IEHP UM Subcommittee Approved Authorization Guideline			
Guideline	Antepartum Fetal Assessment	**Guideline #**	UM_GYN 01
		Original Effective Date	4/21/2005
Section	Gynecology/Obstetrics	**Revision Date**	3/26/2018

COVERAGE POLICY

A referral to a high-risk OB provider must include a high-risk indication together with appropriate diagnosis codes and clinical notes or labs to establish the medical necessity of the request.

"Antepartum fetal assessment" as defined in this document refers to ultrasonography and noninvasive assessments of fetal well-being – these assessments (e.g., biophysical profile, non-stress test, amniotic fluid adequacy) are described below. The frequency of antepartum assessments and the types of tests utilized will evaluated based on Attachment A.

Per Medi-Cal guidelines, "Ultrasound performed for routine screening during pregnancy is considered an integral part of patient care during pregnancy and its reimbursement is included in the obstetrical fee. Ultrasound during pregnancy is reimbursable only when used for the diagnosis or treatment of specific medical conditions." [1]

Prior authorization is required for any additional ultrasound beyond an NT and anatomy scan. Appropriate medical record documentation of **medical necessity** must accompany the prior authorization request. Failure to obtain prior authorization for ultrasounds beyond the NT and routine anatomy studies (as described above) will lead to denial of charges.

No authorization is needed for the routine anatomy ultrasound between 18 and 22 weeks of gestation as long as the member is not under the care of a maternal-fetal medicine (MFM) specialist for a high-risk condition. Appropriate CPT codes for these ultrasounds are:

1. 76805 for a routine anatomy ultrasound
2. 76801 for an ultrasound performed by an MFM specialist for a high-risk condition before 14 weeks of gestation
3. 76811 ("detailed fetal anatomic ultrasound evaluation") for an ultrasound performed by an MFM specialist for a high-risk condition after 14 weeks of gestation

Note that only one initial ultrasound (CPT code 76805, 76801, or 76811) is paid per provider per pregnancy and; any ultrasound thereafter is considered a follow up ultrasound (CPT code 76816).

There are various type of dopplers that can be performed in the antepartum period. However, maternal uterine artery dopplers are currently not indicated for any condition and thus, not covered.

An MFM specialist may perform a modified biophysical profile (BPP) when indicated by a condition listed in the Attachment A schedule. The modified BPP consists of a fetal non-stress test (NST) and evaluation of amniotic fluid adequacy using a measure of the deepest vertical pocket (DVP) of amniotic fluid by ultrasonography. [4] (The DVP measure is now preferred over the amniotic fluid index – AFI – for the diagnosis of abnormalities in the quantity of amniotic fluid.) [4] A "reactive" modified BPP test supports the absence of fetal distress (high negative predictive value). [4]

We recognize that these are guidelines and exceptions will occur. Feel free to contact IEHP's Utilization Management department with questions or problematic cases.

COVERAGE LIMITATIONS AND EXCLUSIONS

IEHP will cover only two (2) ultrasounds in the uncomplicated Medi-Cal pregnancy: a nuchal translucency (NT) scan performed between 11 weeks 2 days and 14 weeks 2 days of gestation, and a routine anatomy ultrasound performed ideally between 18 weeks and 22 weeks of gestation. [2,3] Other ultrasounds performed in an uncomplicated pregnancy will be denied as a non-covered benefit. Any ultrasound performed in a pregnancy beyond the NT and anatomy ultrasounds must include the appropriate ICD-10-CM code and documentation indicating a high-risk condition affecting the pregnancy.

Attachment A:

Maternal High-Risk Conditions in the Antepartum Evaluation			
Condition	**Modified BPP Schedule**	**Ultrasound Surveillance**	**Comments**
Maternal age (≥40 years at time of birth) [5,6]	Twice weekly starting at 38 weeks of gestation	None	
Anemia [4,7]	None	None	See separate entry for maternal sickle cell disease
Asthma[8]			
Mild intermittent asthma that is controlled with medications	None	None	
Mild persistent asthma, moderate persistent asthma, severe persistent asthma, or any classification that is poorly controlled	Weekly Starting at 32 weeks of gestation	Every 4 weeks Starting at 28 weeks (assessing fetal growth)	
Antiphospholipid antibody syndrome [4,9]	Twice weekly Starting at 32 weeks of gestation	Every 4 weeks Starting at 28 weeks (assessing fetal growth)	

Bariatric surgery prior to pregnancy [10]	None	Every 4 weeks Starting at 28 weeks (assessing fetal growth)	See separate entry for maternal obesity
Cerclage in current or prior pregnancy [11]	None	None	Provider may conduct: One transvaginal ultrasound to confirm location after initial cerclage placement Subsequent transvaginal ultrasound surveillance of cervical length is <u>not</u> recommended in the presence of cerclage
Cholestasis of pregnancy [12,13]	Twice weekly Starting at diagnosis, no earlier than 28 weeks	None	
Congenital heart disease (maternal, paternal OR in sibling of the fetus) [14]	None	Detailed fetal anatomic ultrasound examination between 18 and 22 weeks	See IEHP UM Guidelines for fetal echocardiography
Cystic fibrosis carrier	None	None	
Diabetes [15]			
White Class A1 (gestational, diet-controlled) – in <u>good</u> control	None	One ultrasound to assess fetal growth at 28-32 weeks	
White Class A1 (gestational, diet-controlled) – in poor control OR White Class A2 (gestational, medication-controlled) OR White Class B (pre-gestational) or greater	Twice weekly Starting at 32 weeks	Every 4 weeks Starting at 28 weeks	
Excisional procedure of the cervix prior to pregnancy [16,17]	None	None	

Fibroids (leiomyomata) [18]	None	Ultrasound at 28-32 weeks to assess fetal growth	
Gestational trophoblastic disease in a prior pregnancy [19]	None	None	
Any Hypertensive disorders in pregnancy: • **Chronic hypertension** • **Gestational hypertension** • **Preeclampsia with or without severe features, superimposed preeclampsia)**	Twice weekly Starting at 32 weeks	Every 4 weeks Starting at 28 weeks	See separate entries for associated complications (e.g., fetal growth restriction, maternal antiphospholipid antibody syndrome, maternal lupus) Note: uterine artery dopplers (assessing for increased resistance or "notching" are not recommended for screening or management in women with hypertensive disorders of pregnancy
Infectious exposures in pregnancy			
Cytomegalovirus [21] Or Varicella	None	Detailed fetal anatomic ultrasound examination between 18 and 22 weeks Repeat every 4 weeks to assess fetal growth Starting at 28 weeks	
Parvovirus B19 [21]	Twice weekly Starting at 28 weeks, in the setting of associated fetal anemia or hydrops	Every 2 weeks for 8-12 weeks following exposure	Ultrasounds may be accompanied by fetal middle cerebral artery peak systolic velocity (Doppler) assessments in the setting of associated fetal anemia or hydrops
Toxoplasmosis [21]	None	Detailed fetal anatomic ultrasound examination	

		between 18 and 22 weeks. Repeat every 2-4 weeks to assess fetal growth Starting at 28 weeks	
Zika virus [22]	Twice weekly Starting at 28 weeks	Detailed fetal anatomic ultrasound examination between 18 and 22 weeks Repeat every 2-4 weeks to assess fetal growth, possible microcephaly Starting at 28 weeks	
Listeria – asymptomatic [23]	None	None	
Listeria – symptomatic [23]	Twice weekly Starting at 28 weeks	Detailed fetal anatomic ultrasound examination between 18 and 22 weeks. Repeat at 28-32 weeks to assess fetal growth	
Late prenatal care [24] (Gestation after 20 weeks)	Twice weekly Starting at 39 weeks	One ultrasound for pregnancy dating Repeat within 4 weeks to assess fetal growth	
Late term pregnancy (≥41 weeks) [25] OR post dates	Twice weekly	None	
Low-lying placenta	None	One ultrasound at 24-28 weeks to assess placental location If low-lying placenta noted at 24-28 weeks, repeat once in 4	Transvaginal ultrasound preferred for both instances described

		weeks to reassess placental location	
Lupus [26]	Twice weekly starting at 28 weeks of gestation	Every 4 weeks, to assess fetal growth Starting at 28 weeks	
Missed serum genetic screening [24]	None	None	See separate entry for late prenatal care
Obesity (body mass index – BMI - >30 kg/m^2) [27-30]	For BMI>40 kg/m^2: Twice weekly Starting at 32 weeks	Detailed fetal anatomic ultrasound evaluation at 20-22 weeks May repeat once in 2-4 weeks if anatomic views are limited due to maternal habitus Repeat at 32-36 weeks to assess fetal growth	
Placenta previa			
No prior uterine scar (e.g., myomectomy, cesarean birth) [3] OR Prior uterine scar (e.g., myomectomy, cesarean birth) [31]	None	Once at 24-28 weeks to assess placental location Repeat at 34-36 weeks to reassess placental location	Transvaginal ultrasound (to assess placental location) and transabdominal ultrasound (to assess for placenta accreta) preferred for both instances described
Placental abruption in a prior pregnancy	None	None	See entry for prior stillbirth, if applicable
Preterm birth in a prior pregnancy – specifically, prior spontaneous birth of a singleton gestation at <37 weeks [16,17]	None	Initial cervical length screening between 16-24 weeks Repeat every 2 weeks until 24 weeks	Transvaginal ultrasound preferred for all instances
Prolactinoma	None	None	

Psychiatric disorders [32]			
Anxiety or depression, on no medications OR exposure to selective serotonin reuptake inhibitors/selective norepinephrine reuptake inhibitors OR Any psychiatric diagnosis with exposure to antipsychotic medications	None	None	
Anxiety or depression with exposure to paroxetine OR Anxiety with exposure to benzodiazepines OR Any psychiatric diagnosis, with exposure to antiepileptic medications	None	Detailed fetal anatomic ultrasound evaluation at 18-22 weeks	See IEHP UM Subcommittee Approved Authorization Guidelines for Fetal Echocardiography for paroxetine
Seizure- No medication [32]	None	None	
Seizure- on antiepilipetics [32]	None	Detailed fetal anatomic ultrasound evaluation at 12-22 weeks	
Sickle cell [7.4]			
Trait	None	None	
Disease [33]	Weekly Starting at 32 weeks	Every 4 weeks Starting at 28 weeks	See separate entry for fetal growth restriction, if applicable
Stillbirth (fetal loss at >20 weeks) in a prior pregnancy [34]	Weekly Starting 2 weeks prior to gestational age at prior stillbirth, no	None	

	earlier than 32 weeks		
Substance use – during any point in the pregnancy			
Opioids, methamphetamines, cocaine (or its derivatives)	Twice weekly Starting at 32 weeks	Every 4 weeks to assess fetal growth Starting at 28 weeks	See separate entry for fetal growth restriction, if applicable
Alcohol or tobacco OR Marijuana (or its derivatives)	None	Every 4 weeks to assess fetal growth Starting at 28 weeks	See separate entry for fetal growth restriction, if applicable
Third trimester vaginal bleeding	Once at diagnosis May repeat as needed	Ultrasound to evaluate placental location	Transvaginal ultrasound preferred
Thrombocytopenia [36]			
Gestational	None	None	
Maternal immune thrombocytopenia	None	Every 4 weeks to assess fetal growth Starting at 28 weeks	
Thrombophilia (i.e., Factor V Leiden mutation carrier, Prothrombin G20210 mutation carrier, Protein C deficiency, Protein S deficiency, Antithrombin deficiency) [37]	Weekly starting at 32 weeks	Ultrasound to assess fetal growth at 28-32 weeks	See separate entry for fetal growth restriction, if applicable
Thyroid disease [38]			
Hypothyroidism, controlled on medication	None	None	
Hyperthyroidism, controlled on medication	None	Every 4 weeks Starting at 28 weeks	
Uncontrolled hyperthyroidism OR hypothyroidism	Twice weekly Starting at 32 weeks	Every 4 weeks Starting at 28 weeks	
Vasa previa [39]	None	Every 4 weeks Starting at 28 weeks	Transvaginal and transabdominal ultrasound preferred
Velamentous cord insertion [40]	None	Every 4 weeks	

		Starting at 28 weeks	

<u>Fetal</u> High Risk Conditions in the Antepartum Evaluation			
Condition	**Modified BPP Schedule**	**Ultrasound Surveillance**	**Comments**
Abnormal first or second trimester serum analytes, in the setting of normal karyotype and normal fetal anatomy (ie: + AFP, elevated HCG or unconjugated estriol) [41]	None	Ultrasound to assess fetal growth at 28-32 weeks	See separate entry for fetal growth restriction, if applicable
Rh alloimmunization **OR** **other minor antibodies (e.g., Lewis)** **OR** **Kell antibodies** **OR** **Non-immune anemia or hydrops – due to fetal cardiac anomaly, fetal arrhythmia or congenital infection [42]**	Twice weekly Starting at diagnosis, no earlier than 24 weeks	Every 2-4 weeks Starting at 28 weeks	Ultrasounds may be accompanied by fetal middle cerebral artery peak systolic velocity (Doppler) assessments
Arrhythmia [43]			
Premature atrial contractions	None	None	
Tachyarrhythmia or heart block	Twice weekly Starting at diagnosis, no earlier than 24 weeks	Every 4 weeks Starting at 28 weeks	See separate entry for associated non-immune hydrops
Breech presentation [44]	None	None	
Decreased fetal movement [4]	At time of complaint May repeat once within the following 48 hours, then as needed Starting no earlier than 28 weeks	None	

Fetal congenital anomaly			
Isolated choroid plexus cyst [45] OR Isolated echogenic intracardiac focus [46] OR Isolated renal pelviectasis (>4 mm in the second trimester or >7 mm in the third trimester) [48] OR Isolated short humerus or femur [41]	None	Detailed fetal anatomic ultrasound evaluation at 18-22 weeks Repeat at 28-32 weeks	
Isolated echogenic bowel [47]	Weekly Starting at 32 weeks	Detailed fetal anatomic ultrasound evaluation (CPT 76811) at 18-22 weeks Repeat ultrasound evaluation at 28-32 weeks	
Isolated single umbilical artery [49]	None	Detailed fetal anatomic ultrasound evaluation at 18-22 weeks Repeat ultrasound at 28-32 weeks to assess fetal growth	
Isolated cleft lip and/or cleft palate OR Isolated clubbed foot/feet	None	Repeat ultrasound evaluation at 28-32 weeks	
Fetal growth restriction (or "intrauterine growth restriction") [3,50]	Twice weekly Starting at diagnosis, no earlier than 24 weeks	Detailed fetal anatomic ultrasound evaluation to assess for fetal congenital anomalies at time of diagnosis Then every 2-4 weeks Starting at 28 weeks	Approve umbilical artery doppler if requested by the provider
Macrosomia (suspected; estimated fetal weight >4,000 g at term)	None	None	See separate entry for size-dates discrepancy
Multiple gestation [51]			

Dichorionic with concordant growth	Twice weekly starting at 32 weeks	Every 4 weeks Starting at 16 weeks	
Dichorionic with discordant growth (estimated inter-fetal weight difference of ≥20%) OR Monochorionic with concordant growth OR Monochorionic with discordant growth	Twice weekly Starting at 28 weeks in the absence of complications May begin at the time of diagnosis of a related complication (e.g., twin-twin transfusion syndrome)	Every 2 weeks Starting at 16 weeks	
Loss of one twin, diagnosed after 12 weeks of gestation	None	4 weeks after diagnosis of fetal loss	No further imaging or testing indicated if loss diagnosed before 12 weeks of gestation
Nuchal cord	None	None	
Nuchal fold abnormal (>6 mm) in the second trimester, in the setting of normal karyotype [52] **OR** **Nuchal translucency abnormal (>3 mm) in the first trimester, in the setting of normal karyotype [41]**	None	Detailed fetal anatomic ultrasound evaluation at 18-22 weeks Repeat ultrasound evaluation at 28-32 weeks	See IEHP UM guidelines for fetal echocardiography
Oligohydramnios [53]			
Isolated	Twice weekly Starting at diagnosis, no earlier than 24 weeks	Every 2-4 weeks Starting at 28 weeks	
In the presence of another fetal or maternal complication	None	None	See entries for other associated fetal or maternal complications
Polyhydramnios	Twice weekly Starting at 32 weeks	Detailed fetal anatomic ultrasound evaluation to assess for fetal	See entry for diabetes if associated with finding of polyhydramnios

		congenital anomalies Then every 4 weeks Starting at 28 weeks	
Size-dates discrepancy (>2 cm discrepancy between gestational age in weeks and fundal height in cm) [3]	None	One ultrasound at diagnosis to evaluate fetal growth	

ADDITIONAL INFORMATION

Pregnancy-Related Office Visits: Consultants who co-manage a pregnancy without complete transfer of care should not bill with code Z1032 (initial pregnancy-related office visit). Instead, code Z1034 (per-visit antepartum office visit) should be used.

Pregnancy: Per-Visit Billing

A provider who does not render total obstetrical care during the recipient's entire pregnancy, or who renders fewer than four antepartum visits, must bill each visit or procedure separately. Each visit is subject to the six-month billing limit. Recipient eligibility must be verified for each month of service.

Antepartum Visits HCPCS code Z1034 is used for billing antepartum visits and is reimbursable only when obstetrical care is billed on a per-visit basis. Reimbursement for antepartum visits is limited to eight visits in a nine-month period. Providers may bill more than eight antepartum follow-up visits in nine months if the provider documents a second pregnancy within those nine months.

CLINICAL/REGULATORY RESOURCE

N/A

DEFINITION OF TERMS

Definitions: Non-invasive Assessments of Fetal Well-Being [42]

Nonstress Test (NST): The NST is based on the premise that the heart rate of a fetus that is not acidotic or neurologically depressed will temporarily accelerate with fetal movement. Heart rate reactivity is thought to be a good indicator of normal fetal autonomic function. Loss of reactivity is most commonly associated with a fetal sleep cycle but may result from any cause of central nervous system depression, including fetal academia. The patient may be positioned in either the semi-Fowler position (sitting with the head elevated 30 degrees) or lateral recumbent position. The fetal heart rate (FHR) is monitored with an external transducer. The tracing is observed for FHR accelerations that peak (but do not necessarily remain) at least 15 beats per minute above the baseline and last 15 seconds from baseline to baseline. The NST should be conducted for at least 20 minutes, but it may be necessary to monitor the tracing for 40 minutes or longer to take into account the variations of the fetal sleep–wake cycle. Nonstress test results are categorized as reactive or nonreactive. Various definitions of reactivity have been used. The most common definition of a reactive, or normal, NST is if there are two or more FHR accelerations (as

previously defined) within a 20-minute period. A nonreactive NST is one that lacks sufficient FHR accelerations over a 40-minute period.

Amniotic Fluid Adequacy: The currently preferred measure of amniotic fluid adequacy is the "deepest vertical pocket" (DVP) measurement. A DVP of at least 2 cm of amniotic fluid is normal; a DVP of less than 2 cm is considered abnormal (referred to as "oligohydramnios"). Amniotic fluid index (AFI) is the sum of measurements of the deepest umbilical-cord free amniotic fluid pockets in the four uterine quadrants. The AFI is considered normal if it is greater than 5 cm and abnormal if it is 5cm or less (again, "oligohydramnios").

Biophysical Profile (BPP): The BPP is comprised of an NST in addition to four (4) observations made by real-time ultrasonography. The five (5) components of the BPP follow – each component is given a score of 2. A composite score of 8-10 is considered normal (i.e., continued expectant management of the pregnancy is acceptable).

1. NST (as previously described)
2. Fetal breathing movements
3. Fetal movements
4. Fetal tone
5. Determination of adequate amniotic fluid volume (normal DVP)

Contraction Stress Test (CST): The CST is based on the response of the FHR to uterine contractions. It relies on the premise that fetal oxygenation will be transiently worsened by uterine contractions. With the patient in the lateral recumbent position, the FHR and uterine contractions are simultaneously recorded with an external fetal monitor. An adequate uterine contraction pattern is present when at least three contractions persist for at least 40 seconds each in a 10-minute period. Uterine stimulation is not necessary if the patient is having spontaneous uterine contractions of adequate frequency. If fewer than three contractions of 40 seconds' duration occur in 10 minutes, contractions are induced with either nipple stimulation or intravenous oxytocin.

The CST is interpreted according to the presence or absence of late FHR decelerations. The results of the CST are categorized as follows:

1. Negative: no late or significant variable decelerations
2. Positive: late decelerations after 50% or more of contractions (even if the contraction frequency is fewer than three in 10 minutes)
3. Equivocal–suspicious: intermittent late decelerations or significant variable decelerations
4. Equivocal: FHR decelerations that occur in the presence of contractions more frequent than every 2 minutes or lasting longer than 90 seconds
5. Unsatisfactory: fewer than three contractions in 10 minutes or an uninterpretable tracing

Recommendations:

When the clinical condition that prompted testing persists, a reassuring test should be repeated weekly or twice weekly until delivery, depending on the test used and the presence of certain high-risk pregnancy conditions. Any presumed significant change in fetal well-being requires fetal re-evaluation, regardless of the interval since the most recent test.

An abnormal NST or modified BPP usually should be further evaluated using other tests (e.g., CST, full BPP). Subsequent management should then be predicated on the results of subsequent tests (indicating fetal compromise), the gestational age, the presence or absence of oligohydramnios (if assessed), and the maternal condition.

Recent, normal antepartum fetal test results should not preclude the use of intrapartum fetal monitoring.

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DISCLAIMER

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