

Healthy Birth Initiative UNMH Experience

Kelly Gallagher, CNM

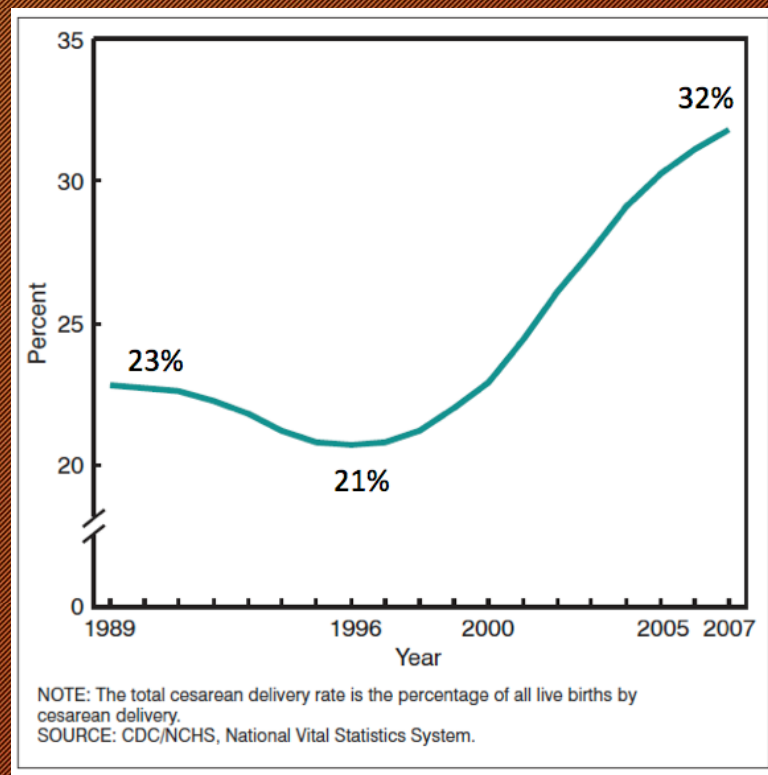
HBI/Reducing Primary Cesareans

- Promote physiologic birth practices to reduce cesarean birth in healthy first time mothers
- 21 hospitals across country initially
- Implementing evidence-based programs to promote physiologic birth and avoid unnecessary cesarean section

Bundles

- Promoting Comfort in Labor
 - Provide non-pharm support, continuous labor support, shared decision making
- Assessing Fetal Well-being
 - Move to IA as standard of care for term women without medical or obstetric risk factors
- Promoting Progress in Labor
 - Diagnosis of active labor, receives care that promotes spontaneous progress, assessment of active labor using graphic tool, support to avoid directed pushing

Cesarean Births Have Risen by Over 50% in the Last 15 years



US 2013= 32.7%

CA 2013= 33.1%

What are the Indications for Cesarean Section?

CS Indication	Proportion of <u>Overall</u> CS Rate	Proportion of <u>Primary</u> CS Rate	CS Rate for <u>this</u> Indication
Repeat (prior)	30-35%		90+%
“Abnormal Labor” (CPD/FTP)	25-30%	35-45%	variable
“Fetal Distress”	10-15%	15-20%	variable
Breech/Malpres.	10%	15-20%	98%
Multiple Gestation	5-9%	10-15%	60-80%
Other: Placenta Previa, Herpes, etc	~5%	~10-15%	90%

Importance of the First Birth

- If you have a CS in the first labor, over 90% of ALL your subsequent births will be by Cesarean Section
- If you have a vaginal birth in the first labor, over 90% of ALL your subsequent births will be vaginal

A Classic Example of "Path Dependency"

How do we focus QI activity on preventing First-birth (Primary) Cesarean sections?

Nulliparous, Term, Singleton, Vertex (NTSV) Cesarean Section Rate: Performance Measure

- Risk Stratified (“standard population”)
- Widely Adopted Nationally
 - ACOG: Task Force on Cesarean Section rates (2000)
 - DHHS: Healthy Person 2010 and 2020
 - NQF endorsed, Joint Commission Perinatal Core Measure (PC-02), LeapFrog, CMS
- Further risk adjustment adds little

NTSV Cesarean Section Rate: Strengths

- Simple concept
- Focuses on the main source of variation
- Focuses on the first birth, and therefore her entire reproductive future
- Focuses on labor management
- Risk-stratified, no further risk-adjustment needed

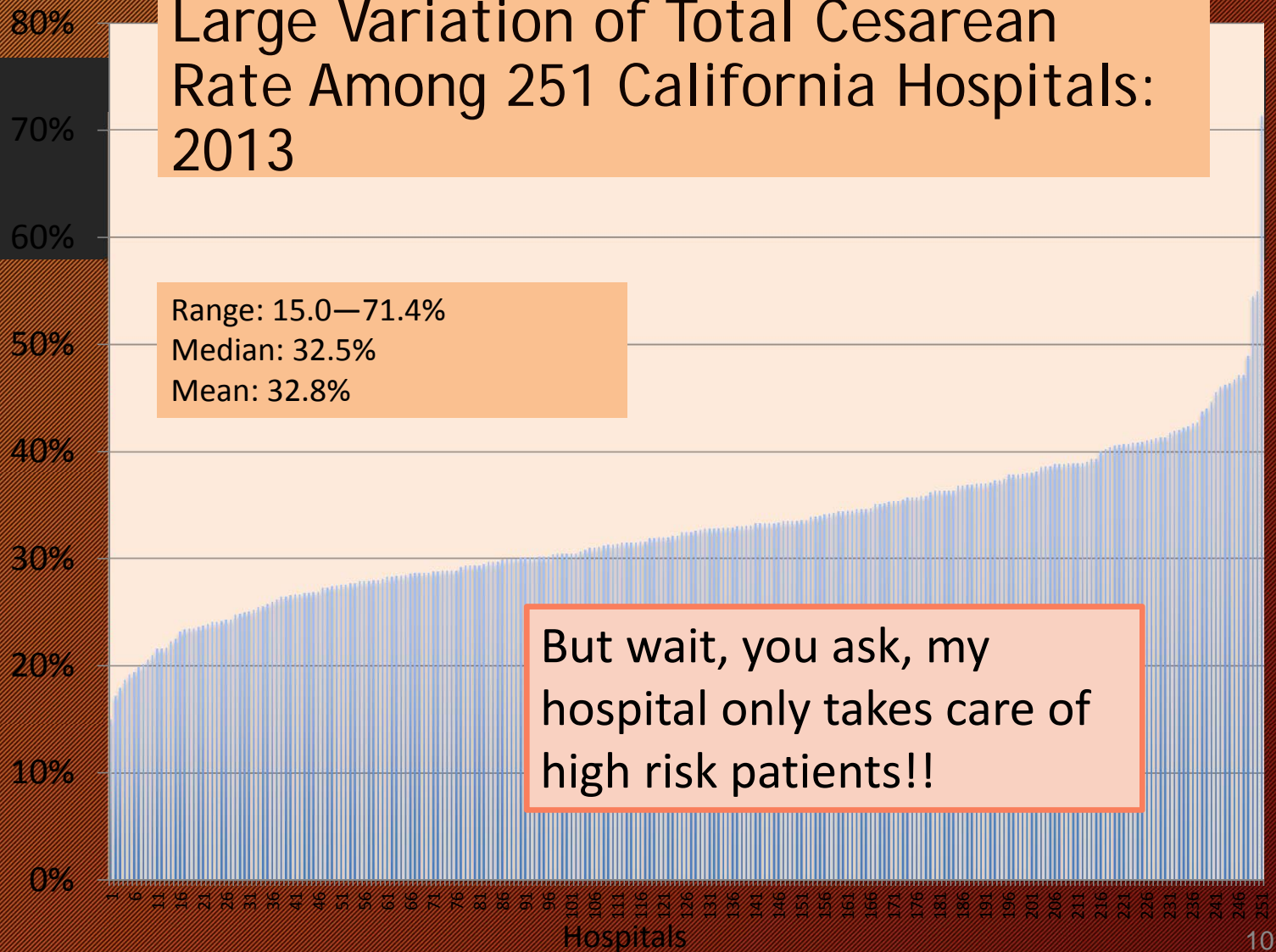
Any Downsides?

- Balancing measures are very important
- More vaginal births: Any increase in 3rd or 4th degree lacerations?
 - Zero change from the prior 4 year baseline
- Most important measure is Healthy Babies
 - NQF measure “Healthy Term Newborns” (#0716) recently reconfigured as “Unexpected Newborn Complications”
 - Asks whether term babies without preexisting conditions had any major complications during birth or neonatal period

Large Variation of Total Cesarean Rate Among 251 California Hospitals: 2013

Range: 15.0—71.4%
Median: 32.5%
Mean: 32.8%

But wait, you ask, my hospital only takes care of high risk patients!!



Extreme Variation of NTSV CS Rate Among 251 California Hospitals: 2013

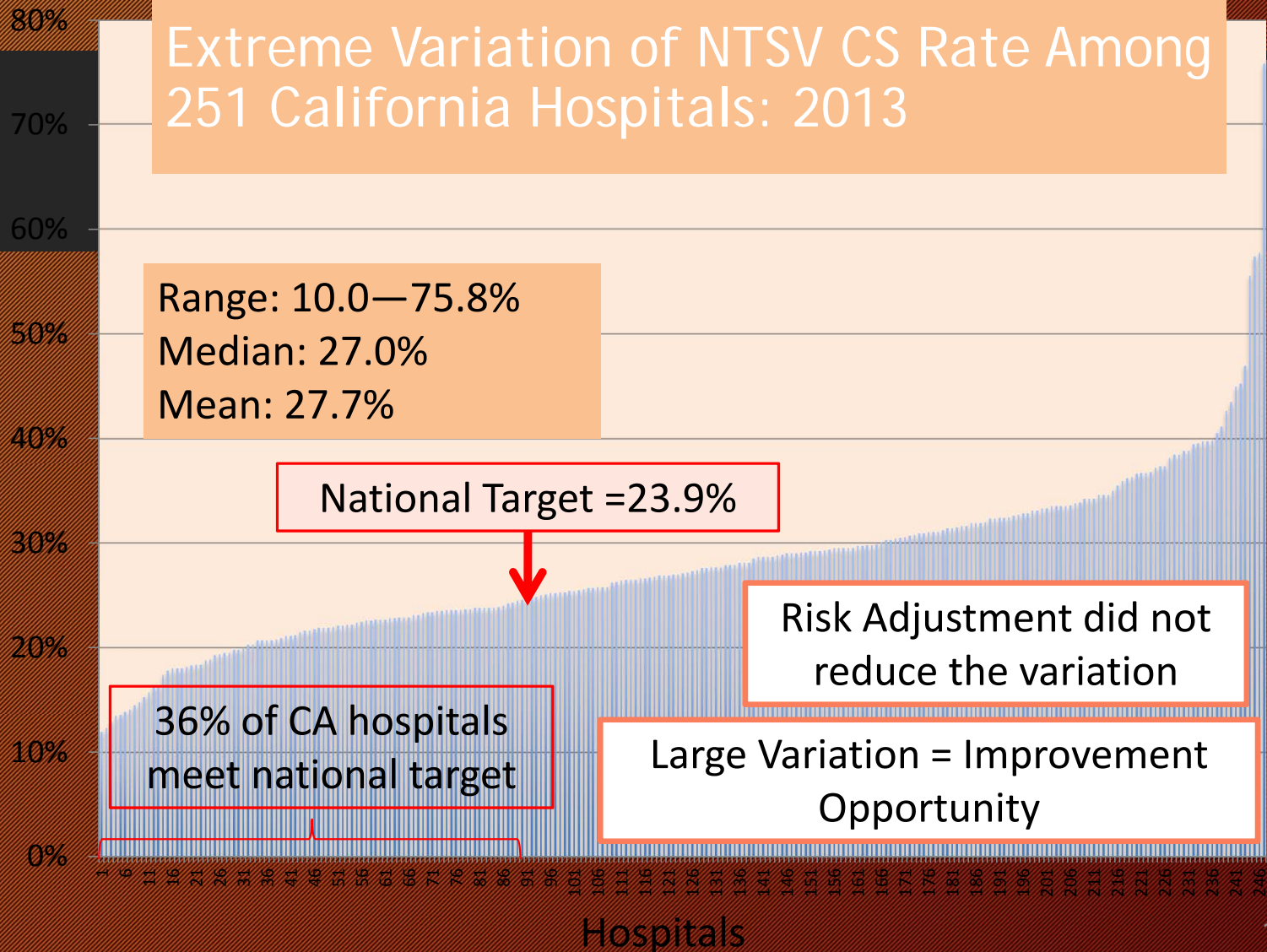
Range: 10.0—75.8%
Median: 27.0%
Mean: 27.7%

National Target = 23.9%

36% of CA hospitals
meet national target

Risk Adjustment did not
reduce the variation

Large Variation = Improvement
Opportunity

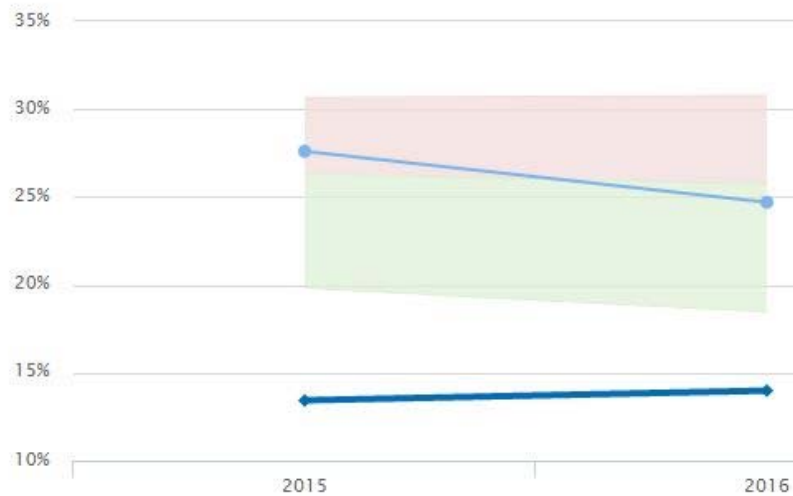




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Reducing Primary Cesareans

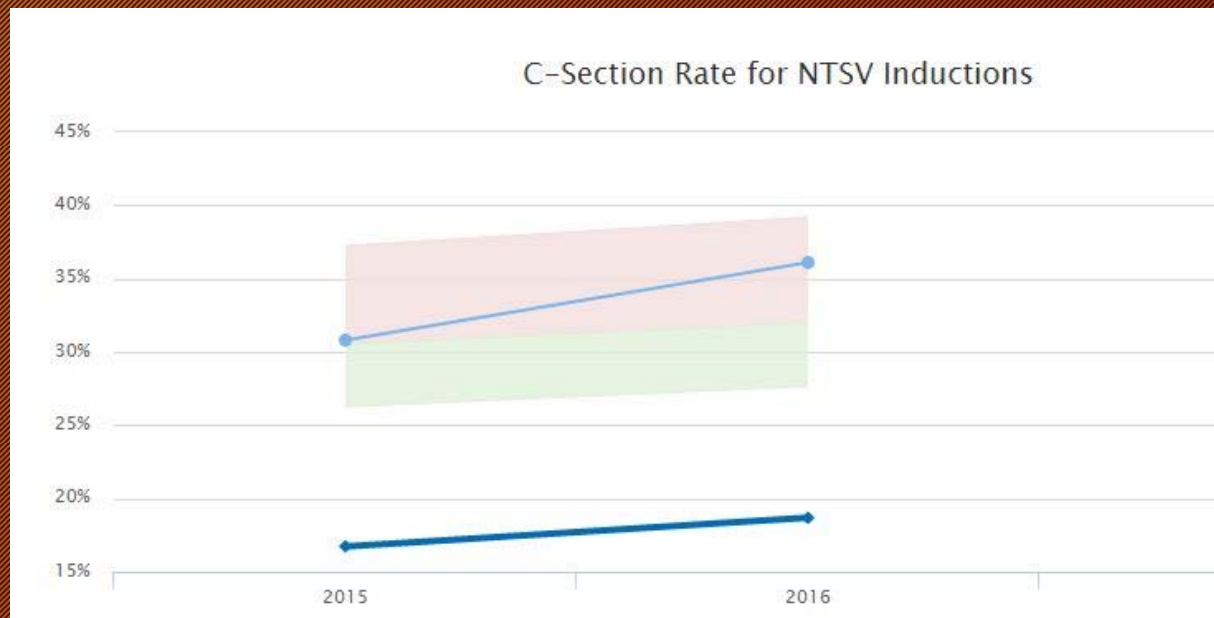
NTSV Cesarean Rate





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Spontaneous Labor and Delivery Rate





The American College of
Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS



Society for
Maternal-Fetal
Medicine

OBSTETRIC CARE CONSENSUS

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Safe Prevention of the Primary Cesarean Delivery

New National Guidelines for Defining Labor
Abnormalities and Management Options



Consortium on Safe Labor

Defining An Alternative to Friedman's Labor Curve

- 19 hospitals across the US with EHRs that contained detailed labor & delivery data and neonatal outcomes
- 228,668 deliveries (87% in 2005-7)
- 62,415 spontaneous labor NTSV births with normal outcomes
- Focus on redefining normal labor

Zhang J et al. Contemporary patterns of spontaneous labor with normal neonatal outcomes. Obstet Gynecol 2010;116:1281-7.

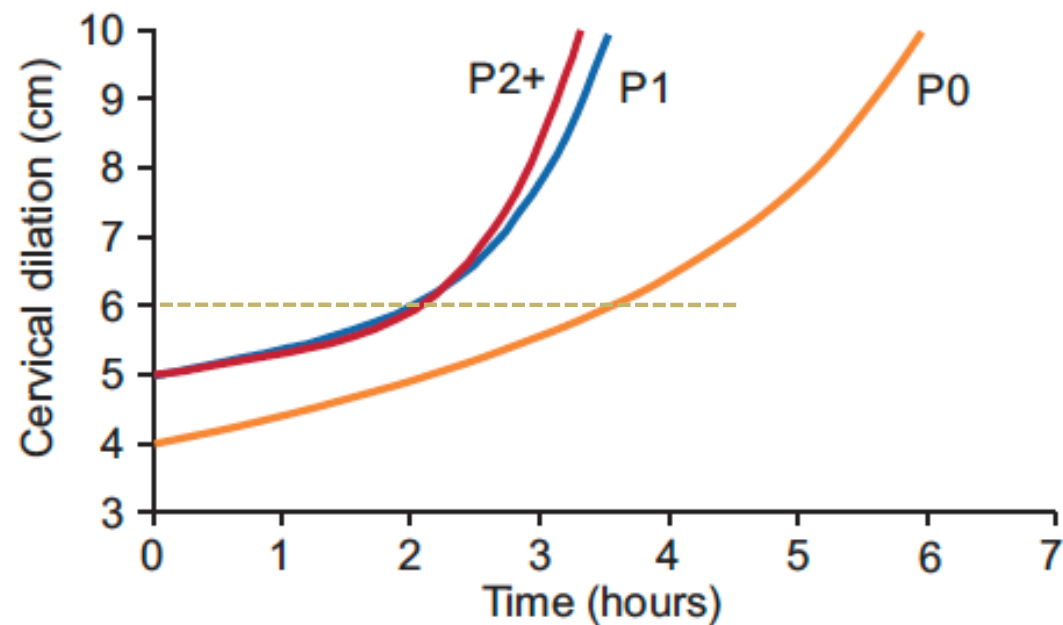
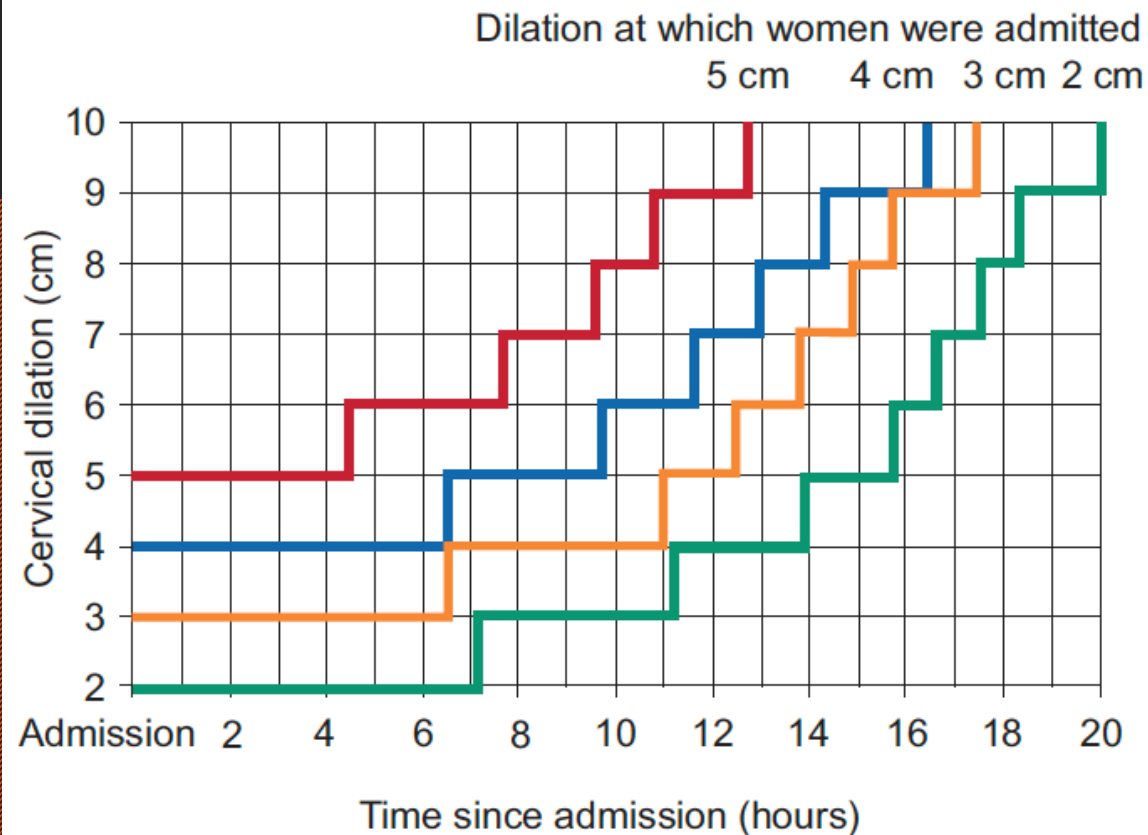


Fig. 2. Average labor curves by parity in singleton term pregnancies with spontaneous onset of labor, vaginal delivery, and normal neonatal outcomes. P0, nulliparous women; P1, women of parity 1; P2+, women of parity 2 or higher.

Zhang. *Contemporary Labor Patterns*. Obstet Gynecol 2010.

Finding: Multips had a clear inflexion point at 6cm, nullips less clear



The 95th percentiles of cumulative duration of labor by cervical dilation at admission (NTSV in spont labor)

Table 3. Recommendations for the Safe Prevention of the Primary Cesarean Delivery ⇐

Recommendations	Grade of Recommendations
<i>First stage of labor</i>	
A prolonged latent phase (eg, greater than 20 hours in nulliparous women and greater than 14 hours in multiparous women) should not be an indication for cesarean delivery.	1B Strong recommendation, moderate quality evidence
Slow but progressive labor in the first stage of labor should not be an indication for cesarean delivery.	1B Strong recommendation, moderate quality evidence
Cervical dilation of 6 cm should be considered the threshold for the active phase of most women in labor. Thus, before 6 cm of dilation is achieved, standards of active phase progress should not be applied.	1B Strong recommendation, moderate quality evidence
Cesarean delivery for active phase arrest in the first stage of labor should be reserved for women at or beyond 6 cm of dilation with ruptured membranes who fail to progress despite 4 hours of adequate uterine activity, or at least 6 hours of oxytocin administration with inadequate uterine activity and no cervical change.	1B Strong recommendation, moderate quality evidence

Safe prevention of the primary cesarean delivery. Obstetric Care Consensus No. 1.
American College of Obstetricians and Gynecologists. Obstet Gynecol 2014;123:693-711.

OBSTETRICS

Intrapartum management of category II fetal heart rate tracings: towards standardization of care

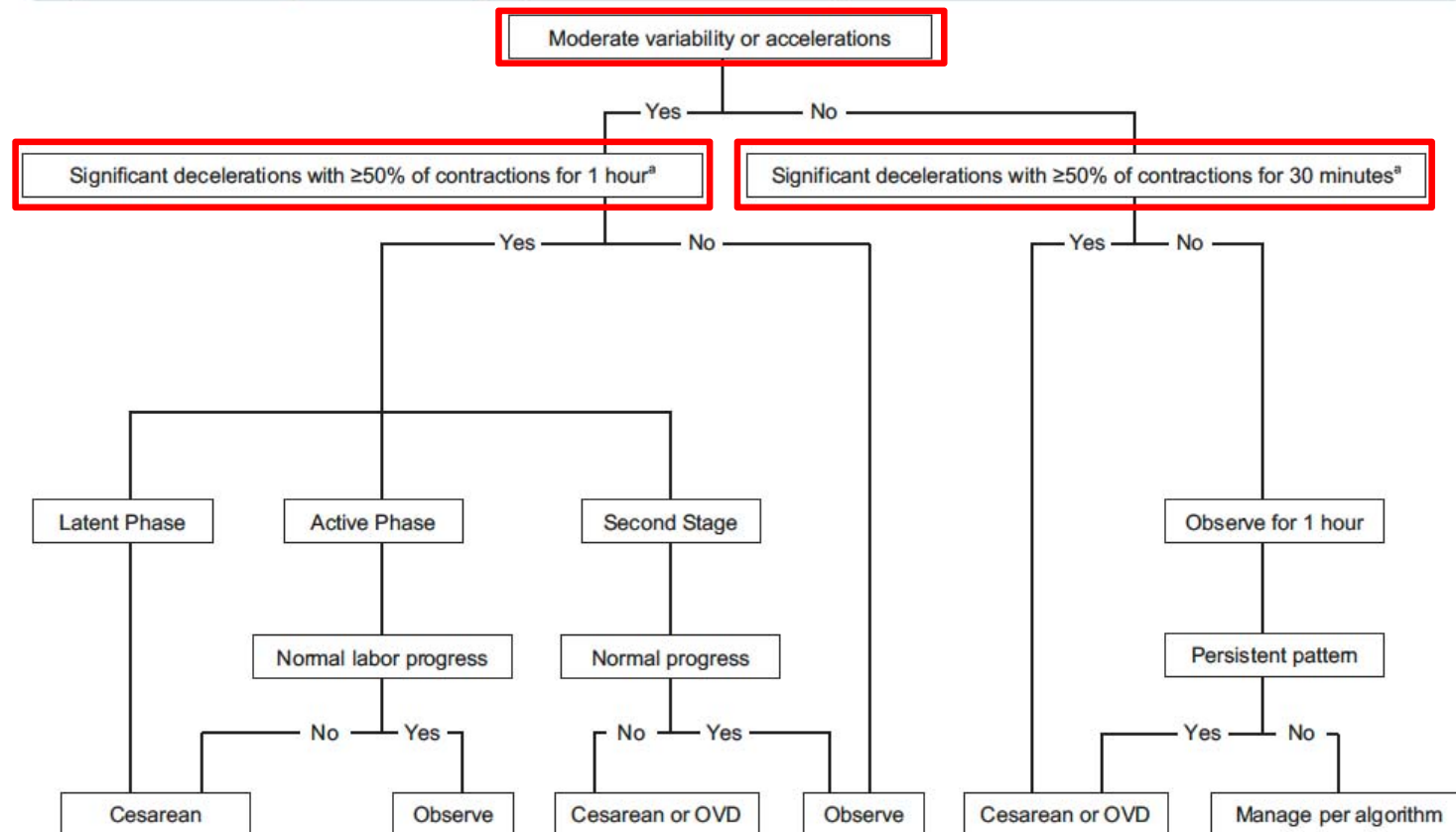
Steven L. Clark, MD; Michael P. Nageotte, MD; Thomas J. Garite, MD; Roger K. Freeman, MD; David A. Miller, MD; Kathleen R. Simpson, RN, PhD; Michael A. Belfort, MD, PhD; Gary A. Dildy, MD; Julian T. Parer, MD; Richard L. Berkowitz, MD; Mary D'Alton, MD; Dwight J. Rouse, MD; Larry C. Gilstrap, MD; Anthony M. Vintzileos, MD; J. Peter van Dorsten, MD; Frank H. Boehm, MD; Lisa A. Miller, CNM, JD; Gary D. V. Hankins, MD

Common sense approach to
Category II fetal monitor strips!

Clark SL et al. Am J Obstet Gynecol Aug 2013;209(2):89-97

FIGURE 1

Algorithm for management of category II fetal heart rate tracings



OVD, operative vaginal delivery.

^aThat have not resolved with appropriate conservative corrective measures, which may include supplemental oxygen, maternal position changes, intravenous fluid administration, correction of hypotension, reduction or discontinuation of uterine stimulation, administration of uterine relaxant, amnioinfusion, and/or changes in second stage breathing and pushing techniques.

Clark. Category II FHRT. Am J Obstet Gynecol 2013.

Primary CS QI Pathways

Which is the driver in my hospital??

- Latent phase admission
- Nullip (first birth) labor induction
 - Esp. with unfavorable cervix
- Dystocia/Failure to progress
 - Arrest or protraction disorder
- Non-reassuring Fetal Status
 - Oxytocin/misoprostol associated tachysytole
- 2nd Stage (failure of descent)
- Predicted macrosomia
- Patient choice

What's happening at UNMH?

- Promoting progress in labor
 - IA for appropriate candidates
 - Long term dream for labor lounge
 - Long term dream for doula service

4 Key Strategies for Reducing Primary Cesarean Sections

- Establish the view that “Cesarean Section rates are important” among employers, purchasers and health plans
- Provide rapid-cycle data with standard measures for all facilities and providers
- Promote public and patient engagement
- Change the culture on L&D to better support labor and vaginal birth

By Katy Backes Kozhimannil, Michael R. Law, and Beth A. Virnig

Cesarean Delivery Rates Vary Tenfold Among US Hospitals; Reducing Variation May Address Quality And Cost Issues

DOI: 10.1377/hlthaff.2012.1030
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NO. 3 (2013): 527-535
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Foundation, Inc.

ABSTRACT Cesarean delivery is the most commonly performed surgical procedure in the United States, and cesarean rates are increasing. Working with 2009 data from 593 US hospitals nationwide, we found that cesarean rates varied tenfold across hospitals, from 7.1 percent to 69.9 percent. Even for women with lower-risk pregnancies, in which more limited variation might be expected, cesarean rates varied fifteenfold, from 2.4 percent to 36.5 percent. Thus, vast differences in practice patterns are likely to be driving the costly overuse of cesarean delivery in many US hospitals. Because Medicaid pays for nearly half of US births, government efforts to decrease variation are warranted. We focus on four promising directions for reducing these variations, including better coordinating maternity care, collecting and measuring more data, tying Medicaid payment to quality improvement, and enhancing patient-centered decision making through public reporting.

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