Supporting Vaginal Birth

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Conflict of Interest Disclosure

We have no conflicting financial interest that would bias this presentation.
Objectives

- Safely support intended vaginal birth
- Practice comfort measures aimed to relieve pain during labor and birth
- Identify provider and system improvement opportunities aimed to reduce cesarean section
- Cite evidence based management for obstructed labor
- Highlight how data utilization can reduce primary cesarean for nulliparous women
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Let’s begin with a question:

You are about to give birth to your first baby. Pregnancy has gone smoothly without any complications. Birth seems as if it will, too. It’s one baby, head down, at term — in other words, you’re at low risk for complications.

What’s the #1 influence on whether or not you’ll have a C-section?

(A) Your personal wishes.
(B) Your choice of hospital.
(C) Your baby’s weight.
(D) Your baby’s heart rate in labor.
(E) The progress of your labor.
There is a Large Variation in Cesarean Rates Among California Hospitals

Range: 15.6%-75.8%
Median: 31.4%
Mean: 32.3%

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

Published from CMQCC data set
NTSV CS Rate Among CA Hospitals: 2014
(Nulliparous Term Singleton Vertex)

Range: 12%—70%
Median: 25.3%
Mean: 26.2%

40% of CA hospitals meet national target

Risk Adjustment did not reduce the variation

National Target = 23.9%

Large Variation = Improvement Opportunity
What Indications Have Driven the RISE in CS?

<table>
<thead>
<tr>
<th>Cesarean Indication</th>
<th>Percent of the Increase in Primary Cesarean Rate Attributable to this Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yale (2003 v. 2009) (Total: 26% to 36.5%) Focus: all primary Cesareans</td>
</tr>
<tr>
<td>Labor progress complications (CPD/FTP)</td>
<td>28%</td>
</tr>
<tr>
<td>Fetal Intolerance of Labor</td>
<td>32%</td>
</tr>
<tr>
<td>Breech/Malpresentation</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Multiple Gestation</td>
<td>16%</td>
</tr>
<tr>
<td>Various Obstetric and Medical Conditions (Placenta Abnormalities, Hypertension, Herpes, etc.)</td>
<td>6%</td>
</tr>
<tr>
<td>Preeclampsia</td>
<td>10%</td>
</tr>
<tr>
<td>“Elective” (variously defined)</td>
<td>8% (Scheduled without “medical indication”)</td>
</tr>
</tbody>
</table>
Safe Prevention of the Primary Cesarean Delivery

New National Guidelines for Defining Labor Abnormalities and Management Options
Table 3. Recommendations for the Safe Prevention of the Primary Cesarean Delivery

**Induction of labor**

Before 41 0/7 weeks of gestation, induction of labor generally should be performed based on maternal and fetal medical indications. Inductions at 41 0/7 weeks of gestation and beyond should be performed to reduce the risk of cesarean delivery and the risk of perinatal morbidity and mortality. **Strong**

Cervical ripening methods should be used when labor is induced in women with an unfavorable cervix. **Strong rec**

If the maternal and fetal status allow, cesarean deliveries for failed induction of labor in the latent phase can be avoided by allowing longer durations of the latent phase (up to 24 hours or longer) and requiring that oxytocin be administered for at least 12–18 hours after membrane rupture before deeming the induction a failure. **Strong rec**
Choosing Wisely

An initiative of the ABIM Foundation

Ten Things Physicians and Patients Should Question

1. Don't schedule elective, non-medically indicated inductions of labor or Cesarean deliveries before 39 weeks 0 days gestational age.
   Delivery prior to 39 weeks 0 days has been shown to be associated with an increased risk of learning disabilities and a potential increase in morbidity and mortality. There are clear medical indications for delivery prior to 39 weeks 0 days based on maternal and/or fetal conditions. A mature fetal lung test, in the absence of appropriate clinical criteria, is not an indication for delivery.

2. Don't schedule elective, non-medically indicated inductions of labor between 39 weeks 0 days and 41 weeks 0 days unless the cervix is deemed favorable.
   Ideally, labor should start on its own initiative whenever possible. High Cesarean delivery rates result from inductions of labor when the cervix is unfavorable. Health care practitioners should discuss the risks and benefits with their patients before considering inductions of labor without medical indications.

3. Don't perform routine annual cervical cytology screening (Pap tests) in women 30–65 years of age.
   In average-risk women, annual cervical cytology screening has been shown to offer no advantage over screening performed at 3-year intervals. However, a well-woman visit should occur annually for patients with their health care practitioner to discuss concerns and problems, and have appropriate screening with consideration of a pelvic examination.

4. Don't treat patients who have mild dysplasia of less than two years in duration.
   Mild dysplasia (Cervical Intraepithelial Neoplasia [CIN 1]) is associated with the presence of the human papillomavirus (HPV), which does not require treatment in average-risk women. Most women with CIN 1 on biopsy have a transient HPV infection that will usually clear in less than 12 months and, therefore, does not require treatment.

5. Don't screen for ovarian cancer in asymptomatic women at average risk.
   In population studies, there is only fair evidence that screening of asymptomatic women with serum CA-125 level and/or transvaginal ultrasound can detect ovarian cancer at an earlier stage than it can be detected in the absence of screening. Because of the low prevalence of ovarian cancer and the invasive nature of the interventions required after a positive screening test, the potential harms of screening outweigh the potential benefits.
Medical Indications for Early Term Delivery

- Abruptio Placentae
- Hypertensive disorders
- Diabetes
- 41 + 0 weeks
- PROM
- Chorioamnionitis
- Fetal demise current/prior
- Oligo or Polyhydramnios
- Non-reassuring fetal status
- Isoimmunization
- Fetal malformation
- Twin with complication
- Maternal conditions/disease
  - cardiac, renal, hepatic, hematologic

Consult Perinatologists
- agrees with plan
Risk-benefit analysis

Balancing 2 Principles

1. Maternal
   - Benefit should outweigh risk

2. Fetal
   - Optimal outcome
Shared Decision Making

- The Share Model
  - Share
  - Help
  - Assess
  - Reach
  - Evaluate

- The Decision Talk Model
  1. Choice Talk
  2. Options Talk
  3. Decision Talk

The Share approach: AHRQ
http://www.ahrq.gov/professional/education/cirriculum-tools

Romano, A. Activation, engagement, and shared decision making in maternity care, 2015. Maternityneighborhood.com
Kristin Terlizzi tells her story……

21 days later Kristen developed DIC and required emergency surgery to remove:
• placental tissue
• repair her bladder
• re-implant her ureter
• remove her uterus, cervix and appendix.

She hemorrhaged during surgery and required transfusion of 26 units of blood products

• Maternal death for women with placenta accreta can be as high as 1 in 16.
Because of the unpredictability of vaginal birth, I would prefer a scheduled cesarean section birth for myself or my partner.

- Develop and conduct inter-professional and inter-disciplinary education around the short- and long-term risks of cesareans.
- Patient/Family Support Bundle, Council on Patient Safety in Women’s Health Care
  - CMQCC Resource: Risk Considerations for Primary Cesarean
  - YouTube: Patient Story: Kristen Terlizzi
    https://www.youtube.com/watch?v=RMnQZUqQhjU
Pro’s and Con’s of C Section

https://www.youtube.com/watch?v=Ilgc2Lbp2-E
Epidemiologic Framework

- Obstetric models of perinatal death
  - Increases interventions based on empiric evidence
- NNT Numbers needed to treat to prevent 1 perinatal death
  e.g. NNT (excess inductions /cesareans = 145 to prevent 1 perinatal death
- Provides a theoretical justification for the intervention
  - The fetuses at risk
  - The women at risk
Overview:
Healthy mothers and babies should wait for labor

- In 2012 IOL was 23.4% of all birth
- Augmentation rates similar to IOL rates

http://www.cdc.gov/nchs/births.htm
What about the Arrive Trial?

If induction is the plan what is the preferred method?
Induction of Labor Update: working the evidence to support vaginal birth
Factors determining success of IOL

- Parity
  - Multiparous
  - Nulliparous C/S rate $\uparrow$ to 65.4% if BS=3/10
- Cervical score
  - $\leq 5$ unfavorable
  - $\geq 6$ ripe
- Position of the vertex
  - Persistent OP
- Method of induction
Long, Thick and Closed……

- Cervical status is the most important factor predicting the success of induction of labor
- Perform the initial vaginal exam prior to initiating pharmacologic therapy
- If the Bishop score is > 8, same probability of vaginal birth as spontaneous labor
**Modified Bishop Scoring System**

The most reliable and cost effective method of predicting the likelihood of successful induction

**Bishop score = 3**

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dilation</strong></td>
<td>Closed</td>
<td>1-2 cm</td>
<td>3-4 cm</td>
<td>5-6 cm</td>
</tr>
<tr>
<td><strong>Effacement</strong></td>
<td>0-30%</td>
<td>40-50%</td>
<td>60-70%</td>
<td>&gt;80%</td>
</tr>
<tr>
<td><strong>Station (based on a –3 to +3 scale)</strong></td>
<td>-3</td>
<td>-2</td>
<td>-1, 0</td>
<td>+1, +2</td>
</tr>
<tr>
<td><strong>Cervical consistency</strong></td>
<td>Firm</td>
<td>Medium</td>
<td>Soft</td>
<td></td>
</tr>
<tr>
<td><strong>Position of the cervix</strong></td>
<td>Posterior</td>
<td>Midposition</td>
<td>Anterior</td>
<td></td>
</tr>
</tbody>
</table>

*Cervical dilatation is the strongest factor associated with successful induction*
Misoprostol Protocol

- **Misoprostol** PO
- **1st Dose** 25mcg q 2 hours x 6 doses
- **2nd Dose** 100mcg PO
  - 4-6 hours following 1st dose of 50mcg.
  - 100mcg PO every 4 hours to a maximum of 6 doses per 24 hours.
- Do NOT start oxytocin infusion until at least 4 hours after last dose to avoid tachysystole.
- UCSF recently reduced protocol dosage

Tenore, 2003; Goldberg & Wing, 2003
Misoprostol Stepwise Oral Guidelines

1. Dosing- initial: 50mcg PO

2. Dosing- subsequent: Patient reassessed 3-4 hours. If no adequate contraction pattern and FHR reassuring, give next dose.
   - May increase dose to 100mcg. Dose may be increased only if patient has received at least 2 doses 50mcg without achieving adequacy.
   - If pattern adequate at 3-4 hours, but subsequently becomes inadequate, another dose may be given at same mcg amount as last dose or lower
Mechanical Dilators

- Foley Catheter
  - Most common mechanical method of cervical ripening.
  - Creates pressure on the internal cervical os increasing production of local prostaglandins.

Document
- Type and size of balloon catheter
- Amount of fluid instilled in balloon
Patient Information

Troye Catheter Cervical Ripening Patient Information Sheet

Dear Patient,

Your doctor has planned an induction of labor and recommends having a troye catheter placed in your cervix. By performing this procedure our hope is to soften and open the cervix so that your labor can be shorter and easier. This process is called “ripening” the cervix. A troye catheter is a soft rubber tube with a small water-filled balloon on the end. The catheter is about the size of a pencil and the balloon about the size of a ping pong ball.

The procedure:

On the day prior to the induction you will be asked to come into the office for placement. Usually you are in and out in about 15 minutes. Once in the office you will be asked to empty your bladder and dress in a similar fashion to having a new diaper change. Once positioned on the examination table with your feet in the stirrups, the speculum will be introduced so that we can visualize the cervical opening. The cervix will be scored off with an iodine solution to reduce the risk of infection. The catheter is then gently threaded into the opening up to a level where the balloon can be inflated and rest between the os of the cervix and the upper portion of the cervix.

The baby’s head will put pressure on the balloon and we believe this is what will ripen the cervix. Once in place, the nurse will inflate the balloon with about an ounce of water, you may feel the fluid flowing into the balloon but it should not hurt. Once inflated we will be off the catheter with hand just outside the opening to your vagina and cut the long portion of the catheter off. The end of the catheter is then pulled through the vagina and a gauze pad placed behind to hold everything in the vagina.

What to expect:

Most patients report that the catheter and gauze feels like a large tampon. It should not interfere with you using the bathroom or causing pain. The procedure will not cause contractions, but may make them more noticeable because of putting more pressure on the cervix. In many patients in the middle of the night you will notice some increased pressure and perhaps some spotting with or without the catheter coming out of the vagina. This is the catheter passing out of the cervix and usually means you are 3 centimeters dilated. Most commonly, the catheter and gauze will stay in the vagina until removed the next morning occasionally. It will fall out completely in our experience about of all women will be dilated to 3 centimeters by the next morning. Your success rate will depend on a number of clinical parameters.

When to call:

You should call your doctor or come to the hospital if you experience: 1) A gush or loss of fluid from the vagina, 2) Fever, 3) Chills, 4) Bleeding greater than a period and 5) bad cramping or strong contractions. Please ask your physician if there are any special instructions for your case.

If you have any questions about why we are having an induction off or if you have questions on your Driver in expand!
Appendix R

Induction of Labor Algorithm

**INDUCTION**

Per ACOG guidelines, induction of labor before 41 weeks should only be performed if there is a maternal indication of fetal medical indication to do so. If 39-41 weeks without a medical indication for induction of labor, do so only with a favorable cervix.

- **Unfavorable Cervix:** Bishop Score ≤ 8 for Nulliparas, ≤ 6 for Multiparas (proceed only if medical indication for induction exists)
  - Mechanical or Pharmacological Cervical Ripening
  - **No Cervical Change**
    - Repeat with Different Method
    - No Response Consider Oxytocin Trial
    - Home (if appropriate) or Cesarean.
      - *(Note: ACOG guidelines state that failed induction in the latent phase can be avoided by allowing for longer durations of the latent phase, 24 hours or more)*
  - **If successful, follow right side of algorithm (favorable cervix)**
    - Cervical Change, and Cervix ≥ 6 cm
      - Continue/Start Oxytocin and Consider ROM
    - Cervical Change, but Cervix < 6 cm
      - See active labor progression and/or labor duration guidelines
    - AROM and No Cervical Change for ≥18 hours of Oxytocin.
      - *(Note: 24 hours of oxytocin is preferable if fetal and maternal statuses permit)*
        - Cervix < 6 cm, UNABLE To AROM and No Cervical Change with ≥24 Hours Oxytocin
          - Consider Home if Effective and/or Medically Stable
          - Proceed to Cesarean
  - **Favorable Cervix:** Bishop Score ≥ 8 for Nulliparas, ≥ 6 for Multiparas
    - Initiate Oxytocin

CMOCC Toolkit to Support Vaginal Birth and Reduce Primary Cesareans

Adapted with permission from Washington State Hospital Association
Induction Bundle

- **Verify Informed consent**
  - provider has discussed the indications and potential risks/benefits of IOL

- **Verify indication for induction**
  - Documented in the medical record

- **Assessment of gestational age**
  - (ensuring that gestational age is greater than or equal to 39 weeks)

- **Pelvic assessment** (Document Bishop’s score)
  - Cervical status, fetal station, presentation
Standardization reduces variation
Standardization reduces variation

Indication for induction: (choose one)

- Medical complication or condition (1): Diagnosis: ________________________________
- Nonmedically indicated (1–3): Circumstances: __________________________________________

Patient counseled about risks, benefits, and alternatives to induction of labor (1)

- Consent form signed as required by institution

Bishop Score (see below) (1): ________

**Bishop Scoring System**

<table>
<thead>
<tr>
<th>Score</th>
<th>Dilation (cm)</th>
<th>Position of Cervix</th>
<th>Effacement (%)</th>
<th>Station*</th>
<th>Cervical Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Closed</td>
<td>Posterior</td>
<td>0–30</td>
<td>-3</td>
<td>Firm</td>
</tr>
<tr>
<td>1</td>
<td>1–2</td>
<td>Midposition</td>
<td>40–50</td>
<td>-2</td>
<td>Medium</td>
</tr>
<tr>
<td>2</td>
<td>3–4</td>
<td>Anterior</td>
<td>60–70</td>
<td>-1, 0</td>
<td>Soft</td>
</tr>
<tr>
<td>3</td>
<td>5–6</td>
<td>—</td>
<td>80</td>
<td>+1, +2</td>
<td>—</td>
</tr>
</tbody>
</table>

*Station reflects a −3 to +3 scale.

- Pertinent prenatal laboratory test results (eg, group B streptococci or hematocrit) available (4, 5)
- Special concerns (eg, allergies, medical problems, and special needs): __________________________

**To be completed by reviewer:**

- Approved induction after 39 0/7 weeks of gestation by aforementioned dating criteria
- Approved induction before 39 0/7 weeks of gestation (medical indication)

**HARD STOP** – gestational age, indication, consent, or other issues prevent initiating induction without further information or consultation with department chair
Patient Safety Checklist

INPATIENT INDUCTION OF LABOR

Date ___________  Patient ___________________________  Date of birth ___________  MR # ___________

Physician or certified nurse–midwife ___________________________  Last menstrual period ___________________________

Gravidity/Parity ___________________________

Estimated date of delivery ___________  Best estimated gestational age at delivery ___________

Indication for induction ___________________________

Fetal Presentation (1)

☐ Vertex

☐ Other ___________

☐ If other, physician or certified nurse–midwife notified

Estimated fetal weight ___________

☐ Patient has a completed medical history and physical examination

☐ Known allergies identified ___________________________

☐ Medical factors that could effect anesthetic choices identified ___________________________

☐ Pertinent prenatal laboratory test results (eg, group B streptococci or hematocrit) available (2, 3)

☐ Other special concerns identified (eg, medical problems and special needs): ___________________________

☐ Patient counseled about risks and benefits of induction of labor (1)

☐ Consent form signed as required by institution

Bishop Score (see below) (1): ___________
- **Hoag Induction Scheduling Process**

- **Patient** will be educated utilizing the **“Induction Education”** form by their **OB Physician** in the **office**

- **OB Physician** will complete **Induction of Labor Scheduling Request (Form PS 5529)**

- **OB Physician Office** will fax the Hoag Scheduling Request to LDR Scheduling (949) 764-5735, no earlier than 9:00 am, 1 week prior to the requested induction date. *Requests received more than 1 week prior to induction date will be discarded; requests received prior to 9:00 am will not receive priority.*

  - For elective inductions, the office must also fax a completed/signed **“Induction Education”** sheet in order for the case to be scheduled.

- **OB Physician Office** can follow their fax with a call to Hoag LDR Scheduling (949) 764-8484 for confirmation of availability of requested date/time.
Hoag Induction Scheduling Process con’t.

Induction will be entered into SIS (Surgical Information System) by Hoag LDR Scheduling

Within 24 hours, a Hoag Physician Leader (Chief of Maternal Child Health, Laborist, Department Head, etc.) will review the Scheduling Request form for completion and appropriate gestational age.

If the Hoag Physician Leader feels additional discussion/information is needed, he/she will call the OB.

Please ensure that your patients understand that the requested date and time is not a guarantee. Accommodation of this request is dependent upon capacity, patient acuity and staffing.
Labor Induction Basics

What is labor induction?
What causes labor to begin?
What is the safest point in pregnancy for the baby to be born?
Why might my care provider recommend induction?
Why might a woman choose induction when there is no clear medical reason?
Why are so many women experiencing induced labor?
What factors affect whether I have an induction?
Are there differences in when care providers recommend induction of labor?
Are the risks of induction higher for certain women?
# NEW ACOG STANDARD LABOR DEFINITIONS (2014)

| LABOR | Uterine contractions resulting in cervical change (dilation and/or effacement) Phases:  
|  | • Latent phase – from the onset of labor to the onset of the active phase  
|  | • Active phase – accelerated cervical dilation typically beginning at 6 cm  |

| AUGMENTATION OF LABOR | The stimulation of uterine contractions using pharmacologic methods or artificial rupture of membranes to increase their frequency and/or strength following the onset of spontaneous labor or contractions following spontaneous rupture of membranes.  
|  | If labor has been started using any method of induction described below (including cervical ripening agents), then the term, Augmentation of Labor, should not be used.  |

| INDUCTION OF LABOR | The use of pharmacological and/or mechanical methods to initiate labor (Examples of methods include but are not limited to: artificial rupture of membranes, balloons, oxytocin, prostaglandin, Laminaria, or other cervical ripening agents)  
|  | Still applies even if any of the following are performed:  
|  | • Unsuccessful attempts at initiating labor  
|  | • Initiation of labor following spontaneous ruptured membranes without contractions  |

Summary

- IOL is performed frequently for medical and obstetric indications – **avoid elective inductions with nullips BS< 8**
- Identify clear indication of benefits and risks associated with IOL and explain these to the patient – use consent/checklists
- The best predictor of labor induction success is cervical dilatation
- The ideal method for induction of labor varies among patients and is yet to be identified – **consider outpatient cervical ripening**
- Follow hospital, provider, and nurses success rate of IOL
Obstetric Triage that Supports Vaginal Birth
Obstetric Triage: Objectives

- Compare and contrast medical-legal implications of telephone and outpatient triage care

- Determine the **right time** for a woman to transition from her home to the hospital for birth
  - **5-1-1 rule** (5 minutes apart, lasting 1 minute, for 1 hour)
  - Recent recommendations 4-1-1 or even **3-1-1** (Lamaze Intl.)

- Explore verbal and written **discharge to home instructions**
  - Most women report they feel most comfortable at home
    - Freedom of movement
    - Able to do things for themselves
Multiple Functions of OB Triage Units

- Labor assessment and evaluation
- Decompression of labor and delivery
- Use as a holding area (busy L&D)
- Fetal evaluation and assessment
- Evaluation of medical/ OB complaints (after hours)
- Initial stabilization of OB complications
- Evaluation of OB referrals /transfers
- Triage OB telephone calls
- Selected OB procedures
- Source of OB care when normal source isn’t accessible or available
Value of the Nursing Role

- 1\textsuperscript{st} to evaluate
- Detect abnormal s/sx
- Alert the team
- Optimize patient outcome
OBSTETRIC units are urged to collaborate with emergency departments and hospital ancillary services, as well as emergency response systems outside of the hospital, to establish guidelines for triage of pregnant women.

Recently developed, validated obstetric triage acuity tools may improve quality and efficiency of care and guide resource use, and they could serve as a template for use in individual hospital obstetric units.
**Toolkit: Implement Early Labor Supportive Care Policies and Active Labor Criteria for Admission**

- Translation: Early labor at home. Let labor start on its own!

- Physiologic onset of labor is critical to the success in labor, and introduces moms and babies to protective hormonal pathways

- Women admitted in early labor are more likely to have a cesarean, and more likely to have routine interventions e.g. oxytocin even if not clinically necessary
Toolkit: Early admission support

- Admission policy or checklist for spontaneous labor
- Latent labor support and therapeutic rest policies
- Patient education materials to explain rationale for delayed admission, reduce anxiety and provide guidance on when to return to the labor and delivery unit
- Material with specific guidance for partners and family members as to how to best support the woman in early labor
ESTABLISHING PHONE TRIAGE

✓ EDUCATION
✓ COMPETENCY
✓ DOCUMENTATION
Phone Triage

Question:

Does your Department have a formal phone triage policy and procedure?

a) No we instruct the patient to call their doctor
b) No but we informally guide them over the phone
c) Yes formal P&P with written documentation
d) Not sure – we’re kind of “winging it” no formal training
e) Other
Phone Triage for Labor

Department guideline?

Gestational age
Complications of pregnancy
ROM
Mucous/Bloody Show
Uterine activity
Recent cervical exam
Fetal Movement
Assess stay home & call back or come in
Notify MD / NP/ CNM

“Welcome policy”
Competence Assessment

- L&D Nurses must complete a series of competence assessments with qualifying exams
  - This education material was based on current evidence and practice standards
  - Emphasis on triage as a systematic approach to rapid patient assessment
  - Assigns priority on the degree of need
  - Primary goal for triage nurse to assign acuity within 10 minutes of arrival to the unit
- Once the educational requirements the nurse is deemed “Triage competent”
BASIC CONSIDERATIONS IN ESTABLISHING A TELEPHONE TRIAGE SYSTEM

1. Are “Protocols” or “Guidelines” an Appropriate Format?
2. What’s the First Step in Drafting Protocols or Guidelines?
3. Who Should Handle the Calls?
4. How Should Calls Be Documented?
5. What Information Is Pertinent for Each Patient Who Calls?
6. Health Insurance Portability and Accountability Act (HIPAA)
   • Speak to the patient, check MR for authorization, confidential record
7. Reducing legal risks/improving patient care
   • Adequately trained staff, protocols in writing, proper documentation

Telephone Triage for Obstetrics and Gynecology, 2010. Philadelphia
Vicki E. Long MSN, CNM, RN, Patricia C. McMullen PhD, JD, WHNP-BC, RN
UCSF OB Phone Triage: 3 Recommendations

1. One person responsible for calls
2. Protocols implemented
3. Documentation

- Phone triage simulation
- Screen shot of order sets
- Documented in EPIC
UCSF OB Phone Triage: Working Diagnosis

- Neither MD’s or RN’s can diagnose without an exam
- Acceptable to form initial impressions “working diagnosis”
- Identify symptoms and classify by acuity rather than seeking to determine specific causes of symptoms
- The MD or RN must always inform patient of the presumptive status of this evaluation
- Use language the client can understand
UCSF OB Phone Triage: Communication

Goal of Telephone triage:

• Listen - receive information
• Assess - acute verses non-acute
• Give and receive information
• Release anxiety - inspire, persuade engender trust
• Problem solve
Hospital Triage: Review Assessments & Interventions

- Labor Evaluation
- ROM
- Contraction pattern
- Frequency/Intensity
- Discomfort in lower abdomen, back, and groin
- Does activity effect or ↓ UC’s
- Cervical change
- Latent phase
  - Long contraction phase
  - Sedation decreases or stops contractions
  - Bloody Show usually not present
Discharge for latent phase

- Eat easily digested foods, drink plenty of fluids
- Alternate activity with rest and take nice walks
- Prepare last minute things for baby
- Surround yourself with people that help you feel comfortable
- Relax with a warm shower
- Listen to music to maintain a tranquil environment
- Ask your partner for a massage
- If unable to talk during a contraction begin a slow chest breathing pattern
- Listen to your body and follow your instinct when it’s time to come back to the hospital
Obstetric Triage: Staffing

- Multiply 1.2 - 1.5 of overall birth volume
- Requires assessment of mother and fetus
  - “in a timely manner” - not defined by AAP or ACOG
- Care is ongoing until disposition
- The initial triage process (10 - 20) minutes
- Requires 1 nurse to 1 woman presenting for care
- This ratio may be changed to 1 Nurse: 2-3 woman as maternal-fetal status is determined to be stable or until patient disposition is determined
- 1 Nurse to 2-3 women during non-stress testing

Therapeutic rest

- Protocol
- Morphine Phenergan dosing
- Trial in progress
Summary

- Telephone triage may be a safe and cost effective means to initiate patient evaluation
- Many women present to the hospital for evaluation prior to their admission for labor and birth
- Nurses play a key role in triage and discharge
- Some nurses conduct MSE in the absence of direct evaluation by a physician per EMTALA
- Mother and baby should be stable prior to discharge to home
- Discharge instructions provide important information for women and their families to cope with latent phase
- Utilization of MFTI, phone triage, the CMQCC triage algorithm, and therapeutic rest promote the right time for a woman to transition from home to hospital for vaginal birth
Resources
Labor Support: A Return to the Basics

Alicia Pollak, RN, CNM, MS
Birth Center
Objectives

- Understand the mechanisms of labor and how the fetus is birthed physiologically
- Name three ways to comfort women during labor
- Name three “tools” readily available that could be used to aid in the comfort of women laboring
Childbirth through the ages

"Birthing" by Alan Levine is licensed under CC by 2.0

"Mother Giving Birth" by Steven Dameron is licensed under CC by 2.0
A birth-scene. Oil painting by a French (?) painter, Åbo, CC by 4.0

Science Museum, London, copyrighted work available under Creative Commons Attribution only license CC 4.0

Dumbarton Oaks Research Library and Collection
Fig. 71. Rebekka gebiert Jakob und Esau.
Von Étienne Delanne gestochen.
Image from page 173 of "Labor among primitive peoples. Showing the development of the obstetric science of to-day, from the natural and instinctive customs of all races, civilized and savage, past and present" (1883) Internet Archive Book Image
Review the Mechanisms of Labor- The 7 Cardinal Movements

- **ENGAGEMENT**: widest part of fetal head has passed through pelvic inlet
- **DESCENT**: progression of fetal head into the pelvis (in relation to ischial spines)
- **FLEXION**: fetal head reaches soft tissue of maternal pelvic floor
- **INTERNAL ROTATION**: to accommodate changes of pelvic diameters (transverse to anterior-posterior)
- **EXTENSION**: born in extension, under the symphysis pubis
- **EXTERNAL ROTATION OR RESTITUTION**: the head realigns with the shoulders, which engage and move similarly through the pelvis, to the head
- **EXPULSION**: the rest of the body is born (via curve of Carus)
A little Theory….

Why do our interventions work?

- Grantly Dick-Read in 1942, *Childbirth without Fear* “Cycle of Fear > Tension> Pain”

- Melzack’s article in 1965, Pain mechanisms: a new theory

- Melzack’s article 1999, Pain-an overview: “The neuromatrix theory of pain proposes that pain is a multidimensional experience produced by characteristic “neurosignature” patterns of nerve impulses generated by a widely distributed neural network- the “body-self-neuromatrix”- in the brain.” Pain can be triggered by sensory inputs or independent of them.

- Trout, CNM 2004, The neuromatrix theory of pain: Implications for selected nonpharmacologic methods of pain relief for labor
Knowledge can break the Fear-Tension-Pain cycle

Grantly Dick-Read, *Childbirth without Fear*, 1944
The ‘Fear Becomes Fact’ Cycle of Birthing Negativity
Let’s break it!
www.facebook.com/positivebirthmovement
“A review of 10 qualitative studies [2015] reported the two main influences on a woman’s ability to cope with labor pain were (1) continuous individualized support, and (2) acceptance of the need for experiencing some pain to birth their infants. Constant support established a sense of safety and reduced feelings of loneliness and fear, which enhanced their coping ability. However, the review also reported a gap in many clinical settings between women’s need for continuous support and its availability.”

“The American College of Obstetricians and Gynecologists has stated that ‘one of the most effective tools to improve labor and delivery outcomes is the continuous presence of support personnel, such as a doula’”

Simkin, P and Klein, M. Nonpharmacologic approaches to management of labor pain. Up to date (2017).
Non-pharmacologic approaches to management of labor pain

Classification of interventions into three categories

- **Low-resource** - “simple, readily available, inexpensive, and low-risk techniques including distraction, self-help, and comforting strategies or tools. These may be used individually or in combination with others”

- **Moderate-resource** - “interventions require patient motivation, specialized training, professional assistance, specific equipment, financial resources, or a combination thereof”

- **High-Resource** - “interventions require professional training and monitoring, have greater risk of adverse effects on mother, fetus, or labor, require increasingly complex equipment and training by staff and/or patient, and incur significant cost. They are highly effective in reducing labor pain, and include neuraxial analgesia and anesthesia and inhaled anesthesia
Non-pharmacologic approaches to management of labor pain

Low-resource - Movement, birth ball, touch and massage, acupressure, application of heat or cold, breathing techniques with relaxation, showers, music and audioanalgesia,

Moderate-resource - Aromatherapy, acupuncture, Yoga, Sterile water injections, hypnosis, biofeedback, Transcutaneous electrical nerve stimulation, water immersion

High-Resource - Epidural, combined spinal epidural, inhaled analgesia
Tools You Might Already Have in Your Birthing Rooms

- Eye mask
- Sheet (you don’t need a fancy Rebozo)
- A partner
- Water in some form (a bath, a shower)
- A basin or water pitcher
- Your labor bed should become a BFF (and that finicky bar!)
- Hand towels and wash-clothes
- A fan
- Warm blankets
- Pillows
- Sweet things to drink, lip gloss for dry mouth-breathing lips
Other Birth Tools that You Might See Brought to Hospital

- TENS unit
- Aromatherapy
- Rice packs (check your policy, caution use with epidurals)
Acupressure Bladder Points 26 and 32

A transcutaneous electrical nerve stimulator (TENS) by Michaelj0505 on Wikipedia Commons, licensed by CC 3.0
Bladder 26 and 32

BL-26 Guānyuánshú

Guanyanshu BL-26
Shiqizhuixia (M-BW-25)
lower border of L5

1.5 cm

Over the second posterior sacral foramen.

BL-32 Ciliáo

Ciliáo BL-32
second sacral foramen
Second Stage Management
2nd Stage of Labor
To Push or Not to Push
That is the Question!

ACOG Opinion 2017:
Reviewed evidence for labor care that minimizes intervention

In the absence of the need for a expeditious delivery, a woman may be offered a rest 1-2 hours at the onset of 2nd stage
Effect of immediate vs delayed pushing

Effect of Immediate vs Delayed Pushing on Rates of Spontaneous Vaginal Delivery Among Nulliparous Women Receiving Neuraxial Analgesia: A Randomized Clinical Trial

Alison G. Cahill, MD, MSCI; Sindhu K. Srinivas, MD, MSCE; Alan T. N. Tita, MD, PhD; Aaron B. Caughey, MD, PhD; Holly E. Richter, PhD, MD; W. Thomas Gregory, MD; Jingxia Liu, PhD; Candice Woolfolk, PhD; David L. Weinstein, MD; Amit M. Mathur, MD; George A. Macones, MD, MSCE; Methodius G. Tuuli, MD, MPH

**Importance** It is unclear whether the timing of second stage pushing efforts affects spontaneous vaginal delivery rates and reduces morbidities.
The 5 Ps

Power = forces
Passenger = fetus
Position = occiput
Passageway = pelvis
Psyche = your patient and support
**ACTIVE MANAGEMENT OF SECOND STAGE**

- Pushing if:
  - Head is visible OR
  - Ure to push is present AND descent occurs with trial push OR
  - Condition prohibits delaying pushing (i.e. chorio, NRFHT)

- **2nd STAGE BEGINS**
  - SVE & Date/Time Complete:
    - Date/Time Active pushing begins:
  - Plan for 2nd stage at bedside w/ senior provider.
    - Labor down appropriate?
      - strip review
      - fetal position/station
      - Urg to push/maternal sensation/uterine forces

- **Interventions:**
  - Maximize pt comfort & fetal ox
  - Assess bladder
  - Reposition pt Q 30-45 min
  - Consider oxytocin if uterine force inadequate

- **Good progress after 1 hr?**
  - Slow/No progress after 1 hr of pushing?
    - Notify provider, hourly bedside evals
  - Good progress after 1 hr?
    - Continue pushing & prepare for birth

- **Good progress after 2 hr?**
  - Continue pushing & prepare for birth

- **Senior OB provider to bedside for eval, hourly plan of care updates**

- **Begin pushing after 1 hr laboring down.**
  - Interventions:
    - Notify provider
    - Maximize pt comfort & fetal oxygenation
    - Position changes Q 30 min

- **Slow/No progress after 2 hr of pushing?**
  - Notify provider, hourly bedside evals

- **Senior OB provider to bedside for eval, hourly plan of care updates**
Positioning aids- Peanut Ball

www.maternalfocus.com - Google images
Pushing a DOP baby

- Hands & Knees or Exaggerated Sims position for DOP
- Encourage pt to hold own thighs to allow for maximal fetal descent and maternal comfort.
- Manual rotation when indicated.
Pushing

- Gone are the days of closed glottis pushing: “take a deep breath and hold it.”

- No clinically significant benefit. Research shows benefits of open glottis pushing and discourages closed glottis pushing to maximize oxygenation to mom and fetus.

- Open glottis/physiologic pushing: Bear down when they feel the pressure of UC and hold that effort as long as they can.

- “Do what comes naturally to you.”
 Instruct woman to bear down and push towards the pressure sensation she feels likely in her rectum.

 Allow it to be her choice whether or not she holds her breath, avoid telling her to do so.

 Discuss action as similar to abdominal crunch if pt familiar, “curling around their baby.”
- Encourage pushing for 6-8 seconds per effort, 3-4 times per UC

- Avoid counting to 10 with each push, as her breath may not last that long.

- Assess maternal effort/fatigue, fetal station, through a few UCs
Length of 2nd stage

- Goal is no more than 2-3 hours for multip vs nullip per ACOG but...

- If FHR tracing remains with moderate variability and maternal efforts are strong, may continue.

- Periodic Attending MD/CNM evaluation of progress/descent is vital.

Fetal Hear Rate Dilemmas
Implement Intermittent Monitoring for Low-risk Patients

Continuous monitoring:

• Increases the likelihood of cesarean
• Has not been shown to improve neonatal outcomes e.g. reduce rates of CP
• Restricts movement (and normal physiologic processes and coping)
• Potentially reduces nursing interaction/ labor support
Fetal Heart Rate Auscultation, 3rd edition

Kirsten Wisner & Carrie Holschuh

Correspondence
Kirsten Wisner, MS, RNC-OB, CNS, C-EFM, Salinas Valley Memorial Healthcare System, 450 E. Rome Lane, Salinas, CA 93901. kwisner@svn.com

ABSTRACT
The use of intermittent auscultation (IA) for fetal surveillance during labor decreased with the introduction of electronic fetal monitoring (EFM). The increased use of EFM is associated with an increase in cesarean births. IA is an evidence-based method of fetal surveillance during labor for women with low risk pregnancies and considered one component of comprehensive efforts to reduce the primary cesarean rate and promote vaginal birth. Many clinicians are not familiar with IA practice. This practice monograph includes information on IA techniques; interpretation and documentation; clinical decision-making and interventions; communication; education, staffing, legal issues, and strategies to promote implementation of IA into practice.

doi: 10.1016/j.mwh.2018.10.001
Management of Intrapartum Fetal Heart Rate Tracings
Number 116, November 2010

Figure 2. Management algorithm for uterine tachysystole. Abbreviation: FHR, fetal heart rate.

*See Table 2 for list of various intrauterine resuscitative measures
Intrauterine Resuscitation

- Repositioning side to side/ hands and knees
- IV bolus of at least 500 mL Lactated Ringer’s
- Oxygen at 10 L/min via non-rebreather facemask (usually no more than 15-30 min per event)
- Discontinue oxytocin/ remove Cervidil
- Amnioinfusion (1st stage) for deep recurrent variables
- Modification of pushing efforts (second stage)
- Medications
  - Terbutaline (1-2 times)
  - IV pressor if hypotensive/ after epidural placement
Fetal indication for cesarean

- Abnormal FHR
  - Reevaluate in OR
  - Obtain umbilical artery cord blood gas
    - Delayed cord clamping
- Multidisciplinary review of failed inductions
  - Improvement opportunities
Example Algorithm for the Management of Intrapartum Fetal Heart Rate Tracings

**Category 1**
- Moderate variability w/o late or variable decels

  - May observe
  - May observe. Apply corrective measures* and scalp stimulation
  - Acceleration or return of mod variability
  - Cautiously observe. Increase frequency of assessments
  - If abnormal pattern persists or returns

**Category 2**
- Non-clinically significant decels* in the presence of marked or mod variability or accels
- Minimal variability w/ clinically significant decels for < 50% of contractions; OR absent variability w/o decels
- Minimal variability w/ clinically significant decels for > 50% of contractions
- Prolonged decel ≤ 60 BPM (or < 80 BPM if remote from delivery)
- Absent variability w/decel or w/ bradycardia (baseline rate < 110 BPM; or sinusoidal pattern)

  - Apply corrective measures** and scalp stimulation
  - No acceleration or return of mod variability
  - Notify provider. Repeat scalp stimulation every 20-30 minutes. If pattern persists for 60 min without accelerations or return to moderate variability, then begin prep for urgent delivery
  - Begin prep for urgent delivery and initiate corrective measures** and scalp stim if not already done
  - Begin transport to OR by 3 min. Deliver without delay should decel persist > 10 min
  - If no improvement, deliver within 30 min

**Category 3**
- Prolonged decel ≤ 60 BPM (or < 80 BPM if remote from delivery)
- Absent variability w/decel or w/ bradycardia (baseline rate < 110 BPM; or sinusoidal pattern)

  - May observe. Apply corrective measures* and scalp stimulation
  - Acceleration or return of mod variability
  - Notify provider. Repeat scalp stimulation every 20-30 minutes. If pattern persists for 60 min without accelerations or return to moderate variability, then begin prep for urgent delivery
  - Begin prep for urgent delivery and initiate corrective measures** and scalp stim if not already done
  - Begin transport to OR by 3 min. Deliver without delay should decel persist > 10 min
  - If no improvement, deliver within 30 min

---

**Clinically significant decelerations include:**
- Variable decels lasting > 60 sec with a nadir > 60 BPM below baseline
- Variable decels > 60 sec with a nadir < 60 BPM regardless of baseline
- Late decels of any depth
- Any prolonged decel as defined by NICHD


**Corrective measures include:**
- Oxygen administration
- Maternal position change
- Fluid bolus
- Reduction or discontinuation of pitocin
- Administration of terbutaline for tachycontraction or tachyhydrotic
- Administration of pressors, if hypotension present
- Amnioinfusion for deep, repetitive variable decelerations


This is an example of one possible algorithm to assist the nurse and provider in the management of intrapartum fetal heart rate patterns. It does not cover all possible clinical situations. The algorithm assumes that the abnormal fetal heart rate pattern has been identified and is consistent with the description of the pattern.
Algorithm for Management of Category II Fetal Heart Rate Tracings

**FIGURE 1**
Algorithm for management of category II fetal heart rate tracings

- Moderate variability or accelerations
  - Yes
    - Significant decelerations with $\geq 50\%$ of contractions for 1 hour
      - Yes
        - Latent Phase
          - Normal labor progress
            - No
              - Cesarean
            - Yes
              - Active Phase
    - No
      - Significant decelerations with $\geq 50\%$ of contractions for 30 minutes
        - Yes
          - Second Stage
            - Normal progress
              - No
                - Observe
              - Yes
                - Cesarean or OVD
        - No
          - Observe

*OVD, operative vaginal delivery.

4That 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.
<table>
<thead>
<tr>
<th>MANAGEMENT OF CATEGORY II FETAL HEART RATE PATTERNS: CLARIFICATIONS FOR USE IN ALGORITHM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Variability refers to predominant baseline FHR pattern (marked, moderate, minimal, absent) during a 30-minute evaluation period, as defined by NICHD.</td>
</tr>
<tr>
<td>2. Marked variability is considered same as moderate variability for purposes of this algorithm.</td>
</tr>
<tr>
<td>3. Significant decelerations are defined as any of the following:</td>
</tr>
<tr>
<td>- Variable decelerations lasting longer than 60 seconds and reaching a nadir more than 60 bpm below baseline.</td>
</tr>
<tr>
<td>- Variable decelerations lasting longer than 60 seconds and reaching a nadir less than 60 bpm regardless of the baseline.</td>
</tr>
<tr>
<td>- Any late decelerations of any depth.</td>
</tr>
<tr>
<td>- Any prolonged deceleration, as defined by the NICHD. Due to the broad heterogeneity inherent in this definition, identification of a prolonged deceleration should prompt discontinuation of the algorithm until the deceleration is resolved.</td>
</tr>
<tr>
<td>4. Application of algorithm may be initially delayed for up to 30 minutes while attempts are made to alleviate category II pattern with conservative therapeutic interventions (eg, correction of hypotension, position change, amnioinfusion, tocolysis, reduction or discontinuation of oxytocin).</td>
</tr>
<tr>
<td>5. Once a category II FHR pattern is identified, FHR is evaluated and algorithm applied every 30 minutes.</td>
</tr>
<tr>
<td>6. Any significant change in FHR parameters should result in reaplication of algorithm.</td>
</tr>
<tr>
<td>7. For category II FHR patterns in which algorithm suggests delivery is indicated, such delivery should ideally be initiated within 30 minutes of decision for cesarean.</td>
</tr>
<tr>
<td>8. If at any time tracing reverts to category I status, or deteriorates for even a short time to category III status, the algorithm no longer applies. However, algorithm should be reinsti.tuted if category I pattern again reverts to category II.</td>
</tr>
<tr>
<td>9. In fetus with extreme prematurity, neither significance of certain FHR patterns of concern in more mature fetus (eg, minimal variability) or ability of such fetuses to tolerate intrapartum events leading to certain types of category II patterns are well defined. This algorithm is not intended as guide to management of fetus with extreme prematurity.</td>
</tr>
<tr>
<td>10. Algorithm may be overridden at any time if, after evaluation of patient, physician believes it is in best interest of the fetus to intervene sooner.</td>
</tr>
</tbody>
</table>

FHR: fetal heart rate; NICHD: Eunice Kennedy Shriver National Institute of Child Health and Human Development.


Graphic reprinted with permission

CMQCC Toolkit to Support Vaginal Birth and Reduce Primary Cesareans
33 yo G1P0 @41+1 weeks arrived for IOL
- What procedures/interventions were beneficial
  - AROM, SE placement, Amni infusion
- Was there anything else that could have been beneficial?
Comfort measures during labor
Comfort in Safety

• Safety first
  • Patient – belongings on one side of room
  • What if scenarios?
    – Toilet delivery (beds have wheels!)
    – Tub pushing
    – Decel when standing moving
    – SROM out of bed
  • Your side
    – clear path to door, beds free of tangled cords
    – BE TIDY!
Comfort in Safety

- Safety first
  - Patient – belongings on one side of room
  - What if scenarios?
    - Toilet delivery (beds have wheels!)
    - Tub pushing
    - Decel when standing moving
    - SROM out of bed
  - Your side
    - clear path to door, beds free of tangled cords
    - BE TIDY!
Comfort in YOU!

- Have faith in the skills you do have
- Be one step ahead
- Your presence matters, be in the “room where it happens”
- Keep active labor “active” by actually being active!
- Be positive and trust birth, each story is unique
- Use of body language to gain trust
  - Early and direct eye contact when meeting patient for first time
  - A “feeler” touch with introduction
Comfort in Your Voice

- Clear communication in the moment with birth team regarding delivery position
  - Conversation with the mum – her participation at time of delivery
    - Clear, direct, with an active voice
      - You are doing this…
      - “Let’s get up now…” or “We are getting up now and going for a walk”
      - You will have a contraction while sitting on toilet…..
      - When your water breaks the sensation of the contractions will change
    - We don’t have babies in the tub!
Comfort in the Room

- Keep the laboring space comfortable
  - Keeping it an active environment
    - Lights on or off
    - Turn position
    - Smells in the room (peppermint as air freshener)
    - Family influencing patient
Comfort Skills

- Breath work (yogis, lamaze, simple breath in breath out, follow my breath)
- Relaxation ("with your next breath, relax your forehead")
- Visualization (Magnolia) "what is your baby doing?"
- Hydrotherapy
- Basics-full bladder? Dry mouth? Thirst? Tired?
- Back labor-pressure points in back, hips to thumbs
- Dancing and moving those hips
- Squats (bed, on the floor, pushing)
- 7th inning stretch-GET HER UP AND WALK
Skills that come with time

*You gain experience by being present during birth*

- Navigating the space which is full of emotions, hormones, and culture
- Partnering with family and doulas
- How to exit the space of birth
- How to take care of yourself physically, emotionally, and spiritually

- Learning doesn’t stop here!
Our hands are our greatest tool
Resources for You

- *The Thinking Woman's Guide to a Better Birth* (1999), by Henci Goe
- *Baby Catcher: Chronicles of a Modern Midwife* (2003), Peggy Vincent
- *When Survivors Give Birth* (2004), Penny Simkin
- *Call the Midwife a True Story of the Easy End in the 1950s* (2007), Jennifer Worth
More Resources for You

- *Mindful Birthing: Training the Mind, Body, and Heart for Childbirth and Beyond* (2012), Nancy Bardacke
- *Childbirth Without Fear* (1944), Grantly Dick-Read.
- ANYTHING by Michel Odent
- [http://spinningbabies.com/](http://spinningbabies.com/)
- [http://optimal-foetal-positioning.co.nz/](http://optimal-foetal-positioning.co.nz/)
More Resources for You

- Keep Calm and Labor On poster (Lamaze)  [https://www.givingbirthwithconfidence.org/blog/keep-calm-and-labor-on-all-you-need-to-know-about-early-labor](https://www.givingbirthwithconfidence.org/blog/keep-calm-and-labor-on-all-you-need-to-know-about-early-labor)
- 40 Ways to Help a Laboring Woman  [http://www.youtube.com/watch?v=SlHIZkEyLBeU](http://www.youtube.com/watch?v=SlHIZkEyLBeU)
- Physical Comfort: Acupressure  [https://www.youtube.com/watch?v=zsyco4tQ_XI](https://www.youtube.com/watch?v=zsyco4tQ_XI)
- Using the Peanut Ball During Labor and Delivery:  [https://www.youtube.com/watch?v=hSn__BWjL1nw](https://www.youtube.com/watch?v=hSn__BWjL1nw)
- Peanut Ball in Labor:  [https://www.youtube.com/watch?v=WcE7wCNdTW0](https://www.youtube.com/watch?v=WcE7wCNdTW0)
- Premier Birth Tool:  [https://premierbirthtools.com](https://premierbirthtools.com)
- Childbirth Connection:  [http://www.lamaze.org/page/adequate-labor-support-infographic](http://www.lamaze.org/page/adequate-labor-support-infographic)
- Woman Dances to ‘Tootsie Roll’ to induce labor  [https://www.youtube.com/watch?v=snnZQxIXaQI](https://www.youtube.com/watch?v=snnZQxIXaQI)
- Mom in labor does the ‘Nae Nae’  [https://www.youtube.com/watch?v=8sf-PI93-nU](https://www.youtube.com/watch?v=8sf-PI93-nU)
-  [www.birthtools.org](http://www.birthtools.org) (ACNM website)
Leopold’s Manuever

- [https://www.gtsimulators.com/Abdominal-Palpation-Model-for-Leopold-Maneuvers-p/he-79820.htm](https://www.gtsimulators.com/Abdominal-Palpation-Model-for-Leopold-Maneuvers-p/he-79820.htm)
Safety Concerns: strategies to reduce patient harm
Measuring Outcomes

OPTIMALITY
Immediate skin to skin contact
Initiation of breastfeeding
Unexpected newborn outcomes
<table>
<thead>
<tr>
<th>Measure</th>
<th>Source/SUPPORTING Organization(s)</th>
<th>Specifications for Denominator and Numerator</th>
<th>Strengths</th>
<th>Limitations (Including data quality issues)</th>
<th>Utility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Term Newborn, aka Unexpected Neonatal Complications</td>
<td>•NQF: #0716 •CMQCC</td>
<td>Denominator: Live births at term without preexisting conditions (excludes IUGR, all fetal anomalies and conditions, maternal drug use) Numerator: Among the denominator, cases with very low Apgars, neonatal transfer, death, major or moderate complications by ICD-9/10 codes some with LOS parameters to guard against over-coding</td>
<td>Collected using administrative data only (no chart review). Serves an important role as a balancing measure to ensure that neonatal outcomes are preserved when working to lower the CS rate</td>
<td>Requires a Neonatal Discharge Diagnosis file linked to a Birth Certificate file to generate all the potential complications and exclusions. It is a complicated set of algorithms to generate the measure</td>
<td>Used wisely in California and by NPIC</td>
</tr>
</tbody>
</table>

**Appendix H**

Performance Measures Used To Assess Term Neonatal Outcomes (Jan 2016)
No Change in Baby Outcomes: Rate of Unexpected Newborn Complications

Screen Shot from the CMQCC Maternal Data Center

Remains significantly below State mean

Hoag Hospital

Intervention Period

Dec - Feb 2015
Avoid Defensive Medicine: Focus on Quality and Safety

- Protocols and workflows
  - IOL that includes adequate cervical ripening
  - Admission to L&D after onset of active labor
    - Reduce cascading interventions
  - Standardized Oxytocin Guideline
  - Using NICHD language for FHR interpretation/documentation
    - Avoid errors of miscommunication
  - Standardized intervention protocols
    - Improve timely intervention for fetal distress
Summary

- Applying what is known about: induction of labor, obstetric triage, management of 2nd stage and category 2 FHR tracings is essential to improve quality and support vaginal birth.

- Using policies, protocols, and guidelines helps to standardize care and provides an evidence based approach and is useful for audits and case review.

- Vaginal birth is nursing, physician, and system sensitive and can be used as a quality measure for pregnant women.