

SARASOTA MEMORIAL HOSPITAL DEPARTMENT POLICY

☒ **Sarasota Memorial Hospital – Sarasota**

☒ **Sarasota Memorial Hospital – Venice**

TITLE: ELECTRONIC FETAL
MONITORING (EFM)-
DOPPLER DEVICE USE
DURING
ANTEPARTUM/INTRA-
PARTUM FOR FETAL
ASSESSMENT

POLICY #: 126.703 (maternal)

EFFECTIVE DATE: 12/1983 SMH-Sarasota

EFFECTIVE DATE: 11/2021 SMH-Venice

REVIEWED/REVISED DATE: 09/2025

POLICY TYPE: ☒ Departmental ☐ Interdepartmental
☐ Departments Providing Nursing Care

DEPARTMENT: Nursing

PAGE: 1 of 5

JOB TITLE OF RESPONSIBLE OWNER: Director Women's and Children's Services

PURPOSE

To establish a policy for delivering optimal care to pregnant patients using electronic fetal monitoring, either externally, internally, or via doppler device.

EXCEPTIONS

Patients with non-pregnancy related complaints: fetal heart rate will be assessed by RN with doppler device (i.e., Rhophylac or non-pregnancy related visits). Need for further fetal monitoring will be determined by provider and OB RN.

DEFINITIONS

1. NICHD Terminology for Fetal Heart Rate Monitor Tracings: Electronic fetal heart rate monitoring definitions and interpretations will follow the 2008 National Institute of Child Health Human Development Workshop Report on Electronic Fetal Monitoring Update on Definitions, Interpretations, and Research Guidelines.
2. Category I - Normal Fetal Heart Rate (FHR) Pattern: normal fetal acid-base status
3. Category II – Indeterminate Fetal Heart Rate (FHR) Pattern: indeterminate fetal acid-base status
4. Category III - Abnormal Fetal Heart Rate (FHR) Pattern: abnormal fetal-acid base status
5. Non-stress Test (NST): Assessment of fetal well-being.
 - a. Baseline FHR should be established. Determination of the baseline by EFM requires at least 2 minutes of interpretable FHR data in any 10-minute period and excludes areas recording periodic or episodic changes and marked variability. -
 - b. *32 weeks gestation and over*: The presence of two accelerations (spontaneous or acoustically stimulated) within a 20-minute period. The FHR should peak at least 15 beats per minute above the baseline and last 15 seconds in duration from beginning to the end of the acceleration. The peak does not have to be sustained for 15 seconds; rather the total duration of the increase in heart rate must be at least 15 seconds. The monitoring period may be extended to 40 minutes to accommodate normal sleep wake cycles.
 - c. *Less than 32 weeks*: The presence of two accelerations (spontaneous or acoustically stimulated) within a 20-minute period. The FHR should peak at least 10 beats per minute above the baseline and last 10 seconds in duration from beginning to the end of the acceleration. The peak does not have to be sustained for 10 seconds; rather the total

duration of the increase in heart rate must be at least 10 seconds. The monitoring period may be extended to 40 minutes to accommodate normal sleep wake cycles.

6. Intermittent Auscultation (IA): intermittent auscultation of fetal heart rate with doppler device or fetoscope for periodic assessment during labor in conjunction with manual palpation to assess uterine contractions.
7. Intermittent Fetal Monitoring: applying external fetal monitors for 20-30 minutes to establish fetal wellbeing, at a frequency determined by provider order.

PROCEDURE

1. An electronic fetal monitor or doppler device will be applied to all patients reporting to Labor and Delivery, OB ECC or Antepartum with considerations to gestation and absence of risk factors. RN will perform fetal assessment as follows:
 - a. <22.6 weeks gestation – use of doppler device
 - b. 23 weeks or greater- Electronic Fetal Monitoring (EFM) – continuous or intermittent per provider order taking into consideration absence of risk factors and gestational age. Intermittent Auscultation or Intermittent fetal monitoring can be initiated with provider order after a Category 1 tracing and for Low-Risk Rule Out (term) labor after reactive NST with provider order.
 - a. Intermittent Auscultation:
 - i. Assess patient's Heart Rate to differentiate from Fetal Heart Rate
 - ii. Doppler Fetal Heart Rate between contractions to determine baseline
 - iii. Count Fetal Heart Rate before, during and after contractions for 30-60 seconds
 - iv. Assessment of Fetal Heart Rate to include:
 1. Audible regular or irregular rhythm
 2. Audible increase or decrease of fetal heart rate
 - v. Palpate uterus for frequency, duration, intensity, and resting tone
 - vi. *If abnormal FHR (baseline less than 110 or greater than 160; any decelerations audible), initiate continuous EFM and contact provider*
 - vii. *Development of risk factors, initiate continuous EFM and contact provider*
 - b. Intermittent Fetal Monitoring:
 - i. Place external fetal monitors on patient for 20-30 minutes to establish Category 1 tracing
 - ii. Frequency and duration determined by provider order depending on patient's admission status
 - iii. *If abnormal FHR (baseline less than 110 or greater than 160; any deceleration), initiate continuous EFM and contact provider*
 - c. IA or Intermittent EFM are not appropriate with the following risk factors
 - i. Maternal:
 1. Previous cesarean section
 2. Pre-Eclampsia
 3. Post-term (greater than 42 weeks)
 4. SROM greater than 24 hours
 5. Induction
 6. Diabetes

7. Antepartum hemorrhage
8. Other maternal medical problems
- ii. Fetal
 1. Intra-uterine growth restriction
 2. Preterm
 3. Oligohydramnios
 4. Abnormal dopplers
 5. Multiple Gestation
 6. Meconium
 7. Breech presentation
 8. Rh Iso-immunization
- iii. Intrapartum
 1. Pitocin
 2. Epidural
 3. Vaginal Bleeding
 4. Maternal temp greater than 100.4
 5. Change in maternal condition
 6. Category 2 tracing
 7. Category 3 tracing
 8. Meconium

c. OB Testing and Evaluation patients will have fetal monitoring as ordered by the physician, related to the test visit, such as an NST or Biophysical Profile (BPP).

2. Fetal monitoring can be performed by Registered Nurses (RNs) who have demonstrated competency in the use of EFM and doppler device and are responsible for the observation of all patients being monitored. RN, who has demonstrated competency in placement, may utilize the Fetal Spiral Electrode (FSE) and/or Intrauterine Pressure Catheter Placement as needed taking into consideration risk factors and contraindications.
 - The RN is also responsible for the collection and documentation of all initial biophysical assessments and provider communication using NICHD terminology. RN is responsible for ongoing assessment.
3. Registered Nurses who have demonstrated competency are responsible for interpretation of the fetal monitor tracing. Fetal well-being is determined visually from data generated from fetal heart rate characteristics. NICHD terminology will be used among health care providers to communicate fetal heart rate patterns, and NST results.
4. Any issues/concerns regarding EFM interpretation should be resolved using Chain of Communication for Resolution of Interpretive Differences in Obstetrics (126.735) and Chain of Command (01.ADM.00).
5. Fetal monitor tracings are part of the medical record. If the fetal monitor is connected to the CPN - CONNECT, the fetal monitor tracing is electronically stored and archived. If the patient is monitored off of the unit (such as ICU), the fetal monitoring tracing should be saved, labeled with patient sticker, and sent to medical records to be scanned into the medical record after discharge.

RESPONSIBILITY

It will be the responsibility of the Sarasota Campus Director of Women's and Children's Services and Venice campus Director of Women's and Operative Services to ensure that nursing personnel are aware of, and adhere to, this department policy.

REFERENCES

Association of Women's Health Obstetric and Neonatal Nurses (2021). Fetal Heart Monitoring, Principles and Practices, 6th edition. Washington, D.C. AWHONN.

American Congress of Obstetricians and Gynecologists (2019). Intrapartum Fetal Heart Rate Monitoring, Nomenclature, Interpretation, and General Management Principles. ACOG Practice Bulletin #106. Washington, D.C.: Author.

American Congress of Obstetrics and Gynecologists (ACOG). (2019). Management of Intrapartum Fetal Heart Rate Tracings. Practice Bulletin #116. Washington, D.C.: ACOG.

SMH Policy. Chain of Command (01.ADM.00). SMH: Author.

SMH Nursing Procedures. Intrauterine Catheter Placement/IUPC. (obs34). Fetal Spiral Electrode Placement. (obs35). SMH: Author.

The 2008 National Institute of Child Health Human Development Workshop Report on Electronic Fetal Monitoring Update on Definitions, Interpretations, and Research Guidelines, 2008 Journal of Obstetric, Gynecologic and Neonatal Nursing, 27, 510-515; Obstetrics & Gynecology, 112, p. 665. ACOG.

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ATTACHMENT(S)

NONE

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PAGE: 5 of 5

APPROVALS:

Approval of the new or reviewed/revised policy.	
Committees/Sections/Departments:	Date
Clinical Policy & Procedure Council	08/07/2025
Name and Title: Abby Olsen, Director, Women's and Children's, SMH Sarasota	08/26/2025
Name and Title: Judy Cavallaro, Director Women's & Operative Services SMH Venice	08/11/2025
Name and Title:	
Name and Title: Julie Polaszek, Chief Nursing Officer, SMH Venice	08/28/2025
Name and Title: Lisa Baumgardner, Chief Nursing Officer SMH Sarasota	08/29/2025
Vice President/Administrative Director (if applicable): Jean Lucas, Chief Nursing Officer, SMHCS	09/02/2025