

**Zuckerberg San Francisco General Hospital. Fetal Monitoring Policy. Includes procedure for intermittent auscultation and exclusion criteria. Used with permission.**

**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

| <b>FHR Characteristic</b> | <b>Doppler without Paper Printout</b> | <b>Electronic FHR Monitor</b>         |
|---------------------------|---------------------------------------|---------------------------------------|
| Variability               | No                                    | Yes                                   |
| Baseline rate             | Yes                                   | Yes                                   |
| Accelerations             | Detects increases                     | Yes                                   |
| Decelerations             | Detects decreases                     | Differentiates types of decelerations |

**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.)

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

**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. Alfrevic Z, Devane D, Gyte GML. Continuous cardiotocography (CTG) as a form of

- electronic fetal monitoring (EFM) for fetal assessment during labour. *Cochrane Database of Systematic Reviews* 2006, Issue 3. Art. No.: CD006066. DOI: 10.1002/14651858.CD006066.
2. Feinstein, NF, Sprague, A, and Trepanier, MJ. 2008. Fetal Heart Rate Auscultation. Washington, DC: AWHONN.
  3. Macones, G et al. The 2008 National Institute of Child Health and Human Development Workshop Report on Electronic Fetal Monitoring. *Obstetrics and Gynecology* 2008;112:661-6.
  4. Simpson, K.R. and Knox, G.E. Common areas of litigation related to care during labor and birth. Recommendations to promote patient safety and decrease risk exposure. *Journal of Perinatal and Neonatal Nursing* 2003;17:110-125.
  5. [Intrapartum electronic fetal heart rate monitoring and the prevention of perinatal brain injury](#). Graham EM, Petersen SM, Christo DK, Fox HE. *Obstet Gynecol.* 2006 Sep;108(3 Pt 1):656-66.
  6. Suggested citation: American College of Nurse-Midwives. Intermittent Auscultation for Intrapartum Fetal Heart Rate Surveillance NUMBER 13. *J Midwifery Womens Health.* 60(5):626–632.

**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  $2 \leq 5$  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

and recovery of the deceleration occur simultaneously to the peak of the contraction.

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  $\geq 15$  bpm, lasting  $\geq 15$  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  $\geq 15$  bpm, lasting  $\geq 2$  minutes but < 10 minutes from onset to return of FHR baseline. A prolonged deceleration of  $\geq 10$  minutes is a baseline change.
8. **Reactive FHR tracing:** A tracing is identified as “reactive” when the tracing exhibits 2 accelerations / 20 minutes,  $\geq 15$  bpm above baseline lasting  $\geq 15$  seconds in association with moderate variability and a baseline between 110-160 bpm. If before **32 weeks gestation** = 2 accelerations / 20 minutes with accelerations  $\geq 10$  bpm above baseline lasting for  $\geq 10$  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  $\geq 50\%$  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.

| Category I Normal   | Category II Indeterminate   | Category III Abnormal  |
|---|---|--|
| <ul style="list-style-type: none"> <li>• Baseline rate: 110–160 beats per minute (bpm)</li> <li>• Baseline FHR variability: moderate</li> <li>• Late or variable decelerations: absent</li> <li>• Early decelerations: present or absent</li> <li>• Accelerations: present or absent</li> </ul> | <ul style="list-style-type: none"> <li><b>Baseline rate</b></li> <li>• Bradycardia not accompanied by absent baseline variability</li> <li>• Tachycardia</li> <li><b>Baseline FHR variability</b></li> <li>• Minimal baseline variability</li> <li>• Absent baseline variability not</li> </ul> | <ul style="list-style-type: none"> <li>• Absent baseline FHR variability and any of the following:               <ul style="list-style-type: none"> <li>- Recurrent late decelerations</li> <li>- Recurrent variable decelerations</li> <li>- Bradycardia</li> </ul> </li> <li>• Sinusoidal pattern</li> </ul> |

|  |  |  |
|--|--|--|
|  | <p>accompanied by recurrent decelerations</p> <ul style="list-style-type: none"> <li>• Marked baseline variability</li> </ul> <p><b>Accelerations</b></p> <ul style="list-style-type: none"> <li>• Absence of induced accelerations after fetal stimulation</li> </ul> <p><b>Periodic or episodic decelerations</b></p> <ul style="list-style-type: none"> <li>• Recurrent variable decelerations accompanied by minimal or moderate baseline variability</li> <li>• Prolonged deceleration <math>\geq 2</math> minutes but <math>&lt; 10</math> minutes</li> <li>• Recurrent late decelerations with moderate baseline variability</li> <li>• Variable decelerations with other characteristics, such as slow return to baseline, "overshoots," or "shoulders"</li> </ul> |  |
|--|--|--|

**Interpretation of Auscultation Findings<sup>6</sup>**

| Category I  | Category II   |
|---|---|
| <ul style="list-style-type: none"> <li>• Normal FHR baseline between 110 and 160 bpm</li> </ul> | <ul style="list-style-type: none"> <li>• Irregular rhythm</li> </ul>  |
| <ul style="list-style-type: none"> <li>• Regular heart rhythm</li> </ul>                        | <ul style="list-style-type: none"> <li>• Presence of FHR decreases or decelerations from the baseline               <ul style="list-style-type: none"> <li>○ 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.</li> </ul> </li> </ul> |



|   |   |
|---|---|
| <ul style="list-style-type: none"><li>Absence of FHR decreases or decelerations from the baseline</li></ul>   | <ul style="list-style-type: none"><li>Tachycardia (baseline &gt;160 bpm &gt;10 minutes in duration)</li></ul> |
| <ul style="list-style-type: none"><li>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.</li></ul> | <ul style="list-style-type: none"><li>Bradycardia (baseline &lt;110 bpm &gt;10 minutes in duration)</li></ul> |

**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 of 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  $\leq 3$  minutes apart.
    - Uterine contractions that are  $\geq 50$  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 1 ½ 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.