

UF HEALTH SHANDS HOSPITAL
DEPARTMENT OF NURSING AND PATIENT SERVICES

POLICY NUMBER: GL- LD-BLC-12
CATEGORY: Basic Labor Care
DATE: May 2025
NEXT REVIEW DATE: May 2027

TITLE: FETAL ASSESSMENT FOR LOW RISK AND MIDWIFERY
SERVICE PATIENTS

PURPOSE: To provide fetal assessment guidelines, including documentation requirements, utilizing the following options:

- Ultrasound Transducer (US)
- Electronic Intermittent (EI) monitoring with US
- Uterine Contraction (UC) assessment:
 - US (ultrasound)
 - Manual palpation
 - Note: Intermittent auscultation with a handheld doppler is currently not an option for fetal assessment by the Nursing team.

STATEMENTS:

- I. Labor & Delivery (L&D) Nursing staff will be trained to support patient identified birth goals including maternal coping strategies, maximizing uterine and umbilical blood flow, optimizing oxygenation, and maintaining appropriate uterine activity.
- II. Standardized workflow for implementation of EI and US monitoring will include patient criteria, provider orders, and unit resources.
- III. Triage and admission order sets will designate appropriate options for fetal assessments utilizing EI and US. Nursing will recognize low risk patients based on their antenatal history, non-stress test results, and provider orders.

SPECIAL INSTRUCTIONS:

- I. Electronic intermittent monitoring utilizing the Corometric ultrasound device:
 - a. Patients identified as low risk and those receiving care from the Midwifery service may qualify for EI monitoring when appropriate and based on unit resources
 - b. L&D nursing staff will receive training and demonstrate competency in managing patients using EI
 - c. Patients in the active phase of labor utilizing EI must have a one-to-one nursing assignment. In the absence of this level of care, continuous fetal monitoring will be implemented utilizing either the wireless fetal monitoring system or the Corometric fetal monitor
- II. Criteria for low risk/midwifery service candidates utilizing EI monitoring:
 - a. Patients routinely identified as appropriate for EI include healthy, full term, singleton, cephalic presentation and in spontaneous labor.
 - b. A documented non-stress test (NST) is required before initiation of EI monitoring.
 - i. Follow the current protocol for obtaining an NST order, completing the test, and documenting results in EPIC.
 - ii. The NST must be identified as 'Reactive' to initiate EI.

- c. Patients with an obstetric or medical risk factor including but not limited to the following will receive continuous fetal monitoring via the Corometric fetal monitor or wireless fetal monitoring system:
 - i. Meconium-stained fluid
 - ii. Maternal fever
 - iii. Hypertensive disorder on medication
 - iv. Vaginal bleeding more than bloody show
 - v. History of previous stillbirth
 - vi. Intrahepatic cholestasis of pregnancy
 - vii. Prior cesarean delivery
 - viii. Multiple gestation
 - ix. Diabetes requiring medication
 - x. Non-cephalic presentation
 - xi. Documented Fetal Growth Restriction less than 10th percentile
 - xii. Active poly-substance abuse
 - xiii. Maternal medical disease
 - xiv. Oligohydramnios or polyhydramnios
 - xv. Decreased fetal movement
 - xvi. Prematurity less than 36 completed weeks
 - xvii. Post maturity greater than 42 completed weeks
 - xviii. Fetal heart block syndrome
 - xix. Known congenital anomaly
 - xx. Absence of uterotonic including Pitocin and Misoprostol

III. Implementation of EI

- a. The maternal pulse should be determined immediately prior to EI and documented accordingly.
- b. Utilizing the NST and an initial US evaluation, the fetal heart rate (FHR) baseline, between contractions, should be established and documented in the EMR.
- c. EI evaluation should be performed before, during, and after the completion of a contraction for one minute. See Appendix A for frequency of assessment and documentation requirements.
- d. Abdominal palpation should be utilized to determine contraction frequency, duration, and intensity.
- e. Uterine activity should be documented in the EMR with the same frequency as the FHR.

IV. Continuous fetal monitoring is required for induction and augmentation of all viable pregnancies. It is also required during epidural placement and other identified procedures. If difficulties in obtaining a continuous fetal tracing occur, the following steps should be taken:

- a. Add additional ultrasonic gel and reposition the monitor
- b. Reposition the patient
- c. Ask for support from a senior staff nurse
- d. If unable to obtain a continuous strip with the above in 3-5 minutes proceed with the following:
 - i. Ask a resident or midwife to show location of FHR via US to improve monitor positioning
 - ii. Make sure the Charge Nurse, Chief and/or Attending is aware of the difficulty
 - iii. Document attempts made and provider notification in EPIC
 - iv. Request placement of internal fetal scalp electrode

V. Documentation of EI

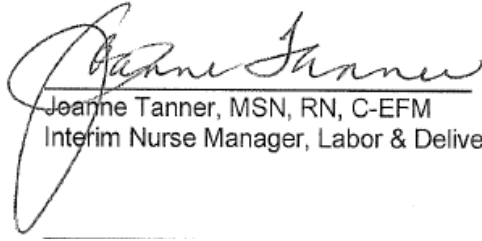
- a. The following components of the fetal assessment should be documented in Watch Child using NICHD definitions of FHR characteristics and patterns (Appendix B):
 - i. Mode
 - ii. FHR
 - iii. Accelerations: presence or absence
 - iv. Decelerations: timing, duration and depth
 - v. FHR will be documented according to NICHD terminology (Appendix C)
 - vi. Communication with provider regarding FHR per orders
- b. The following components of the uterine assessment should be documented in Watch Child:
 - i. Mode
 - ii. Frequency (beginning of one contraction to the beginning of the next contraction in a 10-minute window)
 - iii. Duration
 - iv. Intensity
- c. Implement continuous electronic fetal monitoring (CEFM) for any of the following:
 - i. Inability to clearly auscultate the FHR
 - ii. Baseline bradycardia (less than 110 bpm for 2 to 10 minutes)
 - iii. Tachycardia (greater than 160 bpm for 2 to 10 minutes)
 - iv. Presence of decelerations
 - v. Abnormal FHR patterns unresponsive to repositioning
 - vi. Development of any exclusionary criteria in labor

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SIGNATURES:

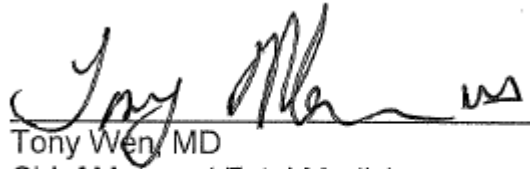


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Appendix A
EI Frequency of Assessment and Documentation Requirements

Phase	Assessment	Documentation
Latent phase <4 cm	Every hour	Every hour
Latent phase 4-5 cm	Every 30 minutes	Every 30 minutes
Active phase >6 cm	Every 15-30 minutes	Every 15-30 minutes
Second stage/passive fetal descent	Every 15 minutes	Every 15 minutes
Second stage/active pushing	Every 15 minutes	Every 15 minutes

Appendix B

NICHD definitions of FHR characteristics and patterns

Variability
Fluctuations in baseline that are irregular in amplitude and frequency
Absent = amplitude undetectable
Minimal = amplitude 0 to 5 bpm
Moderate = amplitude 6 to 25 bpm
Marked = amplitude over 25 bpm
Measured in a 10-minute window. The amplitude is measured peak to trough. There is no distinction between short-term and long-term variability.
Baseline rate
Bradycardia = below 110 bpm
Normal = 110 to 160 bpm
Tachycardia = over 160 bpm
The baseline rate is the mean bpm (rounded to 0 or 5) over a 10-minute interval, excluding periodic changes, periods of marked variability, and segments that differ by more than 25 bpm. The baseline must be identifiable for two minutes during the interval (but not necessarily a contiguous two minutes); otherwise, it is considered indeterminate.
Acceleration
An abrupt* increase in the FHR. Before 32 weeks of gestation, accelerations should last ≥ 10 sec and peak ≥ 10 bpm above baseline. As of 32 weeks gestation, accelerations should last ≥ 15 sec and peak ≥ 15 bpm above baseline.
A prolonged acceleration is ≥ 2 minutes but less than 10 minutes. An acceleration of 10 minutes or more is considered a change in baseline.
Late deceleration
A gradual* decrease and return to baseline of the FHR associated with a uterine contraction. The deceleration is delayed in timing, with the nadir of the deceleration occurring after the peak of the contraction. The onset, nadir, and recovery usually occur after the onset, peak, and termination of a contraction.
Early deceleration
A gradual* decrease and return to baseline of the FHR associated with a uterine contraction. The nadir of the FHR and the peak of the contraction occur at the same time. The deceleration's onset, nadir, and termination are usually coincident with the onset, peak, and termination of the contraction.
Variable deceleration
An abrupt* decrease in FHR below the baseline. The decrease is ≥ 15 bpm, lasting ≥ 15 secs and < 2 minutes from onset to return to baseline. The onset, depth, and duration of variable decelerations commonly vary with successive uterine contractions.
Prolonged deceleration
A decrease in FHR below the baseline of 15 bpm or more, lasting at least 2 minutes but < 10 minutes from onset to return to baseline. A prolonged deceleration of 10 minutes or more is considered a change in baseline.

NICHD: National Institute of Child Health and Human Development; FHR: fetal heart rate; bpm: beats per minute; sec: seconds.

* "Gradual" and "abrupt" changes are defined as taking ≥ 30 seconds or < 30 seconds, respectively, from the onset of the deceleration/acceleration to its nadir/peak.

Adapted from:

1. National Institute of Child Health and Human Development Research Planning Workshop. *Am J Obstet Gynecol* 1997; 177:1385.
2. Macones GA, Hankins GD, Spong CY, et al. The 2008 National Institute of Child Health and Human Development Workshop Report on Electronic Fetal Monitoring: Update on Definitions, Interpretation, and Research Guidelines. *Obstet Gynecol* 2008; 112:661.

Appendix C
Three-Tiered System for Classifying Fetal Heart Rate Tracings

Category	Interpretation	Features
I Normal	Tracings in this category are strongly predictive of normal acid-base status at the time of observation.	• Baseline rate 110 to 160 beats per minute • Baseline variability moderate • Late or variable decelerations absent • Early decelerations present or absent
II Indeterminate	Tracings in this category are not predictive of abnormal acid-base status, however there are insufficient data to classify them as either category I or category III.	All tracings not categorized as category I or III and may represent many tracings that are encountered in everyday clinical practice. Examples: • Minimal variability • Absent variability without recurrent decelerations • Marked variability • Absence of induced accelerations after fetal stimulation • Recurrent variable decelerations with minimal or moderate variability • Prolonged deceleration • Recurrent late decelerations with moderate variability • Variable decelerations with “slow return to baseline”, “overshoots” or “shoulders”
III Abnormal	Tracings in this category are predictive of abnormal acid-base status at the time of observation.	• Absent variability <i>and</i> any of the following: - Recurrent late decelerations - Recurrent variable decelerations - Bradycardia • Sinusoidal pattern