Emphasis on Safe Prevention of the Primary Cesarean Section: How Can It Influence Your Practice?

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Mentor for CMQCC Safe Prevention of the Primary Cesarean Section, Round 3

Steps To Take: Incentivizing Change

- Engage
  - Create a sense of personal involvement in the need to optimize practice patterns
- Empower
  - Create small teams with overlapping goals and project focus
- Support
  - Discover what barriers discourage practice change
- Measure
  - Frequent feedback and recognition of progress
- Enforce
  - Everyone has responsibility to speak out

ENGAGE:
Why the Emphasis on Safe Prevention of Primary Cesarean?

- If a woman has her first baby vaginally, 90% of all subsequent children will also be born vaginally
- If a woman has her first baby by cesarean section, 90% of all subsequent children will also be born by cesarean section
- Over her reproductive lifetime, cesarean section is associated with higher fetal and maternal morbidity

Spong et al JAMA 6/19/2013 Vol 309(23): 2445-2446

A "Triple Win"

- Medical benefit
  - If a woman has her first baby vaginally, 90% of all subsequent children will also be born vaginally
  - If a woman has her first baby by cesarean section, 90% of all subsequent children will also be born by cesarean section
- Public health benefit
  - Over her reproductive lifetime, cesarean section is associated with higher fetal and maternal morbidity
- Cost benefit
  - Limited resources, increasing gaps between funded care and hospital expenses

What IS the optimal cesarean section rate?

- Large global data base reviews
- Millions of deliveries 2000-2014
- Maternal Outcomes
  - Maternal mortality, hysterectomy, intra- or post-partum blood transfusion, maternal admission to ICU, prolonged maternal hospital stay, post-partum infection;
- Neonatal/Infant Outcomes
  - Perinatal mortality, stillbirth, neonatal mortality, infant mortality, admission to NICU, birth asphyxia, need for mechanical ventilation, prolonged neonatal hospital stay,
  - Low-birth-weight (LBW) or preterm birth.
- As national cesarean section rates rose to 9-16%, maternal and fetal outcomes improved.
- Above 16% cesarean section rates, maternal and fetal outcomes worsened.

Beltran et al Reprod Health. 2015; 12: 57

ENGAGE: Maternity Care in Florida

- 223,579 livebirths in 2017
  - 39% are paid for by public insurance plans*
  - One of the "top ten" costs for private insurers
- Vaginal deliveries:
  - MediCal cost $4,590
  - Commercial insurer cost $11,500
- Cesarean deliveries
  - Medi-Cal cost $7451
  - Commercial insurer cost $18,800
- Cesarean section rates per Florida county ranged from 24.2% to 48.2% in 2017**

*Henry J. Kaiser Foundation Medicaid in Florida Report, June 2017 www.kff.org

**Florida Department of Health, Bureau of Vital Statistics

How Do Insurers Incorporate Population Outcomes Into Re-imbursement Decisions?

- Cost, cost, cost
- Oh, and outcomes too…especially good outcomes that cost less
- Enhanced use of statistics and data to characterize physician and hospital performance on costs and outcomes
- Perinatal episodes of care, bundled payments, incentives for meeting outcomes expectations in a cost-efficient manner
- California Maternal Quality Care Collaborative, Ohio Perinatal Quality Care, Florida PROVIDE

How Does the CMQCC Safe Prevention of Primary Cesarean Collaborative Work?

- For the Hospital:
  - CA hospitals are required to report on key performance metrics in order to receive any CA-sponsored plan contracts/re-imbursement
  - Participation encouraged from 2015 on, now essentially a requirement to report
- For the Physician
  - Secure, unbiased data collection that physicians can review and confirm
  - Allows MD to track their own outcomes data and practice patterns and compare it with their group, their med staff peers and state-wide performance.

California State Innovation Model of Care: Maternal Care Initiative Quality Metrics 2018

- Early elective delivery <39 weeks
- NTSV ("low risk") cesarean section rates
- VBAC (TOLAC) rate
- Unexpected newborn complications in full-term babies
- Severe Maternal Morbidity

ENGAGE: Who is Using Value Based Care in Your Re-imbursement Now?

- Covered California announced that in 2019, they will no longer contract with any hospital whose NTSV rate is greater than 23.9%
  - 40% of patients in the state of CA (same as FL)
  - *Beginning in 2019, insurance companies that contract with the exchanges must either exclude from their networks any hospital that doesn't meet the federal government's 2020 target C-section rate or explain why they aren't, according to the new contract approved by the Covered California board*
- Large corporations are directly influencing hospitals to engage in quality metrics projects to improve outcomes (and cost)
  - *Disney, Boeing, Apple, Pacific Business Group on Health: have developed the California Maternal Care Bundled Payment*
  - *Governments and Unions are also becoming active*

What States are Collecting Obstetric Performance Metrics On Individual Physicians?

- All of them
- Publishing individual metrics publicly
  - Massachusetts, Virginia
  - California: planned for 2019
- Providing physicians with individual metrics reports
  - Arkansas, Ohio, Tennessee, Maryland, Minnesota, South Carolina, California

What is the impact of public reporting?

- Less than you think.
- In Virginia, there has been public reporting since 1996, yet Virginia's cesarean section rate has risen faster than the US as a whole.
- IMPORTANT: THE PEOPLE WHO CONTROL YOUR ABILITY TO SEE PATIENTS AND MAKE A LIVING ALREADY HAVE THIS DATA.

ENGAGE: The Cultural Impact of Public Reporting of Outcomes Data

- On Hospital and Physician Performance
  - Moderate impact on performance measures
- On Patient Selection of Providers
  - Minimal
- Physician claims of harm and danger in general not substantiated
  - Urgent care is not amenable to "pick and choose" strategies
- Lack of connection to social media sites
  - Low public interest is connected to inaccessibility of communication channels
  - Do search engines make it is to find the data?
  - Which is easier to get? Yelp or www.ca.gov.CAL/SIM.....

AHRQ: Public Reporting as a Quality Improvement Strategy July 2012

ENGAGE:
Who Is Buying the "Product"?


CARTOONSTOCK
.com
Search ID: gmin104

EMPOWER:
Using Data To Drive Change

- Data is only the "gateway", it can tell you which direction you need to go in, but you still have to take the journey itself
- Data needs to be collected independently, uniformly and completely.
- Data needs to be shared with physicians in an understandable manner
- Physician must have opportunity to verify data and confirm its accuracy
- Physician concerns about what the data means must be respected
- Physicians must be given information that will allow them to target what practice patterns are different (better or worse) than their colleagues, their peers and national guideline recommendations
- A two way information street
  - The insurers are now using the metrics to make more stringent payment and contracting decisions.
  - Physicians, hospitals and data administrators can now see the data and confirm or dispute the payment and contracting decisions.

How Do Payors Get Quality Metrics?

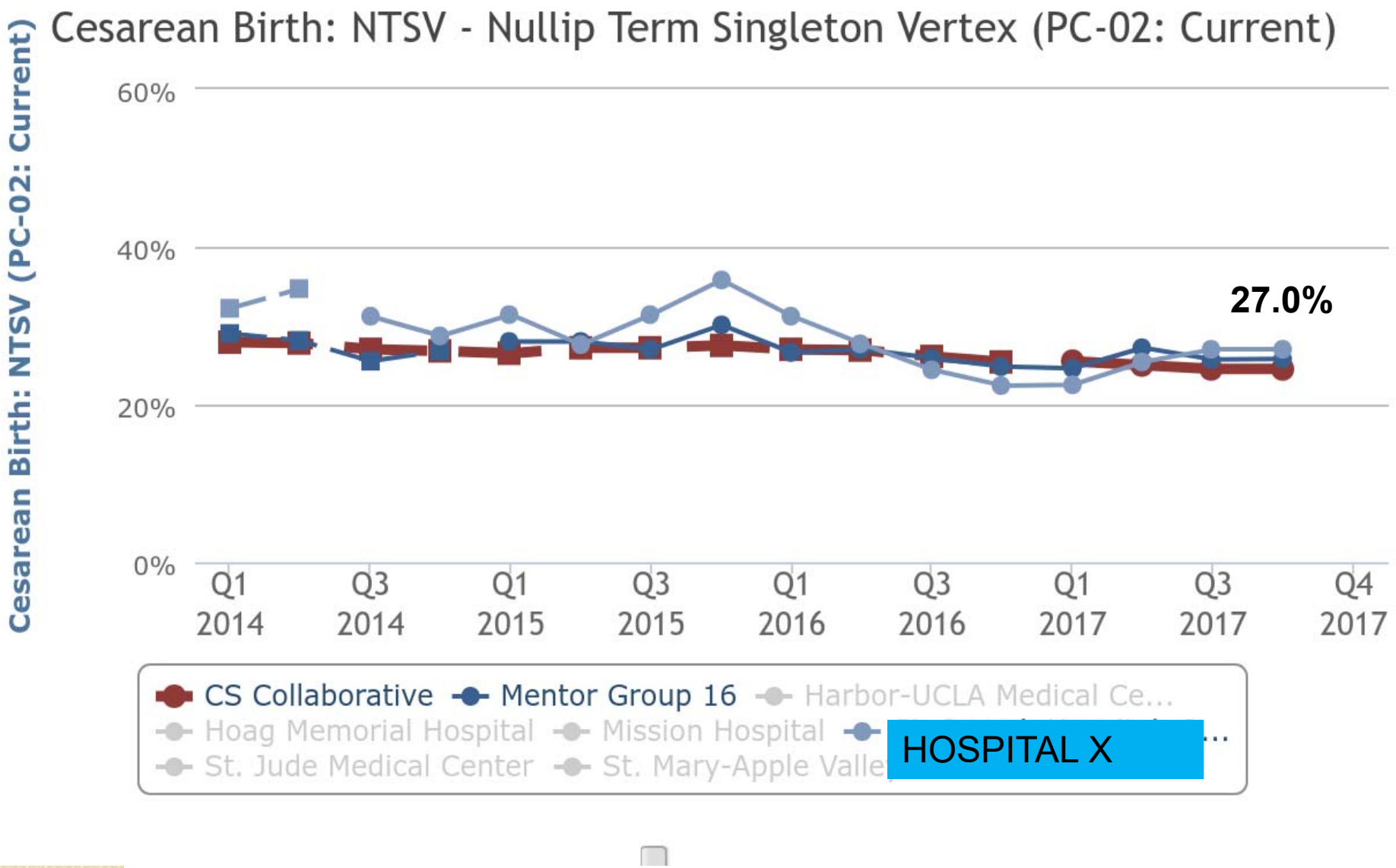
- All ACA plans require reporting to an independent quality assessment database
  - Leapfrog
  - CMQCC
  - Hospital system (Kaiser, Dignity Health)
- In the absence of metrics, the payors have a 6 month baseline period in which they can privately track their provider's metrics
- In Florida, 45 hospitals report to PROVIDE

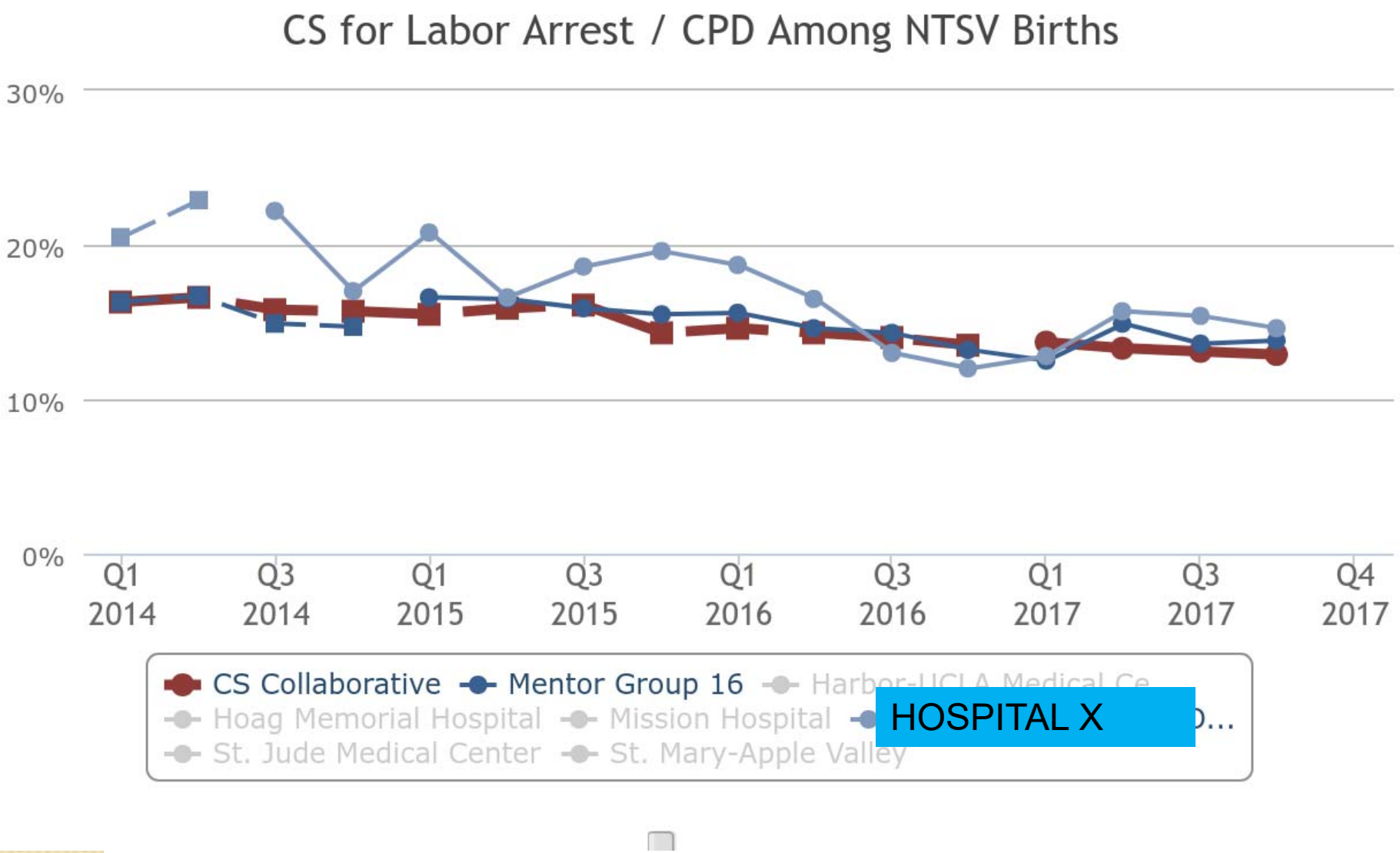
Obstetric Performance Metrics

- Hospital-Specific
  - NTSV rates, breastfeeding rates, patient experience ratings, healthcare acquired infections, severe maternal morbidity
- Physician-Specific
  - NTSV rates, episiotomy rates, pt satisfaction
- Condition-Specific
  - How often patients in your practice deliver preterm?
- "Best Practice" Specific
  - How often do you follow ACOG labor guidelines?
  - How often do you use prophylaxis for DVT?

CMQCC Quality Metrics

- Reports provide state wide comparison data
- Reports provide hospital system comparison data
- Reports provide demographics
- Reports reference the desirable metric where there is a consensus on what that number should be
- Linked to EHR codes
- Incomplete charts are typically <1% of total hospital submissions and must be re-submitted after electronic completion of data fields


Cesarean Birth: NTSV - Nullip Term Singleton Vertex (PC-02: Current)
Cesarean Birth: NTSV (PC-02: Current)
60%
40%
20%
0%
27.0%
Q1 2014
Q3 2014
Q1 2015
Q3 2015
Q1 2016
Q3 2016
Q1 2017
Q3 2017
Q4 2017
CS Collaborative
Mentor Group 16
Harbor-UCLA Medical Ce...
Hoag Memorial Hospital
Mission Hospital
HOSPITAL X
St. Jude Medical Center
St. Mary-Apple Valle


CS for Labor Arrest / CPD Among NTSV Births
30%
20%
10%
0%
Q1 2014
Q3 2014
Q1 2015
Q3 2015
Q1 2016
Q3 2016
Q1 2017
Q3 2017
Q4 2017
CS Collaborative
Mentor Group 16
Hoag Memorial Hospital
Mission Hospital
St. Jude Medical Center
St. Mary-Apple Valley
HOSPITAL X

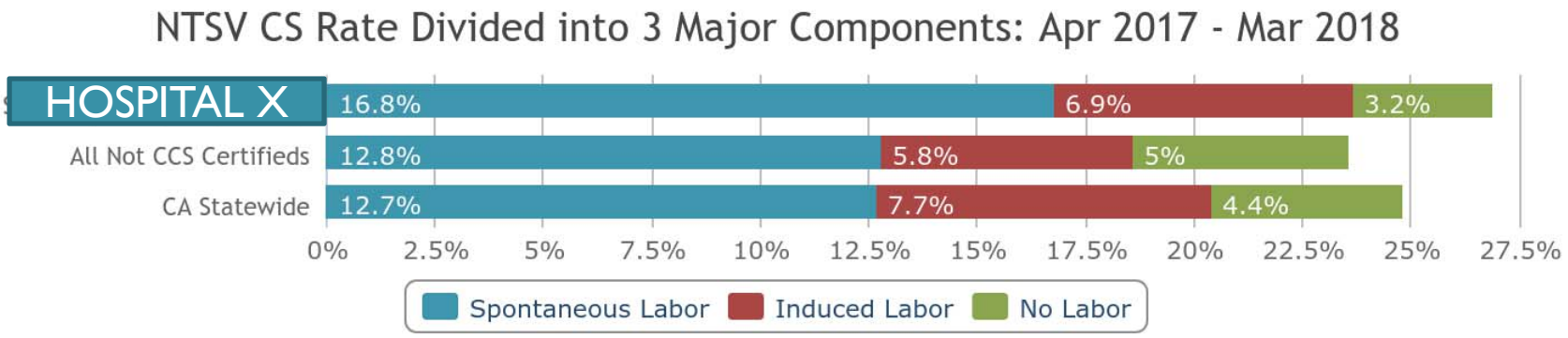
Balancing Measures: Making Sure Prevention of Cesarean Birth is SAFE

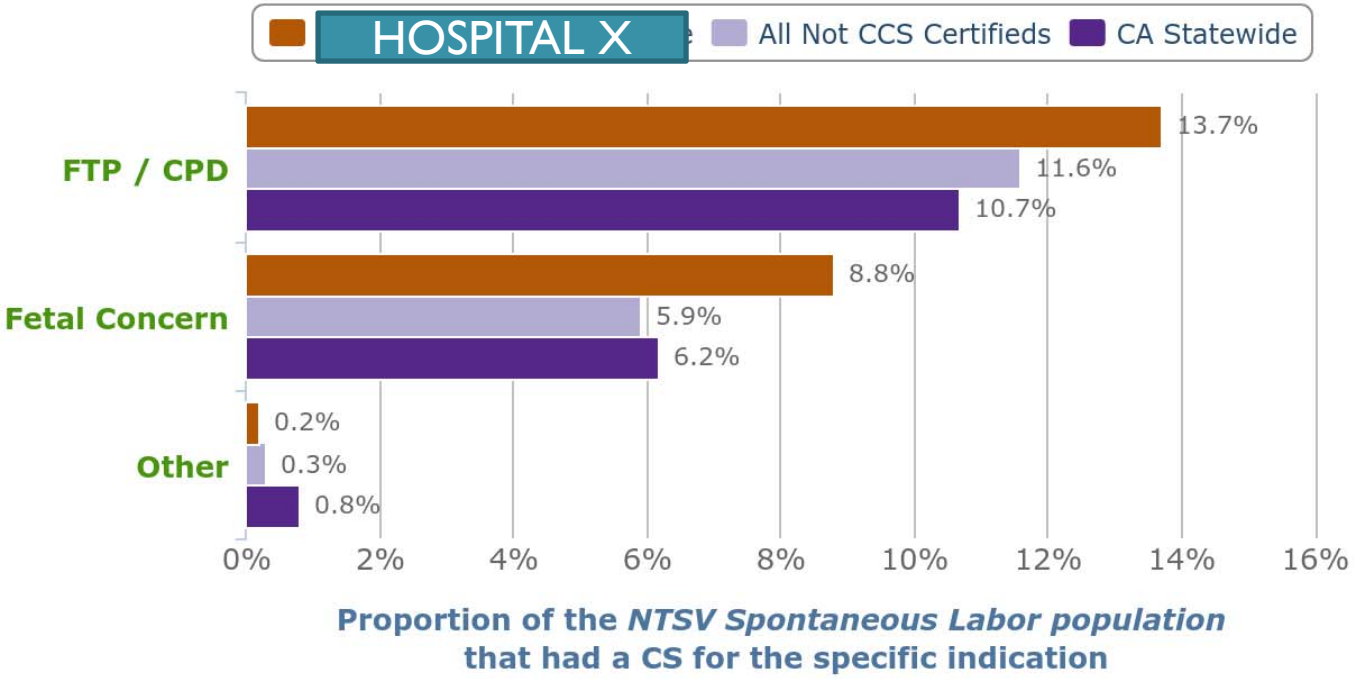
- Third and Fourth Degree Lacerations
  - What is your rate compared to your peers?
  - Compared to state average?
  - Compared to ACOG recommendations?
- Chorioamnionitis
- Unexpected Newborn Complications
- Severe Maternal Morbidity/Mortality

EMPOWER:
What Drives Your NTSV Rate?

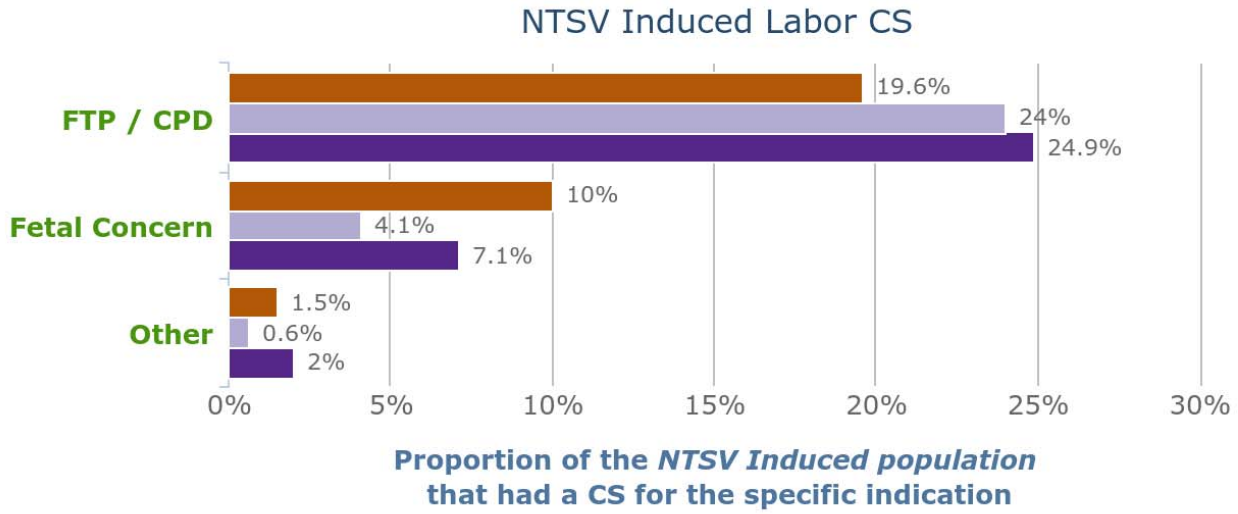
- Three independent groups of patients
  - NTSV patients entering spontaneous labor
  - NTSV patients with induced labor
  - NTSV patients without labor
- Three labor stages
  - Latent Phase Labor
  - Active Phase Labor
  - Second Stage Labor
- How Often Does the Indication Listed for C/S match ACOG guidelines on labor management and FHR interpretation?

EMPOWER:
FOCUSING ON YOUR HOSPITAL'S OPPORTUNITIES FOR CHANGE





Proportion of the *NTSV Spontaneous Labor population* that had a CS for the specific indication



Proportion of the *NTSV Induced population* that had a CS for the specific indication

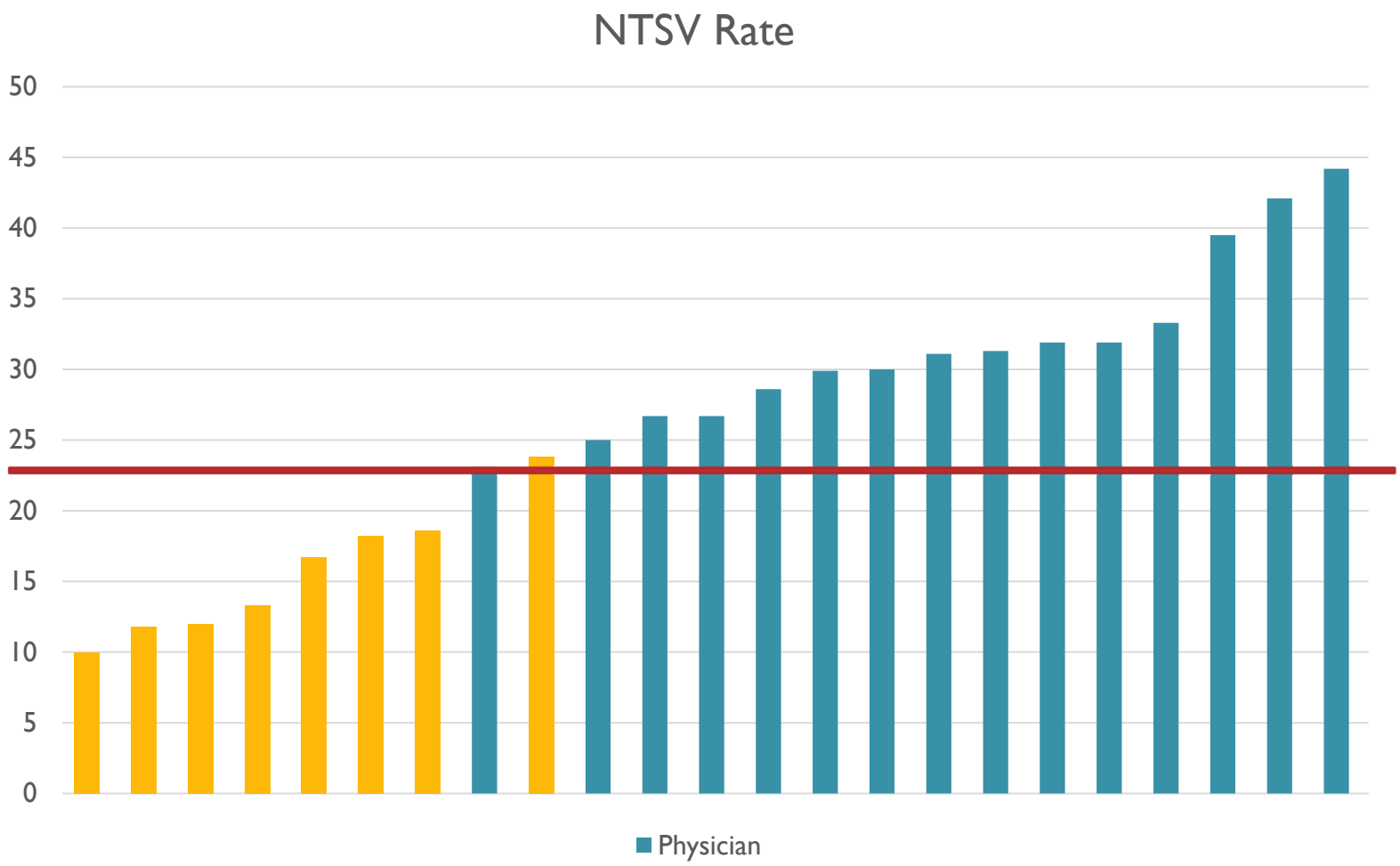
EMPOWER:
What Influences Hospital NTSV Rates?

- Rates of labor induction
- Interpretation/diagnosis of labor abnormalities
- Interpretation/response to FHR abnormalities
- Patient education
- Nursing support
- Underlying maternal and fetal complications

Where Do Large Variations in Care Occur?

- For individual MD:
  - Go to the CMQCC site and find out for yourself!
  - Find your hospital CMQCC administrator, get an invite code, register and you can see your own data anytime you wish
- For Hospital
  - Structured CMQCC reporting is available for hospital who are doing chart reviews
  - Chart reviews elucidate
    - What are your opportunity targets in latent phase management?
    - What are your opportunity targets in FHR monitoring?
    - What are your opportunity targets in elective induction?
    - What are your opportunity targets in elective primary cesarean section?

EMPOWER: NTSV Rate Variations



Cesarean Section Rate Variability

- For a NTSV patient, how often does the indication for cesarean delivery meet ACOG Labor Guidelines?
- Variation in Primary Cesarean Section Rate
  - C/S rate in singleton, term, vertex patient accounts for the majority of variation in a physician's overall C/S rate
- Use of TOLAC will only affect patients who already had cesarean delivery; it will not decrease primary cesarean section rate.
- What is a "good" C/S rate?
  - For hospital
  - For individual physician

ACOG Safe Prevention of the Primary Cesarean Delivery

- First Stage of Labor: Latent and Active Phase
  - 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.
  - Slow but progressive labor in the first stage of labor should not be an indication for cesarean delivery.
- Active Phase : 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.
  - 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.

ACOG Safe Prevention of the Primary Cesarean Delivery

- Second Stage Labor
  - Specific absolute maximum length of time spent in the second stage of labor beyond which all women should undergo operative delivery has not been identified.
- Before diagnosing arrest of labor in the second stage, if the maternal and fetal conditions permit, allow for the following:
  - At least 2 hours of pushing in multiparous women
  - At least 3 hours of pushing in nulliparous women
  - VERY SMALL IMPACT ON YOUR NTSV RATE FROM SECOND STAGE LABOR MANAGEMENT
- Longer durations may be appropriate on an individualized basis (eg, with the use of epidural analgesia or with fetal malposition) as long as progress is being documented.

What Stage of Labor Accounts for Most of the NTSV C/S decisions?

- ACOG Safe Prevention of Primary Cesarean Delivery
- Consortium on Safe Labor
- CMQCC
  - Elective
  - **Latent phase**
  - Active
  - Second Stage

EMPOWER: HOSPITAL X Trends, 2017-2018

- NTSV Rate: Above goal but not trending higher
  - 27% for HOSPITAL X
  - 23.9% for State and 25.8% for Mentor Group
- C/S rates for labor arrest disorders higher
  - 14.6% for HOSPITAL X
  - 12.5% for State and 14.2% for mentor group
- C/S indications less often consistent with ACOG guidelines
  - Inconsistently reported, but running 75% inconsistent
  - 56% for State and 75% for Mentor Group
- HOSPITAL X has no reported data on recent nursing or physician education rates for labor management

EMPOWER: Safely Getting to Goal

- Only 45% of FL hospitals have met the goal of 23.9%
- Those hospitals AND those physicians that don't meet this goal face significant contracting challenges in 2019
- Challenges and Opportunities at HOSPITAL X
  - Challenge: Inconsistency in Labor management
    - Opportunity: Re-evaluate Policy and Procedures, begin or track nursing and physician education efforts on labor management
    - Opportunity: Ambulation, Peanut Balls, Intermittent Monitoring
    - Opportunity: Better tracking of labor management through focused chart reviews
  - Challenge: C/S rate for fetal concern much higher than in similar hospitals around CA
    - Opportunity: Incorporate NIH FHR descriptions into routine communications between all team members
  - Challenge: High rate of unexpected newborn complications
    - Opportunity: Focused chart reviews of these cases to be incorporated into department M&M reviews

EMPOWER: Getting Back to Goal

- How good is your data collection?
  - CA state-wide average of 10%
  - Mentor Group 3.3%
  - HOSPITAL X: Not reported
- How "special" is your population?
  - Data metrics can be used to compare this
- Where are your opportunities
  - Break down your data and show you which areas are the biggest "targets of opportunity"
    - Spontaneously laboring patients, by labor stage
    - Induced labor, by labor stage
    - No labor
    - Fetal distress

EMPOWER: SMALL GROUP ACTION

- Need a complete team
  - MD, RN, IT, OR, Anesthesia, Pharmacy, Admin
  - Midwives and PA, midlevel providers
- Each member of a complete team has a different focus on what solutions will work
  - Peanut Ball, variations in pushing positions
  - Ambulation in labor, delayed epidural, nitrous oxide
  - "Early labor lounge"

EMPOWER The Nursing Effect: Communication Strategies with Physicians

- Collectively agree on guidelines
- Put it on paper
- The 'R' in SBAR

Nursing Interventions for Labor Support

Wireless Fetal Monitoring

Peanut Ball

Birthing Ball

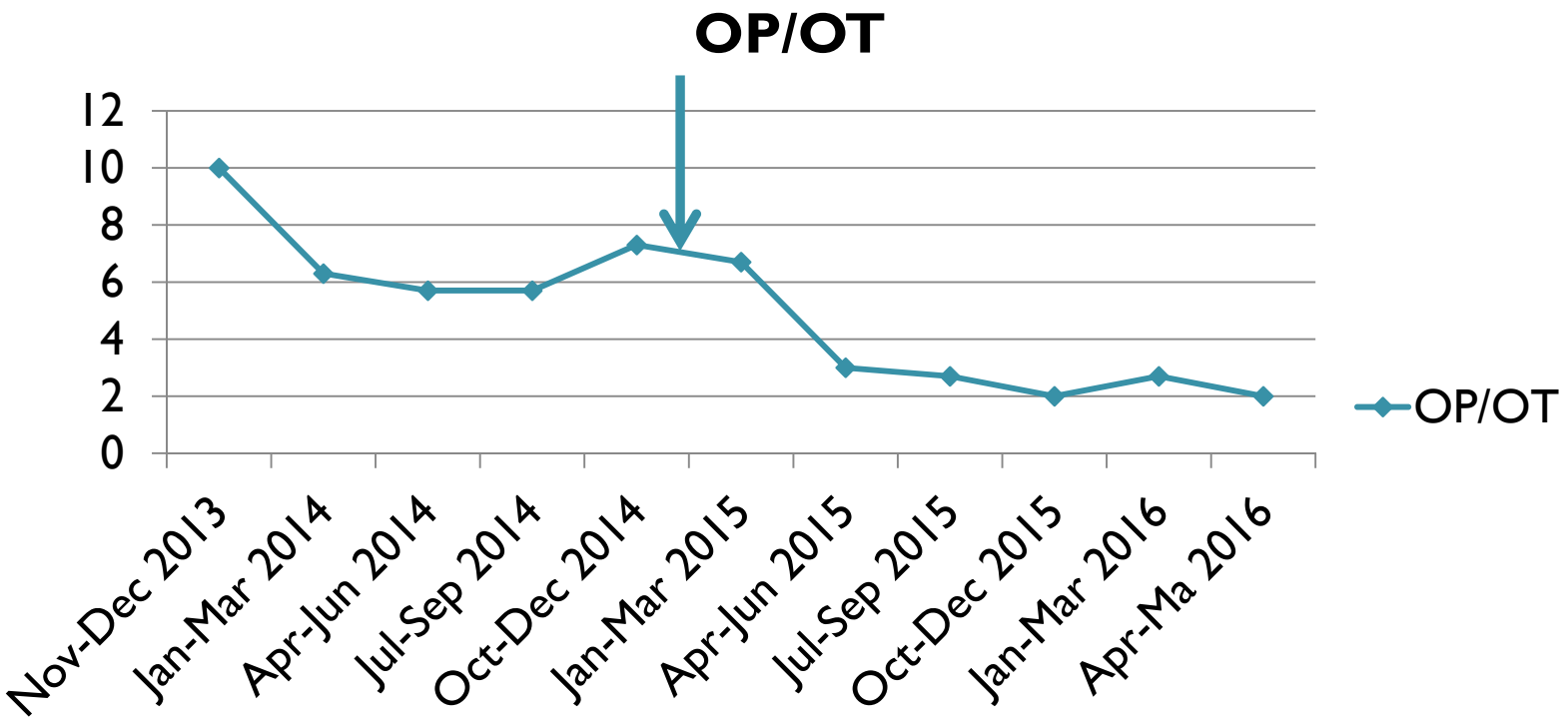
Rocking Chair

Walk, Walk, Walk!

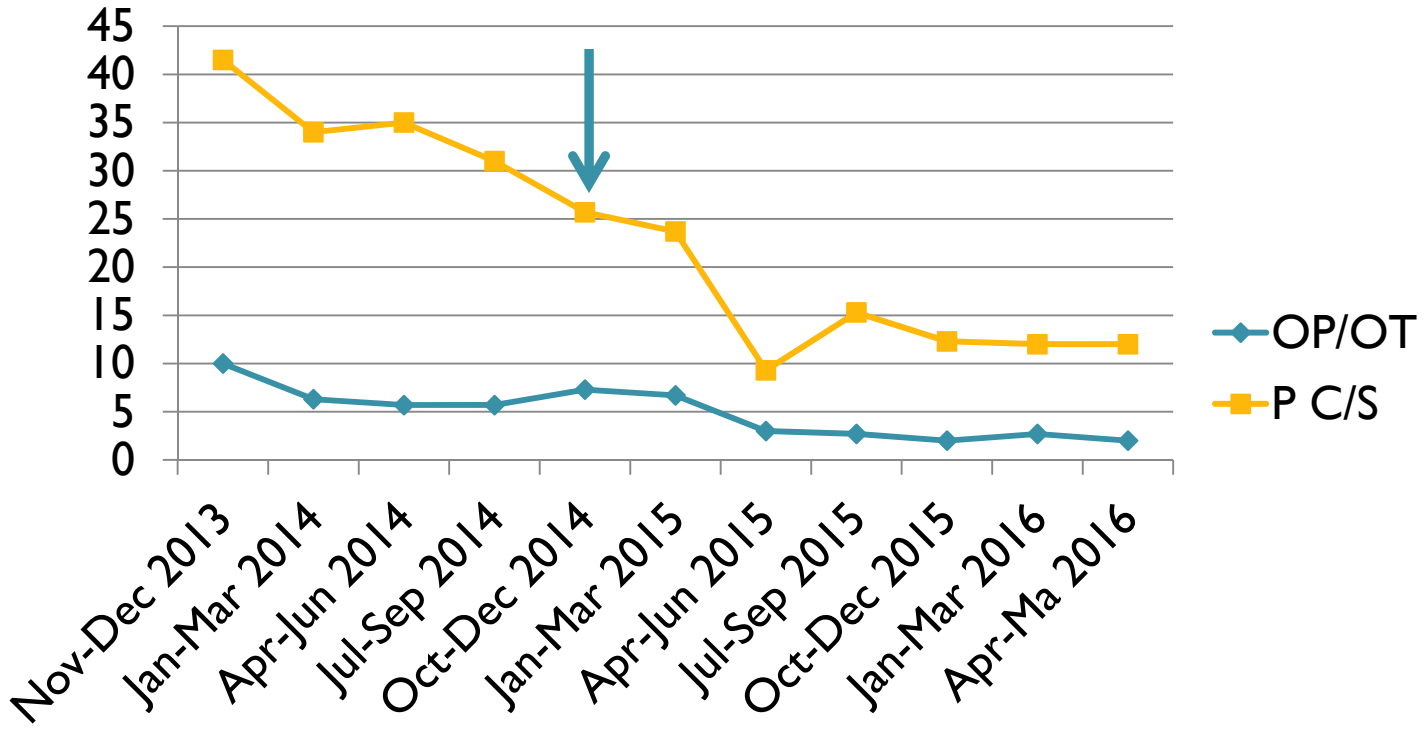
The Peanut Ball: An Example of Nursing and MD Collaboration for Successful Labor Support

- Labor and Delivery performance improvement
  - NTSV primary cesarean section rate
  - Failure to progress – occiput posterior or transverse
  - Labor assisted device
  - Repositioning
  - Time of epidurals
  - Time of admission

Using the Peanut at PIH Whittier: Number of OT/OP at delivery



Correlation between Primary Cesarean Section Rate and Correction of OP/OT Position



SUPPORT:
What are YOUR barriers to change?

- FACT: Large groups and hospitalists have generally lower cesarean section rates than individual practitioners
- How do you support your individual practitioners in making practice change?
  - Improve access to hospitalist group
  - Develop a consortium of individual practitioners to support a group of patients in labor
  - Buddy/Mentor models

SUPPORT: What are the Patient's Barriers to Change?

- Education
  - Standardize birth classes to incorporate information about induction, stages of labor
- Expectation
  - "6 is the new 4"
  - All caregivers relay the same information about labor stage to patient and family
- Encouragement during labor
  - During latent labor
  - During second stage

MEASURE: When Should You Start to See an Improvement?

- "Early Wins Matter"
- Early Progress Measures
  - Policy and Procedure revisions
  - Patient, MD and nurse education
  - Highlight small teams progress and pilot projects as visibly as possible….
  - ….. because…….
    - It usually takes months before you see a meaningful change in the "apex number"
- Goal: Within 6 months, "x"% of our NTSV cesarean section cases will meet ACOG labor guidelines

MEASURE:
When Should You Expect to See Improvements in NTSV C/S rate?

- You DO need to see an improvement by the One-Year mark
  - Seasonal variations in C/S rate and small numbers make it difficult to measure meaningful improvements
- Sub-measures
  - Individual physician improvements
  - Success of small team initiatives
  - Safety measures

ENFORCE: It is Everyone's Responsibility

- If you have been able to create a "flat" hierarchy and respectful dialogue between caregivers, this has become second nature
  - Have you empowered your ward clerks to decline to schedule inductions that are not supported by your admit protocol?
  - Have you empowered nurses to insist that MD lists a labor indication for C/S that matches ACOG criteria?
  - Have you empowered nurses to actively support patient choices for ambulation, pain relief?
  - Have you empowered physicians to use cervical ripening agents appropriately?

ENFORCE: It's Everyone's Responsibility

- About 80% of caregivers will respond to initiatives and make significant changes in practice
- About 10% will not be happy, but will "follow the crowd"
- About 10% will actively resist change
  - Support strategies
  - Enforcement strategies: Use administrators and Med Staff structures to assist with this