TITLE: FETAL MONITORING/UTERINE CONTRACTION ASSESSMENT AND DOCUMENTATION

PURPOSE: The purpose of the policy is to provide guidelines for fetal monitoring and uterine contraction assessment and documentation in the Birth Center.

STATEMENT OF POLICY: To provide guidelines for the trained registered nurse to initiate, assess and document the appropriate monitoring of the fetal heart rate (FHR) and uterine contraction (UC) patterns.

To provide standardized interpretation and communication regarding FHR and UC data based on criteria set forth by the National Institute of Child Health and Human Development (NICHD). (See Appendix C.)

To utilize informed consent and clinical judgment to provide a level of monitoring customized to the patient’s clinical condition and personal preferences, with the goal of achieving a delivery without significant acidemia or unnecessary iatrogenic interventions. It is the policy of SFGH Birth Center that women with low risk pregnancies have the choice to be intermittently auscultated or continuously monitored.

To provide guidelines for the registered nurse to utilize FHR and UC monitoring and assessment to support the overall goals of supporting maternal coping and labor progress, maximizing uterine and umbilical blood flow, maximizing oxygenation, and maintaining appropriate uterine activity.

Indications
(See Appendix A.)

1. Admission / Triage monitoring:
Upon admission or presentation to triage in the Birth Center, generally all patients greater than 24 weeks gestation are monitored for a minimum of 20 minutes. The tracing should be continuous until Category I (if greater than 28 weeks). Notify provider if not Category I after 40 minutes and/or variant FHR patterns are noted. If the patient has been ambulating for a period of time (2 hours or more), another 20 minute tracing of the fetal heart rate and uterine activity should be completed prior to discharge from triage. If patient is laboring, accelerations may not be required to determine Category I tracing.

See Antenatal Testing Center policy for antenatal testing patients in triage.
Patients less than 24 weeks may have a Doppler check for presence and rate of fetal heart tones. Patient’s refusal to be monitored must be documented.

2. **Antepartum monitoring (patient not in labor):**
   Antepartum fetal monitoring should be individualized for each patient dependent on condition and risk factors

3. **Labor monitoring: Intermittent Auscultation (IA vs. Continuous EFM (CEFM))**
   The two methods of fetal heart rate monitoring accepted by the American College of Obstetrician Gynecologists (ACOG) and the American College of Nurse Midwives (ACNM) are: intermittent auscultation (IA) and continuous electronic fetal monitoring (CEFM).

There is widespread support for the use of continuous EFM for high-risk women, while IA is the preferred method of monitoring for low-risk laboring women. There have been many studies comparing IA with EFM among low-risk pregnant women. There are advantages and disadvantages with the use of either method. Some of the differences include:

1. Women who were monitored by CEFM had a 1.66 times increased risk of Caesarean birth.
2. Women who were monitored by CEFM had a 1.2 times increased risk of operative vaginal birth
3. Women who were monitored by CEFM had a 50% decrease in neonatal seizures as compared with those monitored with IA.
4. Case-control studies have shown correlation of EFM abnormalities with umbilical artery base excess. Our institution now transfers these infants to UCSF as part of the “head cooling” protocol.
5. Meta-analysis of the randomized controlled trials comparing EFM with IA have found no effect on the incidence of cerebral palsy or perinatal death.

**Advantages and Disadvantages of CEFM and IA**

**Intermittent Auscultation**
1. IA helps to normalize the birth process by allowing freedom of movement and reducing the use of technology
2. IA has been shown to reduce Cesarean and operative vaginal birth rates
3. IA increases the amount of time that women receive hands-on bedside care and support
   For nurses not accustomed to IA, IA can seem like more work or may seem more intrusive Some nurses may not feel comfortable performing IA if they have more than one patient
4. The literature shows an increase in neonatal seizures for babies monitored with IA and a higher incidence of umbilical artery base excess.
Continuous External Fetal Monitoring

1. CEFM is more appropriate for women at risk for complications because fetal conditions can deteriorate more rapidly in those cases
2. CEFM may be easier to monitor if RN staffing is a concern

<table>
<thead>
<tr>
<th>FHR Characteristic</th>
<th>Doppler without Paper Printout</th>
<th>Electronic FHR Monitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variability</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Baseline rate</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Accelerations</td>
<td>Detects increases</td>
<td>Yes</td>
</tr>
<tr>
<td>Decelerations</td>
<td>Detects decreases</td>
<td>Differentiates types of decelerations</td>
</tr>
</tbody>
</table>

Deciding on the Appropriate Method of Monitoring (See Appendix A)

1. **The Patient’s Role**
   
   All low-risk patients should be offered IA. Ideally this conversation should take place in the antenatal period and be documented in the patient’s chart. In the absence of clinical risk factors or staffing problems, the patient can decide whether IA is right for her labor.

2. **The Nurse’s Role**
   
   The ability to use IA will be part of the standard skill set of all nurses taking care of laboring patients at the Birth Center. The nurse has the responsibility to decline to use IA if he or she feels that staffing does not permit IA. In these cases the nurse should let the provider know in a timely fashion that the nurse is unable to provide IA. The nurse can advocate for IA in a patient that he or she feels qualifies for IA or advocate for EFM in the patient who he or she feels needs to have EFM.

3. **The Provider’s Role**
   
   On admission the provider will evaluate the initial fetal monitoring tracing and the patient’s risk factors and decide whether the patient is appropriate for IA. All low risk women should be offered IA and counseled regarding the advantages and disadvantages.
PROCEDURE:
(See Appendix D for the Procedure of Fetal Monitoring)

FREQUENCY OF ASSESSMENT AND DOCUMENTATION

Documentation of the FHR in the medical record may occur at intervals that are different from assessment. When assessment and documentation are done at different intervals, this should be specified in the notes section of WatchChild. For example, “assessing FHR q 5” can be written in the notes, while a complete “Fetal Assessment” screen is done every 15 minutes. (See Appendix B for further documentation instructions.)

<table>
<thead>
<tr>
<th></th>
<th>Assessment</th>
<th>Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antepartum, not in labor</strong></td>
<td>Individualized per orders.</td>
<td>Individualized per orders.</td>
</tr>
<tr>
<td><strong>Latent phase labor</strong></td>
<td>If on continuous monitoring, assess hourly, unless clinical condition indicates increased frequency of assessment/documentation.</td>
<td>If on continuous monitoring, document hourly, unless clinical condition indicates increased frequency of assessment/documentation.</td>
</tr>
<tr>
<td><strong>Active phase labor:</strong></td>
<td>Assess every 30 minutes</td>
<td>Document every 30 minutes</td>
</tr>
<tr>
<td>Intermittent Auscultation</td>
<td>Note: There is no need to get a continuous EFM strip at the change of shift</td>
<td></td>
</tr>
<tr>
<td><strong>Active phase labor:</strong></td>
<td>Assess every 15 minutes</td>
<td>Document every 30 minutes</td>
</tr>
<tr>
<td>Continuous EFM</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Second stage labor, if actively pushing:</strong></td>
<td>Assess every 5 minutes</td>
<td>Document every 15 minutes</td>
</tr>
<tr>
<td>Intermittent Auscultation</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Second stage labor, if actively pushing:</strong></td>
<td>Assess every 5 minutes</td>
<td>Document every 15 minutes</td>
</tr>
<tr>
<td>Continuous EFM</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

APPENDICES:
- Appendix A: FETAL HEART RATE CHARACTERISTICS
- Appendix B: Examples for Considering Continuous EFM
- Appendix C: The Procedure of Fetal Monitoring
- Appendix D: Documentation of Fetal Monitoring

CROSS REFERENCES:
- Nursing Dept. Policy 6.5/Notification of Physician for Change in Patient Condition
- Birth Center Policy – Documentation: WatchChild

REFERENCES:
1. Alfirevic Z, Devane D, Gyte GML. Continuous cardiotocography (CTG) as a form of


**SUPERSEDES:**

- L&D Policy 5.1/Electronic Fetal/Toco Monitoring-External (2/94)
- OB-Policy/Electronic/Toco Monitoring (10/89)
- L&D Policy 1.6/Assisting with the Insertion of Intrauterine Pressure Catheter (IUPC)
APPENDIX A: FETAL HEART RATE CHARACTERISTICS

1. **Baseline rate**: mean (average) FHR rounded to increments of 5 bpm during a 10 minute segment **excluding**:
   a. Periodic or episodic changes
   b. Periods of marked FHR variability
   c. Segments of the baseline that differ by > 25 bpm

   **Baseline rate is determined over a 10-minute window. Minimum baseline duration must be at least 2 minutes of the baseline, or the baseline for that period is indeterminate. You may refer to the previous 10-minute segment to determine the baseline.**

   **Normal baseline rate is 110-160**
   
   **Tachycardia** = FHR > 160 bpm for ≥ 10 minutes in duration
   
   **Bradycardia** = FHR < 110 bpm for ≥ 10 minutes in duration

2. **Baseline variability**: Fluctuations in the baseline FHR of 2 cycles per minute or greater. Fluctuations are irregular in amplitude and frequency (overall irregularity of the heart rate) and are visually quantified by the amplitude from peak to trough (high to low) in bpm and are labeled as follows:
   a. **Absent** = amplitude range is undetectable
   b. **Minimal** = amplitude range is between 2 ≤ 5 bpm
   c. **Moderate** = amplitude range is 6-25 bpm
   d. **Marked** = > 25 bpm

   Sinusoidal pattern is a smooth sine wave-like pattern of regular frequency and amplitude and is excluded in the definition of FHR variability.

3. **Acceleration**: a visually apparent abrupt increase (defined as onset of acceleration to peak in < 30 seconds) in FHR above the baseline. The increase is identified from the most recently determined portion of the baseline. The acme (peak) of the acceleration is ≥ 15 bpm above the baseline and lasts ≥ 15 seconds and is < 2 minutes in duration from onset to return to the baseline. Prior to 32 weeks gestation, acceleration = an acme (peak) of ≥ 10 bpm above the baseline and a duration of ≥ 10 seconds.

   **Prolonged acceleration** is ≥ 2 minutes and < 10 minutes in duration. An acceleration of ≥ 10 minutes is a baseline change.

4. **Late deceleration**: A visually apparent **gradual** (onset of deceleration to nadir is ≥ 30 seconds) decrease and return to baseline FHR and is associated with a uterine contraction. Decrease is calculated from the most recently determined portion of the baseline. The nadir of the deceleration occurs after the peak of the contraction. Usually, the onset, nadir and recovery of the deceleration occur after the beginning peak and ending of the contraction.

5. **Early deceleration**: A visually apparent **gradual** (onset of deceleration to nadir ≥ 30 seconds) and return to baseline FHR and is associated with a uterine contraction. The decrease is calculated from the most recently determined portion of the baseline. The nadir of the deceleration occurs simultaneously to the peak of the contraction. Usually the onset, nadir
6. **Variable deceleration**: A visually apparent abrupt decrease (onset of deceleration to the beginning of the nadir < 30 seconds) in FHR below baseline. The decrease is calculated from the most recently determined portion of the baseline. The decrease in FHR below the baseline is ≥ 15 bpm, lasting ≥ 15 seconds, and < 2 minutes from onset to return to baseline FHR. When associated with uterine contractions, their onset, depth and duration commonly vary with successive uterine contractions.

7. **Prolonged deceleration**: A visually apparent decrease in FHR below the baseline. The decrease is calculated from the most recently determined portion of the baseline. The decrease from the baseline is ≥ 15 bpm, lasting ≥ 2 minutes but < 10 minutes from onset to return of FHR baseline. A prolonged deceleration of ≥ 10 minutes is a baseline change.

8. **Reactive FHR tracing**: A tracing is identified as “reactive” when the tracing exhibits 2 accelerations / 20 minutes, ≥ 15 bpm above baseline lasting ≥ 15 seconds in association with moderate variability and a baseline between 110-160 bpm. If before 32 weeks gestation = 2 accelerations / 20 minutes with accelerations ≥ 10 bpm above baseline lasting for ≥ 10 seconds.

**Quantification:**

1. Any **deceleration** is quantified by the depth of the nadir in bpm below FHR baseline and excludes any transient spikes or electronic artifact. The duration is described in minutes and seconds beginning to the end of the deceleration. They are defined as recurrent if they occur with ≥ 50% of uterine contractions in a 20 minute period.

2. Any **acceleration** is quantified by the height of the peak in bpm above FHR baseline and excludes any transient spikes or electronic artifact. The duration is described in minutes and seconds from beginning to the end of the acceleration.

3. **Bradycardia** and **tachycardia** are quantified by the actual FHR in bpm or the visually determined range if the FHR does not remain at one rate.

<table>
<thead>
<tr>
<th>Category I Normal</th>
<th>Category II Indeterminate</th>
<th>Category III Abnormal</th>
</tr>
</thead>
</table>
| • Baseline rate: 110–160 beats per minute (bpm)  
• Baseline FHR variability: moderate  
• Late or variable decelerations: absent  
• Early decelerations: present or absent  
• Accelerations: present or absent | **Baseline rate**  
• Bradycardia not accompanied by absent baseline variability  
• Tachycardia  
**Baseline FHR variability**  
• Minimal baseline variability  
• Absent baseline variability not | • Absent baseline FHR variability and any of the following:  
- Recurrent late decelerations  
- Recurrent variable decelerations  
- Bradycardia  
• Sinusoidal pattern |
### Interpretation of Auscultation Findings

<table>
<thead>
<tr>
<th><strong>Category I</strong></th>
<th><strong>Category II</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Normal FHR baseline between 110 and 160 bpm</td>
<td>• Irregular rhythm</td>
</tr>
<tr>
<td>• Regular heart rhythm</td>
<td>• Presence of FHR decreases or decelerations from the baseline</td>
</tr>
</tbody>
</table>

  - Note: When recurrent decelerations are detected, a transfer to EFM is indicated. EFM will be able to determine if the decreases from baseline are early, late, or variable decelerations and a diagnostic category I, II, or III will then be assigned using NICHD criteria for EFM generated FHR tracings.
**Appendix T**

**Model Policies**

<table>
<thead>
<tr>
<th>Eventlesi</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absence of FHR decreases or decelerations from the baseline</td>
<td>Tachycardia (baseline &gt;160 bpm &gt;10 minutes in duration)</td>
</tr>
<tr>
<td>Note: Presence of FHR increases of accelerations from the baseline may or may not be present in a FHR auscultated and determined to be Category I. Accelerations should be assessed for and documented if present. If present, FHR accelerations signify fetal well-being at the time they are noted.</td>
<td>Bradycardia (baseline &lt;110 bpm &gt;10 minutes in duration)</td>
</tr>
</tbody>
</table>
Appendix B: Below, find examples for considering continuous EFM, optimal monitoring will be determined by CNM / MD order

**Maternal Conditions**

**Chronic Disorders**
1. Active drug use that may affect neonatal morbidity
2. Chronic HTN
3. SLE or antiphospholipid syndrome
4. Thyroid disease, if uncontrolled

Diabetes requiring insulin or uncontrolled gestational diabetes

**Obstetric history**
1. History of IUFD
2. Previous cesarean birth

**Current pregnancy**
1. No prenatal care
2. Cholestasis
3. Diabetes that requires insulin or uncontrolled gestational diabetes
4. Gestational hypertension
5. Increased maternal serum AFP or HCG
6. Malpresentation
7. Twins
8. Oligohyramnios
9. Prolonged pregnancy >41 weeks
10. Pre-eclampsia
11. Prematurity (less than 36 weeks)
12. Preterm premature ROM (<36 weeks)

**Labor**
1. Chorioamnionitis
2. Epidural anesthesia
3. Meconium
4. Pitocin administration
5. Vaginal bleeding greater than bloody show
6. Misoprostol administration within two hours

**Fetal Conditions**
1. IUGR
2. Known congenital anomaly
3. Polyhydramnios
4. Red cell alloimmunization in the presence of erythroblastosis

**NOTE: The following ARE NOT exclusions to IA:**
1. Fentanyl administration
2. ROM at term with clear fluid, regardless of duration
APPENDIX C: The Procedure of Fetal Monitoring

1. **Intermittent Auscultation**
   a. Auscultation: When using auscultation as a mode of intermittent monitoring, a Doppler is used. FHR baseline should be established between contractions. Auscultation should be performed before, during and continued for one minute after the completion of a contraction. Maternal pulse to be determined immediately prior to and during auscultation. If maternal pulse and FHR cannot be distinguished from one another consider electronic monitoring and/or use of maternal pulse oxymetry.
   b. Utilizing abdominal palpation, contraction frequency, duration and intensity will be assessed and documented with the same frequency as FHR.

2. **External Fetal Monitoring (EFM/Doppler):**
   a. Precautions / Contraindication: unknown. Although some patients may exhibit sensitivity to aquasonic gel, KY lubricating gel may be used instead.
   b. Assess the need for fetal heart rate monitoring
   c. Operate and set up monitoring equipment appropriately
   d. Explain to the patient the need for FHR monitoring and what data the monitoring will provide
   e. Assess the monitor is functioning properly
   f. Observe the FHR tracing for consistency to verify clarity of input
   g. When monitoring is in progress observe area of abdomen under EFM monitor piece for redness, adjust as needed
   h. Reapply gel as needed
   i. Whenever in doubt, auscultate FHR and check maternal heart rate by applying the pulse ox (or manually).

3. **External Uterine Monitoring/Tocotransducer:**
   a. Precautions / Contraindication: unknown. Although some patients could experience skin breakdown // irritation. Frequently reposition the monitor
   b. Position the woman comfortably. Ensure uterine displacement to reduce compression of the inferior vena cava and position toco transducer on abdomen where fundus is most easily palpable and least maternal tissue is present. Avoid placing toco over umbilicus.
   c. Adjust the control button between contractions to record an artificial baseline tonus of approximately 10 mmHg to prevent the tracing from failing to record
   d. When monitoring is in progress check under the toco for redness and reposition every few hours

4. **Internal uterine pressure catheter monitoring (IUPC):**
   a. The Registered Nurse knowledgeable in this procedure is responsible for assisting the physician and or CNM with the insertion of an intrauterine pressure catheter.
   b. Physicians, Certified Nurse Midwives (CNMs), and medical and midwifery students
under appropriate direction may insert an intrauterine pressure catheter.*

c. Amniotic membranes must be ruptured and cervix adequately dilated prior to insertion.
d. An intrauterine pressure catheter should not be used if placenta previa is present or suspected.
e. Indications: A direct means of detecting frequency, duration, and intensity and resting tone of contractions.
f. An IUPC may be used to determine Montevideo units. Montevideo units (MVUs) are a unit of measure of the intensity or force or a contraction. MVUs are determined by taking the sum of the peak of the contractions in a 10 minute period. Charting frequency remains, if charting every 30 minutes either average the MVU’s or chart a range in the comments section of the uterine activity box. Adequate MVUs are considered to be in the range of:
   • 200-280 mmHg if the baseline uterine tone is subtracted from the total.
   • 240-300 mmHg if the baseline tone is included in the total.
   • Maximal uterine activity is considered to be 280-300 MVUs.
g. Adequacy of uterine activity with an IUPC may also be established by following criteria:
   • A contraction pattern with contractions > 2 minutes and ≤3 minutes apart.
   • Uterine contractions that are ≥50 mmHg above the baseline resting tone.
h. Average uterine resting tone is considered to be 5-25 mmHg. A higher resting tone may be noted for Pitocin induction, multiple fetuses, and amnionitis. An elevated baseline resting tone > 25 mmHg may warrant further evaluation to determine etiology.
i. An intrauterine pressure catheter (IUPC) has been associated with rare complications such as uterine perforation, abruption placenta and possibly amniotic fluid embolus. Use of IUPC in labor has not resulted in a decrease in Cesarean birth; hence its routine use is not recommended.

5. Procedure for IUPC set-up
   a. Explain procedure and indication to patient and family to decrease anxiety and increase cooperation
   b. Position patient in dorsal lithotomy position.
   c. Prepare equipment as follows:
      • Gather supplies: catheter, cable and sterile gloves.
      • Turn on the fetal monitor and plug in IUPC cable
      • Open sterile catheter package.
      • Connect the cable to the IUPC connection site.
      • Maintain zero slide in the “closed” position and zero the monitor. This establishes a zero baseline for the catheter.
      • Assist care provider with the insertion of the IUPC.
      • Secure catheter to patient’s thigh.
   d. Documentation in WatchChild computer system:
      • Fetal Assess screen: Change monitor type. Chart initial baseline reading and uterine resting tone in both lateral positions and while patient is supine.
      • MVUs after 10 minutes

*CMQCC note: Nurses who have been appropriately trained can insert IUPCs, if in accordance with unit policy and procedure
6. **Internal Fetal Monitoring/Fetal Scalp Electrode (FSE):**
   a. Fetal presentation should be documented prior to insertion via exam or ultrasound.
   b. Assist provider with FSE insertion by obtaining FSE packet and positioning patient
   c. Attach cable to FSE leg plate
   d. Attach FSE device to leg plate
   e. Secure leg plate to patient’s anterior thigh
   f. Observe tracing for clarity and functioning. If unclear or erratic, check leg plate contact and check cable attachment. If tracing does not improve, notify provider to replace FSE.
   g. To remove electrode, turn 1½ times counter clockwise and pull gently.
   h. The fetal scalp electrode (FSE) may rarely cause infection at the site of insertion.
   i. The use of a FSE is relatively contraindicated in instances of potential vertical transmission of infection, such as HIV, hepatitis B, and hepatitis C. Risk / benefit analysis must be individualized in these circumstances. Contraindications: face presentation.
   j. With known fetal coagulopathies, the FSE may cause excessive bleeding. Consultation with a High Risk specialist is advisable, as risk/benefit analysis must be individualized in these circumstances.
APPENDIX D: Documentation of Fetal Monitoring

Documentation with Intermittent Auscultation

2) Fetal assessment includes the following:
   a. mode
   b. Fetal heart rate
   c. Rhythm: regular or irregular
   d. Increases (accelerations), presence or absence
   e. Decreases, depth, timing and duration (Type of deceleration per EFM definitions cannot be accurately described with IA)
   Note: FHT variability is not assessed with IA

3) Uterine activity includes the following:
   a. Mode
   b. Frequency: from the beginning of one contraction to the beginning of the next contraction
   c. Duration
   d. Intensity

Documentation with the External Fetal Monitor

1) Fetal assessment includes the following:
   a. Baseline FHR
   b. FHR variability
   c. Presence of accelerations.
   d. Periodic or episodic decelerations.
   e. Changes or trends of FHR patterns over time
   Note: FHR patterns have been given descriptive names. Nurses should use these terms in both written and verbal communication. The terms used at the Birth Center are established by the National Institute of Child Health and Human Development (NICHD) and the National Institutes of Health as universal nomenclature for EFM interpretation. See Appendix C for description of fetal heart rate characteristics.

2) Uterine activity includes the following:
   a. Mode
   b. Frequency: from the beginning of one to beginning of next one
   c. Duration
   d. Intensity
   Use narrative notes, flow sheets, and summary.

Policy: Provide the laboring woman freedom to walk, move about, and assume the position of her choice during labor and birth unless restriction or a specific position is needed because of an underlying maternal-fetal condition.

Purpose: Freedom of movement in labor reduces maternal and neonatal morbidity, facilitates uterine contractility and labor progression, and enhances maternal satisfaction of the childbirth process. Restricting a laboring woman’s movement may adversely affect physiologic and psychologic elements during labor and childbirth, resulting in increased utilization of obstetrical interventions, oxytocin augmentation, and operative delivery.

- There has been no evidence of increased maternal or neonatal morbidity or increased obstetrical interventions in allowing a birthing mother the freedom to ambulate (move about) or change position during labor and birth.
- When a laboring woman is restricted to supine positioning, compression of the inferior vena cava by the weight of the fetus results in maternal hypotension and decreased uteroplacental perfusion. Higher pH and higher values of PO₂ and lower values of PCO₂ are in the cord blood of women who labor and birth in nonsupine positions.
- Ambulation, movement, and upright maternal positioning are likely to reduce the length of the first stage of labor by facilitating fetal descent. Restriction of movement decreases the fetal ability to descend, flex, rotate, and engage into the pelvis.
- Women who ambulate during the first stage of labor are less likely to have an operative delivery, defined as cesarean section, forceps, or vacuum extraction.
- When given the freedom to ambulate, move, and change position during labor and birth, most women find this to be an effective form of pain relief and are less likely to receive regional anesthesia.

Procedure:
1. The laboring woman will have freedom to change position to obtain a position of comfort, including, but not limited to, walking, standing, kneeling, squatting, and the use of chair, stool or birthing ball, unless a restriction on movement is required due to treatment or assessment of an underlying medical condition.
2. Utilization of nonevidence-based practices restrictive to a laboring woman’s freedom of movement (including continuous pulse-oximetry or continuous electronic fetal monitoring for low-risk obstetric clients) should be discouraged and dictated only by the underlying maternal-fetal condition versus institutional protocol.
3. Utilization of technology that affords a laboring woman freedom of movement during labor and childbirth including fetal telemetry and Doppler for intermittent fetal heart rate auscultation should be readily available to all intrapartum nursing and obstetrical staff.
4. The laboring woman whose labor is progressing slowly should be encouraged by the health care team to assume upright positions such as walking, kneeling forward, or rocking on a birthing ball, as ambulation and/or movement may encourage the progression of labor.

PURPOSE: To eliminate non-medically indicated (elective) deliveries prior to 39 weeks. Non-medically indicated cesarean delivery or induction of labor prior to 39 completed weeks gestation requires approval of the Hoag Physician Leader or designee.

SCOPE: Labor and Delivery

AUTHORIZED PERSONNEL: Labor and Delivery Director, Charge Nurses, OR Manager, Clerical Coordinators

1.0 SCHEDULING DEFINITIONS:

1.1 Clock In Time: Patient in the room and anesthesia ready to be administered, surgeon has presented to the department.

1.2 Procedure Start Time: When Anesthesiologist releases patient to Surgical Team.

1.3 Incision Time: When surgeon makes the Incision / starts the surgery.

1.4 Procedure End Time: Surgeon has finished the procedure.

1.5 Out of Room Time: Patient exits the O.R. suite.

1.6 Late Start:

1.6.1 If the patient enters the OR by or before the scheduled start time, the case is considered “on time” and “no delay” is recorded on the Intraoperative Record. If the patient enters the OR past the scheduled time, the case is considered a “late start” and a delay code must be recorded on the Intraoperative Record.

1.7 Urgent/Emergent:

1.7.1 Emergency Cases: Life threatening conditions requiring immediate attention that takes precedence over other cases. Emergencies will be performed in an available operating room during regular hours or may bump scheduled cases if all existing rooms are in use.

1.7.2 Urgent Cases: In house referrals or patients admitted to the hospital that requires surgical intervention within 24 hours.

1.7.3 Turnover Time: The time from when the current patient leaves the room until the next patient enters the room. Turn over time reports are generated for to-follow cases by the same surgeon.

1.7.4 Clean Up Time: Scheduling will allow adequate time between scheduled cases for cleaning and prepping. The OR clean up time is 30 minutes.

2.0 SURGERY CASE / INDUCTION SCHEDULING:

2.1 All cases are scheduled through the Labor and Delivery Scheduling Line.

2.1.1 OB Physician Office will fax the Hoag Scheduling Request/Order to LDR Scheduling.

2.1.2 Forms will not be accepted and requested date will not be granted if:

2.1.2.1 The form has been faxed before 0900

2.1.2.2 The form has been received 8 weeks prior to the requested surgery.
# Appendix T
## Model Policies

## PROCEDURE

**Category:** Patient Care Services  
**Effective Date:** See footer  
**Owner:** Labor and Delivery OR Manager

### Title: Cesarean Delivery / Induction of Labor Scheduling

<table>
<thead>
<tr>
<th>Description</th>
<th>Responsible Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>date for cesareans/ 1 week prior to the requested induction date for vaginal delivery</td>
<td></td>
</tr>
<tr>
<td>2.1.2.3 Orders are not present in SCM at the time of scheduling.</td>
<td></td>
</tr>
<tr>
<td>2.1.3 Women who have medical indications for delivery have priority over women having elective cesarean deliveries and inductions of labor. These decisions are at the discretion of the LDR charge nurse in consultation with the designated physician leader.</td>
<td></td>
</tr>
<tr>
<td>2.2 All scheduled deliveries must have the appropriate form completed and signed by physician to begin the scheduling process.</td>
<td></td>
</tr>
<tr>
<td>2.2.1 Cesarean Deliveries: Cesarean Delivery Scheduling Request/Order form (PS 7598).</td>
<td></td>
</tr>
<tr>
<td>2.2.1.1 For primary, elective cesarean deliveries, a complete/signed “Understanding the Risks” patient education checklist must also be received in order for the case to be scheduled.</td>
<td></td>
</tr>
<tr>
<td>2.2.2 Inductions of labor: Induction of Labor Scheduling Request form (PS 5529).</td>
<td></td>
</tr>
<tr>
<td>2.2.2.1 For elective inductions, a completed/signed “Induction Education” patient education must also be received in order for the case to be scheduled.</td>
<td></td>
</tr>
<tr>
<td>2.3 Cases will be entered into Surgical Information System (SIS) by the LDR Scheduling Clerical Coordinator as tentative.</td>
<td></td>
</tr>
<tr>
<td>2.4 A Hoag Physician Leader (Chief of Maternal Fetal Medicine, Laborist, Department Head, etc.) will review the Scheduling Request/Order form within 24 hours.</td>
<td></td>
</tr>
<tr>
<td>2.4.1 Approval from the Hoag Physician Leader:</td>
<td></td>
</tr>
<tr>
<td>2.4.1.1 The case will proceed as scheduled. No further action taken.</td>
<td></td>
</tr>
<tr>
<td>2.4.2 Further information needed:</td>
<td></td>
</tr>
<tr>
<td>2.4.2.1 The Hoag Physician Leader will complete a request for further information to be faxed to physician office.</td>
<td></td>
</tr>
<tr>
<td>2.4.3 Declines scheduling request:</td>
<td></td>
</tr>
<tr>
<td>2.4.3.1 The Hoag Physician Leader will communicate the cancellation with Clerical Coordinators for removal of schedule.</td>
<td></td>
</tr>
<tr>
<td>2.4.3.2 LDR Scheduling will call the OB Physician’s office to inform them of the cancellation of the case.</td>
<td></td>
</tr>
<tr>
<td>2.5 Computerized Elective Scheduling (captured in SIS)</td>
<td>Scheduler, LDR OR Manager</td>
</tr>
<tr>
<td>2.5.1 In order to ensure correct patient identification the following information is needed in order to schedule surgery:</td>
<td></td>
</tr>
<tr>
<td>2.5.1.1 Social Security Number or Medical Record Number</td>
<td></td>
</tr>
<tr>
<td>2.5.1.2 Patient Name (Last, First, Middle Initial)</td>
<td></td>
</tr>
<tr>
<td>2.5.1.3 Date of Birth</td>
<td></td>
</tr>
<tr>
<td>2.5.1.4 Patient Gender</td>
<td></td>
</tr>
<tr>
<td>2.5.2 If patient is in Affinity, download the above information and continue with the following information.</td>
<td></td>
</tr>
<tr>
<td>2.5.2.1 Patient Home and/or Work Phone Number</td>
<td></td>
</tr>
<tr>
<td>2.5.2.2 Patient In-House Room Number</td>
<td></td>
</tr>
<tr>
<td>2.5.2.3 Surgeon Name</td>
<td></td>
</tr>
<tr>
<td>2.5.2.4 Assistant Surgeon</td>
<td></td>
</tr>
</tbody>
</table>
PROCEDURE

Category: Patient Care Services  Effective Date: See footer
Owner: Labor and Delivery OR Manager
Title: Cesarean Delivery / Induction of Labor Scheduling

### Description

<table>
<thead>
<tr>
<th>Time Availability</th>
<th>Team A</th>
<th>Team B</th>
<th>Induction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday, Tuesday, Thursday, &amp; Friday</td>
<td>0715</td>
<td>0730</td>
<td>0730 – 2 slots</td>
</tr>
<tr>
<td></td>
<td>0900</td>
<td>0900</td>
<td>0900 – 2 slots</td>
</tr>
<tr>
<td></td>
<td>1030</td>
<td>1130</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1200</td>
<td>1430</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1330</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td>0830</td>
<td>0900</td>
<td>0030 – 2 slots</td>
</tr>
<tr>
<td></td>
<td>1130</td>
<td>0400 – 2 slots</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0900</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1300</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1430</td>
</tr>
<tr>
<td>Weekends and Holidays</td>
<td>No scheduled time available</td>
<td>0830</td>
<td>1130</td>
</tr>
</tbody>
</table>

### Add on Cases

2.7.1 Surgeons or their offices call Labor and Delivery to schedule add-on cases. (After the schedule closes for the next day and scheduling for the day of surgery), all non-urgent/emergent add-on cases are considered first call/first serve but will be triaged by the LDR Charge Nurse for time assignment and available space.

2.7.2 Add-on cases are logged on the Add-on list with specific information requested: Patient and surgeon name, procedure. Appropriate ancillary departments are notified as needed. Add-on cases are entered in SIS system by Clerical Coordinator.

2.7.3 Anesthesia department will assign an Anesthesiologist to add-on cases

2.7.3.1 If case has no Anesthesiologist assigned it will automatically be assigned the LDR Unit Anesthesiologist

2.7.4 All Urgent –emergent add-on cases are coordinated by charge nurse

2.7.4.1 Any special requests, such as anesthesia support, or other special equipment need to be communicated to the charge nurse immediately so the items can be obtained

### Bumping:

2.8.1 If the surgeon determines the surgery cannot wait until there is availability of OR-room, the surgeon will contact the OR Manager or the LDR Charge Nurse and discuss the need to bump another case.

2.8.1.1 It is the responsibility of the surgeon to contact the surgeon whose
<table>
<thead>
<tr>
<th>Category:</th>
<th>Patient Care Services</th>
<th>Effective Date:</th>
<th>See footer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner:</td>
<td>Labor and Delivery OR Manager</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Title:</td>
<td>Cesarean Delivery / Induction of Labor Scheduling</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Description**

procedure he/she will bump and discuss the situation with the surgeon.

**Reference:**

**Review and/or input for this procedure was given by the following:**
WHI ACO Pilot Committee
WHI Leadership
WHI OB Core 12/2014

**Revision Designation:** B – significant revisions
INDUCTION OF LABOR (IOL) SCHEDULING REQUEST
HOAG MEMORIAL HOSPITAL PRESBYTERIAN

The Prenatal Record MUST be on file in Labor and Delivery or Faxed with this completed form.

☐ Check if this is an update to a currently scheduled case
☐ Elective  ☐ Non-Elective

Requested Induction Date: ____________________________

Requesting OB: ____________________________ Alternate time availabilities:

Pediatrician: ____________________________

Dating: EDC (month/day/year): ____________________________ Gestational age at desired date of IOL: ___ weeks ___ days

IOL Diagnosis: ____________________________ Latex Allergy: ☐ Yes ☐ No

PATIENT DEMOGRAPHIC INFORMATION:

Patient Name: ____________________________

DOB: ____________________________ SSN: ____________________________ MR#: ____________________________

Address: ____________________________ Home #: ____________________________ Work #: ____________________________

Cell #: ____________________________ Other #: ____________________________

Office contact: ____________________________ Phone #: ____________________________ Fax #: ____________________________

☐ Induction Order in CPOE (Sign & Hold)

Special instructions: ____________________________

To Be Completed by Physician Office Staff

A.M./P.M. ____________________________ [Physician Signature – Required] ____________________________ ID#

INSURANCE CARD INFORMATION

Primary Subscriber’s Name: ____________________________

ID#: ____________________________ Group#: ____________________________

To Be Completed By Hoag Hospital LDR Scheduling

Confirmation Code: ____________________________ IOL Date: ____________________________ IOL Time: ____________________________

FAX FORM TO LDR

PS 5529
Rev 09/14/15

CMQCC Toolkit to Support Vaginal Birth and Reduce Primary Cesareans

20 of 26
Appendix T

Model Policies

Induction of Labor:

Gravity: ________ Parity: ________

**Indication:** (check all appropriate indications below)

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chorioamnionitis</td>
<td>≥ 41 weeks gestation / Post-term pregnancy</td>
<td>Distance from hospital</td>
</tr>
<tr>
<td>Diabetes Uncontrolled</td>
<td>Gestational diabetes</td>
<td>History of rapid labor</td>
</tr>
<tr>
<td>Fetal Anomaly</td>
<td>IUGR – reassuring testing</td>
<td>Maternal request</td>
</tr>
<tr>
<td>Fetal hydrops/somnionization</td>
<td>Fetal demise</td>
<td>Prior C/S</td>
</tr>
<tr>
<td>Gestational/Chronic hypertension</td>
<td></td>
<td>Patient desires VBAC</td>
</tr>
<tr>
<td>IUGR less than 5%</td>
<td></td>
<td>Psychological factors (specify): _____</td>
</tr>
<tr>
<td>Maternal medical conditions (specify): _____</td>
<td></td>
<td>&gt; 39 weeks with a favorable cervix</td>
</tr>
<tr>
<td>Multiple gestation:☐ twins ☐ di/di ☐ moldi</td>
<td></td>
<td>Other indication: _____</td>
</tr>
<tr>
<td>Non-reassuring fetal testing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oligohydramnios</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preecclampsia/HELLP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confirmation of gestational age:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LMP:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDC:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Confirmation of gestational age:**

Determined by: (check all that apply)

- Ultrasound obtained at < 20 weeks on (date): ___ 19 (gestational age): ___ weeks confirms gestational age
- Known date of conception on (date): ___ associated with infertility treatment

If EDC was not determined by above methods, then identify documentation of fetal maturity:

- Amniocentesis performed on: Results: ____________________________

*Provide explanation if scheduling at < 39 weeks:

**Bishop Score**

<table>
<thead>
<tr>
<th>Score</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dilation (cm)</td>
<td>closed</td>
<td>1-2</td>
<td>3-4</td>
<td>≥ 5</td>
</tr>
<tr>
<td>Effacement (%)</td>
<td>0-30</td>
<td>40-50</td>
<td>60-70</td>
<td>≥ 80</td>
</tr>
<tr>
<td>Station (cm)</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
<td>0</td>
</tr>
<tr>
<td>Cervical Consistency</td>
<td>Firm</td>
<td>Medium</td>
<td>Soft</td>
<td></td>
</tr>
<tr>
<td>Cervical Position</td>
<td>Posterior</td>
<td>Midline</td>
<td>Anterior</td>
<td></td>
</tr>
</tbody>
</table>

A Bishop Score ≥ 6 is required for elective induction of multifetal patients.

**Physician Signature:** ____________________________

**Date/Time:** ____________________________

**To be completed by Chief of Maternal Fetal Medicine or OB Hospitalist**

**Procedure Scheduling Determination:**

- Schedule: Medically indicated and necessitates delivery < 39 weeks gestation
- Schedule: Gestation age ≥ 39 weeks on scheduled date

**Completed by:** [Chief of Maternal Fetal Medicine/OB Hospitalist]  
**Date/Time:** ____________________________

**Bishop Score on Admission**

<table>
<thead>
<tr>
<th>Score</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>Repeat Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dilation (cm)</td>
<td>closed</td>
<td>1-2</td>
<td>3-4</td>
<td>≥ 5</td>
<td></td>
</tr>
<tr>
<td>Effacement (%)</td>
<td>0-30</td>
<td>40-50</td>
<td>60-70</td>
<td>≥ 80</td>
<td></td>
</tr>
<tr>
<td>Station (cm)</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Cervical Consistency</td>
<td>Firm</td>
<td>Medium</td>
<td>Soft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cervical Position</td>
<td>Posterior</td>
<td>Midline</td>
<td>Anterior</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Exam done By:**

- Difference in Bishop score greater than or equal to 4
- Cervical ripening ordered
- Patient discharged and rescheduled

**FAX FORM TO LDR**

**INDUCTION OF LABOR SCHEDULING REQUEST**

PS 5529  
Rev 09/14/15

**Name Label:** ____________________________

**Page 2 of 2**
Induction Education for Patients

Induction of labor is the use of medication or other interventions to get labor started. There are a number of medical reasons for which labor induction is indicated. An elective induction is done when a patient and her clinician decide to induce for non-medical reasons. In a first delivery, elective induction is not scheduled before 41 weeks of pregnancy. For women who have already delivered a baby, elective induction is not performed prior to 39 completed weeks of pregnancy. The most common ways of starting contractions are by breaking your bag of water and use of medications.

There are a number of physical and social reasons that a patient and her clinician may choose elective induction. Patients should have a clear understanding of the pros and cons of inducing labor before considering labor induction.

ELECTIVE INDUCTION OF LABOR MAY:
• Increase the duration of labor and hospital stay
• Increase the need for pain medication and/or epidural
• Decrease the patient’s ability to move about the labor room
• Increase the chance of cesarean delivery

For more information about induction please go to:

Please understand that your scheduled time is a request. You may not be able to come in on the day and time that you are scheduled if we have high patient volume and room is not available.

Call Labor and Delivery at 949/764-5789 before coming to the hospital to determine availability for induction. If there is no availability at that time, the charge nurse will provide you follow up instructions. You will be contacted by our Labor and Delivery staff regarding your delivery plans.

Continue your normal routine while waiting to be admitted to the hospital, to include eating and drinking as usual.

I have read and understand the above information and have had the opportunity to ask questions.

| PATIENT SIGNATURE | PATIENT NAME | DATE |

MARIN GENERAL HOSPITAL
DEPARTMENT OF NURSING
WOMEN’S, INFANTS’ AND CHILDREN’S CARE SERVICES

POLICY FOR THE PAIN MANAGEMENT OF THE OB PATIENT DURING THE INTRAPARTUM PERIOD

I. POLICY
It is the policy of Marin General Hospital (MGH) to assure that an obstetric patient be given accurate and current information regarding nonpharmacologic and pharmacologic interventions that are available to them when they are in labor.

II. PURPOSE
The purpose of this policy is to ensure that patients are supported in their pain management decisions by the Obstetric (OB) Registered Nurses (RN) caring for them in labor. Health care providers including nurses are crucial resources for childbearing families. In order to assist women in the decision for relief of labor discomforts, Obstetric Registered Nurses must be knowledgeable regarding the risks and benefits of all medications used in labor and also be able to support them in non pharmacological methods.

III. GENERAL INFORMATION
Labor pain differs from acute or chronic pain in that it is an expectation of the process. Increasing intensity and frequency often heralds progress and is interpreted as a positive sign, rather than a sign that something is wrong. Labor pain has many psychological associations that cause women to actually choose to experience pain rather than control it. The preparation for the labor process as well as the emotional support received during labor aid in decreasing maternal anxiety thereby decreasing or altering her perception of pain.

The laboring patient's description of the pain intensity of her contractions is whatever she says it is, regardless of the intensity of uterine contractions (UC's) as palpated by the nurse.

Pain relief needs to be addressed with use of non-pharmacological interventions any time during labor that pharmacological interventions are contraindicated. Nonpharmacological interventions are an effective alternative to pharmacological interventions and can be used anytime per patient preference.
<table>
<thead>
<tr>
<th>ASSESSMENT</th>
<th>1. Assess each patient upon arrival to the unit for the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a. Onset, frequency, and duration of UCs.</td>
</tr>
<tr>
<td></td>
<td>b. A Labor Pain and Coping Assessment shall be performed initially on admission using the Labor Pain and Coping Scale (LPCS):</td>
</tr>
<tr>
<td></td>
<td>1. Unaware, talking, sleeping</td>
</tr>
<tr>
<td></td>
<td>2. Aware of Contractions, discomfort using breathing and relaxation techniques, comfort relaxation techniques, comfort measures and minimal coaching</td>
</tr>
<tr>
<td></td>
<td>3. Requires coaching, pain medication and pain management interventions</td>
</tr>
<tr>
<td></td>
<td>4. Intense coaching, inadequate pain relief</td>
</tr>
<tr>
<td></td>
<td>c. Description of pain (to rule out pain from other causes than labor, i.e. abruption, uterine rupture, etc.).</td>
</tr>
<tr>
<td></td>
<td>d. Interventions for pain management used by patient at home.</td>
</tr>
<tr>
<td></td>
<td>e. Effectiveness of interventions will be assessed 30 minutes after intervention is given.</td>
</tr>
<tr>
<td></td>
<td>f. If patient has had any childbirth preparation classes.</td>
</tr>
<tr>
<td></td>
<td>g. Patient's plan for pain management during labor.</td>
</tr>
<tr>
<td></td>
<td>2. Pain assessment in Labor is ongoing because it is not expected to diminish or go away. Following the LPCS assessment on admission, a pain/coping assessment shall be performed with complete set of vital signs (every 2-4 hours) before and after medication/intervention is requested and received or as patient conditions warrants. Frequency of assessment may be modified by agreement between the patient and the nurse.</td>
</tr>
</tbody>
</table>
### PLANNED STEPS

1. Assess patient's level of pain and need for intervention.
2. Use any of the following support measures as non-pharmacological methods of pain management.
   a. Dim lights in room
   b. Quiet atmosphere
   c. Support people in room as desired by patient
   d. Instruction/coaching in slow, relaxed breathing or effective breathing pattern of patient's choice.
   e. Instructions/support of relaxation techniques such as
      1. Massage
      2. Visualization
      3. Meditation
      4. Music
      5. Distraction Strategies
      6. Cutaneous stimulations (transcutaneous electrical nerve stimulation [TENS], acupuncture, accupressure)
      7. Hypnosis/self-hypnosis
   f. Hydrotherapy-shower or tub, it not contraindicated (Refer to Hydrotherapy Policy #3050.41).
   g. K-pad for heat per MD order or cold pack.
   h. Counter pressure
   i. Sterile water injections as counter irritant for back labor. (Refer to Intradermal Sacral Sterile Water Injections Policy & Procedure #3050.22).
3. Notify MD/Certified Nurse Midwife (CNM) if non-pharmacological methods ineffective or patient requesting additional pain relief.
4. Provide pharmacological interventions per MD/CNM orders with explanation to patient/support person.

### PATIENT EDUCATION

1. Give appropriate age specific explanation of LPCS assessment.
2. Explain process of labor as needed to decrease patient's anxiety, taking into consideration the following:
   a. Patient's questions
   b. Patient's previous knowledge of labor process
   c. Patient's age
   d. Multiparity
   e. Stage and progress of labor
3. If patient has had no childbirth preparation,
   a. Instruct patient and support person in simple breathing and relaxation techniques.
   b. Provide coaching/support until patient is able to use techniques effectively.
4. If patient has had previous childbirth preparation,
   a. Provide support/encouragement for effective breathing and relaxation techniques by patient.
   b. Provide coaching/support until patient is able to use techniques effectively.
### PATIENT EDUCATION (Continued)

5. Assess pain intensity of UC’s as described by patient (using LPCS coping scale) with vital signs every 2-4 hours or more often if progress of labor changes and/or the patient's condition changes. After epidural anesthesia, assess pain level every 1 hour.

6. Assess effectiveness of each intervention. (Non-pharmacological or pharmacological) by reassessing the patient's pain intensity per pain scale.

### REASSESSMENT

Pain level is reassessed with vital signs and before and within 30 minutes after pain medication intervention is administered for effectiveness. Notify MD if:

1. Respiratory rate <10 or Blood Pressure (BP) < 90/50
2. Inadequate analgesia
3. Side effects (i.e. nausea, itching, hypotension)

### DOCUMENTATION

1. On Labor and Delivery (L&D) Flowsheet, OB Interdisciplinary Plan of Care (IPOC), document:
   a. Baseline UC’s/pain assessment/Patient's acceptable level of pain
   b. Patient's description of intensity of pain using Labor Pain Coping Scale, (LPCS) And mild, moderate or severe per patient’s perception in regards to “uterine contraction assessment”.
   c. Patient's plan for pain management during labor.
   d. Interventions for pain management used by patient at home.
   e. Effectiveness of interventions (per pain scale- assessed 30 minutes after intervention).
   f. If patient has had any childbirth preparation classes.
   g. Any additional cultural/psychosocial information effecting pain.
   h. Patient's pain /coping assessment using LPCS scale. Document in the pain assessment section underneath the Vital Signs at least every 4 hrs and 30 minutes after intervention.
   i. Interventions utilized.
   j. Effectiveness of interventions.
   k. Education given to patient and/or support person.
   l. Document any medication given on L&D flowsheet.

### IV. AGE SPECIFIC CONSIDERATIONS

N/A

### V. EQUIPMENT

Medication as prescribed by MD/CNM
Syringe/needle
Intravenous (IV) Solution
IV Tubing
Angio Catheter