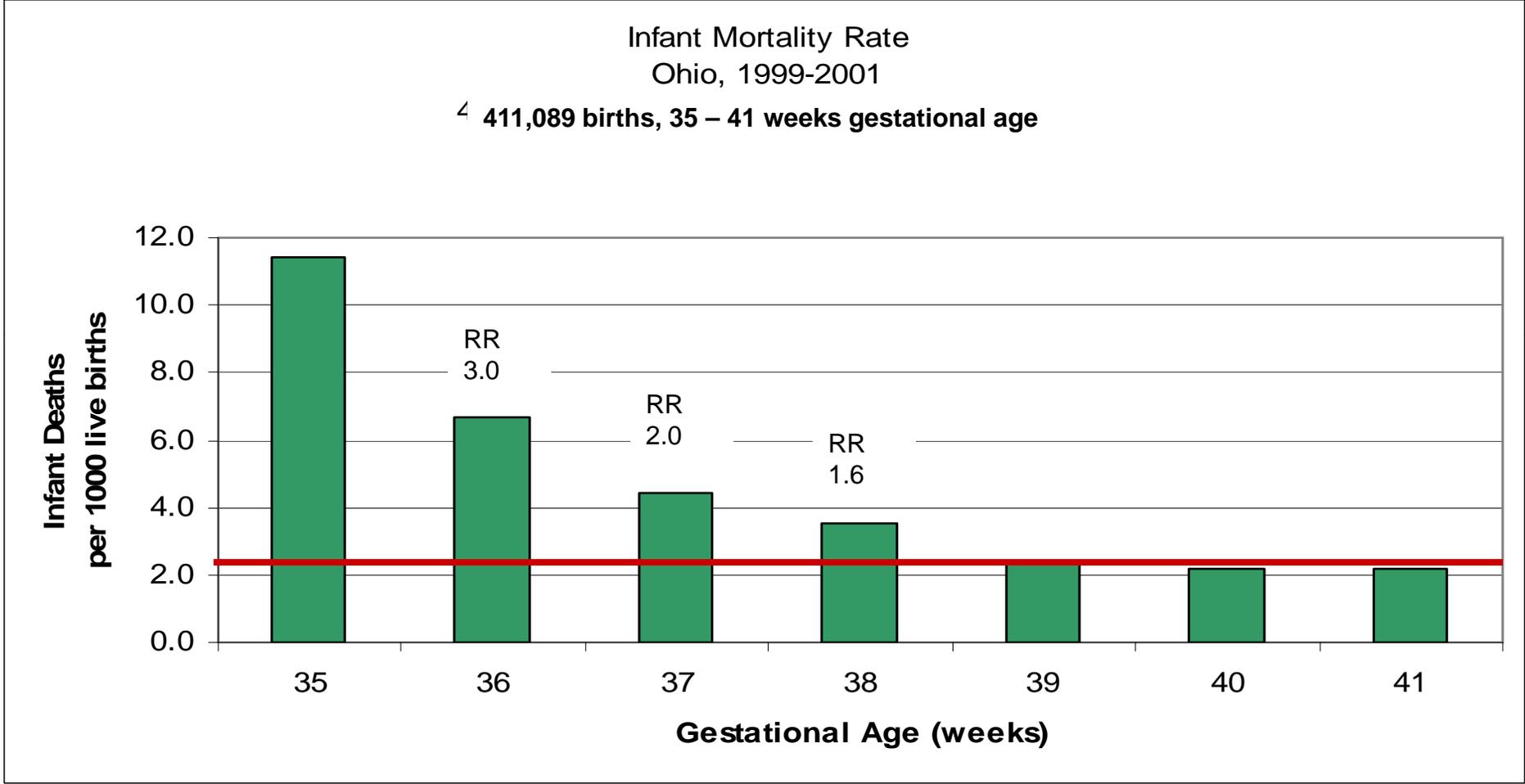
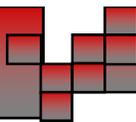
Parkland Hospital Obstet Gynecol 2008



Respiratory Morbidity in Near Term Infants

Yoder BA, Gordon MC, Barth WH Obstet Gynecol 2008



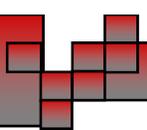


Infant Mortality Rates in Ohio by Gestational Age at Birth

Obstetrical Factors Contributing to a Culture of Scheduled Birth

- ↑ indicated inductions
- Better induction techniques
- Confidence in NICU care
- Better dates
- Antenatal tests not 100%
- Liability for any outcome
 - No suit for doing a section

- Time management
- Need to satisfy patients
- Competition for OR slots
- Cesarean on demand
- Availability of anesthesia
 - The tough case
 - Pain relief



ACOG Guidelines:

Indications for Induction of Labor

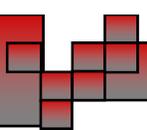
ACOG Practice Bulletin No. 10, 1999

- Examples = Abruptio, ... Preeclampsia, ...
- **“Labor may also be induced for logistic reasons, e.g., rapid labor, distance, or psychosocial reasons. In such circumstances, at least 1 of the criteria (for being > 39 weeks) should be met or fetal lung maturity should be established.”**

ACOG Guidelines to Confirm 39 Weeks Gestation

ACOG Practice Bulletin # 10, 1999

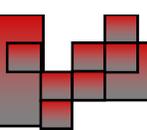
- FHT documented
 - x 20 weeks without electronic fetoscope or
 - x 30 weeks with Doppler
- 36 weeks since + Beta HCG by reliable lab
- **Ultrasound at 6 - 12 weeks → 39 weeks or >**
- **Ultrasound at < 20 weeks *confirms* Hx & PEx**
- **IOM PTB Report: Early Scan for All Patients**



The Washington Post May 21, 2006

As Babies are Born Earlier, They Risk Problems Later

The average U.S. pregnancy has shortened from 40 weeks to 39, driven by social and medical trends, e.g., older mothers, fertility treatments and more women's decision to choose when they will deliver. At the same time, medical advances enable doctors to **detect problem pregnancies earlier and to improve care for premature babies, prompting them to deliver babies early when something threatens their lives or those of their mothers.**

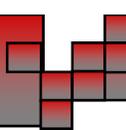


The Washington Post May 21, 2006

As Babies are Born Earlier, They Risk Problems Later

Here's the kicker:

Some question whether the increase in Caesareans and inductions is the reason for the drop in stillbirths. - they worry that **much of the increase may be due to women hastening delivery for non-medical reasons — they want to make sure their mother will be in town, their husband has a business trip pending, or they are just fed up with being pregnant.** An obstetrician in San Ramon, Calif. **routinely honors such requests for the wives of professional athletes so their husbands can be present. “I have no problem with that. We never compromise the mother or baby’s safety”**



The Pediatric Perspective

(Summary of the NICHD Late Preterm Workshop):

- ✓ Do some health care providers use “soft” indications for induction of labor in late-preterm pregnancies?
- ✓ Have the improved standards of neonatal care led to a sense of complacency concerning late-preterm births?
- ✓ Do some patients request early labor inductions (and their obstetricians oblige) for the sake of mutual conveniences? If so, how common are such practices?
- ✓ Are there variations in standards of care for late-preterm birth?

Pediatrics does not speak the same language as OB

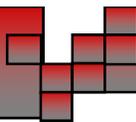
- **Late PTB = Not Term = Not 39 Weeks**
= 38⁶ = Late
- **Scheduled = Elective = Convenient**
 - **A Scheduled Birth Between 34⁰ and 38⁶ = Elective**
- **Definition of Terms on Birth Certificates ?**

Obstetrics

- Elective = Not emergent
- Denominator: All fetuses
- Measure: gestational age
- Good dates: Hx= US <20

Pediatrics

- Elective = Convenient
- Denominator: Live born
- Measure: birth weight
- Good dates: Ballard



Decreasing Elective Deliveries Before 39 Weeks of Gestation in an Integrated Health Care System

Bryan T. Oshiro, MD, Erick Henry, MPH, Jante Wilson, RN, D. Ware Branch, MD, and Michael W. Varner, MD, for the Women and Newborn Clinical Integration Program

Rate of NICU Admission By Gestational Age For Infants Born After Normal Pregnancies

Oshiro et al
Obstet Gynecol 2009

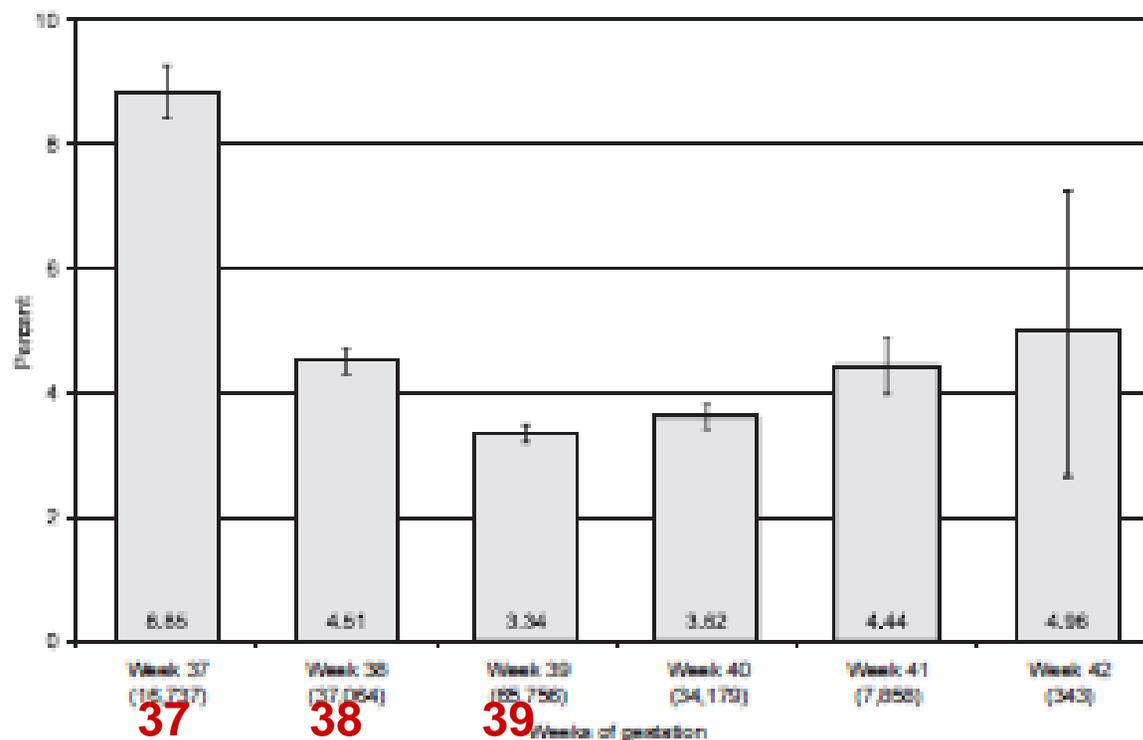
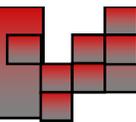


Fig. 1. Rate of neonatal intensive care unit admissions for normal pregnancies by gestational age. Two standard deviations shown by vertical lines. Data from Intermountain Healthcare.

Oshiro. Decreasing Elective Deliveries Before 39 Weeks. Obstet Gynecol 2009.

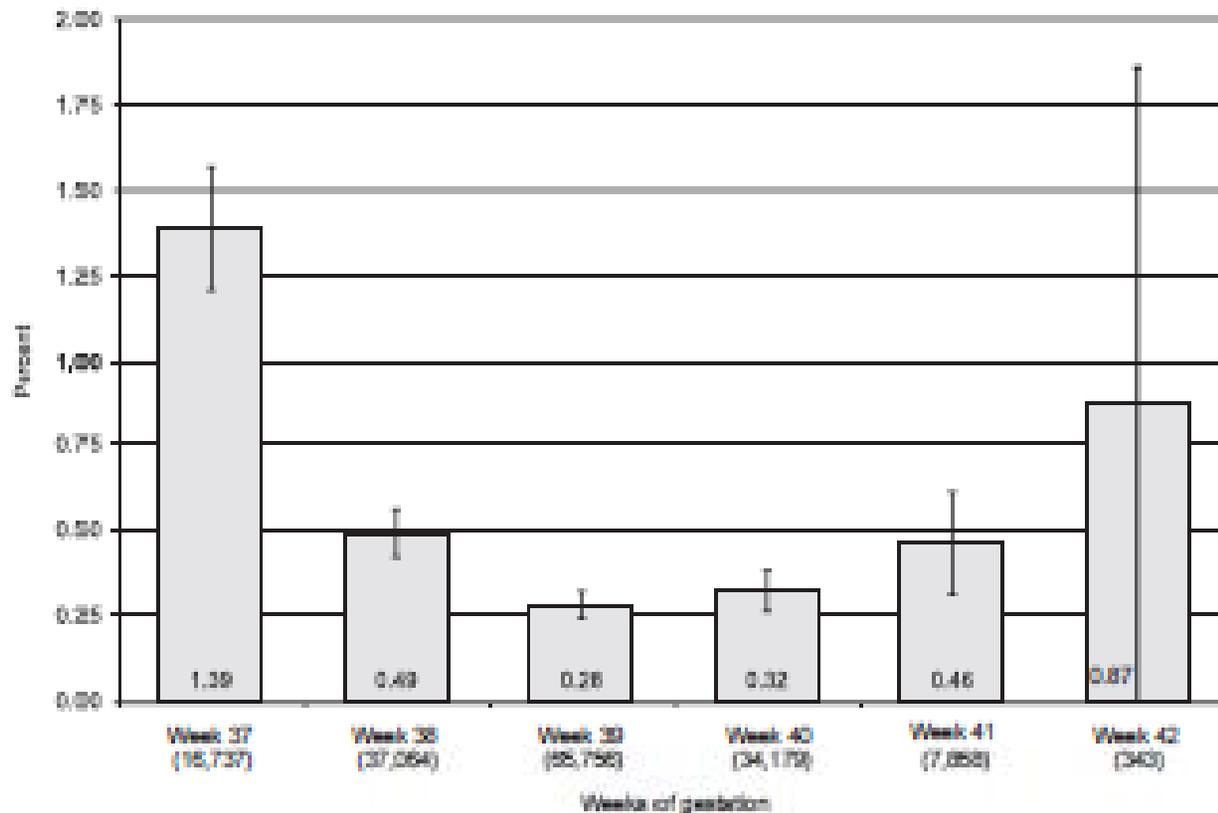


Rate of Ventilator Use By Gestational Age For Infants Born After Normal Pregnancies

Oshiro et al
Obstet Gynecol 2009

Decreasing Elective Deliveries Before 39 Weeks of Gestation in an Integrated Health Care System

Bryan T. Oshiro, MD, Erick Henry, MPH, Jante Wilson, RN, D. Ware Branch, MD, and Michael W. Varner, MD, for the Women and Newborn Clinical Integration Program



37

38

39

Percent Elective Deliveries 1999 – 2008

Oshiro et al Obstet Gynecol 2009

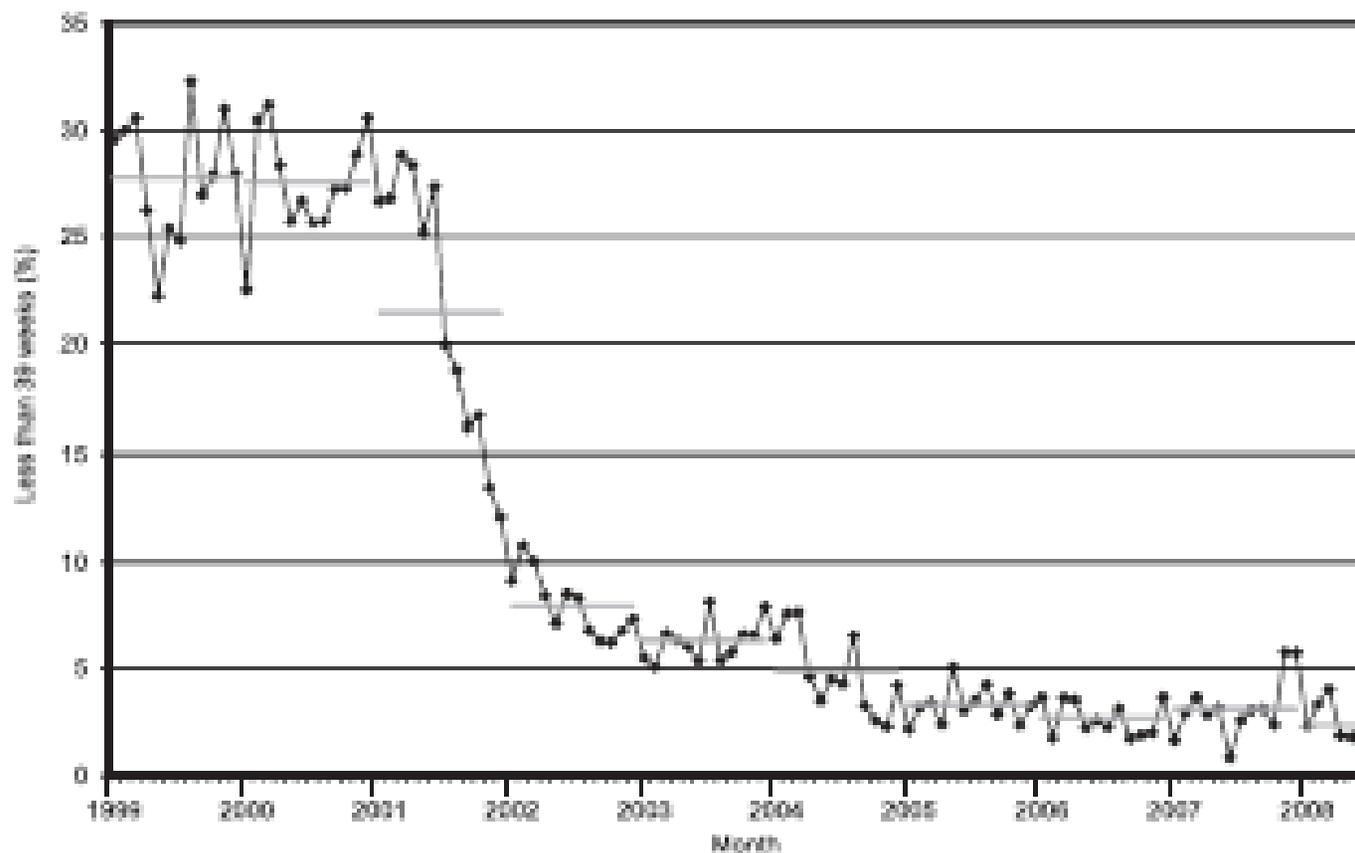
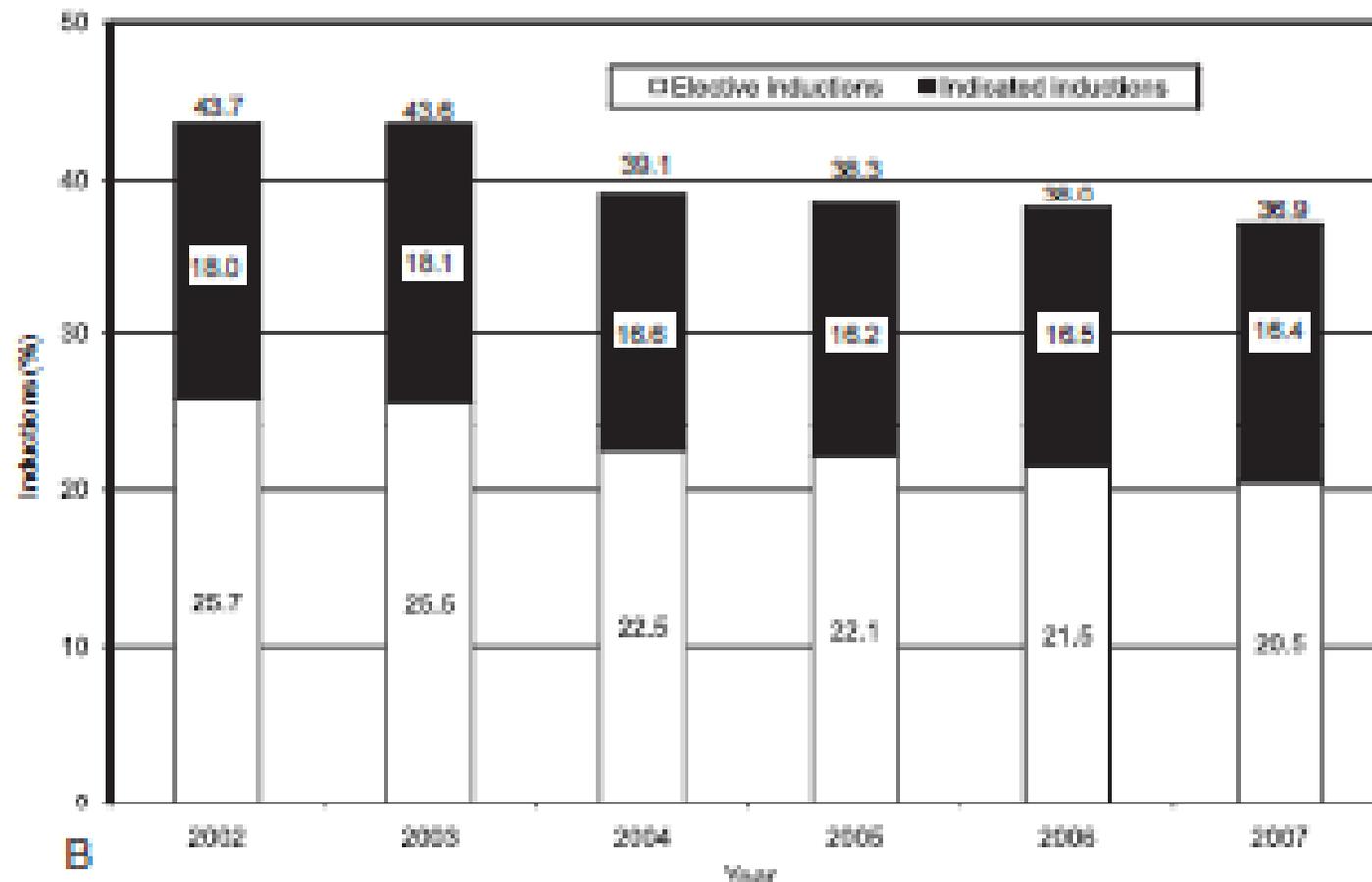


Fig. 3. Percent of elective deliveries before 39 weeks of gestation. Data from Intermountain Healthcare, Oshiro. *Decreasing Elective Deliveries Before 39 Weeks*. *Obstet Gynecol* 2009.

Yearly Rate of Elective & Indicated Inductions 2002 – 2007

Oshiro et al 2009





Ohio Perinatal Quality Collaborative

- CMS Grant to Ohio for Optimal Care re: PTB
- Collaborative = Hospitals Do Same QI Task
- Obstetrical = ↓ Inappropriate Near- & Late PTB
 - Near Term Births at 36-38 → > NICU Admits
 - Late Preterm Will ↓ as Near Term Criteria Adopted

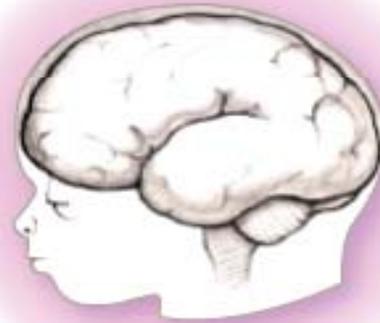
<http://www.opqc.net>



- Document method of pregnancy dating
- Document reason for scheduled delivery < 39 w
- Document discussion with patient re risks & benefits of delivery < 39 weeks
- Scheduled delivery form
- Communicate with Pediatricians directly
- Promote early ultrasound
- OPQC tracks data / Statewide effort / Birth Cert

March of
Dimes
'Brain Card'
for use by
caregivers to
explain the
advantages
of delivery
after 39
weeks

A baby's brain at 35 weeks weighs only
two-thirds of what it will weigh at 40 weeks.



35 weeks



40 weeks

The OPQC Scheduled Delivery Brochure for Clinics and Doctors' Offices

Scheduled Delivery

A scheduled delivery is when you and your doctor pick the day that you will be delivered, either by cesarean delivery or by inducing your labor. Most of the time a delivery is scheduled because of the medical needs of the mother or the baby. Some women may prefer to have their delivery scheduled even without medical need. A scheduled delivery may appeal to both the woman and the health care provider because it helps them plan their schedules.

The Ohio Perinatal Quality Collaborative recommends scheduled deliveries before 39 weeks should occur *only* when there is strong evidence that the health of the woman or baby is at risk if the pregnancy continues.

In the United States in 2005, labor was induced in 1 out of 4 term deliveries and 1 out of 3 women had a cesarean. Some health care providers believe that many scheduled deliveries are medically unnecessary.

The Risk of a Near Term Birth

Inductions may contribute to the growing number of babies who are born "near term," between 36 and 38 weeks gestation. While babies born at this time are usually considered healthy, they are more likely to have medical problems than babies born a few weeks later at full term (39-40 weeks).

A baby's lungs and brain mature late in pregnancy. Compared to a full-term baby, an infant born between 36 and 38 weeks gestation is:

- ❖ 2 to 3 times more likely to be admitted to intensive care. This will mean a longer and more difficult hospital stay for your baby. It may also make it harder for the two of you to breastfeed or bond.
- ❖ More likely to have trouble breathing and need to be connected to a breathing machine (ventilator) to help her breathe.
- ❖ More likely to have trouble maintaining body temperature and need to spend time in a warming area (incubator) to keep her body temperature stable.



All Ohio Births

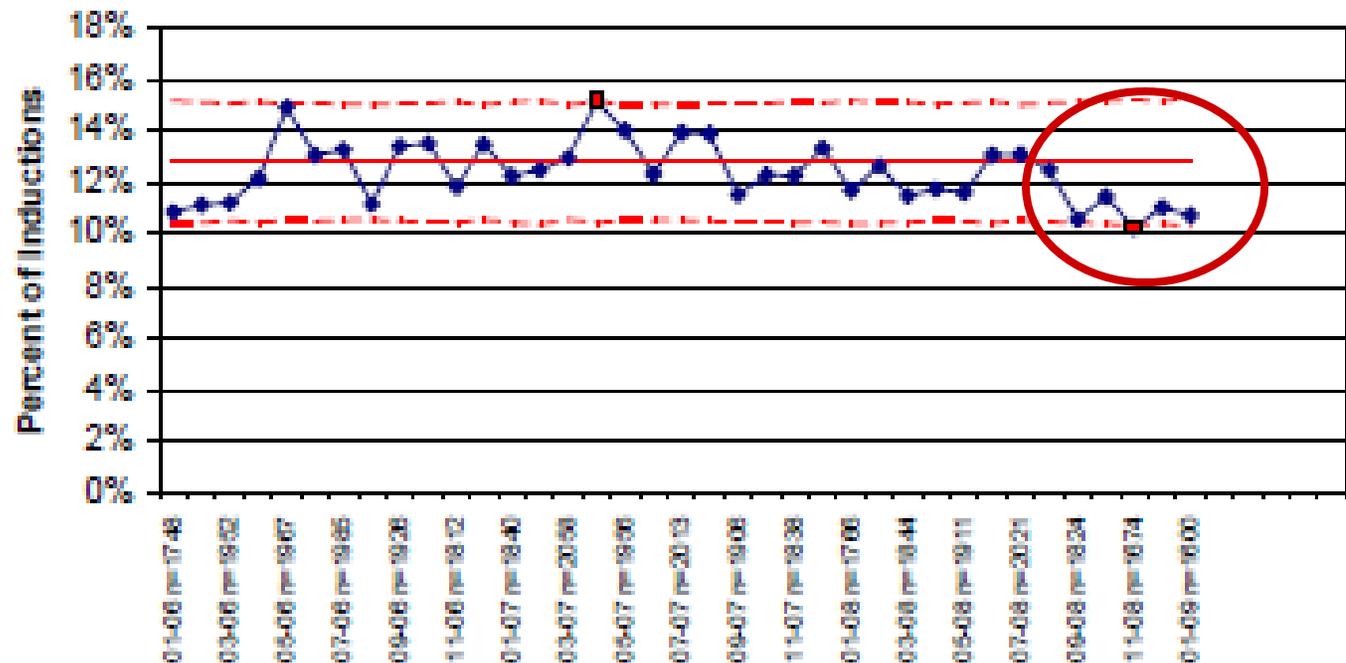
7-08 → 2-09

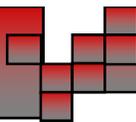
**% Inductions
36-38 wks
w/o indication
on birth
certificate**

Source: Ohio Vital
Statistics

Percent of Inductions 36 to 38 Weeks Without Medical or Obstetric Indication

Baseline: January, 2006 through December, 2007





Ohio Perinatal Quality Collaborative

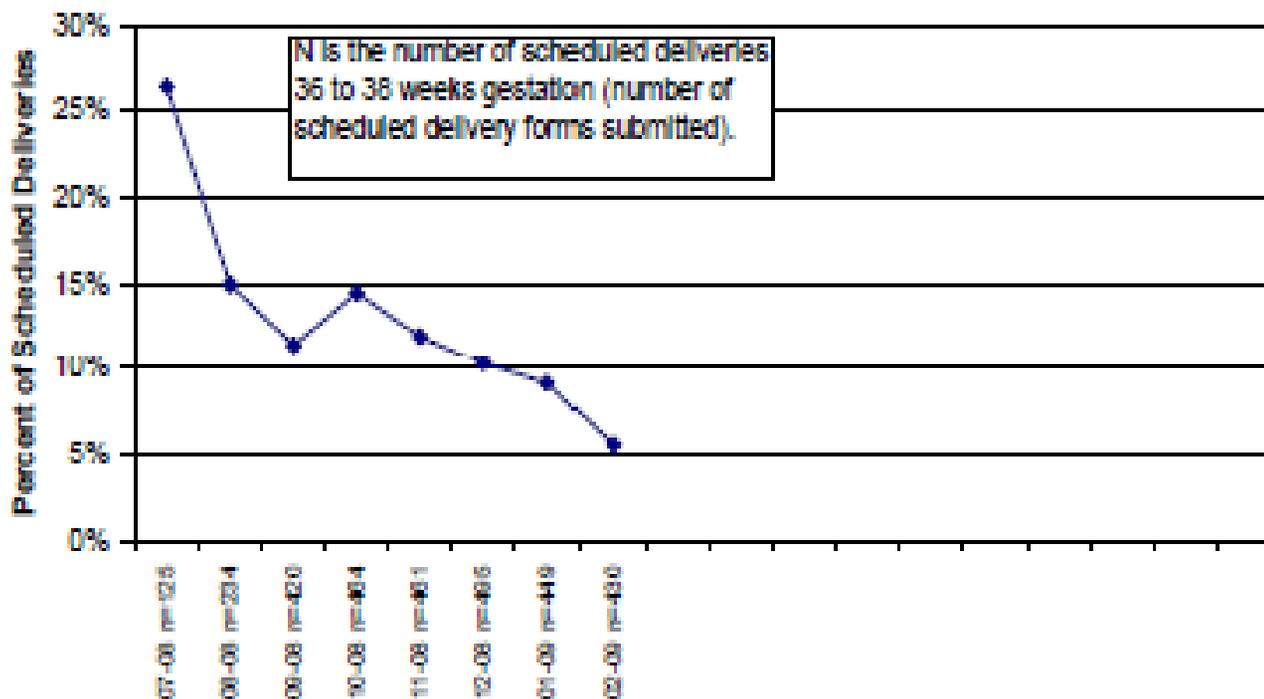
OPQC Sites

7-08 → 2-09

**Percent of All
Scheduled
Births 36-38
w/o indication
Documented**

OPQC data

Percent of Scheduled Deliveries 36 to 38 Weeks Without Medical or Obstetrical Indication Documented

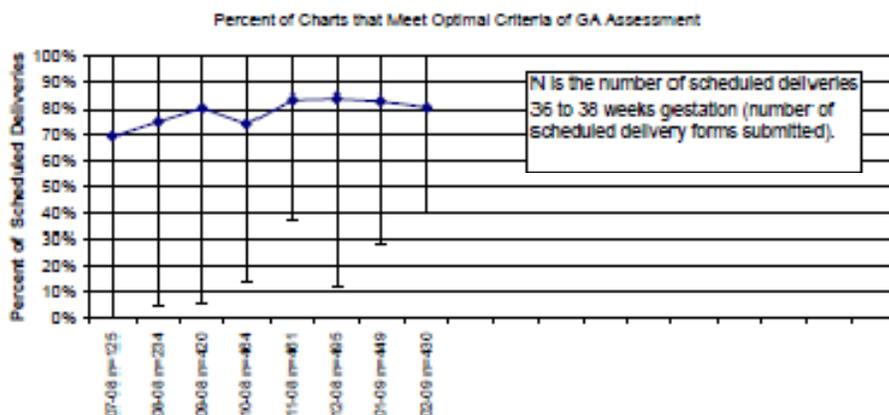
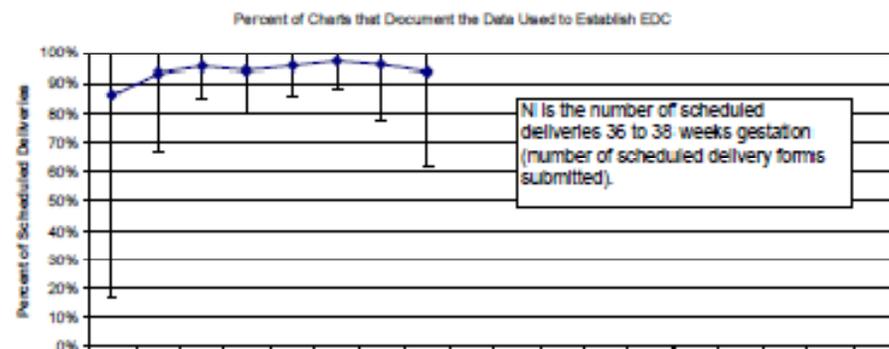
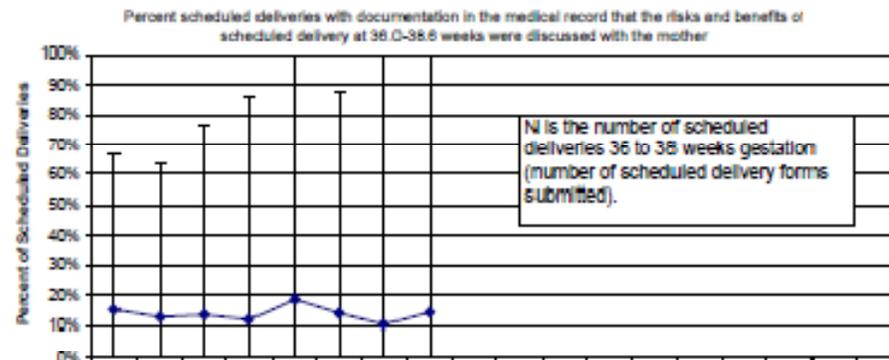


■ % of charts w/ risks
& benefits of scheduled
birth documented

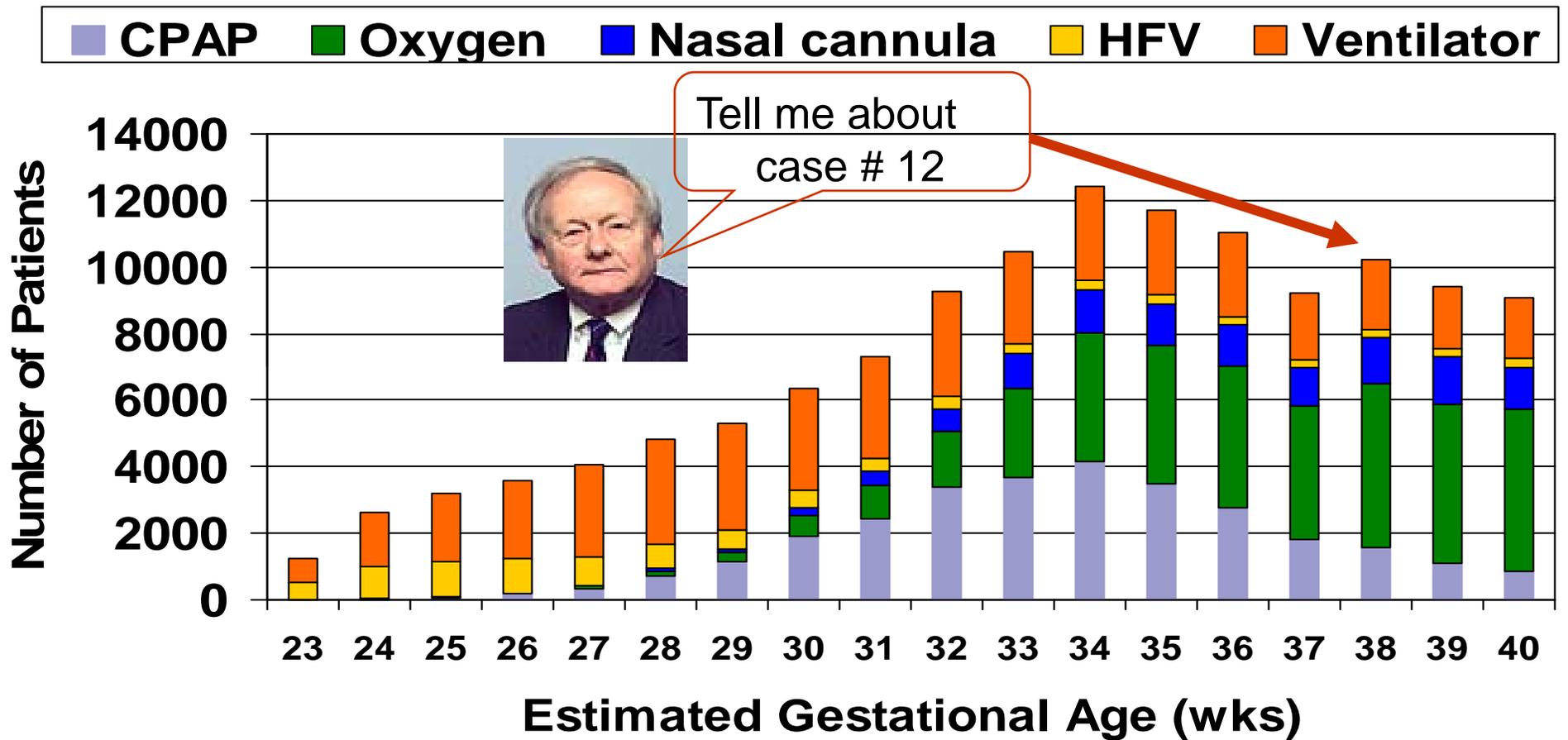
■ % of charts w/ method
of EDC documented

■ % of charts w/ optimal
criteria for Gest Age

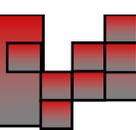
July 2008 → February 2009



Near Term Birth: An MOC Module?



Clark R et.al, Pediatr Database, 2005



Obstetrical Best Practices

- Establish Dates Early w/ ACOG Criteria (1999 PB)
- Patient Education: 39 weeks & ART risks
- Establish Hospital Policies for Scheduled Births
- Document Benefits & Risks of Scheduled Births
 - Signed Consent in Chart
- Improve Communication With Pediatricians
 - Physician to Physician Before AND After Birth
- Maintenance of Certification Module
- Expand Schedule to Weekends