



NHS MEDICAL POLICY

Pregnant Uterus Fetal Biophysical Profile (with or without Nonstress Testing) Procedure 2014-011

Pregnant Uterus Fetal Biophysical Profile (BPP) (with or without Nonstress Testing) may be indicated when any ONE of the following are present:

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| 1 | Abnormal non-stress testing follow up: A single Fetal Biophysical Profile (BPP) test is indicated at the time of an abnormal non-stress testing result. |
| 2 | <p>Abnormal pelvic ultrasound results, which may include any ONE of the following:</p> <ul style="list-style-type: none"> • Intrauterine growth restriction (IUGR) at the 11th to 15th percentile: Frequency is weekly starting at diagnosis until delivery. BPP testing may also include uterine artery Doppler. • Intrauterine growth restriction (IUGR) at the 10th percentile or less: Frequency is twice weekly starting at diagnosis until delivery. BPP testing may also include uterine artery Doppler. • Oligohydramnios with amniotic fluid index at the 5th percentile or less but the amniotic fluid index (AFI) > 8 cm: Frequency is weekly starting at diagnosis until delivery • Oligohydramnios with amniotic fluid index (AFI) 8 cm or less: Frequency is twice weekly starting at diagnosis until delivery • Polyhydramnios with amniotic fluid index (AFI) 25-29 cm: Frequency is weekly starting at diagnosis until delivery • Polyhydramnios with amniotic fluid index (AFI) 30 cm or greater: Frequency is twice weekly starting at diagnosis until delivery • Fetal Gastroschisis: Frequency is twice weekly starting at 28 weeks gestation until delivery • Certain fetal anomalies – Congenital Diaphragmatic Hernia (CDH), persistent echogenic bowel or increased nuchal translucency (NT): Frequency is weekly starting at 32 weeks gestation until delivery • Structural anomalies of umbilical cord or placenta: Frequency is as needed starting at diagnosis until delivery |
| 3 | <p>Multi-fetal gestation, which may include any ONE of the following:</p> <ul style="list-style-type: none"> • Twins – dichorionic diamniotic (DCDA or di/di) with normal growth and amniotic fluid volume: Frequency is weekly starting at 32 weeks gestation, then twice weekly starting at 34 weeks gestation until delivery |

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| | <ul style="list-style-type: none"> Twins – monochorionic diamniotic (mono/di) with normal growth and amniotic fluid volume: Frequency is weekly starting at 28 weeks gestation, then twice weekly starting at 32 weeks gestation until delivery Twins – (di/di or mono/di) with IUGR, discordant growth (>18%) or abnormal amniotic fluid volume: Frequency is twice weekly starting at diagnosis of the complication until delivery Twins – monochorionic monoamniotic (mo/mo): Daily continuous inpatient monitoring is recommended by maternal fetal medicine specialists at gestational age of intervention (usually 24 weeks) Triplets with normal growth and amniotic fluid volume: Frequency is weekly starting at 28 weeks gestation, then twice weekly starting at 32 weeks gestation until delivery. Triplets with IUGR, discordant growth (>18%) or abnormal amniotic fluid volume: Frequency is twice weekly starting at diagnosis of the complication until delivery |
| 4 | <p>Fetal cardiac dysrhythmias, which may include any of the following:</p> <ul style="list-style-type: none"> Fetal heart block: Frequency is weekly starting at diagnosis until delivery Other fetal dysrhythmias (e.g., SVT, PAC's, etc.): Frequency is weekly starting at diagnosis while dysrhythmia is still present |
| 5 | Decreased fetal movement, as perceived by mother or documented by clinician. A single test is indicated at the time of occurrence. Further testing may be indicated for continued symptoms. |
| 6 | Fetal blood disorders (which may include any of the following abnormal labs: Isoimmunization, Parvovirus or Neonatal alloimmune thrombocytopenia- NAIT): Frequency is weekly starting at the onset of disease or 28 weeks gestation until delivery. BPP testing may also include middle cerebral artery Doppler. |
| 7 | Late-term or post-term pregnancy. For this indication, BPP may be performed twice weekly starting at 40 weeks gestation until delivery. BPP may be initiated earlier if EDD is unsure. |
| 8 | Preterm premature rupture of membranes: Frequency is as needed starting at diagnosis until delivery |
| 9 | Prior pregnancy with Intrauterine Fetal Demise (IUFD): Frequency is weekly starting at 32 weeks gestation until delivery. If the previous demise was earlier than 32 weeks gestation, BPP may be initiated 2 weeks prior to the gestational age when that demise occurred. |
| 10 | Prior pregnancy with placental abruption: Frequency is weekly starting at 2 weeks prior to the gestational age when that abruption occurred. |
| 11 | Unexplained third-trimester vaginal bleeding: Frequency is as needed starting at diagnosis until delivery |
| 12 | <p>Advanced maternal age, which is 35 years and older at the time of delivery. For this indication:</p> <ul style="list-style-type: none"> If the mother is aged 35-39 years at the time of delivery, frequency is weekly starting at 37 weeks gestation until delivery. If the mother is aged 40 or more years at the time of delivery, frequency is weekly starting at 34 weeks gestation until delivery. |

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| 13 | Abnormal maternal serum screening (which may include any of the following abnormal labs: AFP, HCG, estriol, inhibin, PAPP-A or maternal serum HCG): Frequency is weekly starting at 32 weeks gestation until delivery. |
| 14 | <p>Maternal disease, which may include any ONE of the following most common conditions. This is not an all-inclusive list:</p> <ul style="list-style-type: none"> • HELLP syndrome: Frequency is twice weekly starting at diagnosis until delivery • Preeclampsia or eclampsia: Frequency is twice weekly starting at diagnosis until delivery • Antiphospholipid syndrome or lupus: Frequency is twice weekly starting at 32 weeks gestation until delivery. May start earlier if microvascular disease is present. • Gestational diabetes under good control with diet and exercise: only kick counts are required for monitoring. BPP is not indicated. • Diabetes or gestational diabetes requiring insulin or oral medication and under good control: Frequency is twice weekly starting at 32 weeks gestation until delivery. • Diabetes requiring insulin or oral medication under poor control or with complications: Frequency is twice weekly starting with a complication or at 28 weeks gestation until delivery. • Controlled hypertension: Frequency is weekly starting at 32 weeks gestation until delivery. • Uncontrolled hypertension requiring multiple antihypertensive medications or under poor control with BP 140/90: Frequency is weekly starting at 32 weeks gestation until delivery (If IUGR is also present, use the above guideline for IUGR.) • Uncontrolled hyperthyroidism: Frequency is twice weekly starting at 32 weeks gestation until delivery • Maternal Graves' disease with Thyroid-Stimulating Immunoglobulin (TSI) > 130%: Frequency is weekly starting at 36 weeks gestation until delivery. • Cholestasis: Frequency is twice weekly starting at diagnosis until delivery • Herpes (pemphigoid) gestationis: Frequency is weekly starting at diagnosis until delivery • HIV on combination therapy: Frequency is weekly starting at 32 weeks gestation until delivery • Poorly controlled seizure disorder: Frequency is weekly starting at 28 weeks gestation until delivery • Heart disease (e.g., dysrhythmias, heart failure, coronary artery disease): Frequency is weekly starting at 32 weeks gestation until delivery • Pulmonary disease (e.g., severe asthma, COPD, pulmonary hypertension): Frequency is weekly starting at 32 weeks gestation until delivery • Sickle Cell Anemia: Frequency is weekly starting at 32 weeks gestation until delivery • Active drug or alcohol abuse or methadone use: Frequency is weekly starting at 32 weeks gestation until delivery. |

SOURCES

1. Dr. Brian Iriye, peer reviewer, Board-Certified: Maternal-Fetal Medicine, Obstetrics & Gynecology, personal communication April 24, July 3, and Oct 6, 2014.
2. Milliman Care Guidelines, 18th edition, A-0435 Pregnant Uterus Fetal Biophysical Profile
3. UpToDate.com accessed Oct 7, 2014, The Fetal Biophysical Profile
4. Eden R, *et al*, A modified biophysical profile for antenatal fetal surveillance, *Obstet Gynecol*, 71:365, 1988.
5. Manning FA, *et al*, Fetal assessment based on fetal biophysical profile scoring: experience in 12,620 referred high-risk pregnancies. I. Perinatal mortality by frequency and etiology, *Am J Obstet Gynecol*, 151:343-50, 1985.
6. Miller DA, *et al*, The modified biophysical profile: antepartum testing in the 1990's, *Am J Obstet Gynecol*, 174:812-7, 1996.
7. Moore TR, *et al*, The amniotic fluid index in normal human pregnancy, *Am J Obstet Gynecol*, 162:1168-73, 1990.
8. Phelan JP, *et al*, Amniotic fluid index measurements during pregnancy, *J Reprod Med*, 32:603-4, 1987.
9. Sadovsky E, *et al*, Antepartum Fetal Evaluation by Assessment of Fetal Heart Rate and Fetal Movements. *Int J Gynaecol Obstet*, 19:21-26, 1981.
10. Signore C, *et al*, Antenatal Testing – A Reevaluation. *Obstet Gynecol*, 113: 687-701, 2009.
11. Smith CV, *et al*, Fetal acoustic stimulation testing. II. A randomized clinical comparison with the nonstress test, *Am J Obstet Gynecol*, 155:131-134, 1986.

CODE REFERENCE (This may not be a comprehensive list of codes to apply to this policy.)

CPT 76818, 76819

POLICY HISTORY/REVISION INFORMATION

| Date | Action/Description |
|------------|---|
| 10/07/2014 | Updated time intervals by indication |
| 09/25/2015 | Annual review and approval by UM Committee |
| 09/14/2015 | Annual review and approval by UM Committee |
| 09/14/2016 | Annual review and approval by UM Committee |
| 09/12/2017 | Annual review and approval by UM Committee |
| 09/12/2018 | Annual review and approval by UM Committee |
| 09/12/2019 | Annual review and approval by UM Committee |
| 09/10/2020 | Annual review and approval by UM Committee |
| 09/10/2021 | Annual review and approval by UM Committee |
| 09/19/2022 | Annual review and approval by UM Committee |
| 08/23/2023 | Annual review and approval by UM/QM Committee |
| 08/23/2024 | Annual review and approval by UM/QM Committee |

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