



CLINICAL GUIDELINES

Obstetrical Ultrasound Imaging Guidelines

Version 1.0.2022

Effective January 1, 2022



eviCore healthcare Clinical Decision Support Tool Diagnostic Strategies: This tool addresses common symptoms and symptom complexes. Imaging requests for individuals with atypical symptoms or clinical presentations that are not specifically addressed will require physician review. Consultation with the referring physician, specialist and/or individual's Primary Care Physician (PCP) may provide additional insight.

eviCore's Clinical Review Criteria ("CRC") and related content is made available for the limited uses of: reference; and individual use, only limited to facilitating the determination of medically necessary and appropriate clinical treatment by clinicians for specific delegated patients under their care. The CRC and related content is proprietary information of eviCore, and copyrighted to the full extent of the law. Except as expressly permitted, you may not modify, copy, reproduce, republish, upload, post, transmit, hyperlink to or from, or distribute in any way the CRC, nor may you sell, transfer, distribute, assign, lease, reproduce, or otherwise use the CRC in commerce, in a manner that competes with us or infringes upon our rights, or for any public or commercial endeavor without our prior and express written consent.

CPT® (Current Procedural Terminology) is a registered trademark of the American Medical Association (AMA). CPT® five digit codes, nomenclature and other data are copyright 2021 American Medical Association. All Rights Reserved. No fee schedules, basic units, relative values or related listings are included in the CPT® book. AMA does not directly or indirectly practice medicine or dispense medical services. AMA assumes no liability for the data contained herein or not contained herein.

Obstetrical Ultrasound Imaging Guidelines	
Abbreviations and Glossary for OB Ultrasound Imaging Guidelines	6
OB-1: Obstetrical Ultrasound Imaging General Guidelines	8
OB-1.0: Obstetrical Imaging	9
OB-1.1: Required Documentation	9
OB-1.2: Inappropriate Use of OB Ultrasound	10
OB-1.3: Ultrasound Code Selection	10
OB-2: Uncertain Dates	13
OB-2.1: Uncertain Dates/Unknown Last Menstrual Period (LMP)	14
OB-3: Intrauterine Device (IUD)	15
OB-3.1: Locate an Intrauterine Device (IUD)	16
OB-4: Infertility	17
OB-4.1: History of Infertility	18
OB-4.2: Present Pregnancy with ART Treatment (IVF)	18
OB-4.3: Recurrent Pregnancy Loss	18
OB-5: Vaginal Bleeding and/or Abdominal/Pelvic Pain/Cramping	19
OB-5.1: Abdominal/Pelvic Pain	20
OB-5.2: Vaginal Bleeding	20
OB-5.3: Ectopic Pregnancy	21
OB-5.4: Spontaneous Abortion/Threatened/Missed Abortion	21
OB-5.5: Hydatidiform Mole	22
OB-6: Fetal Aneuploidy and Anomaly Screening	23
OB-6.1: First Trimester Screening	24
OB-6.2: Second Trimester Screening	25
OB-7: Fetal Anatomic Scan	26
OB-7.1: Fetal Anatomic Scan	27
OB-7.2: Fetal Anatomic Scan – Follow-up	27
OB-8: Third Trimester Imaging	29
OB-8.1: Third Trimester Imaging – Ultrasound	30
OB-9: High Risk Pregnancy	31
OB-9.0: High Risk General Information	32
OB-9.1: High Risk Group One – Risk Factors	33
OB-9.2: High Risk Group Two – Findings on Ultrasound that May Require Further Imaging	38
OB-9.3: High Risk Group Three – Pre-pregnancy BMI ≥ 30 kg/m ²	37
OB-9.4: High Risk Group Four – Macrosomia	38
OB-9.5: High Risk Group Five – Zika and COVID-19 Virus	38

OB-9.6: High Risk Group Six – Pre-Gestational Diabetes	40
OB-9.7: High Risk Group Seven Gestational Diabetes	41
OB-9.8: Hypertensive Disorders in Pregnancy	42
OB-9.9: History of Spontaneous Pre-Term Delivery/History of PPROM	44
OB-9.10: History of Stillbirth	45
OB-10: High Risk Medications and Substances	48
OB-10.1: Potentially Teratogenic Medications/Substances	49
OB-10.2: Medications/ Exposures Associated with Poor Pregnancy Outcome	53
OB-11: Multiple Gestations	52
OB-11.1: Suspected Multiple Gestations	53
OB-11.2: Known Dichorionic Multiple Gestations	53
OB-11.3: Known Monochorionic-Diamniotic or Monochorionic-Monoamniotic Multiple Gestations	54
OB-12: Fetal Echocardiography (ECHO)	57
OB-12.1: Fetal Echocardiography – Coding	58
OB-12.2: Indications for Fetal Conditions	58
OB-12.3: Indications for Maternal Conditions	59
OB-12.4: Medication or Drug Exposure	63
OB-13: Fetal MRI	61
OB-13.1: Indications for Fetal MRI	62
OB-14: Abnormal Fetal Position/ Presentation	65
OB-14.1: Abnormal Fetal Position or Presentation	66
OB-15: Adnexal Mass/Uterine Fibroids and Uterine Anomalies	67
OB-15.1: Adnexal Mass	68
OB-15.2: Uterine Fibroids in Pregnancy	68
OB-15.3: Uterine Anomalies in Pregnancy	69
OB-16: Alloimmunization/Rh Isoimmunization/ Other Causes of Fetal Anemia/Parvo/Hydrops	71
OB-16.1: Alloimmunization/Rh Isoimmunization	72
OB-16.2: Exposure to Parvovirus B-19	73
OB-16.3: Twin Anemia Polycythemia Sequence	73
OB-16.4: Other Fetal Hydrops/Nonimmune Hydrops	73
OB-16.5: Other Causes of Fetal Anemia	74
OB-17: Amniotic Fluid Abnormalities/ Oligohydramnios/Polyhydramnios	75
OB-17.1: Amniotic Fluid Abnormalities	76
OB-18: Cervical Insufficiency/Current Preterm Labor	78

OB-18.1: Cervical Insufficiency	79
OB-18.2: Cerclage in Place in Current Pregnancy	79
OB-18.3: Current Preterm Labor	80
OB-19: No Fetal Heart Tones/Decreased Fetal Movement	82
OB-19.1: No Fetal Heart Tones	83
OB-19.2: Decreased Fetal Movement	83
OB-20: Fetal Growth Problems (FGR and Macrosomia)	84
OB-20.1: Fetal Growth Restriction Current Pregnancy	85
OB-20.2: Macrosomia – Large for Dates Current Pregnancy	86
OB-21: Placental and Cord Abnormalities	87
OB-21.1: Single Umbilical Artery (Two Vessel Cord)	88
OB-21.2: Persistent Right Umbilical Vein (PRUV)	88
OB-21.3: Placental/Cord Abnormalities	89
OB-21.4: Subchorionic Hematoma/Hemorrhage (Placental Hematoma)	90
OB-21.5: Suspected Abruption Placentae	91
OB-21.6: Previa (Placenta Previa and Vasa Previa)	91
OB-21.7: Placenta Accreta Spectrum (Accreta, Increta, Percreta)	92
OB-22: Late-term/Post-term Pregnancy	95
OB-22.1: Late-term/Post-term Pregnancy	96
OB-23: Preterm/Prelabor Rupture of Membranes	97
OB-23.1: Current Preterm/Prelabor Rupture of Membranes (PPROM)	98
OB-23.2: Current Prelabor Rupture of Membranes (PROM)	98
OB-24: Previous C-section or History of Uterine Scar	99
OB-24.1: Previous C-section or History of Uterine Scar	100
OB-25: Termination of Pregnancy – Imaging	101
OB-25.1: Imaging for Planned Pregnancy Termination	102
OB-26: Trauma	103
OB-26.1: Trauma – Imaging	104
OB-27: Unequal Fundal Size and Dates	106
OB-27.1: Unequal Fundal Size and Dates	107
OB-28: Procedure Coding Basics for Established Pregnancy	108
OB-28.1: Procedure Coding Basics for Established Pregnancy General Considerations	109
OB-28.2: Required Elements for Complete First Trimester Ultrasound	109
OB-28.3: Required Elements for Second or Third Trimester Fetal Anatomic Evaluation Ultrasound	110

OB-28.4: Required Elements for a Detailed Fetal Anatomic Evaluation Ultrasound	111
OB-28.5: Fetal Nuchal Translucency	112
OB-28.6: Limited and Follow-up Studies	113
OB-28.7: Obstetric Transvaginal Ultrasound	113
OB-28.8: Biophysical Profile (BPP)	114
OB-28.9: Fetal Doppler	115
OB-28.10: Duplex Scan	115
OB-28.11: Fetal Echocardiography	116
OB-28.12: 3D and 4D Rendering	116

Abbreviations and Glossary for OB Ultrasound Imaging Guidelines

ACOG	American College of Obstetricians and Gynecologists
AFI	amniotic fluid index
AFP	alpha-fetoprotein
B-mode (brightness)	two dimensional imaging procedure, B-mode ultrasound is the basis for all static and real time B-scan images
BPP	Biophysical Profile includes the ultrasound variables: fetal breathing, muscle tone, and movement as well as amniotic fluid volume. BPP may be performed with or without a non-stress test (NST) which involves fetal heart rate (FHR) monitoring.
CST	contraction stress test
D & C/D & E	dilatation and curettage/ Dilation and Evacuation
Dichorionic twins	twins having distinct chorions (membrane that forms the fetal part of the placenta), including monozygotic twins (from one oocyte [egg]) separated within 72 hours of fertilization and all dizygotic twins (from two oocytes fertilized at the same time)
Doppler	involves measuring a change in frequency when the motion of vascular flow is measured
EDC	Estimated Date of Confinement; determined from the first day of the last menstrual cycle
EDD	Estimated Date of Delivery
FGR	Fetal growth restriction; an estimated weight of the fetus at or below 10th percentile for gestational age; and/or abdominal circumference of the fetus at or below 10th percentile for gestational age
FHR	fetal heart rate
hCG	human chorionic gonadotropin
IDDM	insulin-dependent diabetes mellitus
M-mode	ultrasound imaging technique in which structure movement can be depicted in a wave-like manner; primarily used in cardiac and fetal cardiac imaging
Macrosomia	estimated fetal weight of greater than 4000 or 4500 grams
Monochorionic twins	twins developed from one oocyte (egg) developing with a single chorions (membrane that forms the fetal part of the placenta)
NICU	Neonatal Intensive Care Unit
NST	fetal non-stress test

Oligohydramnios	diminished amniotic fluid volume (AFV) for gestational age; definitions include: maximum deepest pocket of ≤ 2 cm and/or AFI of ≤ 5 cm or <the 5 th percentile for gestational age if <30 weeks.
PACS	Picture Archiving and Communications System
Polyhydramnios	AFI ≥ 24 cm or maximum vertical pocket of ≥ 8 cm
PROM	preterm rupture of membranes
Quad screen	alpha-fetoprotein (AFP), estriol, human chorionic gonadotropin (hCG), inhibin A
Real time scan	considered the most common type of ultrasound; a 2-dimensional scan that reflects structure and motion over time, scanning and display of images are run at a sufficiently rapid rate so that moving structures can be viewed moving at their natural rate; frame rates ≥ 15 frames per second are considered “real time”

OB-1: Obstetrical Ultrasound Imaging General Guidelines

OB-1.0: Obstetrical Imaging	9
OB-1.1: Required Documentation	9
OB-1.2: Inappropriate Use of OB Ultrasound	10
OB-1.3: Ultrasound Code Selection	10

OB-1.0: General Guidelines

- This document offers an in-depth, indication driven guide to obstetrical imaging
- The use of an obstetrical CPT code is only indicated with a positive pregnancy test or an otherwise confirmed pregnancy. Likewise, it is not appropriate to report non-obstetrical, pelvic ultrasound procedure codes (CPT® 76830, CPT® 76856, and CPT® 76857) with a positive pregnancy test or a confirmed pregnancy
- An evaluation of pregnancy with a history and physical exam (an initial office visit) is necessary prior to obstetric ultrasound imaging requests
 - ◆ The following information must be submitted with each request:
 - Expected date of delivery
 - Gestational age at date of service
 - Results of prior ultrasound studies if available
- Ultrasound assessment is an accurate method of determining gestational age, fetal number, viability, and placental location, and it is recommended for all pregnant patients
 - ◆ Per ACOG, in the absence of other specific indications, the optimal time for a single ultrasound examination is at 18 to 22 weeks of gestation. This timing allows for a survey of fetal anatomy in most women and an accurate estimation of gestational age.
 - For a Normal (Low Risk) Pregnancy Imaging: Report a fetal anatomy ultrasound CPT® 76805 if ≥16 weeks, for a normal/low risk pregnancy
 - If pregnancy is **High Risk** report a detailed fetal anatomy ultrasound (CPT® 76811) if ≥16 weeks.
 - Generally performed by a Maternal Fetal Medicine (MFM) specialist /Perinatologist, or a Radiologist at an AIUM or ACR accredited facility. See **OB-9: High Risk Pregnancy**
 - Though fetal anatomy may be performed any time after 14 weeks, due to fetal size at earlier gestational age, fetal anatomical survey performed <16 weeks gestation may not be optimal
 - ◆ Current ACOG and SMFM guidelines state that cervical length (CL) screening in singleton gestations without a prior spontaneous preterm birth (PTB) cannot yet be universally mandated.
 - Transvaginal ultrasound (CPT® 76817) may be considered if the transabdominal CL is ≤3.6 cm or in certain circumstances of poor cervical visualization on transabdominal ultrasound
 - ◆ Fetal Nuchal Translucency (CPT® 76813) can be considered if Cell-Free DNA (cfDNA) is not planned or has not already been performed, as they are both screening tools for fetal aneuploidy

OB-1.1: Required Documentation

- See **OB-1.0: General Guidelines**

OB-1.2: Inappropriate Use of OB Ultrasound

Obstetrical ultrasound studies cannot be authorized for payment for individuals who do not have a positive pregnancy test or clinical evidence of a pregnancy (fetal heart tones)

- Obstetrical ultrasound is **not** medically indicated for the following:
 - ◆ Sex determination only
 - ◆ To provide a keepsake or souvenir picture

OB-1.3: Ultrasound Code Selection

- See **OB-28: Procedure Coding Basics for Established Pregnancy**
 - ◆ It is not appropriate to report non-obstetrical pelvic ultrasound procedure codes (CPT® 76830, CPT® 76856, and CPT® 76857) with a positive pregnancy test or confirmed pregnancy

CPT® Code Guidance	
CPT® 76801 and CPT® 76802 (for each additional fetus) are reported for complete studies performed during the first trimester (<14 weeks). These codes should only be used once per pregnancy unless the mother changes to a new medical caregiver at a new office and there is a new medical indication for ultrasound.	
CPT® 76813 and CPT® 76814 (each additional fetus) are used to report nuchal translucency screening: an ultrasound measurement of the clear (translucent) space at the back of the fetal neck to assess risk for Down Syndrome (Trisomy 21), Trisomy 18, and other genetic disorders.	
CPT® 76805 and CPT® 76810 (for each additional fetus) are used to report complete studies (anatomy scan) performed during the second and third trimester, in a normal (low risk) pregnancy. These studies should only be used once per pregnancy unless the mother changes to a new medical caregiver at a new office and there is a new medical indication for ultrasound.	
CPT® 76811 and CPT® 76812 (for each additional fetus) describe a detailed fetal anatomic survey and are used only when the study includes this service. These studies should only be used once per pregnancy unless the mother changes to a new medical caregiver at a new office and there is a new medical indication for ultrasound. This detailed fetal anatomic evaluation is generally performed by those with special skills to perform this study, such as a Maternal Fetal Medicine specialist (Perinatologist), or a Radiologist with advanced training in fetal imaging. In circumstances where a detailed fetal anatomy (CPT® 76811) is indicated but access is limited due to geographic or other constraints, a standard fetal anatomy survey (CPT® 76805) may be authorized instead at the appropriate gestational age.	
CPT® 76817 is used to report a transvaginal ultrasound. The other OB ultrasound codes are used for transabdominal studies.	
CPT® 76816 is used to report a follow up study, such as a growth scan or follow up on anatomy when more than one area requires reexamination. ◆ CPT® 76816 (should not be performed prior to a CPT® 76801 or an anatomy scan CPT® 76805 (normal pregnancy) or Detailed anatomy scan CPT® 76811 (high risk pregnancy) ◆ CPT® 76816 should not be done on same date of service as CPT® 76815	

CPT® Code Guidance	
CPT® 76815 describes a limited or 'quick look' study	
◆ It can be used at any gestational age for various indications, including quick look for AFI assessment, fetal heart-beat, fetal position, placental location etc. ◆ It may be used specifically for 'dating' (when indicated) in those that don't meet gestational age criteria for dating with CPT® 76801 or are too early for anatomy scan (i.e. >14 weeks but <16 weeks) ◆ It is also used to report a modified BPP. ◆ Note: CPT® 76815 should never be reported with complete studies CPT® 76801/CPT® 76802, CPT® 76805/CPT® 76810, CPT® 76811/CPT® 76812, or with CPT® 76816 or BPP (CPT® 76818 and CPT® 76819).	
CPT® 76818 (includes non-stress test) and CPT® 76819: are used to report a Biophysical profile (BPP), a test for antepartum fetal surveillance (A BPP is not typically performed before 26 weeks due to lack of fetal brain stem maturity prior to this gestational age).	
CPT® 76820 describes Doppler velocimetry of the umbilical artery.	
CPT® 76821 describes Doppler velocimetry of the middle cerebral artery.	
CPT® 76825 describes fetal echocardiography and CPT® 76827 describes the Doppler portion of the echocardiogram. These codes should only be used once per pregnancy unless the mother changes to a new medical caregiver at a new office or there is a new medical indication for ultrasound.	
CPT® 76826 describes a follow up fetal echocardiography and CPT® 76828 describes a follow up Doppler portion of the echocardiogram.	
CPT® 93325 may be added for color mapping in conjunction with fetal echocardiography procedures.	
CPT® 93976 describes a limited duplex scan and is used during pregnancy for characterizing the pattern and direction of blood flow in arteries and veins. It can be used to report fetal umbilical-placental flow evaluation (accreta or other placental or cord abnormalities).	
CPT® 74712 and CPT® 74713 (for each additional fetus) are used to report a fetal MRI (indicated for more in depth imaging of certain fetal abnormalities).	

Practice Note

- ACOG recommendations for imaging during pregnancy and lactation:
 - ◆ Ultrasonography and magnetic resonance imaging (MRI) are not associated with risk and are the imaging techniques of choice for the pregnant patient, but they should be used prudently and only when use is expected to answer a relevant clinical question or otherwise provide medical benefit to the patient.
 - ◆ With few exceptions, radiation exposure through radiography (Xrays), computed tomography (CT) scan, or nuclear medicine imaging techniques is at a dose much lower than the exposure associated with fetal harm. If these techniques are necessary in addition to ultrasound or MRI or are more readily available for the diagnosis in question, they should not be withheld from a pregnant patient.
 - ◆ The use of gadolinium contrast with MRI should be limited; it may be used as a contrast agent in a pregnant woman only if it significantly improves diagnostic performance and is expected to improve fetal or maternal outcome.
 - ◆ With regards to iodinated IV contrast media, "it is generally recommended that contrast only be used if absolutely required to obtain additional diagnostic information that will affect the care of the fetus or woman during pregnancy".

- In circumstances where the individual is deemed to have an increased risk for a fetal abnormality and does not have access to a provider who can perform the more desirable fetal and maternal ultrasound with detailed fetal anatomic examination (CPT® 76811) due to geographic or other constraints, a standard (after first trimester) fetal and maternal ultrasound (CPT® 76805) may be authorized instead.
- CPT® 76816 (should not be performed prior to a CPT® 76801 or an anatomy scan CPT® 76805 (normal pregnancy) or Detailed anatomy scan CPT® 76811 (high risk pregnancy), and is typically not performed prior to 14 weeks gestation.
- Typically all components of the BPP (CPT® 76818 and CPT® 76819), such as breathing, are not present until ≥ 26 weeks gestation. However, a modified BPP (CPT® 76815) may be utilized sooner in certain high risk cases but should not be done prior to viability (23 weeks).
- SMFM suggest that ductus venosus, middle cerebral artery, or uterine artery Doppler use for routine clinical management of early- or late-onset FGR is *not recommended*
- The minimal use of color Doppler alone (CPT® 93976), when performed for anatomical structure identification, during a standard ultrasound procedure, is not separately reimbursable.

References

1. Reddy UM, Abuhamad AZ, Levine D, Saade GR. Fetal Imaging: Executive Summary of a Joint Eunice Kennedy Shriver National Institute of Child Health and Human Development, Society for Maternal-Fetal Medicine, American Institute of Ultrasound in Medicine, American College of Obstetricians and Gynecologists, American College of Radiology, Society for Pediatric Radiology, and Society of Radiologists in Ultrasound Fetal Imaging Workshop. *Obstetrical & Gynecological Survey*. 2014;69(8):453-455. doi:10.1097/01.ogx.0000453817.62105.4a.
2. Practice Bulletin No. 175: Ultrasound in Pregnancy. *Obstet Gynecol*. 2016;128(6):e241-e256. Reaffirmed 2020. doi:10.1097/AOG.0000000000001815.
3. AIUM Practice Parameter for the Performance of Detailed Diagnostic Obstetric Ultrasound Examinations Between 12 Weeks 0 Days and 12 Weeks 6 Days. *Journal of Ultrasound in Medicine*. Published online August 27, 2020. doi:10.1002/jum.15477
4. AIUM-ACR-ACOG-SMFM-SRU Practice Parameter for the Performance of Standard Diagnostic Obstetric Ultrasound Examinations. *Journal of Ultrasound in Medicine*. 2018;37(11). doi:10.1002/jum.14831.
5. AIUM Practice Parameter for the Performance of Detailed Second- and Third-Trimester Diagnostic Obstetric Ultrasound Examinations. *Journal of Ultrasound in Medicine*. 2019;38(12):3093-3100. doi:10.1002/jum.15163.
6. AIUM Practice Parameter for the Performance of Limited Obstetric Ultrasound Examinations by Advanced Clinical Providers. *Journal of Ultrasound in Medicine*. 2018;37(7):1587-1596. doi:10.1002/jum.14677.
7. AIUM Practice Parameter for the Performance of Fetal Echocardiography. *Journal of Ultrasound in Medicine*. 2019;39(1). doi:10.1002/jum.15188.
8. Martins JG, Biggio JR, Abuhamad A. Society for Maternal-Fetal Medicine (SMFM) Consult Series #52: Diagnosis and Management of Fetal Growth Restriction. *American Journal of Obstetrics and Gynecology*. 2020. doi:10.1016/j.ajog.2020.05.010.
9. ACOG Practice Bulletin No. 229: Antepartum Fetal Surveillance. *Obstetrics & Gynecology* 2021;137:e116-27. doi:10.1097/aog.0000000000004410.
10. ACOG Committee Opinion No. 828. Indications for outpatient antenatal fetal surveillance. American College of Obstetricians and Gynecologists. *Obstetrics & Gynecology* 2021;137:e177-97. doi:10.1097/aog.0000000000004407.
11. Society for Maternal and Fetal Medicine (SMFM), coding committee, December 2012. SMFM's white paper on Ultrasound Code 76811
12. Natale R, Nasello-Paterson C, Connors G. Patterns of fetal breathing activity in the human fetus at 24 to 28 weeks of gestation. *American Journal of Obstetrics and Gynecology*. 1988;158(2):317-321. doi:10.1016/0002-9378(88)90146-9.
13. ACOG committee opinion Number 723. Guidelines for diagnostic imaging during pregnancy and lactation. *Obstetrics & Gynecology*. 2017;130(4):e210-e216. doi:10.1097/aog.0000000000002355
14. ACOG Practice bulletin Number 226. Screening for Fetal Chromosomal Abnormalities . *Obstetrics & Gynecology*. 2020;136(4):e48-e69. doi:10.1097/aog.0000000000004084.

OB-2: Uncertain Dates

OB-2.1: Uncertain Dates/Unknown Last Menstrual Period (LMP) 14

OB-2.1: Uncertain Dates/Unknown Last Menstrual Period (LMP)

- If there is a difference in the clinical size of the uterus on pelvic exam and the estimated gestational age calculated by the LMP **or** there is an uncertain/unknown LMP **or** there have been irregular periods in the last year, one of the following may be indicated:
 - ◆ If <14 weeks by pelvic exam CPT® 76801 one time (plus CPT® 76802 for each additional fetus) and/or CPT® 76817 one time if a complete ultrasound has not yet been performed
 - ◆ If ≥14 weeks by abdominal exam CPT® 76815 or CPT® 76805 (CPT® 76811 if high risk) if complete fetal anatomic scan has not yet been performed

References

1. Practice Bulletin No. 175: Ultrasound in Pregnancy. Obstetrics & Gynecology. 2016;128(6):e241-e256. Reaffirmed 2020. doi:10.1097/AOG.0000000000001815
2. Reddy UM, Abuhamad AZ, Levine D, Saade GR. Fetal Imaging: Executive Summary of a Joint Eunice Kennedy Shriver National Institute of Child Health and Human Development, Society for Maternal-Fetal Medicine, American Institute of Ultrasound in Medicine, American College of Obstetricians and Gynecologists, American College of Radiology, Society for Pediatric Radiology, and Society of Radiologists in Ultrasound Fetal Imaging Workshop. Obstetrics & Gynecology. 2014;123(5):1070-1082. doi:10.1097/aog.0000000000000245.
3. ACOG Committee Opinion No 700: Methods for Estimating the Due Date. Obstetrics & Gynecology. 2017;129(5):e150-e154. doi:10.1097/AOG.0000000000002046.
4. ACOG Committee Opinion Number 688: Management of Suboptimally Dated Pregnancies, Obstetrics & Gynecology. 2017;129(3). Reaffirmed 2021. doi:10.1097/AOG.0000000000001949.

OB-3: Intrauterine Device (IUD)

OB-3.1: Locate an Intrauterine Device (IUD)

16

OB-3.1: Locate an Intrauterine Device (IUD)

- CPT® 76801 and/or CPT® 76817 if <14 weeks and a complete ultrasound has not yet been performed or
- CPT® 76815 and/or CPT® 76817 if complete ultrasound has already been performed or if ≥14 weeks.
- 3-D Rendering (CPT® 76376/CPT® 76377) may be added for “Lost” IUD (inability to feel or see IUD string).
- For continued pregnancy with retained IUD See **OB 9.1: High Risk Group One – Risk Factors**

References

1. Nowitzki KM, Hoimes ML, Chen B, Zheng LZ, Kim YH. Ultrasonography of intrauterine devices. Ultrasonography. 2015;34(3):183-194. doi:10.14366/usg.15010.
2. ACOG Committee Opinion No 672 Clinical challenges of long-acting reversible contraceptive methods. Obstetrics & Gynecology. 2016;128(3):e69-e77. Reaffirmed 2020. doi:10.1097/aog.0000000000001644.
3. Prabhakaran S and Chuang A. In-office retrieval of intrauterine contraceptive devices with missing strings. Contraception. 2011;83(2):102-106. doi:10.1016/j.contraception.2010.07.004.
4. ACOG Practice Bulletin 186: Long-Acting Reversible Contraception: Implants and Intrauterine Devices. Obstet Gynecol. 2017 Nov;130(5):e251-e269. Reaffirmed 2021. doi: 10.1097/AOG.

OB-4: Infertility

OB-4.1: History of Infertility	18
OB-4.2: Present Pregnancy with ART Treatment (IVF)	18
OB-4.3: Recurrent Pregnancy Loss	18

OB-4.1: History of Infertility

- If the current or a prior pregnancy was conceived using an ovulation induction agent (for example Clomid) and/or by intrauterine insemination (IUI), **or**
- If there is a history of infertility or history of IVF in a **prior** pregnancy, may perform
 - ◆ CPT® 76801 [plus CPT® 76802 for each additional fetus] and/or CPT® 76817 if <14 weeks or
 - ◆ CPT® 76815 if ≥14 weeks but <16 weeks for dating
 - ◆ Then, follow normal/ low risk imaging See **OB-7.1: Fetal Anatomic Scan**
- Repeat ultrasound is not usually necessary unless there are new clinical indications

OB-4.2: Present Pregnancy with ART Treatment (IVF)

- If the **current** pregnancy was conceived by IVF, may perform
 - ◆ CPT® 76801 [plus CPT® 76802 for each additional fetus] if <14 weeks and a complete ultrasound has not yet been performed, **and/or** CPT® 76817 for a transvaginal ultrasound
 - ◆ CPT® 76815 for dating or quick look follow-up if ≥14 weeks but <16 weeks
 - ◆ Detailed Fetal Anatomic Scan CPT® 76811 ≥16 weeks
 - ◆ Initial Fetal echo CPT® 76825 and/or CPT® 76827 +/- CPT® 93325 at ≥16 weeks
 - ◆ Starting at 23 follow-up growth scans (CPT® 76816) every 3 to 6 weeks
 - ◆ Starting at 36 weeks, weekly BPP (CPT® 76818 or CPT® 76819) or modified BPP (CPT® 76815)

OB-4.3: Recurrent Pregnancy Loss

- If there is a history of at least 2 consecutive or 3 non-consecutive clinical miscarriages/losses at <20 weeks gestation
 - ◆ CPT® 76801 [plus CPT® 76802 for each additional fetus] if <14 weeks and a complete ultrasound has not yet been performed, **and/or** CPT® 76817 for a transvaginal ultrasound
 - ◆ CPT® 76815 for dating or quick look follow-up if ≥14 weeks but <16 weeks
 - ◆ Detailed Fetal Anatomic Scan CPT® 76811 ≥16 weeks
 - ◆ Starting at 23 follow-up growth scans (CPT® 76816) every 3 to 6 weeks
 - ◆ Starting at 36 weeks, weekly BPP (CPT® 76818 or CPT® 76819) or modified BPP (CPT® 76815)

References

1. Kondapalli LA, Perales-Puchalt A. Low birth weight: is it related to assisted reproductive technology or underlying infertility? *Fertility and Sterility*. 2013;99(2):303-310. doi:10.1016/j.fertnstert.2012.12.035.
2. Definitions of infertility and recurrent pregnancy loss: a committee opinion. *Fertility and Sterility*. 2020;113(3):533-535. doi:10.1016/j.fertnstert.2019.11.025.
3. ACOG Practice Bulletin No. 200. Early pregnancy loss. *Obstetrics & Gynecology*. 2018;132(5). Reaffirmed 2021. doi:10.1097/aog.0000000000002899.
4. ACOG Committee Opinion No. 828. Indications for outpatient antenatal fetal surveillance. American College of Obstetricians and Gynecologists. *Obstetrics & Gynecology*. 2021;137:e177-97. doi:10.1097/aog.0000000000004407

OB-5: Vaginal Bleeding and/or Abdominal/Pelvic Pain/Cramping

OB-5.1: Acute Abdominal/Pelvic Pain	20
OB-5.2: Vaginal Bleeding	20
OB-5.3: Ectopic Pregnancy	21
OB-5.4: Spontaneous Abortion/Threatened/Missed Abortion	21
OB-5.5: Hydatidiform Mole	22

OB-5.1: Acute Abdominal/Pelvic Pain

For acute abdominal/pelvic pain:

At the time of complaint, can perform:

- CPT® 76801 and/or CPT® 76817 if complete ultrasound has not yet been performed, and <14 weeks or
- CPT® 76815 or
- If ≥14 weeks CPT® 76805 (CPT® 76811 if otherwise indicated) when an anatomy ultrasound (CPT® 76805/76811) is planned and has not yet been performed or
- CPT® 76816 (if an anatomy ultrasound CPT® 76805 or CPT® 76811 has previously been performed and at least 2 weeks since anatomy ultrasound)
- Repeat ultrasound is not usually necessary unless there are new indications.
- Note: Above imaging for acute onset abdominal-pelvic pain, NOT for contraction pain/rule out labor. See **OB-18.3: Current Preterm Labor**

OB-5.2: Vaginal Bleeding

First Trimester

At the time of complaint, can perform:

- CPT® 76801 and/or CPT® 76817 if complete ultrasound has not yet been performed, and <14 weeks or
- CPT® 76815 and/or CPT® 76817
- Repeat ultrasound is not usually necessary unless there are new indications.

Second and Third Trimesters

At the time of complaint, can perform:

- CPT® 76815 and/or CPT® 76817 **or**
- CPT® 76805/76811 if indicated (plus CPT® 76812 for each additional fetus) if ≥14 weeks, when fetal anatomic scan CPT® 76805/76811 has not yet been performed, and/or CPT® 76817 **or**
- CPT® 76816 and/or CPT® 76817 if fetal anatomy scan CPT® 76805/CPT® 76811 has been performed
- CPT® 93976 (limited duplex scan) may be indicated as an add-on (See **OB-21: Placental and Cord Abnormalities**).
- BPP (CPT® 76818 or CPT® 76819) can be considered starting at 26 weeks.
- Repeat ultrasound is not usually necessary unless there are new indications.
- For suspected placental abruption, (See **OB-21.5: Suspected Abruption Placentae**).
- If vaginal bleeding with +KB (Kleihauer-Betke) – fetomaternal hemorrhage – at risk for fetal anemia and hydrops CPT® 76821 may be indicated

OB-5.3: Ectopic Pregnancy

Ectopic Pregnancy
First Trimester
Imaging may be indicated if:
➤ There is a history of an ectopic pregnancy or ➤ There are abnormally rising hCG titers (non-doubling hCG), or ➤ There are signs or symptoms of ectopic pregnancy, e.g. pain and/or bleeding. ◆ CPT® 76801 and/or CPT® 76817 if complete ultrasound has not yet been performed, and is <14 weeks or ◆ CPT® 76815 and/or CPT® 76817 ◆ If an adnexal mass is confirmed, Color Doppler ultrasonography (CPT® 93976) may be useful to evaluate the vascular characteristics
➤ If ectopic pregnancy is being treated non-surgically with Methotrexate, imaging may be required per <u>OB-5: Vaginal Bleeding and/or Abdominal/Pelvic Pain/Cramping</u> or the imaging guidelines above for ectopic pregnancy
➤ If a cornual (interstitial) ectopic is suspected, additional imaging may be indicated. ➤ For C-section scar ectopic pregnancy See <u>OB 24.1: Previous C-section or History of Uterine Scar</u>

Practice Note

- Cornual (interstitial) pregnancies pose a significant high morbidity/ mortality risk due to massive intraperitoneal bleeding, and are often difficult to diagnose. Conventional sonography still remains the primary diagnostic tool, but 3D US and MRI are being utilized more frequently to aid in earlier detection and treatment.

OB-5.4: Spontaneous Abortion/Threatened/Missed Abortion

➤ Imaging may be indicated with or without vaginal bleeding to evaluate for threatened or missed abortion. ◆ CPT® 76801 and/or CPT® 76817 if complete ultrasound has not yet been performed, and is <14 weeks or ◆ CPT® 76815 and/or CPT® 76817 or ◆ CPT® 76805/CPT® 76811 if indicated (plus CPT® 76812 for each additional fetus) , if ≥14 weeks when complete fetal anatomic scan CPT® 76805/CPT® 76811 has not yet been performed, and/or CPT® 76817 ◆ Repeat ultrasound (CPT® 76815 and/or CPT® 76817) may be appropriate at weekly intervals in the setting of rising or non-falling serum hCG levels or if unable to confirm viable IUP (fetal pole with cardiac activity) ◆ Ultrasound imaging can be repeated earlier than seven days if there are new symptoms
➤ For complete spontaneous abortion, ultrasound is generally not indicated if there is no pain, or ongoing bleeding, and hCG levels are decreasing.

OB-5.5: Hydatidiform Mole

Hydatidiform Mole	
First, Second and Third Trimester	
➤	Ultrasound can be performed for diagnosis of hydatidiform mole ◆ CPT® 76801 and/or CPT® 76817 if complete ultrasound has not yet been performed, and is <14 weeks, or ◆ CPT® 76815 and/or CPT® 76817 or ◆ CPT® 76805/CPT® 76811 if indicated (plus CPT® 76812 for each additional fetus) if ≥14 weeks, when complete fetal anatomic scan CPT® 76805/CPT® 76811 has not yet been performed, and/or CPT® 76817 ◆ Ultrasound may be necessary for follow-up (CPT® 76830 and CPT® 76856 or CPT® 76857) if hCG titers are not decreasing as expected, or are increasing following treatment, or if there is onset of pain despite falling hCG titers. See <u>PV-16.1: Molar Pregnancy and GTN</u>
➤	History of a molar pregnancy, can perform: ◆ CPT® 76801 if <14 weeks, or ◆ CPT® 76815 and/or CPT® 76817 or ◆ CPT® 76805/CPT® 76811 if indicated (plus CPT® 76812 for each additional fetus) if ≥14 weeks, when complete fetal anatomic scan CPT® 76805/CPT® 76811 has not yet been performed, and/or CPT® 76817

References

1. ACOG Practice Bulletin No. 200. Early Pregnancy Loss. Obstetrics & Gynecology. 2018;132(5). Reaffirmed 2021. doi:10.1097/aog.0000000000002899.
2. Mari G, Norton ME, Stone J, et al. Society for Maternal-Fetal Medicine (SMFM) Clinical Guideline #8: The fetus at risk for anemia—diagnosis and management. American Journal of Obstetrics and Gynecology. 2015;212(6):697-710. doi:10.1016/j.ajog.2015.01.059.
3. ACOG Practice Bulletin No. 193. Tubal Ectopic Pregnancy. Obstetrics & Gynecology. 2018;131(3). Reaffirmed 2019. doi:10.1097/aog.0000000000002560.
4. ACOG Practice Bulletin No. 174. Evaluation and Management of Adnexal Masses. Obstetrics & Gynecology. 2016;128(5). Reaffirmed 2021. doi:10.1097/aog.0000000000001768.
5. Ramanathan S, Raghu V, Ladumor SB, Nagadi AN, Palaniappan Y, Dogra V, Schieda N. Magnetic resonance imaging of common, uncommon, and rare implantation sites in ectopic pregnancy. Abdom Radiol (NY). 2018 Dec;43(12):3425-3435. doi: 10.1007/s00261-018-1604-2.
6. Dibble EH, Lourenco AP. Imaging Unusual Pregnancy Implantations: Rare Ectopic Pregnancies and More. AJR Am J Roentgenol. 2016 Dec;207(6):1380-1392. doi: 10.2214/AJR.15.15290.
7. Abu-Rustum NR, Yashar CM, Bean S, et al. Gestational Trophoblastic Neoplasia, Version 2.2019, NCCN Clinical Practice Guidelines in Oncology. Journal of the National Comprehensive Cancer Network. 2019;17(11):1374-1391. doi:10.6004/jnccn.2019.0053.

OB-6: Fetal Aneuploidy and Anomaly Screening

OB-6.1: First Trimester Screening	24
OB-6.2: Second Trimester Screening	25

OB-6.1: First Trimester Screening

- First trimester screening includes biochemical markers and fetal nuchal translucency (NT) (CPT® 76813) assessment. An increased Fetal Nuchal Translucency, defined as a NT ≥ 3.0 mm, or greater than the 99th percentile for the crown rump length (CRL), may indicate a fetus with aneuploidy (e.g. Down's syndrome, Trisomy 18) but may also indicate an increased risk for cardiac defects or other structural defects or genetic syndromes in euploid fetuses.
- Nuchal translucency can be performed between 10 and 14 weeks' gestation (CRL 44-83 mm).

First Trimester Screening:	
➤	Ultrasound CPT® 76813 (plus CPT® 76814 for each additional fetus) is the initial imaging for first trimester screening, to evaluate fetal nuchal translucency
➤	If increased Fetal Nuchal Translucency (NT ≥ 3.0 mm or $>99^{\text{th}}$ percentile for the CRL), may perform: ◆ Fetal anatomic ultrasound (CPT® 76811) at ≥ 16 weeks ◆ Fetal echo (CPT® 76825 and/or CPT® 76827 and/or CPT® 93325) at ≥ 16 weeks ◆ Cell-Free DNA (cfDNA), Amniocentesis or CVS may be performed

- Fetal NT (CPT® 76813) is NOT recommended if cfDNA has already been planned or performed, as they are both screening tools for fetal aneuploidy
- Cell-Free DNA (cfDNA) can be performed any time after 10 weeks gestation and is currently the most sensitive screening test for Down's syndrome per the American College of Medical Genetics and Genomics (99% accurate).
- Those with a positive cfDNA should be offered diagnostic testing (amniocentesis or CVS) and a detailed anatomy scan (CPT® 76811) at ≥ 16 weeks. See **OB-9.1: High Risk Group One – Risk Factors**.
 - ◆ A “no call” or indeterminate result can occur (risk is higher with maternal obesity), which also has a higher risk of aneuploidy. These patients should managed as if positive.

Practice Notes

- CPT® 76813/CPT® 76814 can be performed once per pregnancy, and should be performed only by those certified by the Fetal Medicine Foundation or Nuchal Translucency Quality Review Program (NTQR).
- The use of ultrasound codes (CPT® 76801/CPT® 76802) should be indication driven and should NOT be routinely done whenever an ultrasound for nuchal translucency (CPT® 76813/CPT® 76814) is requested. In cases where there is either a maternal and/or fetal indication, then the CPT® 76801/CPT® 76802 code can indeed be billed along with the nuchal translucency screening (CPT® 76813/CPT® 76814).

OB-6.2: Second Trimester Screening

Second Trimester Screening:	
➤	A fetal anatomy ultrasound (CPT® 76805) and/or QUAD screen can be performed during the second trimester to detect fetal aneuploidy, neural tube defects, and other anatomical defects. ◆ See OB-7.1: Fetal Anatomic Scan
➤	If the quad screening is abnormal, a detailed anatomy ultrasound (CPT® 76811) may also be performed.

Practice Notes

Multiple marker screening is used in the second trimester (15 to 22 6/7 weeks) to screen for aneuploidy as well as open neural tube defects (ONTD).

- Maternal serum alpha-fetoprotein (MSAFP) can be done at 15 to 20 weeks to screen for neural tube defects in those that have had cfDNA or NT screen.
- The “quad” screen (AFP (alpha-fetoprotein), hCG (human chorionic gonadotropin), uE (Unconjugated estriol), dimeric inhibin-A) is the most commonly used test for the second trimester.
- A penta screen (quad screen markers + hyperglycosylated hCG) may be done in lieu of a quad screen.
- Combined, integrated or sequential screening (first and second trimester screening) may also be used and provides a higher detection rate than a single screening.
- Providers often wait for the results of the quad screen before ordering CPT® 76805. If the quad screen is abnormal, they may request CPT® 76811 in lieu of CPT® 76805.

References

1. ACOG Practice bulletin number 226. Screening for fetal chromosomal abnormalities. *Obstetrics & Gynecology*. 2020 Oct;136(4):e48-e69. doi: 10.1097/AOG.0000000000004084.
2. ACOG Practice Bulletin No. 175: Ultrasound in Pregnancy. *Obstetrics & Gynecology*. 2016;128(6):e241-e256. Reaffirmed 2020 doi:10.1097/AOG.0000000000001815.
3. Gregg AR, Skotko BG, Benkendorf JL, et al. Noninvasive prenatal screening for fetal aneuploidy, 2016 update: a position statement of the American College of Medical Genetics and Genomics. *Genetics in Medicine*. 2016;18(10):1056-1065. doi:10.1038/gim.2016.97.
4. Norton ME, Biggio JR, Kuller JA, Blackwell SC. Society for Maternal-Fetal Medicine (SMFM) Consult Series | #42: The role of ultrasound in women who undergo cell-free DNA screening. *American Journal of Obstetrics and Gynecology*. 2017;216(3):B2-B7. doi:10.1016/j.ajog.2017.01.005.
5. Society for Maternal and Fetal Medicine (SMFM), coding committee, October 2017. SMFM's white paper on billing combination of 76801 and 76813
6. ACOG Practice Bulletin No. 162 Prenatal diagnostic testing for genetic disorders. *Obstetrics & Gynecology*. 2016;127(5). Reaffirmed 2020. doi:10.1097/aog.0000000000001405.
7. Donofrio MT, Moon-Grady AJ, Hornberger LK, et al. Diagnosis and Treatment of Fetal Cardiac Disease. *Circulation*. 2014;129(21):2183-2242. doi:10.1161/01.cir.0000437597.44550.5d.
8. ACOG Practice Bulletin: No.187: Neural Tube Defects. *Obstetrics & Gynecology*. 2017 Dec;130(6):e279-e290. doi: 10.1097/AOG.0000000000002412.

OB-7: Fetal Anatomic Scan

OB-7.1: Fetal Anatomic Scan	27
OB-7.2: Fetal Anatomic Scan – Follow-up	27

OB-7.1: Fetal Anatomic Scan

- Per ACOG, in the absence of other specific indications, the optimal time for a single ultrasound examination is at 18 to 22 weeks of gestation. This timing allows for a survey of fetal anatomy and an accurate estimation of gestational age.
 - ◆ For a **normal/low risk** pregnancy, report a fetal anatomy ultrasound CPT® 76805 if ≥16 weeks.
 - ◆ If pregnancy is **high risk** report a detailed fetal anatomy ultrasound (CPT® 76811) if ≥16 weeks.
 - Generally performed by a Maternal Fetal Medicine (MFM) specialist /Perinatologist, or a Radiologist at an AIUM or ACR accredited facility. See **OB-9: High Risk Pregnancy**
 - ◆ Though fetal anatomy may be performed any time ≥14 weeks, fetal anatomical survey performed at a gestational age <16 weeks may not be optimal due to fetal size at earlier gestational age.
- Current ACOG and SMFM guidelines state that CL screening in singleton gestations without a prior spontaneous PTB cannot yet be universally mandated.
 - ◆ Transvaginal ultrasound (CPT® 76817) may be considered if the transabdominal cervical length (CL) is ≤3.6 cm or in certain circumstances of poor cervical visualization on transabdominal ultrasound. If cervical shortening is identified – See **OB-18.1: Cervical Insufficiency**

OB-7.2: Fetal Anatomic Scan – Follow-up

- Follow-up ultrasounds (CPT® 76815 to assess a single item or CPT® 76816 if multiple areas to be assessed) can be performed once for incomplete or equivocal finding on initial fetal anatomic scan.
- CPT® 76816 (should not be performed prior to a CPT® 76801 or an anatomy scan CPT® 76805 (normal pregnancy) or Detailed anatomy scan CPT® 76811 (high risk pregnancy))
- If pregnancy is high risk See **OB-9: High Risk Pregnancy** or other applicable high risk guideline.
- Detailed anatomy ultrasound CPT® 76811 can be performed (if not previously performed) when initial fetal anatomic scan CPT® 76805 is abnormal. See **OB-9: High Risk Pregnancy**

References

1. AIUM-ACR-ACOG-SMFM-SRU Practice Parameter for the Performance of Standard Diagnostic Obstetric Ultrasound Examinations. *Journal of Ultrasound in Medicine*. 2018;37(11). doi:10.1002/jum.14831.
2. AIUM Practice Parameter for the Performance of Detailed Second- and Third-Trimester Diagnostic Obstetric Ultrasound Examinations. *Journal of Ultrasound in Medicine*. 2019;38(12):3093-3100. doi:10.1002/jum.15163.
3. Practice Bulletin No. 175: Ultrasound in Pregnancy. *Obstet Gynecol*. 2016;128(6):e241-e256. Reaffirmed 2020 doi:10.1097/AOG.0000000000001815.
4. AIUM Practice Parameter for the Performance of Limited Obstetric Ultrasound Examinations by Advanced Clinical Providers. *Journal of Ultrasound in Medicine*. 2018;37(7):1587-1596. doi:10.1002/jum.14677.
5. American Medical Association. CPT—Current Procedural Terminology. American Medical Association. <https://www.ama-assn.org/practice-management/cpt>. Published 2019. Copyright 1995 - 2019.
6. ACOG Practice Bulletin No. 234: Prediction and Prevention of Spontaneous Preterm Birth. *Obstetrics & Gynecology*. 2021;138(2):e65-e90. doi:10.1097/aog.0000000000004479.
7. Cho HJ, Roh H-J. Correlation Between Cervical Lengths Measured by Transabdominal and Transvaginal Sonography for Predicting Preterm Birth. *Journal of Ultrasound in Medicine*. 2016;35(3):537-544. doi:10.7863/ultra.15.03026.
8. Esplin MS, Elovitz MA, Iams JD, et al. Predictive Accuracy of Serial Transvaginal Cervical Lengths and Quantitative Vaginal Fetal Fibronectin Levels for Spontaneous Preterm Birth Among Nulliparous Women. *JAMA*. 2017;317(10):1047. doi:10.1001/jama.2017.1373.
9. Jain S, Kilgore M, Edwards RK, Owen J. Revisiting the cost-effectiveness of universal cervical length screening: importance of progesterone efficacy. *American Journal of Obstetrics and Gynecology*. 2016;215(1). doi:10.1016/j.ajog.2016.01.165
10. Blackwell SC, Gyamfi-Bannerman C, Biggio JR Jr, et al. 17-OHPC to Prevent Recurrent Preterm Birth in Singleton Gestations (PROLONG Study): A Multicenter, International, Randomized Double-Blind Trial. *Am J Perinatol*. 2020;37(2):127–136. doi:10.1055/s-0039-3400227.
11. McIntosh J, Feltovich H, Berghella V, Manuck T. The role of routine cervical length screening in selected high- and low-risk women for preterm birth prevention. *Society for Maternal-Fetal Medicine (SMFM) Consult Series #40*. *American Journal of Obstetrics and Gynecology*. 2016;215(3). doi:10.1016/j.ajog.2016.04.027.
12. Friedman AM, Schwartz N, Ludmir J, Parry S, Bastek JA, Sehdev HM. Can transabdominal ultrasound identify women at high risk for short cervical length? *Acta Obstetrica et Gynecologica Scandinavica*. 2013;92(6):637-641. doi:10.1111/aogs.12111
13. EPPPIC Group. Evaluating Progestogens for Preventing Preterm birth International Collaborative (EPPPIC): meta-analysis of individual participant data from randomised controlled trials. *Lancet*. 2021 Mar 27;397(10280):1183-1194.
14. SMFM, 2021. SMFM Statement: Response to EPPPIC and considerations of the use of progestogens for the prevention of preterm birth.

OB-8: Third Trimester Imaging

OB-8.1: Third Trimester Imaging – Ultrasound

30

OB-8.1: Third Trimester Imaging – Ultrasound

- | |
|---|
| ➤ Imaging in the third trimester is indicated for bleeding, pain, absent fetal heart tones, decreased fetal movement and/or other high-risk indications.
◆ See specific guidelines based on indication |
| ➤ For suspected breech position, See <u>OB-14: Abnormal Fetal Position/Presentation</u> |

Reference

1. Practice Bulletin No. 175: Ultrasound in Pregnancy. *Obstetrics & Gynecology*. 2016;128(6):e241-e256. Reaffirmed 2020 doi:10.1097/AOG.0000000000001815.

OB-9: High Risk Pregnancy	
OB-9.0: High Risk General Information	32
OB-9.1: High Risk Group One – Risk Factors	33
OB-9.2: High Risk Group Two – Findings on Ultrasound that May Require Further Imaging	36
OB-9.2.1: Soft Markers for Aneuploidy	36
OB-9.2.2: Other Findings on Ultrasound that May Require Further Imaging	36
OB-9.3: High Risk Group Three – Pre-pregnancy BMI ≥ 30 kg/m²	37
OB-9.3.1: Class I Obesity - Pre-pregnancy BMI 30 to 34.9	37
OB-9.3.2: Class II Obesity - Pre-pregnancy BMI 35-39.9	37
OB-9.3.3: Class III Obesity - Pre-pregnancy BMI ≥ 40	37
OB-9.4: High Risk Group Four – Macrosomia	38
OB-9.4.1: Prior Pregnancy with Macrosomia	38
OB-9.4.2: Current Pregnancy with Suspected or Known Macrosomia	38
OB-9.5: High Risk Group Five – Zika and COVID-19 Virus	38
OB-9.5.1: Zika Virus	38
OB-9.5.2: COVID-19 Virus	39
OB-9.6: High Risk Group Six – Pre-Gestational Diabetes	40
OB-9.6.1: Pre-Gestational or Early Diagnosed (≤ 20 weeks) Diabetes - Not on Medication	40
OB-9.6.2: Pre-Gestational or Early Diagnosed (≤ 20 weeks) Diabetes - On Medication	40
OB-9.7: High Risk Group Seven Gestational Diabetes	41
OB-9.7.1: Gestational Diabetes - Diet-Controlled (GDM-A1)	41
OB-9.7.2: Gestational Diabetes on Medications (GDM-A2)	41
OB-9.8: Hypertensive Disorders in Pregnancy	42
OB-9.8.1: Screening in High Risk Groups	42
OB-9.8.2: Current Chronic Hypertension not on Medication	42
OB-9.8.3: Current Chronic Hypertension on Medication	42
OB-9.8.4: Gestational Hypertension (GH, preeclampsia, toxemia)	43
OB-9.9: History of Spontaneous Pre-Term Delivery/History of PPROM	44
OB-9.9.1: Spontaneous Preterm Delivery ≤ 34 Weeks; History of PPROM ≤ 34 weeks	44
OB-9.9.2: History of Spontaneous Preterm Delivery > 34 weeks < 37 weeks; History of PPROM > 34 weeks < 37 weeks	44
OB-9.10: History of Stillbirth	45

OB-9.0: High Risk General Information

High Risk Pregnancy General Information:

- A Detailed Fetal Anatomic Scan (CPT® 76811/CPT® 76812 for each additional fetus) is ideally performed between 18 to 20 weeks, but can be performed any time after 14 weeks when criteria is met. However, due to fetal size at earlier gestational age, fetal anatomical survey performed at a gestational age of <16 weeks may not be optimal.
- This detailed fetal anatomic evaluation is generally performed by those with special skills to perform this study, such as a Maternal Fetal Medicine specialist (Perinatologist), or a Radiologist with advanced training in fetal imaging.
- In circumstances where the individual is deemed to have an increased risk for a fetal abnormality and does not have access to a provider who can perform the more desirable fetal and maternal ultrasound with detailed fetal anatomic examination (CPT® 76811) due to geographic or other constraints, a standard (after first trimester) fetal and maternal ultrasound (CPT® 76805) may be authorized instead.
- CPT® 76805, CPT® 76810, CPT® 76811, and CPT® 76812 should only be used once per pregnancy unless the mother changes to a new medical caregiver at a new office and there is a new medical indication and/or change in condition.
- CPT® 76816 (should not be performed prior to a CPT® 76801 or an anatomy scan CPT® 76805 (normal pregnancy) or Detailed anatomy scan CPT® 76811 (high risk pregnancy)
- Typically all components of the BPP (CPT® 76818 and CPT® 76819), such as breathing, are not present until ≥26 weeks gestation. However, a modified BPP (CPT® 76815) may be utilized sooner in certain high risk cases but should not be done prior to viability (23 weeks).
- SMFM suggest that ductus venosus, middle cerebral artery, or uterine artery Doppler use for routine clinical management of early- or late-onset FGR *is not recommended*

OB-9.1: High Risk Group One – Risk Factors

HIGH RISK PREGNANCY – Risk Factors	
Socio-Demographic Risk Factors (maternal age)	
➤	Age ≥35 years of age at the estimated date of confinement (EDC)
Lifestyle Related Risk Factors (legal or illicit drug/alcohol use)	
➤	Recreational drug (e.g. cocaine, amphetamines, opiates) or excessive alcohol use (≥5 drinks per week) during current pregnancy, or excessive (at least weekly) Marijuana/Cannabinoids/THC use in 2nd and/or 3rd trimesters
◆	For 1 st trimester marijuana exposure – see OB-10.1: Potentially Teratogenic Medications/ Substances
➤	Nicotine (≥10 cigarettes a day)
➤	Other nicotine exposure in pregnancy (e-cigs, vaping, chewing, patch) may also be considered high risk
➤	Current Maternal IV drug use
➤	Current use of Suboxone, Subutex, Methadone
➤	Other polysubstance use
See OB 10.2: Medications/ Exposures Associated with Poor Pregnancy Outcome for imaging recommendations for other high-risk medication or substances not listed above	
Health Condition Related Risk Factors (maternal diseases or conditions)	
➤	Anemia severe, <8 grams Hgb or 24% HCT
➤	Antiphospholipid Syndrome
➤	Asthma (poorly controlled or steroid dependent)
➤	Autoimmune disease (e.g. Multiple Sclerosis, Immune Thrombocytopenic Purpura)
➤	Bariatric surgery
➤	Connective tissue disorders (lupus, RA, scleroderma, Sjogren's, etc.)
➤	DVT/PE or Maternal thrombophilia (Antiphospholipid Syndrome, Factor V Leiden mutation, Antithrombin III deficiency, Protein C/Protein S deficiency, Prothrombin gene mutation etc.)
➤	Genetic Carrier status e.g., Cystic Fibrosis/Known carrier of Spinal Muscular Atrophy (SMA), CF, Tay-Sachs genetic diseases
➤	Heart disease (Maternal) – World Health Organization (WHO) Class II or greater
➤	Hemoglobinopathies (e.g. sickle cell disease, Alpha and Beta thalassemia minor (trait) or major)
➤	History of endometrial ablation or Uterine Artery embolization
➤	Inflammatory Bowel Disease (Ulcerative colitis, Crohn's Disease)
➤	Liver disease e.g. Hepatitis, Cholestasis of pregnancy (see imaging below)
➤	Maternal malnutrition (BMI <18.5) or poor weight gain in pregnancy (1 lb per week in 2 nd or 3 rd trimester if BMI ≤24.9)
➤	PKU
➤	Renal disease e.g. glomerulonephritis, persistent protein in the urine, renal insufficiency
➤	Seizure disorders – on antiepileptic medication
➤	Systemic malignancy
➤	Thyroid disorder (e.g. hyperthyroidism, poorly controlled hypothyroidism)

Previous pregnancy related risk factors	
➤	Prior pregnancy with adverse outcome (e.g. severe or early onset preeclampsia ≤34 weeks, abruption, accreta, previous uterine dehiscence or rupture, nonimmune hydrops).
➤	Prior pregnancy with SGA (baby weighing <2500 grams at term or less than the 10th percentile of expected weight) or FGR at any gestational age.
➤	For stillbirth See <u>OB-9.10: History of Stillbirth</u>
Current pregnancy related risk factors	
➤	Abnormal 1 st or 2 nd trimester screen (e.g. Abnormal MSAFP; Low PAPP_A; Elevated inhibin A)
➤	Known chromosomal abnormalities or abnormal cfDNA
➤	Major Fetal anomaly such as gastroschisis, fetal ventriculomegaly, fetal hydronephrosis (>10mm), achondroplasias, fetal congenital heart disease, neural tube defect, etc. For sustained fetal arrhythmias. (See <u>OB-16.5: Other Causes of Fetal Anemia</u>) For Persistent Right Umbilical Vein (PRUV) - See <u>OB-21.2: Persistent Right Umbilical Vein (PRUV)</u> .
➤	Grand multiparity: must have completed 5 or more pregnancies of greater than 20 weeks gestation, living or stillbirth (does not include current pregnancy; twins count as 1 pregnancy)
➤	Abnormal Fetal Nuchal Translucency ≥3.0mm or above the 99 th percentile for the CRL; Thickened nuchal fold found on second trimester imaging ≥6mm up to 22 weeks
➤	No prenatal care prior to the third trimester
➤	Pregnancy with retained IUD
Maternal Infections (not exposure)	
➤	Acquired Immune Deficiency Syndrome/HIV Positive
➤	Chicken Pox/Varicella
➤	Cytomegalovirus (CMV)
➤	Malaria
➤	Known parvovirus in current pregnancy post fetal treatment. See <u>OB-16.2: Exposure to Parvovirus B-19</u>
➤	Rubella
➤	Syphilis, untreated
➤	Toxoplasmosis
➤	Tuberculosis
➤	For Zika Virus and COVID-19 Virus See <u>OB-9.5: High Risk Group Five: Zika and COVID-19 Virus</u>

Imaging For Above Conditions	
➤	CPT® 76801 [plus CPT® 76802 for each additional fetus] if <14 weeks and a complete ultrasound has not yet been performed, and/or CPT® 76817 for a transvaginal ultrasound
➤	CPT® 76815 can be performed for dating or quick look follow-up if ≥14 weeks but <16 weeks
➤	Detailed Fetal Anatomic Scan CPT® 76811 ≥16 weeks
➤	Starting at 23 follow-up growth scans (CPT® 76816) every 3 to 6 weeks
➤	BPP (CPT® 76818 or CPT® 76819) or modified BPP (CPT® 76815), weekly starting at 32 weeks
➤	More frequent antepartum fetal surveillance may be indicated as below: ◆ Starting at 32 weeks, may perform BPP (CPT® 76818 or CPT® 76819) or modified BPP (CPT® 76815) up to 2x weekly for the conditions below: ■ Antiphospholipid Syndrome ■ Maternal Renal Disease (moderate to severe with creatinine >1.4mg/dl) ■ Sickle cell disease ◆ Starting at diagnosis may perform BPP (CPT® 76818 or CPT® 76819) if ≥26 weeks, or modified BPP (CPT® 76815) if ≥23 weeks, up to 2x weekly: ■ Intra-hepatic cholestasis of pregnancy (IHCP) ■ Complicated Sickle cell disease (e.g. co-existing hypertension, vaso-occlusive crisis, fetal growth restriction) ■ Complicated SLE (e.g. active lupus nephritis, or recent flares) ■ Major fetal anomaly in the current pregnancy (e.g. gastroschisis, fetal ventriculomegaly, fetal hydronephrosis (>10mm), achondroplasias, fetal congenital heart disease, neural tube defect, sustained fetal arrhythmias)

Practice Notes

Studies that note lower birth weights among offspring exposed to marijuana have noted that these findings were more pronounced among women who used more marijuana, particularly during the first and second trimesters (at least weekly during the pregnancy). CPT® 76811 may be indicated, however, given the limited evidence for antenatally detected abnormal growth, serial growth ultrasounds may not be indicated in the absence of other findings concerning for growth restriction.

Modified WHO Classification of Heart Disease in Pregnancy
WHO I: Uncomplicated pulmonary stenosis (PS), mitral valve prolapse (MVP), well repaired patent ductus arteriosus (PDA) or persistent anomalous pulmonary venous return (PAPVR)
WHO II: Unrepaired ASD/VSD, repaired tetralogy of fallot (TOF), most arrhythmias
WHO II-II: Mild LV impairment, hypertrophic cardiomyopathy (HCM), valvular heart disease, Marfan without aortic dilation, bicuspid aortic valve (BAV) with Ao <4.5 cm, repaired coarctation of the aorta
WHO III: Mechanical valves, systemic right ventricle (RV), Fontan, cyanotic heart disease, Marfan Aorta 4.0-4.5 cm, Bicuspid Aortic Valve Aorta 4.5-5.0 cm
WHO IV: Pregnancy Contraindicated – native severe coarctation of the aorta, Pulmonary Hypertension, LVEF <30%, NYHA III-IV, severe symptomatic mitral stenosis (MS), Marfan Aorta >4.5; Bicuspid aortic valves Ao >5.0; prior peripartum cardiomyopathy with residual LV impairment.

Recommended Weight Gain During Pregnancy			
Pre-pregnancy weight Category	BMI	Total Wt Gain (lbs)	Recommended Rate of gain in 2 nd and 3 rd trimester (lb/wk)
Underweight	<18.5	28-40	1
Normal weight	18.5-24.9	25-35	1
Overweight	25-29.99	15-25	0.6
Obese	>30	11 -20	0.5

Modified from: ACOG Practice Bulletin No 230. Obesity in Pregnancy, *Obstetrics & Gynecology*: June 2021 - Volume 137 - Issue 6 - p e128-e144 doi: 10.1097/AOG.00000000000004395.

OB-9.2: High Risk Group Two – Findings on Ultrasound that May Require Further Imaging

OB-9.2.1: Soft Markers for Aneuploidy

- If the following 'soft markers' are found in fetus of current pregnancy on routine imaging:
 - ◆ Shortened long bones (femur and/or humerus),
 - ◆ Pyelectasis of ≥ 4 mm prior to 26 weeks (For Hydronephrosis defined as ≥ 10 mm, See **OB-9.1: High Risk Group One - Risk factors**)
 - ◆ Echogenic bowel
 - ◆ Hypoplastic nasal bone
 - ◆ See **OB-9.2.2: Other Findings on Ultrasound that May Require Further Imaging** for Fetal Echogenic intra-cardiac focus and/or choroid plexus cyst
- Detailed Fetal anatomic scan ≥ 16 weeks (CPT® 76811).
- One follow-up scan (CPT® 76816) in third trimester

OB-9.2.2: Other Findings on Ultrasound that May Require Further Imaging

- If the following conditions are found in fetus of current pregnancy on routine imaging:
 - ◆ Choroid plexus cyst, or
 - ◆ Echogenic intra-cardiac foci (Fetal echo or follow-up ultrasound are not warranted), or
 - ◆ Current pregnancy with suspected fetal anomaly on routine anatomic survey
- Prior pregnancy with a chromosomal and/or structural congenital anomaly
- Detailed fetal anatomic scan (CPT® 76811) at ≥ 16 weeks
 - ◆ If a Major fetal anomaly is found - See **OB-9.1: High Risk Group One - Risk factors** and/ or **OB 12.2: Fetal Echocardiography - Indications for Fetal Conditions**

OB-9.3: High Risk Group Three – Pre-pregnancy BMI ≥ 30 kg/m²

- CPT® 76801 [plus CPT® 76802 for each additional fetus] if <14 weeks and a complete ultrasound has not yet been performed, **and/or**
- CPT® 76817 or
- CPT® 76815 can be performed for dating if ≥ 14 weeks but <16 weeks
- Detailed fetal anatomic scan ≥ 16 weeks (CPT® 76811)

OB-9.3.1: Class I Obesity - Pre-pregnancy BMI 30 to 34.9

Class I Obesity (BMI 30-34.9)

- After first and second trimester imaging as outlined above, Report **One** follow-up scan (CPT® 76816) between 32 to 36 weeks
 - ◆ If unable to clinically assess fundal height due to body habitus a growth scan (CPT® 76816) can be considered in the early third trimester with follow up in 4 weeks

OB-9.3.2: Class II Obesity - Pre-pregnancy BMI 35-39.9

Class II Obesity (BMI 35-39.9)

- After first and second trimester imaging as outlined above, Report:
 - ◆ Growth scans (CPT® 76816) every 4 weeks starting in the third trimester (≥ 28 weeks)
 - ◆ BPP (CPT® 76818 or CPT® 76819) or a modified BPP (CPT® 76815) weekly starting at 36 weeks

OB-9.3.3: Class III Obesity - Pre-pregnancy BMI ≥ 40

Class III Obesity (BMI ≥ 40)

- After first and second trimester imaging as outlined above, Report:
 - ◆ Growth scans (CPT® 76816) every 4 weeks starting in the third trimester (>28 weeks)
 - ◆ BPP (CPT® 76818 or CPT® 76819) or modified BPP (CPT® 76815) weekly starting at 32 weeks

Practice Note

- If pre-pregnancy or early pregnancy weight is over 200 pounds, it may be presumed that BMI is ≥ 30 kg/m².
- In cases of extreme obesity (BMI ≥ 40 -50) where the 4-chamber view is inadequately documented after 2 separate attempts by MFM, fetal echo may be considered.

Recommended Weight Gain During Pregnancy			
Pre-pregnancy weight Category	BMI	Total Wt Gain (lbs)	Recommended Rate of gain in 2 nd and 3 rd trimester (lb/wk)
Underweight	<18.5	28-40	1
Normal weight	18.5-24.9	25-35	1
Overweight	25-29.99	15-25	0.6
Obese	>30	11 -20	0.5

Modified from ACOG Practice Bulletin No 230. Obesity in Pregnancy, *Obstetrics & Gynecology*: June 2021 - Volume 137 - Issue 6 - p e128-e144 doi: 10.1097/AOG.0000000000004395.

OB-9.4: High Risk Group Four – Macrosomia

OB-9.4.1: Prior Pregnancy with Macrosomia

Prior pregnancy with macrosomia (baby weighing >4000 grams at term or greater than the 90th percentile of expected weight)

- Report one of the following in the first trimester to establish dates:
 - ◆ CPT® 76801 [plus CPT® 76802 for each additional fetus] if <14 weeks and a complete ultrasound has not yet been performed, and/or CPT® 76817, or
 - ◆ CPT® 76815 (limited ultrasound) can be performed for dating if an ultrasound has not already been performed, and ≥14 weeks and <16 weeks
- A detailed fetal anatomy scan (CPT® 76811) at ≥16 weeks
- One growth scan (CPT® 76816) in the third trimester

OB-9.4.2: Current Pregnancy with Suspected or Known Macrosomia

- See **OB-20.2: Macrosomia – Large for Dates Current Pregnancy**
- See **OB-27: Unequal Fundal Size and Dates**

OB-9.5: High Risk Group Five – Zika and COVID-19 Virus

OB-9.5.1: Zika Virus

Suspected exposure without symptoms

- Report one of the following:
 - ◆ CPT® 76801 [plus CPT® 76802 for each additional fetus] if <14 weeks and a complete ultrasound has not yet been performed, **and/or**
 - ◆ CPT® 76817 or
 - ◆ CPT® 76815 (limited ultrasound) can be performed for dating if an ultrasound not already been performed and ≥14 week and <16 weeks
- Fetal anatomic scan CPT® 76805 or CPT® 76811 (if indicated) at ≥16 weeks.
- If test positive or if symptoms developed, See below.

Suspected exposure with symptoms or known infection

- Report one of the following
 - ◆ CPT® 76801 [plus CPT® 76802 for each additional fetus] if <14 weeks and a complete ultrasound has not yet been performed, **and/or**
 - ◆ CPT® 76817 or
 - ◆ CPT® 76815 (limited ultrasound) can be performed for dating if an ultrasound not already been performed and ≥14 week and <16 weeks
- Fetal anatomic scan CPT® 76805 or CPT® 76811 (if indicated) at ≥16 weeks.
- Growth scan, (CPT® 76816) every 3 to 4 weeks to monitor for findings such as intracranial calcifications and microcephaly, starting at 16 weeks.
- If FGR diagnosed, See **OB-20.1: Fetal Growth Restriction Current Pregnancy**

OB-9.5.2: COVID-19 Virus

Person Under Investigation (PUI) for infection or known infection

- Report one of the following:
 - ◆ CPT® 76801 [plus CPT® 76802 for each additional fetus] if <14 weeks and a complete ultrasound has not yet been performed, **and/or**
 - ◆ CPT® 76817 or
 - ◆ CPT® 76815 (limited ultrasound) can be performed for dating if an ultrasound not already been performed and ≥14 week and <16 weeks
- Fetal anatomic scan CPT® 76805 or CPT® 76811 (if indicated) at ≥16 weeks.
- Growth scan (CPT® 76816) every 3 to 4 weeks starting at 23 weeks (See **OB-9.1: High Risk Group One - Risk factors**).
- If FGR diagnosed then follow FGR imaging **OB-20.1: Fetal Growth Restriction Current Pregnancy**

Practice Notes

SMFM recommendations during COVID pandemic:

- Combine dating/NT to one ultrasound based on LMP. If ultrasound earlier in the first trimester (e.g., <10 weeks) is indicated due to threatened abortion, pregnancy of unknown anatomic location, may consider foregoing NT ultrasound and offering cell free DNA screening for those desiring early aneuploidy screening
- Perform Anatomy Ultrasound at 20-22 weeks and if needed, consider follow up views in 4-8 weeks rather than 1-2 weeks.
- If serial cervical length assessments are indicated, consider stopping after anatomy u/s if transvaginal cervical length ≥35 mm, or if prior preterm birth at >34 weeks
- BMI >40: schedule anatomy at 22 weeks to reduce suboptimal views/need for repeat
- If Growth Ultrasounds indicated, recommend one third trimester growth at 32 weeks
- Follow up previa/low lying placenta at 34-36 weeks

OB-9.6: High Risk Group Six – Pre-Gestational Diabetes

OB-9.6.1: Pre-Gestational or Early Diagnosed (≤20 weeks) Diabetes - Not on Medication

- If diabetes is diagnosed prior to pregnancy or in the first or early second trimester (typically before 20 weeks gestation) with standard diagnostic criteria of: HbA1C ≥6.5%, fasting plasma glucose ≥126 mg/dL, or 2-hour glucose ≥200 mg/dL on a 75-g oral glucose tolerance test, then image as below.

Test	When	Frequency	Codes
First Trimester Ultrasounds	<14 weeks	Once	CPT® 76801 and/or CPT® 76817
Dating Ultrasound if no prior dating and ≥14 weeks	14-16 weeks	Once	CPT® 76815
Fetal anatomic scan	≥16 weeks	Once	CPT® 76811
Initial Fetal echo (HbA1C ≥6.5%)	Starting at ≥16 weeks	Once	CPT® 76825 and/or CPT® 76827 and/or CPT® 93325
Ultrasound (for fetal growth)	Starting in the 3 rd trimester	Every 3 to 6 weeks	CPT® 76816
Biophysical Profile (BPP) or modified BPP	Starting at 32 weeks	Once per week	CPT® 76818 (BPP) or CPT® 76819 (BPP) or CPT® 76815 (modified BPP)

OB-9.6.2: Pre-Gestational or Early Diagnosed (≤20 weeks) Diabetes - On Medication

- If diabetes is diagnosed prior to pregnancy or in the first or early second trimester (typically before 20 weeks gestation) with standard diagnostic criteria of: HbA1C ≥6.5%, fasting plasma glucose ≥126 mg/dL, or 2-hour glucose ≥200 mg/dL on a 75-g oral glucose tolerance test, then image as below.

Test	When	Frequency	Codes
First Trimester Ultrasounds	<14 weeks	Once	CPT® 76801 and/or CPT® 76817
Dating Ultrasound if no prior dating and ≥14 weeks	14-16 weeks	Once	CPT® 76815
Fetal anatomic scan	≥16 weeks	Once	CPT® 76811
Initial Fetal echo	Starting at ≥16 weeks	Once	CPT® 76825 and/or CPT® 76827 and/or CPT® 93325
Ultrasound (for fetal growth)	Starting at viability 23 weeks	Every 2 to 4 weeks	CPT® 76816
Biophysical Profile (BPP) or modified BPP	Starting at 32 weeks (may start at ≥26 weeks if complicated by additional risk factors (e.g., FGR Oligohydramnios))	Up to twice weekly	CPT® 76818 (BPP) or CPT® 76819 (BPP) or CPT® 76815 (modified BPP)
Umbilical artery Doppler (if FGR diagnosed)	Upon diagnosis of FGR if ≥23 weeks	Weekly	CPT® 76820

OB-9.7: High Risk Group Seven Gestational Diabetes

OB-9.7.1: Gestational Diabetes - Diet-Controlled (GDM-A1)

If patient has gestational diabetes and it is diet controlled:			
Test	When	Frequency	Codes
Fetal anatomic scan	≥16 weeks	Once	CPT® 76805
Ultrasound (for fetal growth)	Once at the time of diagnosis, then starting at 32 weeks	Every 4 weeks	CPT® 76816
Biophysical Profile (BPP) or modified BPP	Starting at 34 weeks	Once weekly if diet controlled.	CPT® 76818 (BPP) or CPT® 76819 (BPP) or CPT® 76815 (modified BPP)

OB-9.7.2: Gestational Diabetes on Medications (GDM-A2)

If patient has gestational diabetes and is on oral medication or insulin:			
Test	When	Frequency	Codes
Fetal anatomic scan	≥16 weeks	Once	CPT® 76811
Initial Fetal echo (if HbA1C >6%)	Once in the third trimester (≥32 weeks)	Once	CPT® 76825 and/or CPT® 76827 and/or CPT® 93325
Ultrasound (for fetal growth)	Starting at viability 23 weeks	Every 2 to 4 weeks	CPT® 76816
Biophysical Profile (BPP) or modified BPP	Starting at 32 weeks (may start at ≥26 if complicated by additional risk factors (e.g., FGR Oligohydramnios))	Up to twice weekly	CPT® 76818 (BPP) or CPT® 76819 (BPP) or CPT® 76815 (modified BPP)
Umbilical artery Doppler (if FGR diagnosed)	Upon diagnosis of FGR if ≥23 weeks	Weekly	CPT® 76820

Practice Notes

- If HbA1c levels are >6%, in those with GDM-A2, fetal echocardiogram in the third trimester to assess for ventricular hypertrophy may be considered.

OB-9.8: Hypertensive Disorders in Pregnancy

OB-9.8.1: Screening in High Risk Groups

- SMFM state that uterine artery Doppler has limited diagnostic accuracy and clinical utility in predicting FGR, SGA birth, and perinatal mortality. As such, its use for screening in high risk groups *is not recommended*.

OB-9.8.2: Current Chronic Hypertension not on Medication

Test	When	Frequency	Codes
First Trimester Ultrasounds	<14 weeks	Once	CPT® 76801 and/or CPT® 76817
If no prior dating ultrasound and ≥14 weeks	14-16 weeks	Once	CPT® 76815
Fetal anatomic scan	≥16 weeks	Once	CPT® 76811
Ultrasound (for fetal growth)	In the third trimester (≥28 weeks)	Every 4-6 weeks	CPT® 76816
If blood pressure is elevated from baseline, See OB-9.8.4: Gestational Hypertension (GH, preeclampsia, toxemia) below			

OB-9.8.3: Current Chronic Hypertension on Medication

Test	When	Frequency	Codes
First Trimester Ultrasounds	<14 weeks	Once	CPT® 76801 and/or CPT® 76817
If no prior dating ultrasound and ≥14 weeks	14-16 weeks	Once	CPT® 76815
Detailed Fetal Anatomic Scan	≥16 weeks	Once	CPT® 76811
Ultrasound (for fetal growth)	Starting at viability 23 weeks gestation	Every 3 to 4 weeks	CPT® 76816
Biophysical profile (BPP) or modified BPP	Starting at 32 weeks If complicated by other risk factors (e.g., FGR Oligohydramnios) may start at ≥26 weeks)	Once weekly If complicated by other risk factors (e.g., FGR Oligohydramnios) twice weekly	CPT® 76818 (BPP) or CPT® 76819 (BPP) or CPT® 76815 (AFI)
Umbilical artery Doppler (if FGR diagnosed) See OB-20.1: Fetal Growth Restriction Current Pregnancy	Upon diagnosis of FGR if ≥23 weeks	Twice weekly	CPT® 76820

OB-9.8.4: Gestational Hypertension (GH, preeclampsia, toxemia)

Test	When	Frequency	Codes
Fetal anatomic scan	≥16 weeks	Once	CPT® 76805 or CPT 76811 if other high risk issues and if not previously completed
Growth US	Starting at time of diagnosis	Every 3 to 4 weeks If FGR, Oligohydramnios or severe preeclampsia (every 2 to 4 weeks)	CPT® 76816
BPP	Starting at time of diagnosis if ≥26 weeks	Up to twice weekly Hypertension/ pre-eclampsia with severe features - Daily	CPT® 76818 or CPT® 76819
Modified BPP	Starting at time of diagnosis if ≥23 weeks	Up to twice weekly Hypertension/ pre-eclampsia with severe features - Daily	CPT® 76815
Umbilical artery Doppler OB-20.1: Fetal Growth Restriction Current Pregnancy	Starting at time of diagnosis of FGR or Oligohydramnios if ≥23 weeks	Twice weekly	CPT® 76820

Practice Note

Disorder	Definition
Hypertension in pregnancy	Systolic blood pressure ≥140 mm Hg or diastolic BP ≥90 mm Hg, or both, measured on two occasions at least 4 hours apart
Severe-range hypertension	Systolic blood pressure ≥160 mm Hg or diastolic BP ≥110 mm Hg, or both, measured on two occasions at least 4 hours apart
Chronic hypertension	Hypertension diagnosed or present before pregnancy or before 20 weeks of gestation; or hypertension that is diagnosed for the first time during pregnancy and that does not resolve in the postpartum period
Chronic hypertension with superimposed preeclampsia	Preeclampsia in a woman with a history of hypertension before pregnancy or before 20 weeks of gestation
Gestational hypertension	Hypertension diagnosed after 20 weeks of gestation, in a woman with a previously normal blood pressure.
Preeclampsia	Disorder of pregnancy associated with new-onset hypertension, which occurs most often after 20 weeks of gestation and frequently near term. Although often accompanied by new-onset proteinuria, hypertension and other signs or symptoms of preeclampsia may present in some women in the absence of proteinuria.
Eclampsia	Convulsive manifestation of the hypertensive disorders of pregnancy and is among the more severe manifestations of the disease.

OB-9.9: History of Spontaneous Pre-Term Delivery/History of PPROM

OB-9.9.1: Spontaneous Preterm Delivery ≤34 Weeks; History of PPROM ≤34 weeks

- For initial imaging:
 - ◆ CPT® 76801 [plus CPT® 76802 for each additional fetus] if <14 weeks and a complete ultrasound has not yet been performed, **and/or**
 - ◆ CPT® 76817 for a transvaginal ultrasound or
 - ◆ CPT® 76815 can be performed for dating if an ultrasound has not already been performed and ≥14 week and <16 weeks
- Fetal Anatomy Ultrasound CPT® 76805 or CPT® 76811 if otherwise indicated [plus CPT® 76810 or CPT® 76812 for each additional fetus] if ≥16 weeks and a complete fetal anatomic scan has not yet been performed during this pregnancy.
- CPT® 76817 and/or CPT® 76815 every 2 weeks, starting at ≥16 weeks until 24 weeks
- Starting after the fetal anatomic scan at ≥23 weeks, ultrasound (CPT® 76816) can be performed every 3 to 6 weeks until delivery
- Starting at 32 weeks, weekly BBP CPT® 76818 or CPT® 76819 or modified BPP CPT® 76815
- If funneling or short cervix ≤25 mm (2.5 cm) is found on a transvaginal ultrasound in a singleton pregnancy See **OB-18.1: Cervical Insufficiency**
- For current preterm labor See **OB-18.3: Current Preterm Labor**

OB-9.9.2: History of Spontaneous Preterm Delivery >34 weeks <37 weeks; History of PPROM >34 weeks <37 weeks

- For initial imaging:
 - ◆ CPT® 76801 [plus CPT® 76802 for each additional fetus] if <14 weeks and a complete ultrasound has not yet been performed, **and/or**
 - ◆ CPT® 76817 for a transvaginal ultrasound or
 - ◆ CPT® 76815 (limited ultrasound) can be performed for dating if an ultrasound not already been performed and ≥14 week and <16 weeks
- An anatomy ultrasound CPT® 76805 or CPT® 76811 if otherwise indicated [plus CPT® 76810 or CPT® 76812 for each additional fetus] **and/or** CPT® 76817 if >16 weeks and a complete fetal anatomic scan has not yet been performed during this pregnancy.
- CPT® 76815 and/or CPT® 76817 every 2 weeks, starting at ≥16 weeks until 24 weeks
- Starting after the fetal anatomic scan at ≥23 weeks, ultrasound (CPT® 76816) can be performed every 3-6 weeks until delivery
- If funneling or short cervix ≤25 mm (2.5 cm) is found on a transvaginal ultrasound in a singleton pregnancy See **OB-18.1: Cervical Insufficiency**
- For current preterm labor See **OB-18.3: Current Preterm Labor**

OB-9.10: History of Stillbirth

- For initial imaging:
 - ◆ CPT® 76801 [plus CPT® 76802 for each additional fetus] if <14 weeks and a complete ultrasound has not yet been performed, **and/or**
 - ◆ CPT® 76817 for a transvaginal ultrasound or
 - ◆ CPT® 76815 (limited ultrasound) can be performed for dating if an ultrasound has not already been performed and ≥14 week and <16 weeks
- Fetal anatomic scan at ≥16 weeks (CPT® 76811)
- Follow up ultrasound (CPT® 76816) every 2 to 4 weeks to assess fetal growth starting at 23 weeks or two weeks before prior pregnancy loss.
- Twice weekly BPP (CPT® 76818 or CPT® 76819, if ≥26 weeks) **or** modified BPP CPT® 76815 (not to be performed prior to 23 weeks) starting at 32 weeks or two weeks before prior pregnancy loss

Practice Notes

- A history of stillbirth is not an indication for fetal echo. Per 2020 ACOG bulletin – there is no mention of recommendation for echo – just a detailed anatomy US. If demised fetus had a confirmed cardiac anomaly on autopsy, or if the detailed anatomy scan on either the demised fetus or the current pregnancy had findings suspicious for cardiac anomaly, then echo may be indicated.

References

1. Practice Bulletin No. 175: Ultrasound in Pregnancy. Obstet Gynecol. 2016;128(6):e241-e256. Reaffirmed 2020. doi:10.1097/AOG.0000000000001815.
2. ACOG Practice Bulletin No. 229: Antepartum Fetal Surveillance. Obstet Gynecol 2021;137:e116-27. doi:10.1097/aog.0000000000004410.
3. ACOG Committee Opinion No. 828. Indications for outpatient antenatal fetal surveillance. American College of Obstetricians and Gynecologists. Obstet Gynecol 2021;137:e177–97. doi:10.1097/aog.0000000000004407.
4. Reddy UM, Abuhamad AZ, Levine D, Saade GR. Fetal Imaging. Obstetrical & Gynecological Survey. 2014;69(8):453-455. doi:10.1097/01.ogx.0000453817.62105.4a
5. AIUM Practice Parameter for the Performance of Detailed Second- and Third-Trimester Diagnostic Obstetric Ultrasound Examinations. Journal of Ultrasound in Medicine. 2019;38(12):3093-3100. doi:10.1002/jum.15163.
6. ACOG Practice Bulletin No. 200: Early Pregnancy Loss. Obstet Gynecol. 2018;132(5):e197-e207. Reaffirmed 2021. doi:10.1097/AOG.0000000000002899.
7. McIntosh J, Feltovich H, Berghella V, Manuck T. The role of routine cervical length screening in selected high- and low-risk women for preterm birth prevention. American Journal of Obstetrics and Gynecology. 2016;215(3). doi:10.1016/j.ajog.2016.04.027.
8. Donofrio MT, Moon-Grady AJ, Hornberger LK, et al. Diagnosis and Treatment of Fetal Cardiac Disease. Circulation. 2014;129(21):2183-2242. doi:10.1161/01.cir.0000437597.44550.5d .
9. Cavazos-Rehg PA, Krauss MJ, Spitznagel EL, et al. Maternal Age and Risk of Labor and Delivery Complications. Maternal and Child Health Journal. 2014;19(6):1202-1211. doi:10.1007/s10995-014-1624-7.
10. ACOG Committee Opinion No. 807: Tobacco and Nicotine Cessation During Pregnancy. Obstetrics & Gynecology. 2020;135(5). doi:10.1097/aog.0000000000003822.
11. Machado JDB, Filho PV, Petersen GO, Chatkin JM. Quantitative effects of tobacco smoking exposure on the maternal-fetal circulation. BMC Pregnancy and Childbirth. 2011;11(1). doi:10.1186/1471-2393-11-24.
12. Hackshaw A, Rodeck C, Boniface S. Maternal smoking in pregnancy and birth defects: a systematic review based on 173 687 malformed cases and 11.7 million controls. Human Reproduction Update. 2011;17(5):589-604. doi:10.1093/humupd/dmr022.
13. Regan, Annette K. PhD, MPH; Bombard, Jennifer M. MSPH; O'Hegarty, Michelle M. PhD; Smith, Ruben A. PhD; Tong, Van T. MPH Adverse Birth Outcomes Associated With Prepregnancy and Prenatal Electronic Cigarette

- Use, Obstetrics & Gynecology: July 2021 - Volume 138 - Issue 1 - p 85-94. doi: 10.1097/AOG.0000000000004432
14. Metz TD, Borgelt LM. Marijuana Use in Pregnancy and While Breastfeeding. *Obstetrics & Gynecology*. 2018;132(5):1198-1210. doi:10.1097/aog.0000000000002878.
 15. ACOG Committee Opinion No. 722: Marijuana Use During Pregnancy and Lactation. *Obstetrics & Gynecology*. 2017;130(4). doi:10.1097/aog.0000000000002354.
 16. ACOG Committee Opinion No. 711: Opioid Use and Opioid Use Disorder in Pregnancy. *Obstetrics & Gynecology*. 2017;130(2). doi:10.1097/aog.0000000000002235.
 17. ACOG Committee Opinion No. 479: Methamphetamine Abuse in Women of Reproductive Age. *Obstetrics & Gynecology*. 2011;117(3):751-755. Reaffirmed 2021. doi:10.1097/aog.0b013e318214784e .
 18. ACOG Practice Bulletin No. 90: Asthma in Pregnancy. *Obstetrics & Gynecology*. 2008;111(2, Part 1):457-464. Reaffirmed 2020. doi:10.1097/aog.0b013e3181665ff4.
 19. ACOG Practice Bulletin No. 212. Pregnancy and heart disease. *Obstetrics & Gynecology* 2019;122:e320-56.
 20. ACOG Practice Bulletin No. 233: Anemia in Pregnancy. *Obstetrics & Gynecology*. 2021;138:e55-64. Reaffirmed 2018. doi:10.1097/00006250-200701000-00055.
 21. ACOG Practice Bulletin No. 223: Thyroid Disease in Pregnancy. *Obstetrics & Gynecology*. 2020;135(6). doi:10.1097/aog.0000000000003894
 22. Lee, RH; Greenberg, M; Metz, TD; et al. Society for Maternal-Fetal Medicine (SMFM) Consult Series #53: Intrahepatic cholestasis of pregnancy. February 2021.
 23. Egan N, Bartels A, Khashan A, et al. Reference standard for serum bile acids in pregnancy. *BJOG: An International Journal of Obstetrics & Gynaecology*. 2012;119(4):493-498. doi:10.1111/j.1471-0528.2011.03245.x.
 24. Getahun D, Fassett MJ, Longstreth GF, et al. Association between maternal inflammatory bowel disease and adverse perinatal outcomes. *Journal of Perinatology*. 2014;34(6):435-440. doi:10.1038/jp.2014.41.
 25. ACOG Committee Opinion No. 776. Immune modulating therapies in pregnancy and lactation. *Obstetrics & Gynecology*. 2019;133(4):846-849. Reaffirmed 2021. doi:10.1097/aog.0000000000003177.
 26. ACOG Practice Bulletin No 230. Obesity in Pregnancy. *Obstetrics & Gynecology*: June 2021 - Volume 137 - Issue 6 - p e128-e144 doi: 10.1097/AOG.0000000000004395
 27. Schuster M, Madueke-Laveaux OS, Mackeen AD, Feng W, Paglia MJ. The effect of the MFM obesity protocol on cesarean delivery rates. *American Journal of Obstetrics and Gynecology*. 2016;215(4). doi:10.1016/j.ajog.2016.05.005.
 28. ACOG. Committee Opinion No. 784: Management of Patients in the Context of Zika Virus. *Obstetrics & Gynecology*. 2019;134(3). doi:10.1097/aog.0000000000003399.
 29. Boelig RC, Saccone G, Bellussi F, Berghella V. MFM guidance for COVID-19. *American Journal of Obstetrics & Gynecology* MFM. 2020;100106. doi:10.1016/j.ajogmf.2020.100106.
 30. The Society for Maternal-Fetal Medicine (SMFM). Coronavirus (COVID-19) and Pregnancy: What Maternal-Fetal Medicine Subspecialists Need to Know. 2020: https://s3.amazonaws.com/cdn.smfm.org/media/2589/COVID19-What_MFMs_need_to_know_revision_11-23-20_final.pdf
 31. Novoa RH, Quintana W, Llancarí P, Urbina-Quispe K, Guevara-Ríos E, Ventura W. Maternal clinical characteristics and perinatal outcomes among pregnant women with coronavirus disease 2019. A systematic review. *Travel Med Infect Dis*. 2021;39:101919. doi:10.1016/j.tmaid.2020.101919
 32. ACOG Practice Bulletin No. 201: Pregestational Diabetes Mellitus. *Obstetrics & Gynecology*. 2018;132(6). doi:10.1097/aog.0000000000002960.
 33. ACOG Practice Bulletin No. 190: Gestational Diabetes Mellitus. *Obstetrics & Gynecology*. 2018;131(2). doi:10.1097/aog.0000000000002501.
 34. ACOG Practice Bulletin No. 203: Chronic Hypertension in Pregnancy. *Obstetrics & Gynecology*. 2019;133(1). doi:10.1097/aog.0000000000003020.
 35. ACOG Practice Bulletin No. 222: Gestational Hypertension and Preeclampsia. *Obstetrics & Gynecology*. 2020;135(6). doi:10.1097/aog.0000000000003891.
 36. ACOG Practice Bulletin No. 227: Fetal Growth Restriction. *Obstet Gynecol*. 2021;137(2):e16-e28 doi: 10.1097/AOG.0000000000004251
 37. Sciscione AC, Hayes EJ. Uterine artery Doppler flow studies in obstetric practice. *American Journal of Obstetrics and Gynecology*. 2009;201(2):121-126. doi:10.1016/j.ajog.2009.03.027.
 38. Martins JG, Biggio JR, Abuhamad A. Society for Maternal-Fetal Medicine (SMFM) Consult Series #52: Diagnosis and Management of Fetal Growth Restriction. *American Journal of Obstetrics and Gynecology*. 2020. doi:10.1016/j.ajog.2020.05.010.
 39. ACOG. Practice Bulletin No. 171: Management of Preterm Labor. *Obstetrics & Gynecology*. 2020;128(4). Reaffirmed 2018. doi:10.1097/aog.0000000000001711.
 40. Yang J, Baer RJ, Berghella V, et al. Recurrence of Preterm Birth and Early Term Birth. *Obstetrics & Gynecology*. 2016;128(2):364-372. doi:10.1097/aog.0000000000001506.
 41. Lengyel CS, Ehrlich S, Iams JD, Muglia LJ, Defranco EA. Effect of Modifiable Risk Factors on Preterm Birth: A Population Based-Cohort. *Maternal and Child Health Journal*. 2016;21(4):777-785. doi:10.1007/s10995-016-2169-8.

42. ACOG Practice Bulletin No. 234: Prediction and Prevention of Spontaneous Preterm Birth. *Obstetrics & Gynecology*. 2021;138(2):e65-e90. doi:10.1097/aog.0000000000004479. SMFM Statement: Use of 17-alpha hydroxyprogesterone caproate for prevention of recurrent preterm birth. *American Journal of Obstetrics and Gynecology*. 2020. doi:10.1016/j.ajog.2020.04.001.
43. Blackwell SC, Gyamfi-Bannerman C, Biggio JR Jr, et al. 17-OHPC to Prevent Recurrent Preterm Birth in Singleton Gestations (PROLONG Study): A Multicenter, International, Randomized Double-Blind Trial. *Am J Perinatol*. 2020;37(2):127–136. doi:10.1055/s-0039-3400227
44. EPPPIC Group. Evaluating Progestogens for Preventing Preterm birth International Collaborative (EPPPIC): meta-analysis of individual participant data from randomised controlled trials. *Lancet*. 2021 Mar 27;397(10280):1183-1194.
45. SMFM, 2021. SMFM Statement: Response to EPPPIC and considerations of the use of progestogens for the prevention of preterm birth.
46. Obstetric Care Consensus No. 10: Management of Stillbirth. *Obstetrics & Gynecology*. 2020;135(3). doi:10.1097/aog.0000000000003719.
47. Gardosi J, Madurasinghe V, Williams M, Malik A, Francis A. Maternal and fetal risk factors for stillbirth: population based study. *Bmj*. 2013;346(jan24 3). doi:10.1136/bmj.f108.

OB-10: High Risk Medications and Substances**OB-10.1: Potentially Teratogenic Medications/Substances 49****OB-10.2: Medications/ Exposures Associated with Poor Pregnancy Outcome 50**

OB-10.1: Potentially Teratogenic Medications/Substances

- If maternal exposure to any of the below Potentially Teratogenic Medications/Substances report:
 - ◆ CPT® 76801 [plus CPT® 76802 for each additional fetus] if <14 weeks and a complete ultrasound has not yet been performed, **and/or**
 - ◆ CPT® 76817 for a transvaginal ultrasound, or
 - ◆ CPT® 76815 if ≥14 weeks but <16 weeks for dating and
 - ◆ CPT® 76811 (detailed fetal anatomy) if ≥16 weeks

Potentially Teratogenic Medications/Substances
Aminoglycosides (amikacin, gentamycin, kanamycin, tobramycin, and other mycins)
Aspirin – only if exposed less than 10 weeks gestation
Benzodiazepines [e.g., Diazepam (valium), Lorazepam (Ativan), Alprazolam (Xanax) etc.]
Codeine
Ergotamine (e.g. Methergine)
Fluconazole (Diflucan)
Lead (Exposure in early pregnancy)
Leflunomide (first trimester exposure)
Marijuana/Cannabinoids/THC Exposure
Methyl mercury
Oral contraceptives (combined and/or progestin only exposure in the first trimester)
Selective serotonin reuptake inhibitors (SSRI) (e.g., Sertraline (Zoloft), Citalopram (Celexa), Fluoxetine (Prozac) etc.)
Serotonin norepinephrine receptor inhibitors (SNRIs) SNRIs (e.g., Venlafexine (Effexor), Duloxetine (Cymbalta), etc.)
Serotonin modulators e.g. Trazadone, etc.
Tricyclics (e.g., Amitriptyline (Elavil), Imipramine (Tofranil) etc.)
Tetracyclines (e.g., Chlortetracycline, Doxycycline, Methacycline, Sumycin, etc.)

- This is ***not*** an all-inclusive list.
 - ◆ See **OB 9.1: High Risk Group One – Health Condition Related Risk Factors** (maternal diseases or conditions) or other appropriate guideline for indicated imaging based on disease process being treated.
 - ◆ See **OB 10.2: Medications/ Exposures Associated with Poor Pregnancy Outcome**
- If documented excessive use (at least weekly) of Marijuana/Cannabinoids/THC in 2nd and/ or 3rd trimesters - See **OB 9.1: High Risk Group One – Risk Factors**
- Other atypical antidepressants like Bupropion, Mirtazapine, Nefazodone and Duloxetine have ***not*** been linked to an increased risk of fetal anomalies or poor pregnancy outcomes.

OB-10.2: Medications/ Exposures Associated with Poor Pregnancy Outcome

- If maternal exposure to any of the Medications or Exposures noted below:
 - ◆ Image as per **OB 9.1: High Risk Group One – Risk Factors**

Medications/Substances associated with poor pregnancy outcome
Anti-convulsants (e.g., Dilantin, Lamictal, Phenobarbital, Tegretol, Valproate etc.)
Anti-hypertensive Agents (e.g. ACE inhibitors, Angiotensin II Antagonists, Beta Blockers, etc.)
Anti-neoplastic agents (e.g. Daunorubicin etc.)
Anti-psychotics (e.g. Abilify, Haldol, Latuda, Seroquel, Stelazine Thorazine Zyprexa, etc.)
Carbon monoxide
Corticosteroids (e.g. Prednisone, Cortisone, etc.)
Coumadin/ warfarin
Heparin/ Low Molecular Weight Heparin (ongoing use during pregnancy)
Immune Modulating Drugs (e.g. Azathioprine, Cyclophosphamide, Cyclosporin A, Hydroxychloroquine, Leflunomide, Mycophenolate mofetil, etc.)
Lithium
Methimazole
Methotrexate
Mifepristone (RU486)
Misoprostol
Monoamine oxidase inhibitors e.g. Phenelzine (Nardil)
Penicillamine
Pregabalin/Lyrica
Quinine
Retinoic acid/retinoid medications
Thalidomide

- This is ***not*** an all-inclusive list. See **OB 9.1: High Risk Group One – Health Condition Related Risk Factors** (maternal diseases or conditions) or other appropriate guideline for indicated imaging based on disease process being treated.

Practice Note

- Studies that note lower birth weights among offspring exposed to marijuana have noted that these findings were more pronounced among women who used more marijuana, particularly during the first and second trimesters (at least weekly during the pregnancy). CPT® 76811 may be indicated, however, given the limited evidence for antenatally detected abnormal growth, serial growth ultrasounds may not be indicated in the absence of other findings concerning for growth restriction.
- In circumstances where the individual is deemed to have an increased risk for a fetal abnormality and does not have access to a provider who can perform the more desirable fetal and maternal ultrasound with detailed fetal anatomic examination (CPT® 76811) due to geographic or other constraints, a standard (after first trimester) fetal and maternal ultrasound (CPT® 76805) may be authorized instead.

References

1. Practice Bulletin No. 175: Ultrasound in Pregnancy. Obstet Gynecol. 2016;128(6):e241-e256. Reaffirmed 2020. doi:10.1097/AOG.0000000000001815.
2. ACOG Practice Bulletin No. 92: Use of Psychiatric Medications During Pregnancy and Lactation. Obstet Gynecol. 2008;111(4):1001-1020. Reaffirmed 2018. doi:10.1097/AOG.0b013e31816fd910.
3. Burkey BW, Holmes AP. Evaluating Medication Use in Pregnancy and Lactation: What Every Pharmacist Should Know. The Journal of Pediatric Pharmacology and Therapeutics. 2013;18(3):247-258. doi:10.5863/1551-6776-18.3.247
4. ACOG Committee Opinion No. 711: Opioid Use and Opioid Use Disorder in Pregnancy. Obstetrics & Gynecology. 2017;130(2):e81-e94. doi:10.1097/aog.0000000000002235.
5. Schaefer C, Peters PWJ, Miller RK. Drugs during Pregnancy and Lactation: Treatment Options and Risk Assessment. 3rd ed. London: Elsevier/Academic Press; 2015.
6. ACOG Committee Opinion No. 776 Immune Modulating Therapies in Pregnancy and Lactation. Obstetrics & Gynecology. 2019;133(4):846-849. Reaffirmed 2021. doi:10.1097/aog.0000000000003177.
7. ACOG Committee Opinion No. 722: Marijuana Use During Pregnancy and Lactation. Obstetrics & Gynecology. 2017;130(4). doi:10.1097/aog.0000000000002354.
8. Reprotox • Home Page. reprotox.org. <http://reprotox.org>.

OB-11: Multiple Gestations

OB-11.1: Suspected Multiple Gestations	53
OB-11.2: Known Dichorionic Multiple Gestations	53
OB-11.3: Known Monochorionic-Diamniotic or Monochorionic-Monoamniotic Multiple Gestations	54

OB-11.1: Suspected Multiple Gestations

For Suspected multiple pregnancies:

- CPT® 76801 [plus CPT® 76802 for each additional fetus] and/or CPT® 76817 if a complete ultrasound has not yet been performed and is <14 weeks, or
- CPT® 76815 and/or CPT® 76817 can be performed for dating if an ultrasound not already been performed and ≥14 week and <16 weeks, or
- CPT® 76805 and CPT® 76810 for each additional fetus if ≥14 weeks if a dating ultrasound or a complete anatomy ultrasound has not yet been performed during this pregnancy

OB-11.2: Known Dichorionic Multiple Gestations

For Known dichorionic multiple pregnancies:

- CPT® 76811 and CPT® 76812 for each additional fetus at ≥16 weeks if a complete detailed anatomic scan (CPT® 76811) has not yet been performed
- Growth ultrasound (CPT® 76816) can be done every 4 to 6 weeks at ≥14 weeks.
- Universal cervical length (CL) screening with transvaginal ultrasound (CPT® 76817) is NOT recommended in twin gestations. However, transvaginal ultrasound (CPT® 76817) may be considered if the cervical length (CL) is <3.6 cm on trans-abdominal ultrasound (as with singleton pregnancies – See **OB-7.1: Fetal Anatomic Scan**), or in certain circumstances of poor visualization with trans-abdominal ultrasound.
- If cervical shortening identified – See **OB-18.1: Cervical Insufficiency**
- If otherwise uncomplicated dichorionic twins, BPP (CPT® 76818 or CPT® 76819) or modified BPP (CPT® 76815) may be performed weekly starting at 36 weeks
- If additional risk factors (e.g. diabetes, or hypertensive disease), BPP (CPT® 76818 or CPT® 76819) or modified BPP (CPT® 76815) may be performed weekly starting at 32 weeks or sooner (See **OB-9: High Risk Pregnancy**)
- If FGR or growth discordance ≥20% is diagnosed, can perform:
 - ◆ CPT® 76816 (growth ultrasound) every 2 to 4 weeks
 - ◆ Modified BPP (CPT® 76815) up to twice weekly starting at ≥ 23 weeks, or BPP (CPT® 76818 or CPT® 76819) up to twice weekly starting at ≥ 26 weeks
 - ◆ UA Doppler (CPT® 76820) weekly (starting at ≥23 weeks)
- If Severe FGR (EFW ≤3%, AC ≤3%), **OR** Abnormal UA Doppler studies (defined as a PI, RI, or S/D ratio greater than the 95th percentile for gestational age **OR** absent or reversed end-diastolic velocity (AEDV or REDV), **OR** confirmed oligohydramnios:
 - ◆ BPP (CPT® 76818 or CPT® 76819 or CPT® 76815) and/or umbilical artery (UA) Doppler (CPT® 76820) may be needed more frequently (2-3 times per week, or even daily).
- If IVF dichorionic twins, report an initial fetal echo as CPT® 76825 and/or CPT® 76827 with or without CPT® 93325. Trans-abdominal fetal echo is usually not performed prior to 16 weeks. See **OB-12.3: Indications for Maternal Conditions**
- If other high risk factors, See **OB-9: High Risk Pregnancy**

OB-11.3: Known Monochorionic-Diamniotic or Monochorionic-Monoamniotic Multiple Gestations

For Known monochorionic-diamniotic or monochorionic-monoamniotic multiple pregnancies

- CPT® 76811 and CPT® 76812 for each additional fetus if ≥16 weeks and a complete detailed anatomic scan (CPT® 76811) has not yet been performed.
- Universal cervical length (CL) screening with transvaginal ultrasound (CPT® 76817) is NOT recommended in twin gestations. However, transvaginal ultrasound (CPT® 76817) may be considered if the cervical length (CL) is <3.6 cm on trans-abdominal ultrasound (as with singleton pregnancies – See **OB-7.1: Fetal Anatomic Scan**), or in certain circumstances of poor visualization with trans-abdominal ultrasound.
 - ◆ If cervical shortening identified – See **OB-18.1: Cervical Insufficiency**
- CPT® 76816 (growth ultrasound) every 2 to 4 weeks starting at 14 weeks
- Initial Fetal Echo (CPT® 76825 and/or CPT® 76827) with or without color Doppler (CPT® 93325) (usually not performed <16 weeks).
- MCA Doppler (CPT® 76821) is indicated every 2 weeks starting at 16 weeks until delivery to monitor for Twin-Twin Transfusions Syndrome (TTTS) and/or Twin Anemia Polycythemia Sequence (TAPS). This may be performed with a limited ultrasound (CPT® 76815) or growth ultrasound (CPT® 76816).
- BPP (CPT® 76818 or CPT® 76819) or modified BPP (CPT® 76815) may be performed weekly starting at 32 weeks or sooner if additional risk factors (eg. diabetes, or hypertensive disease - See **OB-9: High Risk Pregnancy**)
- If TTTS is suspected or diagnosed, or if FGR or growth discordance ≥20% is diagnosed, more frequent testing (usually twice per week but may be more often) may be indicated. In these cases, you may perform:
 - ◆ BPP (CPT® 76818 or CPT® 76819 (≥26 weeks) or CPT® 76815) and/or umbilical artery (UA) Doppler (CPT® 76820) and/or MCA Doppler (CPT® 76821) may be needed more frequently (2-3 times per week, or even daily)
- If other high risk factors, See **OB-9: High Risk Pregnancy**
- Triplets or higher order Multiple Pregnancy receive same imaging as monochorionic-diamniotic twins.

Practice Notes

- Birth weight discordance = (larger twin weight minus smaller twin weight) divided larger twin weight × 100.
- Universal CL screening with transvaginal ultrasound (CPT® 76817) is NOT recommended in twin gestations. In addition, Per ACOG - Cerclage placement (prophylactic or rescue) should be avoided in multifetal pregnancies. However, because several studies have shown that a one-time CL measurement ≤20 mm at 18-24 weeks may be an accurate predictor of preterm birth in multiple gestation, and because progesterone therapy might reduce the risk of neonatal morbidity and mortality associated with PTB, then a one-time transvaginal CL assessment may be considered if trans-abdominal CL measures ≤3.6 cm (as with singleton gestation- See: **OB-7.1: Fetal Anatomic Scan**). Transvaginal ultrasound (CPT® 76817) may be considered if the cervical length (CL) is ≤3.6 cm on trans-abdominal ultrasound (as with singleton pregnancies- See **OB-7.1: Fetal Anatomic Scan**), or in certain circumstances of poor visualization with trans-abdominal ultrasound.

- TTTS is diagnosed by the ultrasound findings of polyhydramnios in one twin (the recipient) and oligohydramnios in the other twin (the donor). If AFI is discordant between the twins (low but not <2 cm in one and/or high but not >8 cm in the other); weekly imaging (MCA and/or limited US) may be indicated to ensure not developing TTTS.
- Fetal loss of one twin during the first trimester does not appear to increase the risk of FGR or preterm delivery in the surviving twin, however, loss of one or more fetus(es) after 17 weeks gestation is associated with increased risk for FGR and PTB and should be imaged according to **OB-11: Multiple Gestations**. Monochorionic twin pregnancies with demise of one twin after 17 weeks have up to an 18% chance of major morbidity or mortality for the remaining fetus.
- Typically all components of the BPP (CPT® 76818 and CPT® 76819), such as breathing, are not present until ≥26 weeks gestation. However, a modified BPP (CPT® 76815) may be utilized sooner in certain high risk cases but should not be done prior to viability (23 weeks).
- In circumstances where CPT® 76811 cannot be performed See **OB-1.3: Ultrasound Code Selection**

References

1. ACOG Practice Bulletin No. 231: Multifetal Gestations: Twin, Triplet, and Higher-Order Multifetal Pregnancies. *Obstet Gynecol.* 2021;137:e145-62.
2. ACOG Practice Bulletin No. 175: Ultrasound in Pregnancy. *Obstet Gynecol.* 2016;128(6):e241-e256. Reaffirmed 2020. doi:10.1097/AOG.0000000000001815.
3. Khalil A, Rodgers M, Baschat A, et al. ISUOG Practice Guidelines: role of ultrasound in twin pregnancy. *Ultrasound in Obstetrics & Gynecology.* 2016;47(2):247-263. doi:10.1002/uog.1582.
4. ACOG Practice Bulletin No. 234: Prediction and Prevention of Spontaneous Preterm Birth. *Obstet Gynecol.* 2021;138:e65-90.
5. ACOG Practice Bulletin No. 142: Cerclage for the Management of Cervical Insufficiency. *Obstet Gynecol.* 2014;123(2, PART 1):372-379. Reaffirmed 2020. doi:10.1097/01.aog.0000443276.68274.cc.
6. Rafael TJ, Berghella V, Alfirevic Z. Cervical stitch (cerclage) for preventing preterm birth in multiple pregnancy. *Cochrane Database of Systematic Reviews.* September 2014. doi:10.1002/14651858.cd009166.pub2.
7. Roman A, Rochelson B, Fox NS, Hoffman M, Berghella V, Patel V, Calluzzo I, Saccone G, Fleischer A. Efficacy of ultrasound-indicated cerclage in twin pregnancies. *Am J Obstet Gynecol.* 2015 Jun;212(6):788.e1-6. doi: 10.1016/j.ajog.2015.01.031.
8. Razaz N, Avitan T, Ting J, Pressey T, Joseph K. Perinatal outcomes in multifetal pregnancy following fetal reduction. *Canadian Medical Association Journal.* 2017;189(18). doi:10.1503/cmaj.160722.
9. McIntosh J, Feltovich H, Berghella V, Manuck T. The role of routine cervical length screening in selected high- and low-risk women for preterm birth prevention. *Society for Maternal-Fetal Medicine (SMFM) Consult Series #40. American Journal of Obstetrics and Gynecology.* 2016;215(3). doi:10.1016/j.ajog.2016.04.027.
10. EPPPIC Group. Evaluating Progestogens for Preventing Preterm birth International Collaborative (EPPPIC): meta-analysis of individual participant data from randomised controlled trials. *Lancet.* 2021 Mar 27;397(10280):1183-1194.
11. SMFM, 2021. SMFM Statement: Response to EPPPIC and considerations of the use of progestogens for the prevention of preterm birth
12. Practice Committee of American Society for Reproductive Medicine: Multiple gestation associated with infertility therapy: an American Society for Reproductive Medicine Practice Committee opinion. *Fertility and Sterility.* 2012;97(4):825-834. doi:10.1016/j.fertnstert.2011.11.048.
13. Slaghekke F, Pasman S, Veujoz M, et al. Middle cerebral artery peak systolic velocity to predict fetal hemoglobin levels in twin anemia-polycythemia sequence. *Ultrasound in Obstetrics & Gynecology.* 2015;46(4):432-436. doi:10.1002/uog.14925.
14. Lopriore E, Slaghekke F, Oepkes D, Middeldorp JM, Vandenbussche FP, Walther FJ. Clinical outcome in neonates with twin anemia-polycythemia sequence. *American Journal of Obstetrics and Gynecology.* 2010;203(1). doi:10.1016/j.ajog.2010.02.032.
15. Slaghekke F, Kist W, Oepkes D, et al. Twin Anemia-Polycythemia Sequence: Diagnostic Criteria, Classification, Perinatal Management and Outcome. *Fetal Diagnosis and Therapy.* 2010;27(4):181-190. doi:10.1159/000304512.
16. Tollenaar LSA, Slaghekke F, Middeldorp JM, et al. Twin Anemia Polycythemia Sequence: Current Views on Pathogenesis, Diagnostic Criteria, Perinatal Management, and Outcome. *Twin Research and Human Genetics.* 2016;19 (3):222-233. doi:10.1017/thg.2016.18.
17. ACOG Practice Bulletin No. 227: Fetal Growth Restriction. *Obstet Gynecol.* 2021;137(2):e16-e28 doi: 10.1097/AOG.0000000000004251.
18. Martins JG, Biggio JR, Abuhamad A. Society for Maternal-Fetal Medicine (SMFM) Consult Series #52: Diagnosis and Management of Fetal Growth Restriction. *American Journal of Obstetrics and Gynecology.* 2020. doi:10.1016/j.ajog.2020.05.010
19. Simpson LL. Twin-twin transfusion syndrome. *American Journal of Obstetrics and Gynecology.* 2013;208(1):3-18. doi:10.1016/j.ajog.2012.10.880.
20. Lanna MM, Consonni D, Faiola S, et al. Incidence of Cerebral Injury in Monochorionic Twin Survivors after Spontaneous Single Demise: Long-Term Outcome of a Large Cohort. *Fetal Diagnosis and Therapy.* 2019;47(1):66-73. doi:10.1159/000500774.Hoskins.
21. SMFM Special Statement: Updated checklists for management of monochorionic twin pregnancy. *Am J Obstet Gynecol* 2020.
22. ACOG Committee Opinion No. 828. Indications for outpatient antenatal fetal surveillance. *American College of Obstetricians and Gynecologists.* *Obstet Gynecol* 2021;137:e177–97. doi:10.1097/aog.0000000000004407.

OB-12: Fetal Echocardiography (ECHO)	
OB-12.1: Fetal Echocardiography – Coding	58
OB-12.2: Fetal Echocardiography – Indications for Fetal Conditions	58
OB-12.3: Fetal Echocardiography – Indications for Maternal Conditions	59
OB-12.4: Fetal Echocardiography – Indications for Medication or Drug Exposure	59

OB-12.1: Fetal Echocardiography – Coding

- Supported fetal echocardiography (echo) codes include:
 - ◆ Initial Fetal Echo, CPT® 76825 and Doppler Echo CPT® 76827 are performed only once per fetus/per facility (i.e. Maternal Fetal Medicine versus Pediatric Cardiology request)
 - ◆ Follow-up-Fetal echo and/or Follow-up Doppler echo (CPT® 76826/CPT® 76828) may be subsequently performed in certain rare circumstances.
 - ◆ CPT® 93325 for Doppler color flow velocity mapping
- An initial fetal echo is usually not performed prior to 16 weeks.
- Doppler echo procedure codes (CPT® 76827 or CPT® 76828) include the evaluation of veins, arteries, and valves. Guidelines do not support the billing of additional codes (CPT® 76820 and/or CPT® 76821)

OB-12.2: Fetal Echocardiography - Indications for Fetal Conditions

Initial Fetal echocardiography (CPT® 76825) and/or Doppler echocardiography (CPT® 76827) with or without Doppler color flow velocity mapping (CPT® 93325) can be performed if ≥16 weeks, for the indications listed below (See **OB-12.1: Fetal Echocardiography – Coding**):

➤ Known or suspected abnormal fetal cardiac evaluation on fetal anatomic scan. ◆ Known or suspected abnormality must be documented as hard copy or acknowledged verbally by provider of known or suspected fetal cardiac evaluation ◆ Suboptimal cardiac evaluation alone is not an indication for fetal echogram. If the 4-chamber view is adequate and there is no other suspicion of a cardiac abnormality, a fetal echocardiogram is not considered medically necessary. A follow up ultrasound (CPT® 76815 or CPT® 76816) is indicated for suboptimal visualization.
➤ Fetal cardiac arrhythmia; sustained fetal tachycardia or bradyarrhythmia
➤ Major fetal extra-cardiac anomaly, (excluding soft markers for aneuploidy: for example shortened long bones, pyelectasis, echogenic bowel, hypoplastic nasal bone, cardiac echogenic foci and choroid plexus cyst) See <u>OB-9.2: High Risk Group Two – Findings on Ultrasound that May Require Further Imaging</u> .
➤ Congenital heart disease (CHD) in a 1 st degree relative of the fetus (i.e. CHD in the mother, father, or sibling of the fetus)
➤ Known fetal chromosomal abnormalities (fetal aneuploidy) or ultrasound findings of a suspected chromosomal abnormality (excluding soft markers as only ultrasound findings)
➤ Single umbilical artery
➤ Chorioangioma or Umbilical cord varix (if suspicion of fetal hydrops)
➤ Fetal intra-abdominal venous anomaly (persistent right umbilical vein)
➤ Fetal effusion (pericardial, pleural effusion, ascites, etc.)
➤ Fetal hydrops, See <u>OB-16: Alloimmunization/Rh Isoimmunization/Other Causes of Fetal Anemia/Parvo/Hydrops</u>
➤ Monochorionic twins/TTTS
➤ Abnormal Fetal Nuchal Translucency scan (NT ≥3.0mm or above the 99 th percentile for the CRL) during current pregnancy.

OB-12.3: Fetal Echocardiography - Indications for Maternal Conditions

Initial Fetal echocardiography (CPT® 76825) and/or Doppler echocardiography (CPT® 76827) with or without Doppler color flow velocity mapping (CPT® 93325) can be performed if ≥ 16 weeks, for the indications listed below (See **OB-12.1: Fetal Echocardiography – Coding**):

Maternal Conditions:	
➤	Maternal pre-gestational DM or early diagnosed GDM (1st or early 2nd trimester)
➤	Maternal gestational diabetes mellitus on medication, if HbA1C $>6\%$
➤	Maternal connective tissue disease (SLE, RA, Sjogrens) with Anti-Ro/SSA or anti-La/SSB antibodies present
◆	Weekly follow-up Doppler fetal echocardiography (CPT® 76828) (plus CPT® 76815, if requested) from the 18th through the 26th week of pregnancy and then every other week until 30 weeks
➤	Phenylketonuria
➤	Infections associated with cardiac anomalies (such as parvovirus, Rubella, Coxsackie virus)
➤	Genetic conditions associated with CHD in a first degree relative of the fetus (e.g. Marfan syndrome, 22q11.2 deletion syndrome (DiGeorge Syndrome) or Noonan syndrome)
➤	IVF pregnancies

Practice Note

- If HbA1c levels are $>6\%$, fetal echocardiogram in the third trimester to assess for ventricular hypertrophy may be considered.

OB-12.4: Fetal Echocardiography - Indications for Medication or Drug Exposure

Initial Fetal echocardiography (CPT® 76825) and/or Doppler echocardiography (CPT® 76827) with or without Doppler color flow velocity mapping (CPT® 93325) can be performed if ≥ 16 weeks, for the indications listed below (See **OB-12.1: Fetal Echocardiography – Coding**):

- Ace inhibitors
- Alcohol (excessive quantities)
- Anti-seizure medication, e.g. carbamazepine, hydantoin, valproate
- Folate antagonists (methotrexate)
- Lithium
- NSAIDS (Ibuprofen, Indomethacin) 2nd and 3rd trimester
- Paroxetine (Paxil)
- Retinoids (e.g. Isotretinoin, Retinoic acid, Vitamin A -over 10,000 IU per day, etc.)
- Thalidomide
- Venlafaxine (Effexor)
- This may not be an all-inclusive list, however, exposure to other potential teratogens associated with cardiac anomalies in the fetus are typically adequately assessed with a detailed fetal anatomy ultrasound.(CPT 76811) (See **OB 10.1:**)

Practice Note

- In cases of extreme obesity (BMI≥40-50) where the 4-chamber view is inadequately documented after 2 separate ultrasound visits with MFM, fetal echo may be considered.
- With positive SSA/SSB antibodies, the most vulnerable period for the fetus is during the period from 18 to 24 weeks gestation. Normal sinus rhythm can progress to complete block in seven days during this high-risk period. New onset of heart block is less likely during the 26th through the 30th week, and it rarely develops after 30 weeks of pregnancy.
- Fetal echocardiography may be indicated with severe, unexplained polyhydramnios if there are other suspicious findings on an anatomy scan.
- The minimal use of color Doppler (CPT® 93325) alone, when performed for anatomical structure identification during a standard ultrasound procedure, is not separately reimbursable.

References

1. Donofrio MT, Moon-Grady AJ, Hornberger LK, et al. Diagnosis and Treatment of Fetal Cardiac Disease. *Circulation*. 2014;129(21):2183-2242. doi:10.1161/01.cir.0000437597.44550.5d.
 2. Brucato A. Prevention of congenital heart block in children of SSA-positive mothers. *Rheumatology*. 2008;47(Supplement 3):iii35-iii37. doi:10.1093/rheumatology/ken153.
 3. McBride KL, Garg V. Impact of Mendelian inheritance in cardiovascular disease. *Annals of the New York Academy of Sciences*. 2010;1214(1):122-137. doi:10.1111/j.1749-6632.2010.05791.x.
 4. Reddy UM, Abuhamad AZ, Levine D, et al. Fetal imaging: executive summary of a joint Eunice Kennedy Shriver National Institute Child Health and Human Development, Society for Maternal-Fetal Medicine, American Institute of Ultrasound in Medicine, American College of Obstetricians and Gynecologists, American College of Radiology, Society of Pediatric Radiology, and Society of Radiologists in Ultrasound Fetal Imaging Workshop. *Obstet Gynecol Survey*. 2014;69(8):453-455.
 5. Lee W, Allan L, Carvalho JS, et al. ISUOG consensus statement: what constitutes a fetal echocardiogram? *Ultrasound in Obstetrics and Gynecology*. 2008;32(2):239-242. doi:10.1002/uog.6115.
 6. Friedman DM, Kim MY, Copel JA, et al. Utility of Cardiac Monitoring in Fetuses at Risk for Congenital Heart Block. The PR Interval and Dexamethasone Evaluation (PRIDE) Prospective Study. *Circulation*. 2008;117(4):485-493. doi:10.1161/circulationaha.107.707661
 7. AIUM Practice Parameter for the Performance of Fetal Echocardiography. *Journal of Ultrasound in Medicine*. 2019;39(1). doi:10.1002/jum.15188.
 8. Sammaritano LR, Bermas BL, Chakravarty EE, et al. 2020 American College of Rheumatology Guideline for the Management of Reproductive Health in Rheumatic and Musculoskeletal Diseases. *Arthritis Care & Research*. 2020;72(4):461-488. doi:10.1002/acr.24130.
 9. Jenkins KJ, Correa A, Feinstein JA, et al. Noninherited Risk Factors and Congenital Cardiovascular Defects: Current Knowledge. *Circulation*. 2007;115(23):2995-3014. doi:10.1161/circulationaha.106.183216.
- Anderson KN, Lind JN, Simeone RM, Bobo WV, Mitchell AA, Riehle-Colarusso T, Polen KN, Reefhuis. Maternal Use of Specific Antidepressant Medications During Early Pregnancy and the Risk of Selected Birth Defects. *JAMA Psychiatry*. 2020 Aug 5;77(12):1246-55. doi: 10.1001/jamapsychiatry.2020.2453..

OB-13: Fetal MRI

OB-13.1: Indications for Fetal MRI

62

OB-13.1: Indications for Fetal MRI

ACOG recommendations for imaging during pregnancy and lactation:

- Ultrasonography and magnetic resonance imaging (MRI) are not associated with risk and are the imaging techniques of choice for the pregnant patient, but they should be used prudently and only when use is expected to answer a relevant clinical question or otherwise provide medical benefit to the patient.
- The use of gadolinium contrast with MRI should be limited; it may be used as a contrast agent in a pregnant woman only if it significantly improves diagnostic performance and is expected to improve fetal or maternal outcome.

CPT® Code Guidance
➤ Fetal MRI (CPT® 74712); for each additional fetus (CPT® 74713)
➤ Do not report CPT® 74712 and CPT® 74713 in conjunction with CPT® 72195, CPT® 72196, CPT® 72197
➤ If only placenta or maternal pelvis is imaged without fetal imaging, use MRI Pelvis (CPT® 72195)

- Fetal MRI (CPT® 74712) [plus CPT® 74713 for each additional fetus] may be considered for assessment of known or suspected fetal abnormalities for surgical planning, and/or if an ultrasound is equivocal **and** additional information is needed for counseling purposes, or for delivery planning.
- Though rarely needed, repeat fetal MRI may be indicated later in pregnancy for delivery or perinatal surgical planning.
- Fetal MRI indications include but may not be limited to the following:
 - ◆ Brain
 - Congenital anomalies
 - Ventriculomegaly
 - Agenesis of the corpus callosum
 - Abnormalities of the cavum septum pellucidum
 - Holoprosencephaly
 - Posterior fossa anomalies
 - Malformations of cerebral cortical development
 - Microcephaly
 - Solid or cystic masses
 - Cephalocele
 - Screening fetuses with a family risk for brain anomalies
 - Tuberous sclerosis
 - Corpus callosal dysgenesis
 - Malformations of cerebral cortical development
 - Vascular abnormalities
 - Vascular malformations
 - Hydranencephaly
 - Intra-uterine cerebrovascular accident (CVA)

- ◆ Spine
 - Congenital anomalies
 - Neural tube defects
 - Sacrococcygeal teratomas
 - Caudal regression/sacral agenesis
 - Syringomyelia
 - Vertebral anomalies
- ◆ Skull, face, and neck
 - Masses of the face and neck
 - Vascular or lymphatic malformations
 - Hemangiomas
 - Goiter
 - Teratomas
 - Facial clefts
 - Airway obstruction
 - Conditions that may impact parental counseling, prenatal management, delivery planning, and postnatal therapy
- ◆ Thorax
 - Masses
 - Congenital pulmonary airway malformations (congenital cystic adenomatoid malformation; sequestration, and congenital lobar emphysema);
 - Congenital diaphragmatic hernia
 - Effusion
 - Mediastinal masses
 - Assessment for esophageal atresia
 - Volumetric assessment of lung
 - Cases at risk for pulmonary hypoplasia secondary to oligohydramnios, chest mass, or skeletal dysplasias
- ◆ Abdomen, retroperitoneal and pelvis
 - Bowel anomalies such as anorectal malformations, or complex bowel obstructions such as with megacystis microcolon hypoperistalsis syndrome
 - Abdominal wall defect
 - Mass
 - Abdominal–pelvic cyst
 - Tumors (e.g. hemangiomas, neuroblastomas, sacrococcygeal teratomas, and suprarenal or renal masses)
 - Complex genitourinary anomalies (e.g. cloaca, prune belly syndrome)
- ◆ Congenital Heart Disease (CHD)
- ◆ Skeletal dysplasia
- ◆ Multiple malformations
- ◆ Complications of monochorionic twins/TTTS (eg. Laser treatment of twins, demise of one twin, conjoined twins)
- ◆ Any suspected fetal anomaly associated with severe oligohydramnios or anhydramnios.

References

1. Saleem SN. Fetal MRI: An approach to practice: A review. *Journal of Advanced Research*. 2014;5(5):507-523. doi:10.1016/j.jare.2013.06.001.
2. Prayer D, Malinge G, Brugger PC, et al. ISUOG Practice Guidelines: performance of fetal magnetic resonance imaging. *Ultrasound in Obstetrics & Gynecology*. 2017;49(5):671-680. doi:10.1002/uog.17412.
3. Reddy UM, Abuhamad AZ, Levine D, Saade GR. Fetal Imaging: Executive Summary of a Joint Eunice Kennedy Shriver National Institute of Child Health and Human Development, Society for Maternal-Fetal Medicine, American Institute of Ultrasound in Medicine, American College of Obstetricians and Gynecologists, American College of Radiology, Society for Pediatric Radiology, and Society of Radiologists in Ultrasound Fetal Imaging Workshop. *Obstetrics & Gynecology*. 2014;123(5):1070-1082. doi:10.1097/aog.0000000000000245.
4. American College of Radiology (ACR) and the Society for Pediatric Radiology (SPR). Practice Parameters by Modality | American College of Radiology: Practice Parameter for the Safe And Optimal Performance of Fetal Magnetic Resonance Imaging (MRI). American College of Radiology | American College of Radiology. <https://www.acr.org/-/media/ACR/Files/Practice-Parameters/MR-Fetal.pdf>. Published 2015. (Resolution 11).
5. American College of Obstetricians and Gynecologists Committee Opinion No. 723. Guidelines for diagnostic imaging during pregnancy and lactation. *Obstetrics & Gynecology*. 2017;130(4). doi:10.1097/aog.00000000000002355

OB-14: Abnormal Fetal Position/ Presentation

OB-14.1: Abnormal Fetal Position or Presentation

66

OB-14.1: Abnormal Fetal Position or Presentation

- To confirm suspected abnormal fetal position or presentation (transverse or breech presentation) at ≥ 36 weeks gestation, report one of the following:
 - ◆ CPT® 76805 (plus CPT® 76810 for each additional fetus) when complete anatomy scan has not yet been performed in the pregnancy **or**
 - ◆ CPT® 76815 for limited ultrasound to check fetal position **or**
 - ◆ CPT® 76816 if version is being considered and/or for delivery planning

Practice Note

- Fetal presentation should be assessed by abdominal palpation (Leopold's) at 36 weeks or later, when presentation is likely to influence the plans for the birth. Routine assessment of presentation by abdominal palpation before 36 weeks is not always accurate. Suspected fetal malpresentation should be confirmed by an ultrasound assessment. An ultrasound can be performed at ≥ 36 weeks gestation to determine fetal position to allow for external cephalic version. Ultrasound to determine fetal position is not necessary prior to 36 weeks gestation unless delivery is imminent.
- There is not enough evidence to support the use of X-ray pelvimetry for deciding on mode of delivery in women whose fetuses have a cephalic presentation. However, clinical pelvimetry in breech presentation may allow for better selection of the delivery route.

References

1. ACOG Practice Bulletin No. 221: External Cephalic Version. Obstetrics & Gynecology. 2020;135(5). doi:10.1097/aog.0000000000003837.
2. Safe Prevention of the Primary Cesarean Delivery. Obstetric Care Consensus No. 1. Obstetrics & Gynecology. 2014;123(3):693-711. Reaffirmed 2018. doi:10.1097/01.aog.0000444441.04111.1d.
3. Pattinson RC, Cuthbert A, Vannevel V. Pelvimetry for fetal cephalic presentations at or near term for deciding on mode of delivery. Cochrane Database of Systematic Reviews. 2017. doi:10.1002/14651858.cd000161.pub2

OB-15: Adnexal Mass/Uterine Fibroids and Uterine Anomalies

OB-15.1: Adnexal Mass	68
OB-15.2: Uterine Fibroids in Pregnancy	68
OB-15.3: Uterine Anomalies in Pregnancy	69

OB-15.1: Adnexal Mass

- For a known or suspected adnexal/pelvic mass, may perform:
 - ◆ CPT® 76801 [plus CPT® 76802 for each additional fetus] and/or CPT® 76817 to establish dates if <14 weeks **or**
 - ◆ CPT® 76815 and/or CPT® 76817 if a complete ultrasound was previously performed **or**
 - ◆ CPT® 76805 [plus CPT® 76810 if more than one fetus] if a complete fetal anatomic scan has not yet been performed and ≥14 weeks, **or**
 - ◆ CPT® 76816 if a complete anatomy scan was done previously.
- Following the initial ultrasound, follow up can be done once in each trimester
 - ◆ CPT® 76805 [plus CPT® 76810 for each additional fetus] if a complete fetal anatomic scan has not yet been performed, **or**
 - ◆ CPT® 76815 or CPT® 76816 if a complete ultrasound was previously performed.
 - ◆ CPT® 76817 may be indicated for poor visualization of the adnexal mass in certain circumstances.
- MRI Pelvis (CPT® 72195) without contrast can be done for indeterminate findings on ultrasound; for surgical planning and/or for suspected malignancy.
- See **PV-5: Adnexal Mass/Ovarian Cysts** in the Pelvis Imaging Guidelines

Practice Note

- The majority of adnexal masses in pregnancy are benign, the most common diagnoses are mature teratomas and corpus luteum or paraovarian cysts. Malignancy is reported in only 1.2-6.8% of pregnant patients with persistent mass.
- Levels of CA-125 are elevated in pregnancy, a low-level elevation in pregnancy is not typically associated with malignancy.
- ACOG recommendations for imaging during pregnancy and lactation:
 - ◆ Ultrasonography and magnetic resonance imaging (MRI) are not associated with risk and are the imaging techniques of choice for the pregnant patient, but they should be used prudently and only when use is expected to answer a relevant clinical question or otherwise provide medical benefit to the patient.
 - ◆ The use of gadolinium contrast with MRI should be limited; it may be used as a contrast agent in a pregnant woman only if it significantly improves diagnostic performance and is expected to improve fetal or maternal outcome.

OB-15.2: Uterine Fibroids in Pregnancy

- If more than one fibroid, total size of all fibroids should be used, i.e. one fibroid at 2 cm and one 3 cm is total of 5 cm and imaging would be indicated as below:
 - ◆ Moderate (>5 cm) and large (>10 cm) fibroid(s):
 - CPT® 76801 [plus CPT® 76802 for each additional fetus] and/or CPT® 76817 to establish dates if ≤14 weeks, or
 - CPT® 76815 can be performed for dating if ≥14 weeks but <16 weeks
 - Fetal anatomic scan (CPT® 76805 or CPT® 76811 if other high risk indication. See **OB-9: High Risk Pregnancy**) at ≥16 weeks.
 - If the fibroid is in the lower uterine segment or the cervix (cervical fibroid), can perform ultrasound (CPT® 76815) and/or transvaginal ultrasound (CPT® 76817) every 2 weeks between 16 to 24 weeks, and
 - Follow up ultrasound (CPT® 76816) every 3 to 6 weeks, starting at 23 weeks.

- Submucosal fibroid(s) of any size:
 - ◆ First trimester: CPT® 76801 [plus CPT® 76802 for each additional fetus] and/or CPT® 76817 to establish dates if <14 weeks, or
 - ◆ CPT® 76815 if ≥14 weeks but <16 weeks for dating
 - ◆ Fetal anatomic scan (CPT® 76805 or CPT® 76811) if other high risk indication.
 - ◆ If placentation is over a submucosal fibroid:
 - Follow up ultrasound (CPT® 76816) every 3 to 6 weeks, starting at 23 weeks

Practice Note

- Though pregnancy seems to have little or no effect on the overall size of fibroids, Fibroids affect pregnancy and delivery in several ways, with abdominal pain, miscarriage, fetal malpresentation, and difficult delivery being the most frequent complications. These complications relate to preterm labor, placental abruption, fetal growth restriction, and fetal compression syndromes. The risk of preterm labor appears to correlate with the size of the fibroid (over 600 cm³) and/or the presence of multiple fibroids. Placental abruption has been reported to occur frequently in pregnancies complicated by fibroids, especially with placentation over a fibroid. Fibroid volumes >200 cm³ are more commonly associated with fetal growth restriction. Fetal compression syndrome is a direct result of large fibroids and is not commonly found with small fibroids. Finally, malposition or obstructed labor may be associated with fibroids of the lower uterine segment.

OB-15.3: Uterine Anomalies in Pregnancy

- For uterine septum, uterine didelphys, unicornuate uterus, bicornuate uterus:
 - ◆ CPT® 76801 [plus CPT® 76802 for each additional fetus] and/or CPT® 76817 to establish dates if <14 weeks if a complete ultrasound has not yet been performed, **or**
 - ◆ If a complete ultrasound was previously performed, CPT® 76815 and/or CPT® 76817 **or**
 - ◆ CPT® 76805 or CPT® 76811 and/or CPT® 76817 at ≥16 weeks
 - ◆ CPT® 76817 and/or CPT® 76815 every 2 weeks at 16 to 24 weeks (See **OB-18.1: Cervical Insufficiency**)
 - ◆ CPT® 76816 every 3 to 6 weeks starting at ≥23 weeks
 - ◆ Starting at 32 weeks, weekly BPP (CPT® 76818 or CPT® 76819) or modified BPP (CPT® 76815)

Practice Note

- In circumstances where the individual is deemed to have an increased risk for a fetal abnormality and does not have access to a provider who can perform the more desirable fetal and maternal ultrasound with detailed fetal anatomic examination (CPT® 76811) due to geographic or other constraints, a standard (after first trimester) fetal and maternal ultrasound (CPT® 76805) may be authorized instead.
- CPT® 76811 and CPT® 76812 should only be used once per pregnancy unless the mother changes to a new medical caregiver at a new office and there is a new medical indication and/or change in condition.

References

1. ACOG Practice Bulletin No. 174: Evaluation and Management of Adnexal Masses. Obstet Gynecol. 2016;128(5):e210-e226. Reaffirmed 2021. doi:10.1097/AOG.0000000000001768.
2. Stout M, Odibo A, Graseck A, et al. Leiomyomas at Routine Second-trimester Ultrasound Examination and Adverse Obstetric Outcomes. Obstetric Anesthesia Digest. 2012;32(1):21-22. doi:10.1097/01.aoa.0000410780.41686.41.
3. Lee HJ, Norwitz ER, Shaw J. Contemporary management of fibroids in pregnancy. Reviews in obstetrics & gynecology. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2876319/>. Published 2010.
4. Shavell VI, Thakur M, Sawant A, et al. Adverse obstetric outcomes associated with sonographically identified large uterine fibroids. Fertility and Sterility. 2012;97(1):107-110. doi:10.1016/j.fertnstert.2011.10.009.
5. Kase BA, Blackwell SC. SMFM consult: Fibroids in pregnancy: Meaning and Management. Contemporary OBGYN. <http://www.contemporaryobgyn.net/modern-medicine-feature-articles/smf-consult-fibroids-pregnancy-meaning-and-management>. Published December 5, 2014.
6. Sei K, Masui K, Sasa H, Furuya K. Size of uterine leiomyoma is a predictor for massive haemorrhage during caesarean delivery. European Journal of Obstetrics & Gynecology and Reproductive Biology. 2018;223:60-63. doi:10.1016/j.ejogrb.2018.02.014
7. Penzias A, Bendikson K, Butts S, et al. Removal of myomas in asymptomatic patients to improve fertility and/or reduce miscarriage rate: a guideline. Fertility and Sterility. 2017;108(3):416-425. doi:10.1016/j.fertnstert.2017.06.034.
8. ACOG Practice Bulletin No. 142: Cerclage for the Management of Cervical Insufficiency. Obstet Gynecol. 2014;123(2, PART 1):372-379. Reaffirmed 2020. doi:10.1097/01.aog.0000443276.68274.cc.
9. Hua M, Odibo AO, Longman RE, Macones GA, Roehl KA, Cahill AG. Congenital uterine anomalies and adverse pregnancy outcomes. American Journal of Obstetrics and Gynecology. 2011;205(6). doi:10.1016/j.ajog.2011.07.022
10. Pfeifer S, Butts S, Dumesic D, et al. Uterine septum: a guideline. Fertility and Sterility. 2016;106(3):530-540. doi:10.1016/j.fertnstert.2016.05.014.

**OB-16: Alloimmunization/Rh Isoimmunization/
Other Causes of Fetal Anemia/Parvo/Hydrops**

OB-16.1: Alloimmunization/Rh Isoimmunization	72
OB-16.2: Exposure to Parvovirus B-19	73
OB-16.3: Twin Anemia Polycythemia Sequence	73
OB-16.4: Other Fetal Hydrops/Nonimmune Hydrops	73
OB-16.5: Other Causes of Fetal Anemia	74

OB-16.1: Alloimmunization/Rh Isoimmunization

Imaging for Alloimmunization/Rh Isoimmunization for any of the following indications:

- When any one of the following maternal antibody titers are $\geq 1:8$ (critical titer):
 - ◆ Rhesus antibodies (Cc/Dd/Ee)
 - ◆ Anti-Duffy (anti-fya) antibody
 - ◆ Anti-Kidd antibody
- If antibody titers are $\geq 1:8$ for any of the following atypical antigens associated with hemolytic disease of the fetus and newborn: p antigen, MNS series, MSSsMT, Diego, Public antigens, Private antigens.
- Anti-Kell antibody (any antibody titer warrants additional evaluation)
- If evidence of fetal hydrops on previous imaging
- Prior pregnancy associated with HDFN (hemolytic disease of the fetus and newborn)

The following imaging is indicated:

- CPT® 76801 [plus CPT® 76802 for each additional fetus] if <14 weeks and a complete ultrasound has not yet been performed, **and/or**
- CPT® 76817 for a transvaginal ultrasound or
- CPT® 76815 can be performed for dating or quick look follow-up if ≥ 14 weeks but <16 weeks
- Detailed Fetal Anatomic Scan (CPT® 76811) ≥ 16 weeks Ultrasound
- CPT® 76816 every 2 to 4 weeks to assess fetal growth starting after fetal anatomic scan (CPT® 76811)
- Fetal middle cerebral artery (MCA) Doppler (CPT® 76821) and CPT® 76815 every 1 to 2 weeks starting at 16 weeks
- BPP (CPT® 76818 or CPT® 76819) or modified BPP (CPT® 76815) weekly, starting at 32 weeks or sooner depending on fetal condition
- More frequent imaging (MCA Doppler and/or BPP) may be indicated if suspected worsening fetal condition (up to 2x weekly).

Practice Note

- Fetal anemia and hydrops may be a result of immune conditions, such as red-cell or Kell alloimmunization, non-immune hydrops caused by parvovirus B19 infection or any other known acquired or congenital causes of fetal anemia.
- Rhesus isoimmunization/alloimmunization is the process through which fetal Rh+ red blood cells enter the circulation of an Rh negative mother causing her to produce antibodies which can cross the placenta and destroy the red blood cells of the current Rh+ fetus and/or in subsequent Rh+ pregnancies.
- Atypical antigens not listed above, may be associated with hemolytic disease of the fetus and newborn and may require fetal assessment as in **OB-16.1: Alloimmunization/Rh Isoimmunization** if maternal antibody titers are $\geq 1:8$. Atypical antigens include: MNSs series (M, N, S, s, U, Mi), MSSs-Mta, Diego (Di^a, Di^b), P- PPTj, Public antigen (Yt, En, Co2). Private antigens (Biles, Good, Heibel, Radin, Wright^a, and Z^d). PP1Pk, Far, Good, Lan, LW.

- Peak systolic velocity (PSV) of the fetal middle cerebral artery can be used as a substitute for amniocentesis to evaluate a fetus at risk for anemia due to Rhesus isoimmunization/alloimmunization. Measurements can be initiated as early as 16 weeks of gestation if there is a past history of early severe fetal anemia or very high titers. Because MCA-PSV increases across gestation, results are adjusted for gestational age.
- In circumstances where the individual is deemed to have an increased risk for a fetal abnormality and does not have access to a provider who can perform the more desirable fetal and maternal ultrasound with detailed fetal anatomic examination (CPT® 76811) due to geographic or other constraints, a standard (after first trimester) fetal and maternal ultrasound (CPT® 76805) may be authorized instead.
- CPT® 76811 and CPT® 76812 should only be used once per pregnancy unless the mother changes to a new medical caregiver at a new office **and** there is a new medical indication and/or change in condition.

OB-16.2: Exposure to Parvovirus B-19

- Parvovirus B-19 Exposure (Fifth Disease):
 - ◆ CPT® 76801 [plus CPT® 76802 for each additional fetus] if <14 weeks and a complete ultrasound has not yet been performed, **and/or**
 - ◆ CPT® 76817 for a transvaginal ultrasound or
 - ◆ CPT® 76815 can be performed for dating or quick look follow-up if ≥14 weeks but <16 weeks
 - ◆ CPT® 76811 if not yet performed and ≥16 weeks
 - ◆ CPT® 76816 if >2 weeks since performance of the fetal anatomic scan (CPT® 76811)
- Confirmed Parvovirus B-19 Infection (+IgM):
 - ◆ Ultrasound (CPT® 76816) every 2 to 4 weeks to assess fetal growth starting after performance of the fetal anatomic scan (CPT® 76811) and
 - ◆ Starting at time of confirmed infection weekly limited ultrasound (CPT® 76815) if >23 weeks or weekly BPP (CPT® 76818 or CPT® 76819) if ≥26 weeks gestation and
 - ◆ Fetal middle cerebral artery (MCA) Doppler (CPT® 76821) every 1 to 2 weeks, starting at time of confirmed infection (if ≥16 weeks)
 - ◆ Continue above imaging for 8 to 12 weeks after initial date of exposure

OB-16.3: Twin Anemia Polycythemia Sequence

- See **OB-11.3: Known Monochorionic-Diamniotic or Monochorionic-Monoamniotic Multiple Gestations**

OB-16.4: Other Fetal Hydrops/Nonimmune Hydrops

- Suspected or known hydrops from any cause should be imaged according to **OB-16.1: Alloimmunization/Rh Isoimmunization**

OB-16.5: Other Causes of Fetal Anemia

- MCA Doppler (CPT® 76821) assessment may be indicated if there is suspected fetal anemia (e.g. fetus with heart failure, hydrops, alloimmunization), in a fetus at high risk for fetal anemia due to other pregnancy complications, e.g. chorioangioma, umbilical vein varix, or finding of sustained fetal tachyarrhythmia or bradyarrhythmia - See **OB-12.2: Indications for Fetal Conditions**; **OB-16.1: Alloimmunization/Rh Isoimmunization**, and **OB-21: Placental and Cord Abnormalities**.

Practice Notes

- In circumstances where the individual is deemed to have an increased risk for a fetal abnormality and does not have access to a provider who can perform the more desirable fetal and maternal ultrasound with detailed fetal anatomic examination (CPT® 76811) due to geographic or other constraints, a standard (after first trimester) fetal and maternal ultrasound (CPT® 76805) may be authorized instead.
- CPT® 76811 and CPT® 76812 should only be used once per pregnancy unless the mother changes to a new medical caregiver at a new office and there is a new medical indication and/or change in condition.
- Typically all components of the BPP (CPT® 76818 and CPT® 76819), such as breathing, are not present until ≥ 26 weeks gestation. However, a modified BPP (CPT® 76815) may be utilized sooner in certain high risk cases but should not be done prior to viability (23 weeks).

References

1. ACOG Practice Bulletin No. 181. Prevention of Rh D alloimmunization. Obstet Gynecol 2017(2); 130: 57-70. doi:10.1097/aog.0000000000002232.
2. ACOG Practice Bulletin No. 192. Management of Alloimmunization During Pregnancy. Obstetrics & Gynecology. 2018;131(3):e82-e90. doi:10.1097/aog.0000000000002528.
3. Mari G, Deter RL, Carpenter RL, et al. Noninvasive Diagnosis by Doppler Ultrasonography of Fetal Anemia Due to Maternal Red-Cell Alloimmunization. New England Journal of Medicine. 2000;342(1):9-14. doi:10.1056/nejm200001063420102.
4. Mari G, Norton ME, Stone J, et al. Society for Maternal-Fetal Medicine (SMFM) Clinical Guideline #8: The fetus at risk for anemia—diagnosis and management. American Journal of Obstetrics and Gynecology. 2015;212(6):697-710. doi:10.1016/j.ajog.2015.01.059.
5. Crane J, Mundle W, Boucoiran I, et al. Parvovirus B19 Infection in Pregnancy. Journal of Obstetrics and Gynaecology Canada. 2014;36(12):1107-1116. doi:10.1016/s1701-2163(15)30390-x.
6. ACOG. Practice Bulletin No. 151: Cytomegalovirus, parvovirus B19, varicella zoster, and toxoplasmosis in pregnancy. Obstetrics & Gynecology. 2015;125(6):1510-1525. Reaffirmed 2020. doi:10.1097/01.aog.0000466430.19823.53
Norton ME, Chauhan SP, Dashe JS. Society for Maternal-Fetal Medicine (SMFM) Clinical Guideline #7: nonimmune hydrops fetalis. American Journal of Obstetrics and Gynecology. 2015;212(2):127-139. doi:10.1016/j.ajog.2014.12.018.

OB-17: Amniotic Fluid Abnormalities/ Oligohydramnios/Polyhydramnios

OB-17.1: Amniotic Fluid Abnormalities

76

OB-17.1: Amniotic Fluid Abnormalities

For suspected polyhydramnios or oligohydramnios:

- Imaging may be indicated for unequal size and dates or suspected preterm/prelabor rupture of membranes. See **OB-27: Unequal Fundal Size and Dates** and/or **OB-23: Preterm/Prelabor Rupture of Membranes**

For confirmed diagnosis of polyhydramnios: AFI ≥ 24 cm or maximum deepest vertical pocket (MVP) ≥ 8 cm.

- CPT® 76811 (Detailed Fetal Anatomy) at diagnosis, if not previously performed
- CPT® 76816 starting at ≥ 23 weeks
 - ◆ Every 3 - 4 weeks for mild polyhydramnios (AFI 24 - 30 cm or MVP 8 - 10 cm)
 - ◆ Every 2 weeks for severe polyhydramnios (AFI > 30 cm or MVP > 10 cm)
- CPT® 76815 may be indicated weekly for antepartum fetal surveillance starting at ≥ 23 weeks
- BPP (CPT® 76818 or CPT® 76819) or modified BPP (CPT® 76815) for AFI with NST starting at 26 weeks
 - ◆ Weekly for mild polyhydramnios
 - ◆ Twice weekly for severe polyhydramnios

For confirmed diagnosis of oligohydramnios: AFI ≤ 5 cm or maximum vertical pocket ≤ 2 cm

- CPT® 76811 if not already performed; or
- CPT® 76816 every 2 to 4 weeks starting at ≥ 23 weeks
- CPT® 76815 weekly for antepartum fetal surveillance from 23 - 26 weeks
- CPT® 76818 or CPT® 76819 or a modified BPP (CPT® 76815), weekly, starting at 26 weeks.
- CPT® 76820, weekly starting at time of diagnosis if ≥ 23 weeks.

Practice Notes

- Polyhydramnios can be an early presenting finding of fetal hydrops associated with fetal anemia. Middle cerebral artery Doppler is commonly used to diagnose whether this fetal anemia is present or not. See **OB-16.1: Alloimmunization/Rh Isoimmunization**.
- Polyhydramnios may also present as a finding of cardiac dysfunction, fetal arrhythmias or cardiac malformation. Fetal echocardiography may be indicated if there are abnormal findings on an anatomy scan. See **OB-12: Fetal Echocardiography (ECHO)**.
- In circumstances where the individual is deemed to have an increased risk for a fetal abnormality and does not have access to a provider who can perform the more desirable fetal and maternal ultrasound with detailed fetal anatomic examination (CPT® 76811) due to geographic or other constraints, a standard (after first trimester) fetal and maternal ultrasound (CPT® 76805) may be authorized instead.
- CPT® 76811 and CPT® 76812 should only be used once per pregnancy unless the mother changes to a new medical caregiver at a new office and there is a new medical indication and/or change in condition.
- Typically all components of the BPP (CPT® 76818 and CPT® 76819), such as breathing, are not present until ≥ 26 weeks gestation. However, a modified BPP (CPT® 76815) may be utilized sooner in certain high risk cases but should not be done prior to viability (23 weeks).

References

1. Practice Bulletin No. 175: Ultrasound in Pregnancy. *Obstet Gynecol.* 2016;128(6):e241-e256. Reaffirmed 2020. doi:10.1097/AOG.0000000000001815.
2. ACOG Practice Bulletin No. 229: Antepartum Fetal Surveillance. *Obstetrics & Gynecology.* 2021;137(6):e177-e197. doi:10.1097/aog.0000000000004407.
3. ACOG Committee Opinion No. 828. Indications for outpatient antenatal fetal surveillance. American College of Obstetricians and Gynecologists. *Obstetrics & Gynecology.* 2021;137:e177-97. doi:10.1097/aog.0000000000004407.
4. AIUM Practice Parameter for the Performance of Detailed Second- and Third-Trimester Diagnostic Obstetric Ultrasound Examinations. *Journal of Ultrasound in Medicine.* 2019;38(12):3093-3100. doi:10.1002/jum.15163 .
5. Dashe JS, Pressman EK, Hibbard JU. SMFM Consult Series #46: Evaluation and management of polyhydramnios. *American Journal of Obstetrics and Gynecology.* 2018;219(4). doi:10.1016/j.ajog.2018.07.016.
6. Guidelines for Perinatal Care, 8th Edition; By AAP Committee on Fetus and Newborn and ACOG Committee on Obstetric Practice; Edited by Sarah J. Kilpatrick, Lu-Ann Papile and George A. Macones; Published in 2017.
7. Martins JG, Biggio JR, Abuhamad A. Society for Maternal-Fetal Medicine (SMFM) Consult Series #52: Diagnosis and Management of Fetal Growth Restriction. *American Journal of Obstetrics and Gynecology.* 2020. doi:10.1016/j.ajog.2020.05.010

OB-18: Cervical Insufficiency/Current Preterm Labor

OB-18.1: Cervical Insufficiency	79
OB-18.2: Cerclage in Place in Current Pregnancy	79
OB-18.3: Current Preterm Labor	80

OB-18.1: Cervical Insufficiency

- For any of the following:
 - ◆ History of cervical insufficiency (defined as one or more 2nd trimester loss (14 to 24 weeks gestation) related to painless cervical dilation.)
 - ◆ History of cerclage in prior pregnancy
 - ◆ History of prior precipitous delivery
 - ◆ Surgical trauma to cervix, e.g.
 - Over dilation of cervix during a termination of pregnancy
 - Cervical obstetrical laceration from a previous delivery
 - History of an extensive cold-knife conization or multiple prior Loop Electrosurgical Excision Procedures (LEEP)
- CPT® 76801 [plus CPT® 76802 for each additional fetus] and/or CPT® 76817 if <14 weeks and a complete ultrasound has not yet been performed or
- CPT® 76815 and/or CPT® 76817 for dating if ≥14 weeks and <16 weeks
- CPT® 76805 **and/or** CPT® 76817 at ≥16 weeks if a complete fetal anatomic scan has not yet been performed during this pregnancy
- CPT® 76815 **and/or** CPT® 76817 every 2 weeks from 16 to 24 weeks
- Note: Lower uterine segment or cervical fibroid may also require CL screening with (CPT® 76815) and/or transvaginal ultrasound (CPT® 76817) every 2 weeks between 16 to 24 weeks (See **OB-15.2: Uterine Fibroids in Pregnancy**)
- If funneling or short cervix ≤25 mm (2.5 cm) is found on a transvaginal ultrasound
 - ◆ CPT® 76816 may be performed after a complete ultrasound every 3 to 4 weeks **and/or**
 - ◆ CPT® 76817 and/or CPT® 76815 every 1 to 2 weeks until 32 weeks
 - ◆ Note: CPT® 76815 should not be done on same date of service as CPT® 76816

OB-18.2: Cerclage in Place in Current Pregnancy

- CPT® 76801 [plus CPT® 76802 for each additional fetus] and/or CPT® 76817 once in first trimester (<14 weeks) if a complete ultrasound has not yet been performed or
- CPT® 76815 and/or CPT® 76817 for dating if ≥14 weeks and <16 weeks
- CPT® 76805 or CPT® 76811 if other high risk factors [plus CPT® 76810/CPT® 76812 for each additional fetus] and/or CPT® 76817 once if a complete detailed fetal anatomic scan has not been performed
- CPT® 76816 can be performed every 3 to 6 weeks starting after the fetal anatomic scan at 16 weeks.
- If a **prophylactic** (history-indicated) cerclage is placed in the current pregnancy (usually done early in the second trimester due to a prior 2nd trimester loss after painless cervical dilation at ≤24 weeks gestation)
 - ◆ No further CL assessment with Transvaginal Ultrasound (CPT® 76817) after cerclage placement is necessary.
- If a **rescue** cerclage (exam indicated) was placed due to cervical shortening or dilation found by ultrasound or physical exam in the current pregnancy
 - ◆ Transvaginal (CPT® 76817 and/or CPT® 76815) every 2 weeks, starting at ≥16 weeks until 32 weeks.
- If funneling or further shortening of the cervix is found See **OB 18.1: Cervical Insufficiency**

OB-18.3: Current Preterm Labor

- Preterm labor in current pregnancy (contractions **PLUS** cervical change at <37 weeks gestation), may perform once when symptomatic
 - ◆ CPT® 76805 [plus CPT® 76810 for each additional fetus] if a complete fetal anatomic scan has not yet been performed during this pregnancy; **or**
 - ◆ CPT® 76815 **or** CPT® 76816, if a complete fetal anatomic scan was performed previously, (CPT® 76816 if more than 2 weeks since last growth), **and/or**CPT® 76817
- Biophysical profile (BPP) (CPT® 76818 **or** CPT® 76819) **or** modified BPP (CPT® 76815), once when symptomatic starting at 30 weeks.
- For history of pre-term labor, See **OB-9.9: History of Spontaneous Pre-Term Delivery/History of PPRM**

Practice Notes

- In circumstances where the individual is deemed to have an increased risk for a fetal abnormality and does not have access to a provider who can perform the more desirable fetal and maternal ultrasound with detailed fetal anatomic examination (CPT® 76811) due to geographic or other constraints, a standard (after first trimester) fetal and maternal ultrasound (CPT® 76805) may be authorized instead.
- CPT® 76811 and CPT® 76812 should only be used once per pregnancy unless the mother changes to a new medical caregiver at a new office and there is a new medical indication and/or change in condition.
- Typically all components of the BPP (CPT® 76818 and CPT® 76819), such as breathing, are not present until ≥26 weeks gestation. However, a modified BPP (CPT® 76815) may be utilized sooner in certain high risk cases but should not be done prior to viability (23 weeks).

References

1. ACOG Practice Bulletin No.142: Cerclage for the Management of Cervical Insufficiency. *Obstet Gynecol.* 2014;123(2, PART 1):372-379.Reaffirmed 2020. doi:10.1097/01.aog.0000443276.68274.cc.
2. ACOG Practice Bulletin No. 234: Prediction and Prevention of Spontaneous Preterm Birth. *Obstet Gynecol.* 2021;138:e65-90.
3. ACOG. Practice Bulletin No. 171: Management of Preterm Labor. *Obstetrics & Gynecology.* 2016;128(4).Reaffirmed 2020. doi:10.1097/aog.0000000000001711.
4. Practice Bulletin No. 175: Ultrasound in Pregnancy. *Obstet Gynecol.* 2016;128(6):e241-e256. Reaffirmed 2020. doi:10.1097/AOG.0000000000001815.
5. Society for Maternal-Fetal Medicine. Progesterone and preterm birth prevention: translating clinical trials data into clinical practice. *Am J Obstet Gynecol.* 2012;206(5):376-386.doi:10.1016/j.ajog.2012.03.010
6. Esplin MS, Elovitz MA, Iams JD, et al. Predictive Accuracy of Serial Transvaginal Cervical Lengths and Quantitative Vaginal Fetal Fibronectin Levels for Spontaneous Preterm Birth Among Nulliparous Women. *JAMA.* 2017;317(10):1047. doi:10.1001/jama.2017.1373.
7. McIntosh J, Feltovich H, Berghella V, Manuck T. The role of routine cervical length screening in selected high- and low-risk women for preterm birth prevention. Society for Maternal-Fetal Medicine (SMFM) Consult Series #40. *American Journal of Obstetrics and Gynecology.* 2016;215(3). doi:10.1016/j.ajog.2016.04.027.
8. SMFM Statement: Use of 17-alpha hydroxyprogesterone caproate for prevention of recurrent preterm birth. *American Journal of Obstetrics and Gynecology.* 2020. doi:10.1016/j.ajog.2020.04.001.
9. Blackwell SC, Gyamfi-Bannerman C, Biggio JR Jr, et al. 17-OHPC to Prevent Recurrent Preterm Birth in Singleton Gestations (PROLONG Study): A Multicenter, International, Randomized Double-Blind Trial. *Am J Perinatol.* 2020;37(2):127–136. doi:10.1055/s-0039-3400227
10. EPPPIC Group. Evaluating Progestogens for Preventing Preterm birth International Collaborative (EPPPIC): meta-analysis of individual participant data from randomised controlled trials. *Lancet.* 2021 Mar 27;397(10280):1183-1194.
11. SMFM, 2021. SMFM Statement: Response to EPPPIC and considerations of the use of progestogens for the prevention of preterm birth

OB-19: No Fetal Heart Tones/Decreased Fetal Movement

OB-19.1: No Fetal Heart Tones	83
OB-19.2: Decreased Fetal Movement	83

OB-19.1: No Fetal Heart Tones

- Prior to considering ultrasound, fetal heart tones (FHT) should be assessed with a hand-held doppler device.

The following is supported during the First Trimester:

- If ≥ 12 weeks gestation and unable to obtain FHT using a hand-held doppler, **or**
- If < 12 weeks gestation, in the setting of absent fetal heart tones, only if accompanied by other maternal signs or symptoms (such as cramping, vaginal bleeding, etc.) **or**
- If < 12 weeks and FHT had previously been heard using a fetal hand-held doppler, but now are unable to be heard by this method, regardless of symptoms
- Report **one** of the following:
 - ◆ CPT® 76801 (plus CPT® 76802 for each additional fetus) and/or CPT® 76817 if a complete ultrasound has not yet been performed; or
 - ◆ CPT® 76815 and/or CPT® 76817

One of the following may be supported during the Second and Third Trimester:

- CPT® 76815 for limited ultrasound or
- CPT® 76805 (plus CPT® 76810 for each additional fetus) if ≥ 14 weeks, when complete fetal anatomic scan CPT® 76805 has not yet been performed or
- CPT® 76816 if ≥ 14 weeks and an anatomy ultrasound (CPT® 76805/CPT® 76811) was performed previously

OB-19.2: Decreased Fetal Movement

- One of the following may be performed at the time of the complaint of decreased fetal movement:
 - ◆ Limited ultrasound or modified BPP (CPT® 76815) or
 - ◆ If ≥ 26 weeks BPP (CPT® 76818 or CPT® 76819) or a modified BPP (CPT® 76815) may be performed. See **OB-28.8: Biophysical Profile (BPP)**
 - ◆ If BPP/Modified BPP is abnormal CPT® 76816 may be indicated for delivery planning.
 - ◆ Subsequent/repeat ultrasound is not usually necessary unless there are new indications or if BPP is abnormal.

References

1. ACOG Practice Bulletin No. 229: Antepartum Fetal Surveillance. *Obstetrics & Gynecology*. 2021;137(6):e177-e197. doi:10.1097/aog.0000000000004407.
2. ACOG Committee Opinion No. 828. Indications for outpatient antenatal fetal surveillance. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2021;137:e177–97. doi:10.1097/aog.0000000000004407.
3. Practice Bulletin No. 175: Ultrasound in Pregnancy. *Obstet Gynecol*. 2016;128(6):e241-e256. Reaffirmed 2020. doi:10.1097/AOG.0000000000001815.

OB-20: Fetal Growth Problems (FGR and Macrosomia)

OB-20.1: Fetal Growth Restriction Current Pregnancy	85
OB-20.2: Macrosomia – Large for Dates Current Pregnancy	86

OB-20.1: Fetal Growth Restriction Current Pregnancy

- The ACOG definition of Fetal Growth Restriction (FGR): Estimated or actual weight of the fetus $\leq 10^{\text{th}}$ percentile for gestational age, and/or Abdominal Circumference $\leq 10^{\text{th}}$ percentile.

For Suspected FGR:
➤ If there is a $\geq 3\text{cm}$ difference in fundal height measurement and gestational age, or ➤ Report one of the following: ◆ CPT® 76805/CPT® 76811 if otherwise indicated (plus CPT® 76810/CPT® 76812 for each additional fetus) if anatomy ultrasound has not yet been performed or ◆ CPT® 76816 if anatomy ultrasound (CPT® 76805/CPT® 76811) previously performed
➤ For clinical situations that have a higher probability of FGR such as maternal hypertension, maternal diabetes, previous stillbirth, etc. See OB-9: High Risk Pregnancy, or the specific guidelines for these clinical entities for guidance regarding follow-up ultrasounds to assess fetal growth
For Known FGR:
➤ Detailed Fetal Anatomic Scan (CPT® 76811) at diagnosis if not already performed
➤ Starting at diagnosis, if ≥ 16 weeks gestation, follow up ultrasound (CPT® 76816) may be performed every 2 to 4 weeks if complete anatomy ultrasound previously performed ➤ Starting at 23 weeks, a modified BPP (CPT® 76815) can be performed weekly, or ➤ Starting at 26 weeks, BPP (CPT® 76818 or CPT® 76819) or a modified BPP (CPT® 76815) may be performed weekly, and ➤ Starting at 23 weeks Umbilical artery (UA) Doppler (CPT® 76820) may be performed weekly. ➤ If FGR is diagnosed in the current ultrasound, BPP (CPT® 76818 or CPT® 76819) can be performed if ≥ 26 weeks, and/or UA Doppler (CPT® 76820) if ≥ 23 weeks.
➤ If Severe FGR (EFW $\leq 3\%$, AC $\leq 3\%$), OR Abnormal UA Doppler studies (defined as a PI, RI, or S/D ratio greater than the 95th percentile for gestational age OR absent or reversed end-diastolic velocity (AEDV or REDV), OR confirmed oligohydramnios: ◆ BPP (CPT® 76818 or CPT® 76819 or CPT® 76815) and/or umbilical artery (UA) Doppler (CPT® 76820) may be considered up to 2-3 times per week.
➤ Per SMFM guidelines: Ductus venosus, middle cerebral artery, or uterine artery Doppler use for routine clinical management of early- or late-onset FGR is not recommended

Practice Notes

- An abnormal umbilical artery Doppler is defined as a PI, RI, or S/D ratio greater than the 95th percentile for gestational age or an absent or reversed end-diastolic velocity (AEDV or REDV). Those with REDV are usually hospitalized for closer surveillance and delivery planning.
- Fetuses with early onset FGR are at significant risk for IUFD and the rate of fetal growth prior to 23 weeks and UA Doppler findings may aid in counseling patients in this peri-viability period (TOP versus attempt at prolonging pregnancy till viability) – as such in rare circumstances fetal growth (CPT® 76816) and UA Doppler (CPT® 76820) may be considered prior to 23 weeks gestation.
- In circumstances where CPT® 76811 cannot be performed See **OB-1.3: Ultrasound Code Selection**
- Typically all components of the BPP (CPT® 76818 and CPT® 76819), such as breathing, are not present until ≥ 26 weeks gestation. However, a modified BPP (CPT® 76815) may be utilized sooner in certain high risk cases but should not be done prior to viability (23 weeks).

OB-20.2: Macrosomia – Large for Dates Current Pregnancy

For Suspected Macrosomia:
➤ At ≥23 weeks gestation, if there is a ≥3 week difference in fundal height and gestational age, may report one of the following: ◆ CPT® 76805 [plus CPT® 76810 for each additional fetus] if a complete fetal anatomic scan has not yet been performed or ◆ CPT® 76816 if a complete ultrasound was done previously ➤ See OB-27.1: Unequal Fundal Size and Dates
For Known Macrosomia ≥90th percentile
➤ In a low risk pregnancy, ultrasound is generally not indicated to estimate fetal weight before 30 weeks gestation. As such, repeat imaging is generally not necessary unless needed to plan for delivery or if there are other high risk indications. ◆ Additional imaging recommendations are usually guided by the cause of the fetal macrosomia (obesity, DM, etc.) See appropriate guideline for indication
➤ If no other high risk indication present, one CPT® 76816 ≥37 weeks to plan for delivery

➤ The ACOG definition of macrosomia: Estimated fetal weight of greater than 4000 grams (DM) or 4500 grams (non-DM); ≥90th percentile for gestational age

➤ For history of a macrosomia see **OB-9.4.1: Prior Pregnancy with Macrosomia**

Practice Notes

- Ultrasound is imprecise in predicting fetal macrosomia. Prospective studies have shown that clinical estimates of macrosomia (Leopold's) may be as predictive as estimates derived by ultrasonography

References

1. ACOG Practice Bulletin No. 227: Fetal Growth Restriction. *Obstet Gynecol.* 2021;137(2):e16-e28 doi: 10.1097/AOG.0000000000004251
2. Martins JG, Biggio, JR, Abuhamad, A. Society for Maternal-Fetal Medicine (SMFM) Consult Series #52: Diagnosis and Management of Fetal Growth Restriction. 2020 doi:10.1016/j.ajog.2015.01.059.
3. ACOG Practice Bulletin No. 230: Obesity in Pregnancy, *Obstetrics & Gynecology.* 2021;137(6):e128-e144. doi:10.1097/aog.0000000000004395
4. ACOG Practice Bulletin No. 229: Antepartum Fetal Surveillance. *Obstetrics & Gynecology.* 2021;137(6):e177-e197. doi:10.1097/aog.0000000000004407
5. ACOG Committee Opinion No. 828. Indications for outpatient antenatal fetal surveillance. American College of Obstetricians and Gynecologists. *Obstetrics & Gynecology.* 2021;137(6):e177-e197. doi:10.1097/aog.0000000000004407.
6. American Institute of Ultrasound in Medicine. AIUM practice guideline for the performance of detailed second- and third-trimester diagnostic obstetric ultrasound examinations. *Journal of Ultrasound Medicine* 2019; 38:3093-3100.
7. ACOG Practice Bulletin No. 175: Ultrasound in Pregnancy. *Obstet Gynecol.* 2016;128(6):e241-e256. Reaffirmed 2020. doi:10.1097/AOG.0000000000001815.
8. Berkley E, Chauhan SP, Abuhamad A. Doppler assessment of the fetus with intrauterine growth restriction. *American Journal of Obstetrics and Gynecology.* 2012; 206(4):300-308. doi:10.1016/j.ajog.2012.01.022
9. Obstetric Care consensus No. 6: Periviable Birth. American College of Obstetricians and Gynecologists; Society for Maternal-Fetal Medicine. *Obstetrics & Gynecology.* 2017;130(4):e187-e199. doi:10.1097/aog.0000000000002352. Reaffirmed 2019.
10. ACOG Practice Bulletin No. 216: Fetal Macrosomia. *Obstet Gynecol.* 2020; 135(1):246-248. doi:10.1097/aog.0000000000003607.

OB-21: Placental and Cord Abnormalities	
OB-21.1: Single Umbilical Artery (Two Vessel Cord)	88
OB-21.2: Persistent Right Umbilical Vein (PRUV)	88
OB-21.3: Placental/Cord Abnormalities	89
OB-21.3.1: Placental/Cord Abnormalities	89
OB-21.3.2: Other Placental/Cord Abnormalities	89
OB-21.4: Subchorionic Hematoma/Hemorrhage (Placental Hematoma)	90
OB-21.5: Suspected Abruption Placentae	91
OB-21.6: Previa (Placenta Previa and Vasa Previa)	91
OB-21.6.1: Placenta Previa	91
OB-21.6.2: Vasa Previa	92
OB-21.7: Placenta Accreta Spectrum (PAS): Accreta, Increta, Percreta	92
OB-21.7.1: Suspected PAS	92
OB-21.7.2: Known PAS	93

OB-21.1: Single Umbilical Artery (Two Vessel Cord)

If a single umbilical artery is found on initial imaging:	
➤ Detailed anatomic ultrasound at ≥16 weeks	CPT® 76811
➤ Fetal echocardiogram (if ≥16 weeks)	CPT® 76825 and/or CPT® 76827 and/or CPT® 93325
➤ Follow-up ultrasound to evaluate fetal growth at ≥28 weeks and then every 3 to 6 weeks if more than one clinical high-risk factors are documented	CPT® 76816
➤ Weekly BPP or modified BPP starting at 36 weeks	CPT® 76818 or CPT® 76819 (BPP) or modified BPP CPT® 76815

Practice Note

- In circumstances where the individual is deemed to have an increased risk for a fetal abnormality and does not have access to a provider who can perform the more desirable fetal and maternal ultrasound with detailed fetal anatomic examination (CPT® 76811) due to geographic or other constraints, a standard (after first trimester) fetal and maternal ultrasound (CPT® 76805) may be authorized instead.
- CPT® 76811 and CPT® 76812 should only be used once per pregnancy unless the mother changes to a new medical caregiver at a new office and there is a new medical indication and/or change in condition.

OB-21.2: Persistent Right Umbilical Vein (PRUV)

PRUV – is a variant of the usual intra-abdominal umbilical venous connection. It may be associated with other fetal defects.

If a PRUV is found on initial imaging:	
➤ Detailed anatomic ultrasound at ≥16 weeks	CPT® 76811
➤ Fetal echocardiogram (if ≥16 weeks)	CPT® 76825 and/or CPT® 76827 and/or CPT® 93325
➤ Follow-up ultrasound to evaluate fetal growth at ≥23 weeks and then every 3 to 6 weeks if more than one clinical high-risk factors are documented	CPT® 76816
➤ Weekly BPP or modified BPP starting at 32 weeks	CPT® 76818 or CPT® 76819 (BPP) or modified BPP CPT® 76815

OB-21.3: Placental/Cord Abnormalities

OB-21.3.1: Placental/Cord Abnormalities

Circumvallate Placenta

Placental hemangioma

Succenturiate placenta or accessory lobe

Hypo/Hyper-coiled Umbilical Cord

Marginal Cord Insertion

Umbilical cord cyst

Velamentous Cord Insertion

- Fetal anatomic scan can be performed after 16 weeks (CPT® 76805/CPT® 76811) with or without CPT® 93976 (limited duplex scan of arterial and venous)
- Ultrasound CPT® 76817 may be indicated to evaluate the placenta and/or cord in relation to the cervix
- Ultrasound (CPT® 76816) with or without CPT® 93976 (limited duplex scan) every 3-6 weeks starting at 28 weeks until delivery
- Weekly BPP or modified BPP (CPT® 76818/CPT® 76819 or CPT® 76815) starting at 32 weeks

Practice Note

- **Hypo/Hyper-coiled umbilical cord** - Several studies have reported an increased frequency of adverse pregnancy outcome, including congenital anomalies, growth restriction, fetal heart rate abnormalities, preterm birth, and intrauterine death in pregnancies with both hypocoiled and hypercoiled umbilical cord.

OB-21.3.2: Other Placental/Cord Abnormalities

Amniotic Sheet/ Amniotic Band (Uterine Synechiae)

- Fetal anatomic scan can be performed after 16 weeks (CPT® 76805)
- One follow-up Ultrasound (CPT® 76816) may be considered in the 3rd trimester to ensure that the band is not restricting fetal growth or movement.
- **Amniotic Band Syndrome** is a completely different entity, associated with an increased risk of fetal anomalies and poor outcome. If Amniotic band syndrome is suspected or diagnosed, image as in **OB-9: High Risk Pregnancy**.

Chorioangioma

Umbilical cord varix

- Detailed fetal anatomic scan can be performed after 16 weeks (CPT® 76811) with or without CPT® 93976 (limited duplex scan)
- Ultrasound (CPT® 76816) with or without CPT® 93976 (limited duplex scan) every 3-6 weeks starting at the time of diagnosis until delivery
- Weekly BPP (CPT® 76818 or CPT® 76819) or a modified BPP (CPT® 76815) starting at 32 weeks

- Both chorioangioma and UVV can be associated with fetal anemia and/or low output heart failure. As such, MCA Dopplers (CPT® 76821) may be indicated e.g. If turbulence develops within the UVV
- If suspected or known hydrops, Fetal ECHO (CPT® 76825, CPT® 76827, CPT® 93325) may be indicated. If fetal hydrops develops then image as per **OB-16.1: Alloimmunization/Rh Isoimmunization**

Practice Note

- Amniotic Bands visualized on ultrasound are often due to uterine synechiae (intrauterine adhesions), residual gestation sac of a demised twin, fibrin strands s/p bleeding, chorioamniotic separation or may be noted with a circumvallate placenta. In general, they are benign entities and are not associated with adverse pregnancy outcome.
- In circumstances where the individual is deemed to have an increased risk for a fetal abnormality and does not have access to a provider who can perform the more desirable fetal and maternal ultrasound with detailed fetal anatomic examination (CPT® 76811) due to geographic or other constraints, a standard (after first trimester) fetal and maternal ultrasound (CPT® 76805) may be authorized instead.
- CPT® 76811 and CPT® 76812 should only be used once per pregnancy unless the mother changes to a new medical caregiver at a new office and there is a new medical indication and/or change in condition.

OB-21.4: Subchorionic Hematoma/Hemorrhage (Placental Hematoma)

Subchorionic Hematoma/Hemorrhage (Placental Hematoma)	
➤	Ultrasound can be performed for follow-up of a known subchorionic hematoma or placental hematoma ◆ CPT® 76815 and/or CPT® 76817 if the last ultrasound was performed ≥7 days ago or ◆ CPT® 76816 and/or CPT® 76817 if a complete ultrasound scan was performed ≥2 weeks ago
➤	Imaging may be repeated earlier than seven days if there are new or worsening symptoms such as an increasing amount of vaginal bleeding or increasing cramping or pain.
➤	No further imaging is needed if the follow-up ultrasound shows that the hemorrhage has resolved.
➤	If pregnancy is in second or third trimester follow <u>OB-21.5: Suspected Abruption Placentae</u>

OB-21.5: Suspected Abruption Placentae

Suspected Abruption Placentae
Second and Third Trimesters
➤ For suspected abruption placentae: ◆ CPT® 76805 [plus CPT® 76810 for each additional fetus] and/or CPT® 76817 if a complete fetal anatomic scan has not yet been performed during this pregnancy, with or without CPT® 93976 (limited duplex scan) ◆ CPT® 76815 for limited ultrasound and/or CPT® 76817, or ◆ CPT® 76816 if anatomy ultrasound was done previously, and/or CPT® 76817 ◆ Vaginal bleeding with +KB (Kleihauer-Betke) – fetomaternal hemorrhage – at risk for fetal anemia and hydrops CPT® 76821 may be indicated. ➤ Ultrasound is appropriate to follow-up a known abruption: ◆ CPT® 76815 or CPT® 76816 if a complete ultrasound was done previously and/or CPT® 76817. ◆ The number and frequency of follow-up ultrasounds will depend on the degree of abruption and the presence or absence of ongoing signs and symptoms.

OB-21.6: Previa (Placenta Previa and Vasa Previa)

OB-21.6.1: Placenta Previa

Placenta Previa
Second and Third Trimesters
➤ For suspected placenta previa (placental edge covers the internal cervical os) one of the following ultrasound can be performed: ◆ CPT® 76805 [plus CPT® 76810 for each additional fetus] and/or CPT® 76817 if a complete fetal anatomic scan has not yet been performed during this pregnancy with or without CPT® 93976 (limited duplex scan) or ◆ CPT® 76815 for limited ultrasound and/or CPT® 76817 with or without CPT® 93976 (limited duplex scan) or ◆ CPT® 76816 if a complete ultrasound was done previously and/or CPT® 76817 for a transvaginal ultrasound with or without CPT® 93976 (limited duplex scan) ➤ For known placenta previa (placental edge covers the internal cervical os) or low lying placenta (placental edge <2 cm from internal os): ◆ One routine follow-up ultrasound can be performed in the 3rd trimester (CPT® 76815 or CPT® 76816 and/or CPT® 76817) ■ If placenta previa or low lying placenta is still present, one follow-up ultrasound (CPT® 76815 or CPT® 76816 and/or CPT® 76817) can be performed in 3-4 weeks ◆ If persistent placenta previa (placental edge covers the internal cervical os), BPP (CPT® 76818/ CPT® 76819 or modified BPP (CPT® 76815) weekly, starting at 32 weeks ◆ Follow-up ultrasound can be performed at any time if bleeding occurs BPP (CPT® 76818 or CPT® 76819) or CPT® 76815 or CPT® 76816 if a complete ultrasound was done previously and/or CPT® 76817)

Practice Note

- For pregnancies beyond 16 weeks, if the placental edge is ≥ 2 cm away from the internal os, the placental location should be reported as normal.
- If the placental edge is < 2 cm from the internal os but not covering the internal os, it should be labeled as low lying.
- If the placental edge covers the internal cervical os, the placenta should be labeled as a placenta previa.
- “There is no evidence to guide the optimal time of subsequent imaging in pregnancies thought to have placenta previa. In stable patients it is reasonable to perform a follow-up ultrasonogram at approximately 32 weeks of gestation. This allows adequate time for “resolution” of low-lying placentas and avoids potentially unnecessary studies. It may be worthwhile to perform an additional study at 36 weeks of gestation (if the previa persists) to determine the optimal route and timing of delivery. There is no clear benefit from more frequent ultrasonograms (eg, every 4 weeks) in stable cases.

OB-21.6.2: Vasa Previa

- Vasa previa occurs when fetal blood vessels that are unprotected by the umbilical cord or placenta run through the amniotic membranes and cross over the internal cervical os.

If a Vasa Previa is found on initial imaging:	
➤ Detailed anatomic ultrasound at ≥ 16 weeks	CPT® 76811
➤ Follow-up growth ultrasound every 2 to 4 weeks starting at ≥ 23 weeks	CPT® 76816
➤ Once vasa previa is confirmed cervical length screening every 2 to 4 weeks starting at 28 weeks	CPT® 76817 and CPT® 76816 or CPT® 76815
➤ BPP or modified BPP starting at 32 weeks (may be needed earlier and/or more frequently if worsening fetal condition suspected)	CPT® 76818 or CPT® 76819 (BPP) or CPT® 76815

OB-21.7: Placenta Accreta Spectrum (PAS): Accreta, Increta, Percreta

- PAS includes placenta accreta, placenta increta or placenta percreta.

OB-21.7.1: Suspected PAS

- For **suspected PAS**:
 - ◆ CPT® 76811 or CPT® 76805 and/or CPT® 76817 if a complete fetal anatomic scan has not yet been performed. May be performed with or without CPT® 93976 (limited duplex scan) **or**
 - ◆ CPT® 76816 (if a complete ultrasound was done previously) or CPT® 76815 and/or CPT® 76817 with or without CPT® 93976 (limited duplex scan)
 - ◆ If the ultrasound is inconclusive or equivocal then MRI Pelvis without contrast (CPT® 72195) may be indicated

OB-21.7.2: Known PAS

- For **known PAS**:
 - ◆ Follow up growth ultrasounds can be performed every 2 to 4 weeks (CPT® 76816 if a complete ultrasound was done previously and/or CPT® 76817)
 - ◆ BPP (CPT® 76818 or CPT® 76819) or a modified BPP (CPT® 76815) weekly, starting at 32 weeks or sooner if indicated (other high-risk concerns)
 - ◆ Follow-up ultrasound can be performed at any time if bleeding occurs (CPT® 76815 and/or CPT® 76817)
 - ◆ MRI Pelvis without contrast (CPT® 72195) if the ultrasound is indeterminate or advanced imaging is needed for surgical planning. MRI Pelvis without contrast (CPT® 72195) is the appropriate code if only placenta or maternal pelvis is imaged without fetal imaging
 - The uterus, tubes and ovaries arise out of the pelvis and are considered pelvic organs. If the uterus rises out of the pelvic cavity, the imaging field can be determined on scout films. Imaging of the abdomen is not supported for problems suspected to arise from the pelvis.
 - The scout images (CT) and localizer images (MRI) are used to define the imaging field that is relevant to anatomical structures of clinical interest. The imaging field is defined by this clinical question, not by the imaging procedure code. The imaging code indicates the general anatomical region but does not define the specific imaging protocol or sequences.

Practice note

- ACOG recommendations for imaging during pregnancy and lactation:
 - ◆ Ultrasonography and magnetic resonance imaging (MRI) are not associated with risk and are the imaging techniques of choice for the pregnant patient, but they should be used prudently and only when use is expected to answer a relevant clinical question or otherwise provide medical benefit to the patient.
 - ◆ The use of gadolinium contrast with MRI should be limited; it may be used as a contrast agent in a pregnant woman only if it significantly improves diagnostic performance and is expected to improve fetal or maternal outcome.

References

1. ACOG Committee Opinion No. 723. Guidelines for Diagnostic Imaging During Pregnancy and Lactation Obstetrics & Gynecology. 2017 Oct;130(4):933-934. doi: 10.1097/AOG.0000000000002350.
2. AIUM Practice Parameter for the Performance of Limited Obstetric Ultrasound Examinations by Advanced Clinical Providers. Journal of Ultrasound in Medicine. 2018;37(7):1587-1596. doi:10.1002/jum.14677.
3. Lide B, Lindsley W, Foster MJ, Hale R, Haeri S. Intrahepatic Persistent Right Umbilical Vein and Associated Outcomes. Journal of Ultrasound in Medicine. 2016;35(1):1-5. doi:10.7863/ultra.15.01008.
4. Zangen R, Boldes R, Yaffe H, Schwed P, Weiner Z. Umbilical cord cysts in the second and third trimesters: significance and prenatal approach. Ultrasound in Obstetrics and Gynecology. 2010;36(3):296-301. doi:10.1002/uog.7576.
5. Predanic M, Perni SC, Chasen ST, et.al. Ultrasound evaluation of abnormal umbilical cord coiling in second trimester of gestation in association with adverse pregnancy outcome. Am J Obstet Gynecol. 2005 Aug;193(2):387-94. doi:10.1016/j.ajog.2004.12.092.
6. Laat MWMD, Franx A, Bots ML, Visser GHA, Nikkels PGJ. Umbilical Coiling Index in Normal and Complicated Pregnancies. Obstetrics & Gynecology. 2006;107(5):1049-1055. doi:10.1097/01.aog.0000209197.84185.15.
7. McKinney J, Rac MW, Gandhi M. Society for Maternal-Fetal Medicine (SMFM) Fetal Anomalies Consult Series #2: December 2019. <https://doi.org/10.1016/j.ajog.2019.09>.
8. Jensen KK, Oh KY, Kennedy AM, Sohaey R. Intrauterine Linear Echogenicities in the Gravid Uterus: What Radiologists Should Know. Radiographics. 2018 Mar-Apr;38(2):642-657. doi: 10.1148/rg.2018170062.
9. Siström CL, Ferguson JE. Abnormal membranes in obstetrical ultrasound: incidence and significance of amniotic sheets and circumvallate placenta. Ultrasound Obstet Gynecol. 1993 Jul 1;3(4):249-55. doi: 10.1046/j.1469-0705.1993.03040249.x.
10. Weissmann-Brenner A, Simchen MJ, Moran O, Kassif E, Achiron R, Zalel Y. Isolated fetal umbilical vein varix-prenatal sonographic diagnosis and suggested management. Prenatal Diagnosis. 2009;29(3):229-233. doi:10.1002/pd.2219.
11. Zalel Y, Lehavi O, Heifetz S, et al. Varix of the fetal intra-abdominal umbilical vein: prenatal sonographic diagnosis and suggested in utero management. Ultrasound in Obstetrics and Gynecology. 2000;16(5):476-478. doi:10.1046/j.1469-0705.2000.00283.x.
12. Lee SW, Kim MY, Kim JE, Chung JH, Lee HJ, Yoon JY. Clinical characteristics and outcomes of antenatal fetal intra-abdominal umbilical vein varix detection. Obstetrics & Gynecology Science. 2014;57(3):181. doi:10.5468/ogs.2014.57.3.181.
13. ACOG Committee Opinion No. 831 Summary: Medically Indicated Late-Preterm and Early-Term Deliveries. Obstet Gynecol. 2021;138:e35-39.
14. Tuuli MG, Norman SM, Odibo AO, Macones GA, Cahill AG. Perinatal Outcomes in Women With Subchorionic Hematoma. Obstetrics & Gynecology. 2011;117(5):1205-1212. doi:10.1097/aog.0b013e31821568de.
15. Gyamfi-Bannerman C. Society for Maternal-Fetal Medicine (SMFM) Consult Series #44: Management of bleeding in the late preterm period. American Journal of Obstetrics and Gynecology. 2018;218(1). doi:10.1016/j.ajog.2017.10.019.
16. Heller HT, Mullen KM, Gordon RW, Reiss RE, Benson CB. Outcomes of pregnancies with a low-lying placenta diagnosed on second-trimester sonography. J Ultrasound Med. 2014 Apr;33(4):691-6. doi: 10.7863/ultra.33.4.691.
17. Silver RM. Abnormal Placentation Placenta Previa, Vasa Previa, and Placenta Accreta. Obstetrics & Gynecology. 2015;126(3):654-668. doi:10.1097/aog.0000000000001005.
18. Sinkey RG, Odibo AO, Dashe JS. Society for Maternal-Fetal Medicine (SMFM) #37: Diagnosis and management of vasa previa. American Journal of Obstetrics and Gynecology. 2015;213(5):615-619. doi:10.1016/j.ajog.2015.08.031.
19. Cahill AG, Beigi R, Heine P, Silver RM, Wax JR. Placenta Accreta Spectrum. Obstetric Care Consensus No. 7. Obstetrics & Gynecology. 2018;132(6):e259-e275. doi:10.1097/aog.0000000000002983.
20. Kilcoyne A, Shenoy-Bhangle AS, Roberts DJ, Sisodia RC, Gervais DA, Lee SI. MRI of Placenta Accreta, Placenta Increta, and Placenta Percreta: Pearls and Pitfalls. American Journal of Roentgenology. 2017;208(1):214-221. doi:10.2214/ajr.16.16281.
21. SMFM Coding Committee White Paper: Coding for Placenta Accreta Spectrum.
22. Cali G, Giambanco L, Puccio G, Forlani F. Morbidly adherent placenta: evaluation of ultrasound diagnostic criteria and differentiation of placenta accreta from percreta. Ultrasound in Obstetrics & Gynecology. 2013;41(4):406-412. doi:10.1002/uog.12385.
23. Jauniaux E, Collins S, Burton GJ. Placenta accreta spectrum: pathophysiology and evidence-based anatomy for prenatal ultrasound imaging. American Journal of Obstetrics and Gynecology. 2018;218(1):75-87. doi:10.1016/j.ajog.2017.05.067.
24. Mari G, Norton ME, Stone J, et al. Society for Maternal-Fetal Medicine (SMFM) Clinical Guideline #8: The fetus at risk for anemia—diagnosis and management. American Journal of Obstetrics and Gynecology. 2015;212(6):697-710. doi:10.1016/j.ajog.2015.01.059.
25. Shainker SA, Coleman B, Timor-Tritsch IE, Bhide A, Bromley B, Cahill AG, Gandhi M, Hecht JL, Johnson KM, Levine D, Mastrobattista J, Phillips J, Platt LD, Shamshirsaz AA, Shipp TD, Silver RM, Simpson LL, Copel JA, Abuhamad A; Society for Maternal-Fetal Medicine. Electronic address: pubs@smfm.org. Special Report of the Society for Maternal-Fetal Medicine Placenta Accreta Spectrum Ultrasound Marker Task Force: Consensus on definition of markers and approach to the ultrasound examination in pregnancies at risk for placenta accreta spectrum. Am J Obstet Gynecol. 2021 Jan;224(1):B2-B14. doi: 10.1016/j.ajog.2020.09.001.

OB-22: Late-term/Post-term Pregnancy

OB-22.1: Late-term/Post-term Pregnancy

96

OB-22.1: Late-term/Post-term Pregnancy

- Ultrasound is supported at ≥ 41 weeks gestation
 - ◆ CPT® 76816 (if ≥ 2 weeks since last follow up ultrasound).
 - ◆ Twice weekly BPP (CPT® 76818 or CPT® 76819) or modified BPP CPT® 76815

Practice Note

In post-date pregnancy, uterine artery Doppler velocimetry (CPT® 93976) has not been found to be useful. Per SMFM - uterine artery Doppler has limited diagnostic accuracy and clinical utility in predicting FGR, SGA birth, and perinatal mortality.

Reference

1. Practice Bulletin No. 146: Management of Late-Term and Postterm Pregnancies. Obstet Gynecol. 2014;124(2, PART 1):390-396. Reaffirmed 2020. doi:10.1097/01.AOG.0000452744.06088.48.
2. Martins JG, Biggio JR, Abuhamad A. Society for Maternal-Fetal Medicine (SMFM) Consult Series #52: Diagnosis and Management of Fetal Growth Restriction. American Journal of Obstetrics and Gynecology. 2020. doi:10.1016/j.ajog.2020.05.010.
3. ACOG Committee Opinion No. 828. Indications for outpatient antenatal fetal surveillance. American College of Obstetricians and Gynecologists. *Obstetrics & Gynecology*. 2021;137(6):e177-e197. doi:10.1097/aog.0000000000004407.

OB-23: Preterm/Prelabor Rupture of Membranes

OB-23.1: Current Preterm/Prelabor Rupture of Membranes (PPROM)	98
OB-23.2: Current Prelabor Rupture of Membranes (PROM)	98

See **OB-17: Amniotic Fluid Abnormalities/Oligohydramnios/Polyhydramnios**

OB-23.1: Current Preterm/Prelabor Rupture of Membranes (PPROM)

- If suspected preterm/prelabor rupture of membranes (<37 weeks) imaging may be indicated to assess AFI:
 - ◆ One time CPT® 76815 for quick look for AFI check, **OR**
 - ◆ CPT® 76816 (If confirmed oligohydramnios or PPRM), for delivery planning
 - This will likely result in a hospital admission for evaluation and monitoring until delivery. Only in rare cases is outpatient monitoring performed.

OB-23.2: Current Prelabor Rupture of Membranes (PROM)

- If ≥37 weeks and PROM is suspected
 - ◆ One time CPT® 76815 for quick look for AFI check, **OR**
 - ◆ CPT® 76816 (If confirmed oligohydramnios or PROM), for delivery planning
 - This will likely result in a hospital admission for delivery.

References

1. ACOG Practice Bulletin No. 234: Prediction and Prevention of Spontaneous Preterm Birth. *Obstetrics & Gynecology*. 2021;138(2):e65-e90. doi:10.1097/aog.0000000000004479.
2. ACOG Practice Bulletin No. 171: Management of Preterm Labor. *Obstetrics & Gynecology*. 2016;128(4):e155-e164. Reaffirmed 2020. doi:10.1097/AOG.000000000000171
3. ACOG Practice Bulletin No. 217: Prelabor Rupture of Membranes. *Obstetrics & Gynecology*. March 2020;135:e80–e97. doi: 10.1097/AOG.0000000000003701.
4. ACOG Committee Opinion No. 831. Medically Indicated Late-Preterm and Early-Term Deliveries. *Obstetrics & Gynecology*. 2021;138(1):e35-e39. doi:10.1097/aog.0000000000004447.

OB-24: Previous C-section or History of Uterine Scar

OB-24.1: Previous C-section or History of Uterine Scar	100
--	-----

OB-24.1: Previous C-section or History of Uterine Scar

Previous Cesarean section and/or uterine scar

- Report one of the following:
 - ◆ CPT® 76801 [plus CPT® 76802 for each additional fetus] if <14 weeks and a complete ultrasound has not yet been performed, and/or CPT® 76817, or
 - ◆ CPT® 76815 for dating if ≥14 weeks and <16 weeks
- Fetal anatomic scan CPT® 76805 ≥16 weeks.
- Growth scan (CPT® 76816) in the early third trimester (between 28-32 weeks) **and**
- CPT® 76816 once in the late third trimester for delivery planning (36-38 weeks)
- Transvaginal ultrasound, CPT® 76817 may be indicated for poor visualization of the lower uterine segment or if uterine wall thinning (dehiscence) is suspected.
- If a cesarean scar pregnancy is suspected, additional imaging may be indicated.

Practice Note

- Cesarean scar pregnancy is a complication in which an early pregnancy implants in the fibrous tissue of a prior uterine scar. Because of the fibrous nature of scar tissue, a CSP is at risk for dehiscence, placenta accreta and hemorrhage. Women who consider pregnancy after a CSP are at significant risk of recurrence.
- A combination of transvaginal and transabdominal, combined with color Doppler ultrasound imaging are recommended for diagnosis.
- MRI Pelvis may also be considered in cases where ultrasound alone is inconclusive.

References

1. Gyamfi-Bannerman C, Gilbert S, Landon MB, et al. Risk of Uterine Rupture and Placenta Accreta With Prior Uterine Surgery Outside of the Lower Segment. *Obstetrics & Gynecology*. 2012;120(6):1332-1337. doi:10.1097/aog.0b013e318273695b.
2. ACOG Practice Bulletin No. 205: Vaginal Birth After Cesarean Delivery. *Obstetrics & Gynecology*. 2019;133(2):110-127. doi:10.1097/aog.0000000000003078.
3. Hamar BD, Levine D, Katz NL, Lim K-H. Expectant Management of Uterine Dehiscence in the Second Trimester of Pregnancy. *Obstetrics & Gynecology*. 2003;102(Supplement):1139-1142. doi:10.1097/00006250-200311001-00006.
4. Oyelese Y, Tchabo J-G, Chapin B, Nair A, Hanson P, McLaren R. Conservative Management of Uterine Rupture Diagnosed Prenatally on the Basis of Sonography. *Journal of Ultrasound in Medicine*. 2003;22(9):977-980. doi:10.7863/jum.2003.22.9.977.
5. Miller R, Timor-Tritsch IE, Gyamfi-Bannerman C. Society for Maternal-Fetal Medicine (SMFM) Consult Series #49: Cesarean scar pregnancy. *American Journal of Obstetrics and Gynecology*. 2020;222(5):B2-B14. doi:10.1016/j.ajog.2020.01.030.
6. Ramanathan S, Raghu V, Ladumor SB, Nagadi AN, Palaniappan Y, Dogra V, Schieda N. Magnetic resonance imaging of common, uncommon, and rare implantation sites in ectopic pregnancy. *Abdom Radiol (NY)*. 2018 Dec;43(12):3425-3435. doi: 10.1007/s00261-018-1604-2.
7. Dibble EH, Lourenco AP. Imaging Unusual Pregnancy Implantations: Rare Ectopic Pregnancies and More. *AJR Am J Roentgenol*. 2016 Dec;207(6):1380-1392. doi: 10.2214/AJR.15.15290.

OB-25: Termination of Pregnancy – Imaging

OB-25.1: Imaging for Planned Pregnancy Termination

102

OB-25.1: Imaging for Planned Pregnancy Termination

- For a planned pregnancy termination, ultrasound can be performed to determine intrauterine pregnancy and gestational age.
 - ◆ CPT® 76801 if <14 weeks and/or CPT® 76817, or
 - ◆ CPT® 76815 and/or CPT® 76817, or
 - ◆ If ≥14 weeks, CPT® 76805 (or CPT® 76811 if otherwise indicated, e.g. termination planned for chromosomal or structural fetal anomaly) may be performed (there may be State mandated imaging prior to termination).
- Routine follow-up is not usually necessary after uncomplicated medical abortion.
- For suspected medical abortion complication see **OB 5.4: Spontaneous Abortion/Threatened/Missed Abortion**

Practice Note

- In general, most ultrasound requests are approvable for planned pregnancy termination regardless of clinical information provided. Imaging may be indicated to confirm EGA, placenta location, and/or fetal anomalies.
- Though routine follow-up is not usually necessary after uncomplicated medical abortion, if otherwise medically indicated or preferred by the patient, follow-up ultrasound assessment after a medically induced termination may be considered.

References

1. ACOG Practice Bulletin No.225. Medication abortion up to 70 days of gestation Obstetrics & Gynecology. 2020;136:e31-47.
2. ACOG Practice Bulletin No. 135. Second-trimester abortion. Obstetrics & Gynecology. 2013;121(6):1394-1406. Reaffirmed 2021. doi:10.1097/01.aog.0000431056.79334.cc

OB-26: Trauma**OB-26.1: Trauma – Imaging****104**

OB-26.1: Trauma – Imaging

Prior to 13 weeks:
➤ Blunt trauma in the first trimester (prior to 13 weeks) generally does not cause pregnancy loss with the exception of profound hypotension: ◆ No imaging is indicated unless there is cramping and/or bleeding.
Between 13-20 weeks gestation:
➤ CPT® 76815 and/or CPT® 76817 can be performed, or ➤ CPT® 76801 and/or CPT® 76817 if complete ultrasound has not yet been performed, and is <14 weeks or ➤ CPT® 76805 (plus CPT® 76810 for each additional fetus) (or 76811/76812 if otherwise indicated) if ≥14 weeks, when complete fetal anatomic scan has not yet been performed
After 20 weeks:
➤ CPT® 76805 (or CPT® 76811 plus CPT® 76812 for each additional fetus if otherwise indicated) when a fetal anatomic scan has not yet been performed, or ➤ CPT® 76815 and/or CPT® 76817 or ➤ CPT® 76816 ➤ Additionally, starting at 26 weeks, BPP (CPT® 76818 or CPT® 76819) or modified BPP (CPT® 76815) can be considered ➤ Vaginal bleeding with +KB (Kleihauer-Betke) (feto-maternal hemorrhage) at risk for fetal anemia and hydrops, CPT® 76821 may be indicated. ➤ Other advanced imaging may be indicated. See <u>AB-10.1: Blunt Abdominal Trauma</u>

Practice Note

- Typically all components of the BPP (CPT® 76818 and CPT® 76819), such as breathing, are not present until ≥26 weeks gestation. However, a modified BPP (CPT® 76815) may be utilized sooner in certain high risk cases but should not be done prior to viability (23 weeks).
- ACOG recommendations for imaging during pregnancy and lactation:
 - ◆ Ultrasonography and magnetic resonance imaging (MRI) are not associated with risk and are the imaging techniques of choice for the pregnant patient, but they should be used prudently and only when use is expected to answer a relevant clinical question or otherwise provide medical benefit to the patient.
 - ◆ With few exceptions, radiation exposure through radiography (Xrays), computed tomography (CT) scan, or nuclear medicine imaging techniques is at a dose much lower than the exposure associated with fetal harm. If these techniques are necessary in addition to ultrasound or MRI or are more readily available for the diagnosis in question, they should not be withheld from a pregnant patient.
 - ◆ The use of gadolinium contrast with MRI should be limited; it may be used as a contrast agent in a pregnant woman only if it significantly improves diagnostic performance and is expected to improve fetal or maternal outcome.
 - ◆ With regards to iodinated IV contrast media, “it is generally recommended that contrast only be used if absolutely required to obtain additional diagnostic information that will affect the care of the fetus or woman during pregnancy”.

References

1. Jain V, Chari R, Maslovitz S, Farine D; Maternal Fetal Medicine Committee, Bujold E, Gagnon R, Basso M, Bos H, Brown R, Cooper S, Gouin K, McLeod NL, Menticoglou S, Mundle W, Pylypjuk C, Roggensack A, Sanderson F. Guidelines for the Management of a Pregnant Trauma Patient. J Obstet Gynaecol Can. 2015 Jun;37(6):553-74. English, French. doi: 10.1016/s1701-2163(15)30232-2.
2. Greco PS, Day LJ, Pearlman MD. Guidance for Evaluation and Management of Blunt Abdominal Trauma in Pregnancy. Obstet Gynecol. 2019 Dec;134(6):1343-1357. doi: 10.1097/AOG.0000000000003585.
3. Mari G, Norton ME, Stone J, et al. Society for Maternal-Fetal Medicine (SMFM) Clinical Guideline #8: The fetus at risk for anemia—diagnosis and management. American Journal of Obstetrics and Gynecology. 2015;212(6):697-710. doi:10.1016/j.ajog.2015.01.
4. ACOG Practice Bulletin No. 211: Critical Care in Pregnancy. Obstet Gynecol. 2019 May;133(5):e303-e319. doi: 10.1097/AOG.0000000000003241.

OB-27: Unequal Fundal Size and Dates

OB-27.1: Unequal Fundal Size and Dates

107

OB-27.1: Unequal Fundal Size and Dates

Unequal fundal size is defined as ≥ 3 cm difference between fundal height measurement and gestational age (weeks), at ≥ 23 weeks gestation

- One ultrasound can be performed (CPT® 76805) if complete fetal anatomic scan is planned and has not been performed **or**
- CPT® 76816 if complete anatomy scan or detailed anatomy ultrasound (CPT® 76805/CPT® 76811) has been done previously
- Where fundus cannot be adequately palpated such as in obesity, leiomyomas, multiple gestations, See appropriate chapter

References

1. Pay A, Frøen J, Staff A, Jacobsson B, Gjessing H. Prediction of small-for-gestational-age status by symphysis-fundus height: a registry-based population cohort study. *BJOG: An International Journal of Obstetrics & Gynaecology*. 2016;123(7):1167-1173. doi:10.1111/1471-0528.13727.
2. Pay ASD, Wiik J, Backe B, Jacobsson B, Strandell A, Klovning A. Symphysis-fundus height measurement to predict small-for-gestational-age status at birth: a systematic review. *BMC Pregnancy and Childbirth*. 2015;15(1). doi:10.1186/s12884-015-0461-z.
3. ACOG Practice Bulletin No. 227: Fetal Growth Restriction. *Obstet Gynecol*. 2021;137(2):e16-e28 doi: 10.1097/AOG.0000000000004251.
4. ACOG Practice Bulletin No. 216: Macrosomia. *Obstetrics & Gynecology*. 2020;135(1):246-248. doi:10.1097/aog.0000000000003607.

OB-28: Procedure Coding Basics for Established Pregnancy

OB-28.1: Procedure Coding Basics for Established Pregnancy General Considerations	109
OB-28.2: Required Elements for Complete First Trimester Ultrasound	109
OB-28.3: Required Elements for Second or Third Trimester Fetal Anatomic Evaluation Ultrasound	110
OB-28.4: Required Elements for a Detailed Fetal Anatomic Evaluation Ultrasound	111
OB-28.5: Fetal Nuchal Translucency	112
OB-28.6: Limited and Follow-up Studies	113
OB-28.7: Obstetric Transvaginal Ultrasound	113
OB-28.8: Biophysical Profile (BPP)	114
OB-28.9: Fetal Doppler	115
OB-28.10: Duplex Scan	115
OB-28.11: Fetal Echocardiography	116
OB-28.12: 3D and 4D Rendering	116

OB-28.1: Procedure Coding Basics for Established Pregnancy

General Considerations

- All obstetric ultrasound studies require permanently recorded images which may be stored on film or in a Picture Archiving and Communication System (PACS). Obstetric ultrasound services may not be billed without image recording.
- Ultrasound procedure codes include the preparation of a required final written report which should be included in the patient's medical record.
 - ◆ Each procedure code has specific required elements which are described in this section.
 - ◆ The report should document the results of the evaluation of each element or the reason any element is non-visualized.
 - ◆ Documentation of less than the required elements requires the billing of the "limited" code for that anatomic region.
 - ◆ Only one (1) limited exam may be billed per encounter.
- The use of a hand-held or any Doppler device that does not create a hard-copy output is considered part of the physical examination and is not separately billable.

OB-28.2: Required Elements for Complete First Trimester Ultrasound

CPT® Code Guidance	
➤	CPT® 76801 and CPT® 76802 (for each additional fetus) can be performed up to and including 13 6/7 weeks gestation and is defined in CPT® as including the following elements: ◆ Number and size of gestational sacs and fetuses ◆ Survey of visible fetal anatomic structures and placental evaluation when possible ◆ Qualitative assessment of amniotic fluid volume/gestational sac shape ◆ Examination of maternal uterus and adnexa
➤	CPT® 76801 and CPT® 76802 should only be reported once per pregnancy/per practice/facility unless the mother changes to a new medical caregiver at a new practice/facility and there is a new medical indication for ultrasound.
➤	Follow-up studies to CPT® 76801 and CPT® 76802 should be reported as CPT® 76815

OB-28.3: Required Elements for Second or Third Trimester Fetal Anatomic Evaluation Ultrasound

CPT® Code Guidance

- A complete second or third trimester transabdominal ultrasound (CPT® 76805 and CPT® 76810 for each additional fetus) is defined in CPT® as including the following elements:
 - ◆ **Head, face, and neck:** Lateral cerebral ventricles; Choroid plexus; Midline falx; Cavum septum pellucidum; Cerebellum; Cistern magna; Upper lip: A measurement of the nuchal fold may be helpful during a specific age interval to assess the risk of aneuploidy
 - ◆ **Chest/Heart:** Four-chamber view; Left and Right ventricular outflow tracts
 - ◆ **Abdomen:** Stomach (presence, size, and situs); Kidneys; Urinary bladder; Umbilical cord insertion site into the fetal abdomen and number of vessels
 - ◆ **Spine:** Cervical, thoracic, lumbar, and sacral spine
 - ◆ **Extremities:** Legs and arms
 - ◆ **Genitalia:** (In multiple gestations and when medically indicated)
 - ◆ **Placenta:** Location; Relationship to internal os; Appearance; Placental cord insertion (when possible) and overall standard evaluation
 - ◆ Fetal number and Presentation
 - ◆ Qualitative or semi-qualitative estimate of amniotic fluid
 - ◆ **Maternal anatomy:** Cervix (transvaginal if cervical length is ≤ 3.6 cm), Uterus, and Adnexa
 - ◆ **Fetal Biometry:** Biparietal diameter, Head circumference, Femur length, Abdominal circumference, and Fetal weight estimate.
- CPT® 76805 and CPT® 76810 **should only be used once per pregnancy per practice/facility** unless the mother changes to a new medical caregiver at a new practice/facility and there is a new medical indication for ultrasound.
- Follow-up studies to CPT® 76805/CPT® 76810 should be coded as CPT® 76815 or CPT® 76816.

OB-28.4: Required Elements for a Detailed Fetal Anatomic Evaluation Ultrasound

CPT® Code Guidance
➤ Detailed fetal anatomy scan (CPT® 76811 and CPT® 76812 for each additional fetus) is generally performed by those with special skills to perform this study, such as Maternal Fetal Medicine specialists (Perinatologists), or Radiologists with advanced training in fetal imaging.
➤ CPT® 76811 and CPT® 76812 are defined in CPT® as including all of the requirements listed for CPT® 76805 and CPT® 76810. In addition, the report must document detailed anatomic evaluation of the following elements: ◆ Head, face, and neck: 3rd and 4th ventricles; Lateral ventricles; Cerebellar lobes, vermis, and cisterna magna; Corpus callosum; Integrity and shape of cranial vault; Brain parenchyma; Neck; Profile; Coronal face (nose/lips/lenses); Palate, maxilla, mandible, and tongue; Ear position and size; Orbits ◆ Chest/Heart: Aortic arch; Superior and inferior vena cava; 3-vessel view; 3-vessel and trachea view; Lungs; Integrity of diaphragm; Ribs ◆ Abdomen: Small and large bowel; Adrenal glands; Gallbladder; Liver; Renal arteries; Spleen; Integrity of abdominal wall ◆ Spine: Integrity of spine and overlying soft tissue; Shape and curvature ◆ Extremities: Number: architecture and position; Hands; Feet; Digits: number and position ◆ Genitalia: Gender ◆ Placenta: Masses; Placental cord insertion; Accessory/succenturiate lobe with location of connecting vascular supply to primary placenta ◆ Biometry: Cerebellum; Inner and outer orbital diameters; Nuchal thickness (16 to 20 wk); Nasal bone measurement (15 to 22 wk); Humerus; Ulna/radius; Tibia/fibula ◆ Maternal Anatomy: Cervix (transvaginal if cervical length is ≤ 3.6cm); Uterus; Adnexa
➤ CPT® 76811 and CPT® 76812 should only be used once per pregnancy per practice/ facility unless the mother changes to a new medical caregiver at a new facility and there is a new medical indication for ultrasound. ➤ Follow-up studies to CPT® 76811/CPT® 76812 should be coded as CPT® 76815 or CPT® 76816. ➤ In circumstances where the individual is deemed to have an increased risk for a fetal abnormality and does not have access to a provider who can perform the more desirable fetal and maternal ultrasound with detailed fetal anatomic examination (CPT® 76811) due to geographic or other constraints, a standard (after first trimester) fetal and maternal ultrasound (CPT® 76805) may be authorized instead.

OB-28.5: Fetal Nuchal Translucency

CPT® Code Guidance

- CPT® 76813 and CPT® 76814 (for each additional fetus) describe ultrasound measurement of the clear (translucent) space at the back of the fetal neck
 - ◆ The first trimester screening can be performed between 10 and 14 weeks (crown rump length (CRL) 44-83 mm)
- Abnormal Fetal Nuchal Translucency scan (NT $\geq$ 3 mm or above the 99th percentile for the CRL) suggests an increased risk for aneuploidy. An NT $\geq$ 3 mm or above the 99th percentile for the CRL with normal aneuploidy testing may be a marker for cardiac defects, abdominal wall defects, diaphragmatic hernia, and genetic syndromes in euploid fetuses during current pregnancy.
- The sonographer performing the study and/or the physician interpreting the study must be credentialed by the Maternal Fetal Medicine Foundation or Nuchal Translucency Quality Review Program (NTQR).
- The use of ultrasound codes (CPT® 76801/CPT® 76802) should be indication driven and should not be routinely done whenever an ultrasound for nuchal translucency (CPT® 76813/CPT® 76814) is requested. In cases where there is either a maternal and/or fetal indication, then the CPT® 76801 code can be billed along with the nuchal translucency screening (CPT® 76813/CPT® 76814).

Practice Note

- The first trimester screening is typically done between 11 and 13 6/7 weeks but can be performed if the crown rump length (CRL) measures between 44-83 mm (typically at gestational age range 10 4/7 to 14 weeks)
- **Required elements of the CPT® 76813 ultrasound code include:**
 - ◆ Fetal crown-rump measurement
 - ◆ Observation of fetal cardiac activity
 - ◆ Observation of the embryo at high magnification until the embryonic neck is in a neutral position and spontaneous embryonic movement allows for differentiation between the outer edge of the nuchal skin and the amnion
 - ◆ Measurement of the largest distance between the inner borders of the fetal nuchal translucency

OB-28.6: Limited and Follow-up Studies

CPT® Code Guidance	
➤	CPT® 76815 describes a limited or “quick look” study used to report one or more of the elements listed in the code definition, i.e. “fetal heartbeat”, placental location, for viability/dating (when indicated), or fluid check (re: modified BPP which is NST with CPT® 76815) ◆ Reported only once, regardless of the number of fetuses, and only once per date of service ◆ CPT® 76815 should never be reported with complete studies CPT® 76801/CPT® 76802, CPT® 76805/CPT® 76810 or CPT® 76811/CPT® 76812 or with CPT® 76816 or BPP (CPT® 76818 and CPT® 76819).
➤	CPT® 76816 describes a follow-up ultrasound (eg, re-evaluation of fetal size by measuring standard growth parameters and amniotic fluid volume, re-evaluation of organ system(s) suspected or confirmed to be abnormal on a previous scan), trans-abdominal approach, per fetus. ◆ The use of this CPT code is reserved for subsequent follow up ultrasound only; i.e. complete ultrasound (CPT® 76801, or CPT® 76805/CPT® 76811) must have been performed previously. ◆ Components include: Focused assessment of fetal biometry, amniotic fluid volume and/or a detailed re-examination of a specific organ or system known or suspected to be abnormal on prior ultrasound. ◆ CPT® 76816 should be reported once per fetus evaluated in follow-up. ◆ CPT® 76816 should never be reported with complete studies (CPT® 76801, CPT® 76802, CPT® 76805/CPT® 76810, or CPT® 76811/CPT® 76810) or with a limited study (CPT® 76815). ◆ CPT® 76816 should not be performed prior to a CPT® 76801 and/or an anatomy scan CPT® 76805 (normal pregnancy) or Detailed anatomy scan CPT® 76811 (high risk pregnancy), and is typically not performed before 14 weeks gestation.

OB-28.7: Obstetric Transvaginal Ultrasound

CPT® Code Guidance	
➤	CPT® 76817 is used to report an obstetrical transvaginal ultrasound and may be used to report TV cervical length assessment (when indicated), or in certain circumstances with poor visualization by transabdominal US assessment.
➤	CPT® 76817 is reported only once regardless of the number of fetuses.

OB-28.8: Biophysical Profile (BPP)

CPT® Code Guidance	
➤	CPT® 76818 includes non-stress testing. Supported ≥26 weeks.
➤	CPT® 76819 does not include the non-stress testing portion. Supported ≥26 weeks
➤	CPT® 76815 is a modified BPP – includes NST and AFI. Supported ≥23 weeks
➤	BPPs performed on more than one fetus, should be reported separately.
➤	Modified BPP (CPT® 76815) should be reported only once, regardless of the number of fetuses, and only once per date of service.
➤	Modified BPP (CPT® 76815) should never be reported with complete studies, CPT® 76805/CPT® 76810 or CPT® 76811/CPT® 76812 or with CPT® 76816 or BPP (CPT® 76818 and CPT® 76819).

Practice Note

- The BPP is designed to predict the presence or absence of fetal asphyxia and, ultimately the risk of fetal death. A BPP is scored out of 10 with each parameter given a score of 0 or 2. A score ≥8 is considered normal. The following parameters are evaluated:
 - ◆ Fetal breathing movements
 - ◆ Gross fetal body movements
 - ◆ Fetal tone
 - ◆ Amniotic fluid volume, at least one vertical pocket 2 x 2 cm
 - ◆ Reactive FHR (non-stress testing portion)
- CPT® 76815 is used to assess the AFI portion of a modified BPP (NST + AFI)
- Typically all components of the BPP (CPT® 76818 and CPT® 76819), such as breathing, are not present until ≥26 weeks gestation. However, a modified BPP (CPT® 76815) may be utilized sooner in certain high risk cases but should not be done prior to viability (23 weeks).
- If BPP ≤6, repeat BPP in ≤24 hours

OB-28.9: Fetal Doppler

CPT® Code Guidance

- CPT® 76820 describes Doppler velocimetry of the umbilical artery (UA Doppler)
 - ◆ Utilized for known FGR; See **OB-20.1: Fetal Growth Restriction Current Pregnancy** and known oligohydramnios See **OB-17.1: Amniotic Fluid Abnormalities**, and is typically performed ≥ 23 weeks gestation (viability).
 - ◆ May also be indicated with known twin to twin transfusion or known discordant twins (See **OB-11: Multiple Gestations**).
 - ◆ Its use to predict preeclampsia, and stillbirth is considered investigational.
- CPT® 76821 describes Doppler velocimetry of the middle cerebral artery (MCA Doppler).
 - ◆ Performed to evaluate a fetus at risk for anemia due to Rhesus isoimmunization/alloimmunization (as a substitute for amniocentesis), Twin anemia polycythemia sequence and non-immune hydrops caused by parvovirus B19 infection or any other known acquired or congenital cause of fetal anemia. See **OB-16.1: Alloimmunization/Rh Isoimmunization**, **OB-16.5: Other Causes of Fetal Anemia** and **OB-11: Multiple Gestations**
- MCA Doppler (CPT® 76821) assessment may also be indicated if a fetus is at high risk for fetal anemia due to other pregnancy complications, e.g. chorioangioma, umbilical vein varix, or finding of sustained fetal tachyarrhythmia or bradyarrhythmia or a known congenital heart defect with suspected heart failure in the fetus - See **OB-12.2: Indications for Fetal Conditions**, **OB-16.1: Alloimmunization/Rh Isoimmunization**, and **OB-21: Placental and Cord Abnormalities**.
- SMFM suggest that ductus venosus, middle cerebral artery, or uterine artery Doppler use for routine clinical management of early- or late-onset FGR *is not recommended*

OB-28.10: Duplex Scan

- A Duplex scan describes an ultrasonic scanning procedure for characterizing the pattern and direction of blood flow in arteries and veins. It produces real-time images integrating a B-mode two dimensional vascular structure, Doppler spectral analysis, and color flow Doppler imaging.
- **CPT® 93976** describes a limited duplex scan and is used during pregnancy to report uterine artery Doppler studies (done to report fetal umbilical-placental flow evaluation, accreta or other placental or cord abnormalities).
 - ◆ **CPT® 93975** describes a complete duplex scan. This code is **NOT** used in obstetrical imaging.
- The minimal use of color Doppler alone, when performed for anatomical structure identification, during a standard ultrasound procedure, is not separately reimbursable.
- SMFM state that uterine artery Doppler has limited diagnostic accuracy and clinical utility in predicting FGR, SGA birth, and perinatal mortality. As such, its use for screening in high risk groups is not recommended

OB-28.11: Fetal Echocardiography

CPT® Code Guidance	
➤	CPT® 76825 describes a complete fetal echocardiography.
➤	CPT® 76827 describes a complete Doppler echocardiography, fetal, pulsed wave and/or continuous wave with spectral display
◆	It is usually billed along with CPT® 76825
➤	CPT® 76826 describes a follow-up or repeat fetal echocardiogram
◆	It should never be billed with CPT® 76825 or more than once per fetus on any date of service
➤	CPT® 76828 is a follow-up or repeat Doppler fetal echocardiogram
➤	Procedure code (CPT® 76827 or CPT® 76828) includes the evaluation of veins, arteries, and valves, and covers Doppler evaluation of the ductus venosus, ductus arteriosus, and PR Interval measurement as well as other vessels. Guidelines do not support the additional billing of CPT® 76820 and/or CPT® 76821.
➤	It is inappropriate to report codes CPT® 76825 – CPT® 76828 for the routine monitoring of fetal heart tones using a hand-held or any Doppler device that does not create a hard-copy output. Such fetal heart tone monitoring is considered part of the physical examination and is not separately billable.
➤	CPT® 93325 is used to report color mapping in conjunction with fetal echocardiography procedures CPT® 76825 – CPT® 76828.
◆	The use of color Doppler (CPT® 93325) alone, when performed for anatomical structure identification, during a standard ultrasound procedure, is not separately reimbursable.

OB-28.12: 3D and 4D Rendering

- There is currently insufficient data to generate appropriateness criteria for the use of 3D and 4D rendering in conjunction with Obstetrical ultrasound imaging.
 - ◆ Per ACOG, despite the technical advantages of 3-dimensional ultrasonography, proof of a clinical advantage of 3-dimensional ultrasonography in prenatal diagnosis, in general, is still lacking.
- However, 3D (CPT® 76376 or CPT® 76377) rendering may be considered in certain situations of abnormal pregnancy implantation like suspected C-section scar pregnancies or suspected cornual (interstitial) ectopic pregnancy, or to locate an IUD. See **OB-3.1: Locate an Intrauterine Device (IUD)**, **OB 24.1: Previous C-section or History of Uterine Scar**, **OB 5.3: Ectopic Pregnancy**, and **PV-14.1: Uterine Anomalies** in the Pelvis Imaging Guidelines

References

1. AIUM-ACR-ACOG-SMFM-SRU Practice Parameter for the Performance of Standard Diagnostic Obstetric Ultrasound Examinations. *Journal of Ultrasound in Medicine*. 2018;37(11). doi:10.1002/jum.14831.
2. AIUM Practice Parameter for the Performance of Detailed Second- and Third-Trimester Diagnostic Obstetric Ultrasound Examinations. *Journal of Ultrasound in Medicine*. 2019;38(12):3093-3100. doi:10.1002/jum.15163.
3. Reddy UM, Abuhamad AZ, Levine D, Saade GR. Fetal Imaging: Executive Summary of a Joint Eunice Kennedy Shriver National Institute of Child Health and Human Development, Society for Maternal-Fetal Medicine, American Institute of Ultrasound in Medicine, American College of Obstetricians and Gynecologists, American College of Radiology, Society for Pediatric Radiology, and Society of Radiologists in Ultrasound Fetal Imaging Workshop. *Obstetrics & Gynecology*. 2014;123(5):1070-1082. doi:10.1097/aog.0000000000000245
4. Practice Bulletin No. 175: Ultrasound in Pregnancy. *Obstet Gynecol*. 2016;128(6):e241-e256. Reaffirmed 2020. doi:10.1097/AOG.0000000000001815.
5. ACOG Practice Bulletin No. 226: Screening for Fetal Chromosomal Abnormalities. *Obstetrics & Gynecology*. 2020;136(4):e48-e69. doi:10.1097/aog.00000000000004084.
6. Society for Maternal and Fetal Medicine (SMFM), coding committee. SMFM Coding Committee White Paper: Billing of 76801 and/or 76813 with cfDNA. October 2017.
7. AIUM Practice Parameter for the Performance of Limited Obstetric Ultrasound Examinations by Advanced Clinical Providers. *Journal of Ultrasound in Medicine*. 2018;37(7):1587-1596. doi:10.1002/jum.14677
8. ACOG Practice Bulletin No. 229: Indications for Outpatient Antenatal Fetal Surveillance. *Obstetrics & Gynecology*. 2021;137(6):e177-e197. doi:10.1097/aog.00000000000004407.
9. ACOG Committee Opinion No. 828. Indications for outpatient antenatal fetal surveillance. American College of Obstetricians and Gynecologists. *Obstetrics & Gynecology*. 2021;137:e177–97. doi:10.1097/aog.00000000000004407.
10. ACOG Practice Bulletin No. 227: Fetal Growth Restriction. *Obstet Gynecol*. 2021;137(2):e16-e28 doi: 10.1097/AOG.00000000000004251 Galan HL. Timing Delivery of the Growth-Restricted Fetus. *Seminars in Perinatology*. 2011;35(5):262-269. doi:10.1053/j.semperi.2011.05.009
11. Martins JG, Biggio JR, Abuhamad A. Society for Maternal-Fetal Medicine (SMFM) Consult Series #52: Diagnosis and Management of Fetal Growth Restriction. *American Journal of Obstetrics and Gynecology*. 2020. doi:10.1016/j.ajog.2020.05.010.
12. AIUM Practice Parameter for the Performance of Fetal Echocardiography. *Journal of Ultrasound in Medicine*. 2019;39(1). doi:10.1002/jum.15188.
13. Miller R, Timor-Tritsch IE, Gyamfi-Bannerman C. Society for Maternal-Fetal Medicine (SMFM) Consult Series #49: Cesarean scar pregnancy. *American Journal of Obstetrics and Gynecology*. 2020;222(5):B2-B14. doi:10.1016/j.ajog.2020.01.030.
14. Dibble EH, Lourenco AP. Imaging Unusual Pregnancy Implantations: Rare Ectopic Pregnancies and More. *AJR Am J Roentgenol*. 2016 Dec;207(6):1380-1392. doi: 10.2214/AJR.15.15290. Epub 2016 Aug 30. PMID: 27574902.
15. Ramanathan S, Raghu V, Ladumor SB, Nagadi AN, Palaniappan Y, Dogra V, Schieda N. Magnetic resonance imaging of common, uncommon, and rare implantation sites in ectopic pregnancy. *Abdom Radiol (NY)*. 2018 Dec;43(12):3425-3435. doi: 10.1007/s00261-018-1604-2.