



CLINICAL GUIDELINES

OB Ultrasound Imaging Policy

Version 20.0.2018
Effective May 17, 2018



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.

CPT® (Current Procedural Terminology) is a registered trademark of the American Medical Association (AMA). CPT® five digit codes, nomenclature and other data are copyright 2016 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		4
OB-1: Vaginal Bleeding and/or Abdominal/Pelvic Pain/Cramping with or without Trauma		6
OB-1.1: Abdominal Pain		7
OB-1.2: Trauma		7
OB-1.3: Vaginal Bleeding and/or Abdominal/Pelvic Cramping/Pain		7
OB-1.4: Ectopic Pregnancy		8
OB-1.5: Spontaneous Abortion		8
OB-1.6: Hydatidiform Mole		9
OB-2: Abnormal Fetal Position or Presentation		10
OB-3: Alloimmunization/Rh Isoimmunization/Other Causes of Fetal Anemia/Parvo/Hydrops		12
OB-3.1: Alloimmunization/RH Isoimmunization/Other Causes of Fetal Anemia		13
OB-3.2: Exposure to Parvovirus B-19		13
OB-3.3: Twin Anemia Polycythemia Sequence		13
OB-3.4: Fetal Hydrops Associated with Polyhydramnios		14
OB-4: Amniotic Fluid Abnormalities/ Oligohydramnios/ Polyhydramnios		16
OB-5: Fetal Anatomic Scan		19
OB-6: No Fetal Heart Tone/Decreased Fetal Movement		22
OB-7: Fetal Echocardiography (ECHO)		24
OB-8: Fetal Growth Problems		28
OB-8.1: Fetal Growth Restriction-Small for Dates Current Pregnancy		29
OB-8.2: Macrosomia-Large for Dates Current Pregnancy		30
OB-9: Placental or Cord Abnormalities		32
OB-9.1: Vasa Previa		33
OB-9.2: Placental or Cord Abnormalities		33
OB-9.3: Subchorionic Hematoma or Placental Hematoma		33
OB-9.4: Suspected Abruption Placentae		34
OB-9.5: Placenta Previa		34
OB-9.6: Placenta Accreta/Placenta Percreta		34
OB-10: Fetal Aneuploidy and Anomaly Screening		36
OB-11: High Risk Pregnancy		41
OB-11.1: High Risk Group One-Risk Factors		43
OB-11.2: High Risk Group Two – Findings on Ultrasound That May Require Further Imaging		45
OB-11.3: High Risk Group Three – BMI		45
OB-11.4: High Risk Group Four		47
OB-11.5: High Risk Group Five: Zika Virus		47
OB-11.6: High Risk Group 6 – Pre-Gestational Diabetes on Oral Medications or Insulin		48
OB-11.7: High Risk Group Seven Gestational Diabetes		50
OB-11.8: Hypertension		52
OB-11.9: Single Umbilical Artery		53

OB-11.10: History of Pre-Term Delivery/History of PPROM	53
OB-11.11: History of Stillbirth	54
OB-12: History of Infertility	58
OB-13: Cervical Insufficiency/Current Preterm Labor	60
OB-13.1: Cervical Insufficiency	61
OB-13.2: Cerclage in place in current pregnancy	61
OB-13.3: Current Preterm Labor	62
OB-14: Intrauterine Device (IUD)	63
OB-15: Macrosomia	65
OB-16: Multiple Pregnancies	66
OB-17: Previous C-section	70
OB-18: Post Date Pregnancy	72
OB-19: Preterm/Premature Rupture of Membranes	74
OB-20: Third Trimester Imaging	76
OB-21: Uncertain Dates	78
OB-22: Unequal Fundal Size and Dates	80
OB-23: Uterine Anomalies/Adnexal/Pelvic Masses/Ovarian Cysts or Mass	82
OB-24: Procedure Coding Basics for Established Pregnancy	85
OB-24.1: OB Ultrasound Code Selection	87
OB-24.2: Required Elements for First Trimester OB Ultrasound	88
OB-24.3: Required Elements for Second or Third Trimester Fetal Anatomic Evaluation OB Ultrasound	89
OB-24.4: Required Elements for a Detailed Fetal Anatomic Evaluation OB Ultrasound	91
OB-24.5: Fetal Nuchal Translucency	94
OB-24.6: Limited and Follow-Up Studies	95
OB-24.7: Obstetric Transvaginal Ultrasound	96
OB-24.8: Biophysical Profile (BPP)	96
OB-24.9: Fetal Doppler	97
OB-24.10: Duplex Scan (Uterine Artery)	99
OB-24.11: Fetal Echocardiography	101
OB-24.12: 3D and 4D Rendering	102
OB-24.13: Fetal MRI	104
OB-25: High Risk Medications and Substances	106
OB-26: Imaging for Planned Pregnancy Termination	108

Abbreviations and Glossary for OB Ultrasound Imaging Guidelines

ACOG	American College of Obstetricians and Gynecologists
AFI	amniotic fluid index
AFP	alpha-fetoprotein
CST	contraction stress test
B-mode (brightness)	a 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.
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
FHR	fetal heart rate
hCG	human chorionic gonadotropin
IDDM	insulin-dependent diabetes mellitus
FGR	Fetal growth restriction; an estimated or actual weight of the fetus below 10 th percentile for gestational age
M-mode	an 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: 1.) maximum deepest pocket of ≤ 2cm, and, 2.) AFI of ≤ 5cm or < the 5 th percentile for gestational age
PACS	Picture Archiving and Communications System
polyhydramnios	1.) AFI ≥ 24cm, 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”

Obstetrical Ultrasound Imaging General Guidelines

Required Documentation

- An evaluation of pregnancy with 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:
 - ◆ Anticipated date of service
 - ◆ Expected date of delivery
 - ◆ Gestational age at date of service
 - ◆ Results of prior ultrasound studies if available

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** appropriate for the following:
 - ◆ Sex determination only.
 - ◆ To provide a keepsake or souvenir picture.

Practice Note

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.²

References

1. 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. Accessed November 3, 2017.
http://journals.lww.com/obgynsurvey/Abstract/2014/08000/Fetal_Imaging_Executive_Summary_of_a_Joint.4.aspx.
2. Practice Bulletin No. 175 Summary: Ultrasound in pregnancy. *Obstet Gynecol*. 2016;128(6):1459-1460. Accessed November 3, 2017.
http://journals.lww.com/greenjournal/Abstract/2016/12000/Practice_Bulletin_No_175_Summary_Ultrasound_in.50.aspx.

OB-1: Vaginal Bleeding and/or Abdominal/Pelvic Pain/Cramping with or without Trauma

OB-1.1: Abdominal Pain	7
OB-1.2: Trauma	7
OB-1.3: Vaginal Bleeding and/or Abdominal/Pelvic Cramping/Pain	7
OB-1.4: Ectopic Pregnancy	8
OB-1.5: Spontaneous Abortion	8
OB-1.6: Hydatidiform Mole	9

OB-1.1: Abdominal Pain

For abdominal pain or trauma that presents without bleeding:

- Initially CPT® 76815 and/or CPT® 76817 for limited ultrasound when medically indicated **or**
 - ◆ CPT® 76801 and/or CPT® 76817 when complete ultrasound has not yet been performed, if less than 14 weeks **or**
 - ◆ CPT® 76805 (plus CPT® 76810 if more than one fetus) if equal to or greater than 14 weeks, when complete fetal anatomic scan CPT® 76805 is planned and has not yet been performed.

OB-1.2: Trauma

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.

Management of outpatient trauma implies that the trauma was not serious enough to be treated as inpatient. The major risk is abruptio placentae:

- Monitor for uterine contractions for those > 20 weeks.
- CPT® 76805 (plus CPT® 76810 if more than one fetus) when complete fetal anatomic scan CPT® 76805 is planned and has not yet been performed, **or**
- CPT® 76815 or CPT® 76816 (if a complete anatomy ultrasound was done previously)
 - ◆ Additionally, if greater than 24 weeks, BPP CPT® 76818 or CPT® 76819 or CPT® 76815 for AFI can be considered.
- Other advanced imaging may be indicated, send for Medical Director review.

OB-1.3: Vaginal Bleeding and/or Abdominal/Pelvic Cramping/Pain

Vaginal Bleeding and/or Abdominal/Pelvic Cramping/Pain

First Trimester

- Initially CPT® 76815 and/or CPT® 76817 for limited ultrasound when medically indicated **or**
- CPT® 76801 when complete ultrasound has not yet been performed, if less than 14 weeks and/or CPT® 76817 may be performed once when medically indicated for complete ultrasound.

Second and Third Trimesters

CPT® 76815 or CPT® 76816 if a complete anatomic ultrasound was done previously and/or CPT® 76817

OB-1.4: Ectopic Pregnancy

Ectopic Pregnancy
First Trimester
<i>Signs and symptoms of ectopic pregnancy include pain and/or bleeding</i>
Initially CPT® 76815 and/or CPT® 76817 for limited ultrasound when medically indicated or CPT® 76801 when complete ultrasound has not yet been performed, if less than 14 weeks and/or CPT® 76817 may be performed once when medically indicated for complete ultrasound.
If patient has a history of ectopic pregnancy with non-doubling hCG without pain and bleeding, ultrasound can be performed (CPT® 76801 and/or CPT® 76817) to confirm an intrauterine pregnancy
If ectopic pregnancy is being treated non-surgically with Methotrexate, imaging may be required per <u>OB-1: Vaginal Bleeding and/or Abdominal/Pelvic Pain/Cramping with or without Trauma</u> or the imaging guidelines above for ectopic pregnancy.

OB-1.5: Spontaneous Abortion

Spontaneous Abortion
<ul style="list-style-type: none"> ➤ For <u>spontaneous abortion</u> (miscarriage), ultrasound can be performed to evaluate threatened or missed abortion (with or without vaginal bleeding prior to 20 weeks) <ul style="list-style-type: none"> ◆ Initially CPT® 76815 and/or CPT® 76817 for limited ultrasound when medically indicated or ◆ CPT® 76801 when complete ultrasound has not yet been performed, if less than 14 weeks and/or CPT® 76817 may be performed once when medically indicated for complete ultrasound ◆ Repeat ultrasound (CPT® 76815 or CPT® 76816 if a complete anatomic ultrasound was done previously and/or CPT® 76817) is appropriate in the setting of rising or non-falling serum hCG levels at weekly intervals ◆ Ultrasound imaging can be repeated earlier than seven days if there are new symptoms
<ul style="list-style-type: none"> ➤ For <u>complete spontaneous abortion</u>, ultrasound is generally not indicated if there is no pain, no ongoing bleeding, and hCG levels are decreasing

OB-1.6: Hydatidiform Mole

Hydatidiform Mole

First, Second and Third Trimester

- Ultrasound can be performed for diagnosis of hydatidiform mole
 - ◆ Initially CPT® 76815 and/or CPT® 76817 for limited ultrasound when medically indicated **or**
 - ◆ CPT® 76801, when complete ultrasound has not yet been performed, if less than 14 weeks, and/or CPT® 76817 may be performed once when medically indicated for complete ultrasound.
- Following treatment with D & C and/or Methotrexate, serial serum hCG values are measured until they become negative.
 - ◆ Ultrasound may be necessary for follow-up (CPT® 76815, or CPT® 76816 if a complete anatomic ultrasound was done previously, and/or CPT® 76817) if hCG titers are not decreasing as expected, are increasing following treatment, or if there is onset of pain despite falling hCG titers.

References

1. Committee Opinion No. 529: Placenta accreta. *Obstet Gynecol.* 2012;120(1):207-211, reaffirmed 2017. Accessed November 3, 2017.
http://journals.lww.com/greenjournal/Citation/2012/07000/Committee_Opinion_No_529_Placenta_Accreta.42.aspx

OB-2: Abnormal Fetal Position or Presentation

OB-2.1: Abnormal Fetal Position or Presentation

11

OB-2.1: Abnormal Fetal Position or Presentation

- Confirmation of suspected abnormal fetal position or presentation (transverse or breech presentation):
 - ◆ An ultrasound can be performed at 36 weeks gestation or greater 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

Coding Notes

- Report one of the following:
 - ◆ CPT® 76805 (plus CPT® 76810 if more than one fetus) for complete fetal anatomic scan when complete fetal anatomic scan CPT® 76805 is planned and has not yet been performed **or**
 - ◆ CPT® 76815 for limited ultrasound

Practice Note

Fetal presentation should be assessed by abdominal palpation at 36 weeks or later, when presentation is likely to influence the plans for the birth. Routine assessment of presentation by abdominal palpation should not be offered before 36 weeks because it is not always accurate and may be uncomfortable. Suspected fetal malpresentation should be confirmed by an ultrasound assessment.

Reference

1. Practice Bulletin No. 161: Summary. External cephalic version. *Obstetrics & Gynecology*. 2016;127(2):412-413. Accessed November 14, 2017.
http://journals.lww.com/greenjournal/Abstract/2016/02000/Practice_Bulletin_No_161_Summary_External.44.aspx

OB-3: Alloimmunization/Rh Isoimmunization/Other Causes of Fetal Anemia/Parvo/Hydrops

OB-3.1: Alloimmunization/RH Isoimmunization/Other Causes of Fetal Anemia	13
OB-3.2: Exposure to Parvovirus B-19	13
OB-3.3: Twin Anemia Polycythemia Sequence	13
OB-3.4: Fetal Hydrops Associated with Polyhydramnios	14

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.

OB-3.1: Alloimmunization/RH Isoimmunization/Other Causes of Fetal Anemia

Imaging for Alloimmunization/ RH Isoimmunization:
<ul style="list-style-type: none"> ➤ Ultrasound (CPT® 76816) every 2 to 4 weeks to assess fetal growth starting after performance of the fetal anatomic scan CPT® 76811 at 16 weeks or greater. If less than 16 weeks, send to MD Review
<ul style="list-style-type: none"> ➤ Weekly BPP (CPT® 76818 or CPT® 76819) or CPT® 76815 for AFI with NST starting at 32 weeks or sooner depending on fetal condition
<ul style="list-style-type: none"> ➤ 3a. Weekly fetal middle cerebral artery MCA Doppler (CPT® 76821) starting at 20 weeks or sooner depending on fetal condition when any one of the following maternal antibody titers are ≥ 1:8 <ul style="list-style-type: none"> ◆ Anti-D antibody and/or ◆ Anti-Duffy (.i.e anti-fya, anti-fyb) antibody and/or ◆ Anti-Kidd antibody ➤ 3b. With Anti-Kell antibody (any antibody titer) MCA Doppler (CPT® 76821) once weekly ➤ 3c. Evidence of fetal hydrops on previous imaging once weekly MCA Doppler (CPT® 76821) ➤ Because MCA-PSV increases across gestation, results should be adjusted for gestational age. 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. The optimal interval between examinations has not been determined, but should be one to two weeks based on clinical experience and what is known about progression of fetal anemia in this setting

OB-3.2: Exposure to Parvovirus B-19

- Parvovirus B-19 (Fifth Disease):
 - ◆ Ultrasound (CPT® 76816) every 2 to 4 weeks to assess fetal growth starting at time of known exposure and continuing for 8 to 10 weeks post-exposure
 - ◆ Weekly BPP (CPT® 76818 or CPT® 76819) or CPT® 76815 for AFI with NST starting at time of known exposure if ≥ 24 weeks gestation and continuing for 8 to 12 weeks post-exposure
 - ◆ Fetal middle cerebral artery (MCA) Doppler (CPT® 76821) every 1 to 2 weeks, starting at time of known exposure, if 16 weeks or greater and continuing for 8 to 12 weeks post-exposure

OB-3.3: Twin Anemia Polycythemia Sequence

- See: **OB-16.3: Monochorionic-diamniotic or monochorionic-monoamniotic multiple pregnancies**

OB-3.4: Fetal Hydrops Associated with Polyhydramnios

- Fetal hydrops associated with Polyhydramnios: if diagnosed with hydrops, image according to **OB-3.1: Alloimmunization/Rh Isoimmunization/Other Causes of Fetal Anemia**

Practice Notes

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 in subsequent Rh+ pregnancies.

Twin anemia polycythemia sequence (TAPS) may occur spontaneously in up to 5% of monochorionic twins and may also develop after incomplete laser treatment in twin-twin transfusion syndrome (TTTS) cases. As with TTTS the underlying mechanism is thought to be abnormal placental vascular anastomoses. One twin develops anemia and the other polycythemia. One of the features suggesting towards the diagnosis is discordance in fetal middle cerebral artery peak systolic velocity (MCA-PSV) measurements

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

References

1. Mari G, Deter RL, Carpenter RL, et al. Noninvasive diagnosis by Doppler ultrasonography of fetal anemia due to maternal red-cell alloimmunization. Collaborative Group for Doppler Assessment of the Blood Velocity in Anemic Fetuses. *N Engl J Med.* 2000;342(1):9-14. Accessed November 14, 2017. <http://www.nejm.org/doi/full/10.1056/NEJM200001063420102>.
2. Lopriore E, Slaghekke F, Oepkes D, et al. Clinical outcome in neonates with twin anemia-polycythemia sequence. *Am. J. Obstet. Gynecol.* 2010; 203(1):54.e1-5. Accessed November 14, 2017. [http://www.ajog.org/article/S0002-9378\(10\)00245-0/fulltext?cc=y](http://www.ajog.org/article/S0002-9378(10)00245-0/fulltext?cc=y).
3. Slaghekke F, Kist WJ, Oepkes D, et al. Twin anemia-polycythemia sequence: diagnostic criteria, classification, perinatal management and outcome. *Fetal Diagn Ther.* 2010;27(4):181-90. Accessed November 20, 2017. <https://www.ncbi.nlm.nih.gov/pubmed/20339296>.
4. Suzuki S. Twin anemia-polycythemia sequence with placental arterio-arterial anastomoses. *Placenta.* 2010;31(7):652. Accessed November 14, 2017. [http://www.placentajournal.org/article/S0143-4004\(10\)00158-X/pdf](http://www.placentajournal.org/article/S0143-4004(10)00158-X/pdf).
5. Gucciardo L, Lewi L, Vaast P, et al. Twin anemia polycythemia sequence from a prenatal perspective. *Prenat Diagn* 2010;30(5):438-42. Accessed November 14, 2017. <http://onlinelibrary.wiley.com/doi/10.1002/pd.2491/epdf>.
6. Weingertner AS, Kohler A, Kohler M, et-al. Clinical and placental characteristics in four new cases of twin anemia-polycythemia sequence. *Ultrasound Obstet Gynecol.* 2010;35(4):490-4. Accessed November 14, 2017. <http://onlinelibrary.wiley.com/doi/10.1002/uog.7508/abstract>
7. Practice Bulletin No. 75: Management of alloimmunization , reaffirmed 2016 *Obstet Gynecol.* 2006 Aug;108(2):457-464. Accessed November 14, 2017. https://www.researchgate.net/publication/289994990_ACOG_Practice_Bulletin_No_75_Management_of_Alloimmunization

8. Lamont RF, Sobel JD, Vaisbuch E, et al. Parvovirus B19 infection in human pregnancy. *Brit J Obstet Gynecol*. 2011;118:175-186. Accessed November 14, 2017. <http://onlinelibrary.wiley.com/doi/10.1111/j.1471-0528.2010.02749.x/abstract>.
9. Reddy UM, Filly RA, and Copel JA. Prenatal imaging: ultrasonography and magnetic resonance imaging. *Obstet Gynecol*. 2008;112(1):145-157. Accessed November 14, 2017. <http://journals.lww.com/greenjournal/pages/articleviewer.aspx?year=2008&issue=07000&article=00024&type=abstract>
10. 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. Accessed November 14, 2017. http://journals.lww.com/obgynsurvey/Abstract/2014/08000/Fetal_Imaging_Executive_Summary_of_a_Joint.4.aspx
11. Mari G, Norton ME, Stone J, et al. Society for Maternal-Fetal Medicine (SMFM) Clinical guideline No. 8: The fetus at risk for anemia: diagnosis and management. *Am J Obstet Gynecol*. 2015;212(6):697-710. Accessed November 14, 2017. [http://www.ajog.org/article/S0002-9378\(15\)00203-3/pdf](http://www.ajog.org/article/S0002-9378(15)00203-3/pdf).
12. Crane J, Mundle W, and Boucoiran I. SOGC Clinical Practice Guideline No. 316. Parvovirus B19 Infection in Pregnancy. *J Obstet and Gynecol Canada*. 2014;36(12):1107-1116. Accessed January 29, 2018. [http://www.jogc.com/article/S1701-2163\(15\)30390-X/fulltext](http://www.jogc.com/article/S1701-2163(15)30390-X/fulltext).
13. Practice Bulletin No. 151. Cytomegalovirus, parvovirus B19, varicella zoster, and toxoplasmosis in pregnancy. *Obstet Gynecol*. 2015 Jun;125(6):1510-1525. Accessed January 29, 2018. https://journals.lww.com/greenjournal/Citation/2015/06000/Practice_Bulletin_No_151_Cytomegalovirus,.54.aspx
14. Khalil A, Rodgers M, Baschat A et al. ISUOG Practice Guidelines: role of ultrasound in twin pregnancies. *Ultrasound Obstet Gynecol* 2016;47(2):247–263. Accessed November 16, 2017. <http://onlinelibrary.wiley.com/doi/10.1002/uog.15821/epdf>

OB-4: Amniotic Fluid Abnormalities/ Oligohydramnios/ Polyhydramnios

OB-4.1: Amniotic Fluid Abnormalities

17

OB-4.1: Amniotic Fluid Abnormalities

For suspected polyhydramnios or oligohydramnios:
<ul style="list-style-type: none"> ➤ One ultrasound is appropriate ➤ CPT® 76805 (plus CPT® 76810 if more than one fetus) for complete fetal anatomic scan when complete fetal anatomic scan CPT® 76805 is planned and has not yet been performed or ➤ If complete fetal anatomic scan CPT® 76805 was previously performed: ➤ CPT® 76815 for limited ultrasound or ➤ CPT® 76816 for complete ultrasound (if complete anatomy ultrasound was done previously)
For confirmed diagnosis of polyhydramnios: AFI ≥ 24cm or maximum deepest vertical pocket ≥ 8cm.
<ul style="list-style-type: none"> ➤ One ultrasound (CPT® 76816) <ul style="list-style-type: none"> ◆ Starting at ≥ 22 weeks, every 3 to 4 weeks for mild polyhydramnios; AFI ≥ 24 cm to 30 cm or maximum deepest vertical pocket ≥ 8 cm to 10 cm ◆ Starting at ≥ 22 weeks, every 2 weeks for severe polyhydramnios; AFI > 30 or maximum deepest vertical pocket is > 10 cm ➤ Starting at 26 weeks, weekly BPP (CPT® 76818 or CPT® 76819) or CPT® 76815 for AFI with NST, if maximum vertical pocket is ≥ 8 cm or if AFI ≥ 24 cm. ➤ Starting at 26 weeks, twice-weekly BPP (CPT® 76818 or CPT® 76819) or CPT® 76815 for AFI with NST, if maximum deepest vertical pocket is > 10 cm or an AFI > 30 ➤ One time fetal echo if initial echo has not already been performed (CPT® 76825 and/or CPT® 76827 and/or CPT® 93325. All requests for follow-up echo go to Medical Director review.
For confirmed diagnosis of oligohydramnios: AFI ≤ 5 cm or maximum vertical pocket ≤ 2 cm
Starting at ≥ 22 weeks, one ultrasound (CPT® 76816) every 2 to 4 weeks for fetal growth
Starting at 26 weeks, weekly biophysical profile (CPT® 76818 or CPT® 76819) or CPT® 76815 for AFI with NST, if maximum vertical pocket ≤ 2 cm or AFI ≤ 5 cm. If less than 26 weeks send to Medical director review
Starting at time of diagnosis, weekly umbilical artery Doppler (CPT® 76820)

Practice Notes

Polyhydramnios refers to excessive amniotic fluid volume. It is determined with AFI ≥ 24 cm or (greater than the 95th percentile by gestational age), or maximum deepest vertical pocket ≥ 8 cm.

Oligohydramnios refers to diminished amniotic fluid volume. At 30 weeks or greater, it is determined with AFI ≤ 5 cm by measuring fluid in each of the four quadrants or by the maximum single deepest vertical pocket ≤ 2 cm (is the best definition of oligohydramnios). At less than 30 weeks, oligohydramnios is determined by a gestation age cut off of ≤ 5 percentile

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-3.1: Alloimmunization/RH Isoimmunization/Other Causes of Fetal Anemia.**

Polyhydramnios may also present as a finding of cardiac dysfunction, fetal arrhythmias or cardiac malformation. Fetal echocardiography is commonly performed to determine if any other conditions are present or not. See: **OB-7: Fetal Echocardiography (ECHO)**

References

1. Practice Bulletin No. 175: Ultrasound and pregnancy. *Obstet Gynecol.* 2016;128(6):1459-1460. Accessed November 15, 2017.
http://journals.lww.com/greenjournal/Abstract/2016/12000/Practice_Bulletin_No_175_Summary_Ultrasound_in.50.aspx.
2. Practice Bulletin 145: Antepartum fetal surveillance. *Obstet Gynecol.* 2014;124(1):182-192, reaffirmed 2016. Accessed November 15, 2017.
http://journals.lww.com/greenjournal/Citation/2014/07000/Practice_Bulletin_No_145_Antepartum_Fetal.35.aspx.

OB-5: Fetal Anatomic Scan

OB-5.1: Initial Screening for Fetal Anomalies	20
OB-5.2: Follow-Up	20

OB-5.1: Initial Screening for Fetal Anomalies

- A fetal anatomic scan to screen for anomalies is ideally performed at 18 to 20 weeks, but may be performed after week ≥ 16 . If less than 16 weeks gestation, send to MD review
 - ◆ CPT® 76817 transvaginal ultrasound can be considered if the cervical length is less than or equal to 3.0 cm with transabdominal ultrasound measurement
 - ◆ Reported as CPT® 76805 if the patient is **not** high risk.
 - ◆ If pregnancy **is** high risk report as (CPT® 76811). A detailed fetal anatomic scan (CPT® 76811) is performed by a Maternal Fetal Medicine (MFM) specialist, Perinatologist, Radiologist, or AIUM or ACR accredited facilities as the screening anatomic study. **See: OB-11: High Risk Pregnancy**

OB-5.2: Follow-Up

- Follow-up ultrasounds (CPT® 76816) can be performed every 3 to 6 weeks to evaluate fetal growth if pregnancy is high risk. See also: **OB-11: High Risk Pregnancy**
- Follow-up ultrasound (CPT® 76815 or CPT® 76816) can be performed if indeterminate, incomplete or equivocal finding on initial fetal anatomic scan. A limited ultrasound CPT® 76815 if limited to a follow up of a single item
- Detailed anatomy ultrasound CPT® 76811 can be performed if not previously performed when initial fetal anatomic scan CPT® 76805 is abnormal. See: **OB-11: High Risk Pregnancy**

Coding Notes

Fetal Anatomic Scan - Coding Notes	
CPT® 76805	A complete transabdominal ultrasound (CPT® 76805). See: <u>OB-24.3: Required Elements for Second or Third Trimester Fetal Anatomic Evaluation OB Ultrasound</u>
CPT® 76810	CPT® 76810 is an add-on code used with the primary procedure CPT® 76810 to report each additional fetus if there is a multiple gestation
CPT® 76805 CPT® 76810	CPT® 76805 and CPT® 76810 should only be reported once per pregnancy unless the mother changes to a new medical caregiver at a new office, and there is a medical indication for ultrasound
CPT® 76811 CPT® 76812	CPT® 76811 and CPT® 76812 are defined as including all of the requirements listed for procedures CPT® 76805 and CPT® 76810 plus additional detailed anatomic examination. The pregnancy must also be high risk to support CPT® 76811 and CPT® 76812. In addition the report must include the detailed elements found in OB 24.4. See: <u>OB-24.4: Required Elements for a Detailed Fetal Anatomic Evaluation OB Ultrasound</u>
CPT® 76812	CPT® 76812 is an add-on code used with the primary procedure CPT® 76812 to report each additional fetus in a multiple gestation
CPT® 76811	The reporting of CPT® 76811 only once per pregnancy, per practice (per NPI) is appropriate

References

1. Wax J, Minkoff H, Johnson A, et al. Consensus report on the detailed fetal anatomic ultrasound examination: indications, components, and qualifications. *J Ultrasound in Medicine*. 2014 Feb;33(2):189-195. Accessed December 12, 2017. <http://onlinelibrary.wiley.com/doi/10.7863/ultra.33.2.189/full>.
2. Practice Bulletin No. 175: Ultrasound in pregnancy. *Obstet Gynecol*. 2016;128(6):1459-1460. Accessed November 15, 2017. http://journals.lww.com/greenjournal/Abstract/2016/12000/Practice_Bulletin_No_175_Summary_Ultrasound_in.50.aspx.
3. Wax J, Minkoff H, Johnson A et al. Consensus report on the detailed fetal anatomic ultrasound examination indications, components, and qualifications. *J Ultrasound Med*. 2014;33(2):189-195. Accessed November 15, 2017. http://api.ning.com/files/cZ399qCqOaHeuZzVLVyhIBxiUetrLyKO3Bw9Tt6vH2VZjNDiuNoRV*TfNUrqT5k4qdLfS6J8OIAgmAHfkKiXIDZdpW4U1-u/consensus768112014.pdf
4. Berghella V, Blackwell S, Anderson B, et al. Progesterone and preterm birth prevention: translating clinical trials data into clinical practice. *Am J Obstet Gynecol*. 2012;206(5):376-386. Accessed November 15, 2017. [http://www.ajog.org/article/S0002-9378\(12\)00291-8/fulltext](http://www.ajog.org/article/S0002-9378(12)00291-8/fulltext).
5. American Medical Association. CPT—Current Procedural Terminology. Accessed November 15, 2017. <https://www.ama-assn.org/practice-management/cpt-current-procedural-terminology>.
6. Practice bulletin 130: Prediction and prevention of pre-term birth. *Obstet Gynecol*. 2012;120(4):964-973, reaffirmed 2016. Accessed November 15, 2017. http://journals.lww.com/greenjournal/Citation/2012/10000/Practice_Bulletin_No_130_Prediction_and.42.aspx.
7. Cho, H.J. and Roh, H.J. Correlation Between Cervical Lengths Measured by Transabdominal and Transvaginal Sonography for Predicting Preterm Birth. *J Ultrasound Med*. 2016; 35:537–544. Accessed November 15, 2017. <http://onlinelibrary.wiley.com/doi/10.7863/ultra.15.03026/epdf>.
8. McIntosh J, Feltovich H, Berghella V et al. The role of routine cervical length screening in selected high- and low-risk women for preterm birth prevention. *Am J Obstet Gynecol*. 2016; 215(3):B2-B7. Accessed November 15, 2017. [http://www.ajog.org/article/S0002-9378\(16\)30112-0/fulltext](http://www.ajog.org/article/S0002-9378(16)30112-0/fulltext).
9. Khalifeh A, Berghella V, Stamilio D, et al. Ultrasound approach for cervical length screening in preterm birth prevention. *Am J Obstet Gynecol*. 2016 Dec;215(6):739-744.
10. 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 Mar 14;317(10):1047-1056. Accessed January 29, 2018. <https://jamanetwork.com/journals/jama/fullarticle/2610337>.
11. Jain S, Kilgore M, Edwards, RK, et al. Revisiting the cost-effectiveness of universal cervical length screening: importance of progesterone efficacy. *Am J Obstet Gynecol*. 2016 Jul;215(1):101.e1-7. Accessed January 29, 2018. [http://www.ajog.org/article/S0002-9378\(16\)00215-5/fulltext](http://www.ajog.org/article/S0002-9378(16)00215-5/fulltext).

OB-6: No Fetal Heart Tone/Decreased Fetal Movement

OB-6.1: No Fetal Heart Tone/Decreased Fetal Movement	23
---	-----------

OB-6.1: No Fetal Heart Tone/Decreased Fetal Movement

- Ultrasound is appropriate to confirm suspected fetal demise

The following is supported during the first trimester:

- Prior to considering ultrasound for absence of fetal heart tone at less than 12 weeks, fetal heart tone assessment should be repeated at 12 weeks gestation
- Ultrasound imaging is supported, prior to 12 weeks gestation, in the setting of absent fetal heart tones accompanied by other maternal signs or symptoms (such as cramping, vaginal bleeding, etc.). Report **one** of the following:
 - ◆ CPT® 76801 (plus CPT® 76802 if more than one fetus) and/or CPT® 76817 if a complete ultrasound has not yet been performed; or
 - ◆ CPT® 76815 for limited ultrasound and/or CPT® 76817
- Note: CPT® 76816 can only be used after CPT® 76805 has been performed, therefore should not be done in the first trimester

The following is supported during the second and third trimester:

- If less than 24 weeks gestation, report **one** of the following:
 - ◆ CPT® 76805 if a complete fetal anatomic scan is planned and has not yet been performed during this pregnancy (plus CPT® 76810 if more than one fetus); **or**
 - ◆ CPT® 76816 if a complete ultrasound was done previously; **or**
 - ◆ CPT® 76815 for limited ultrasound; **and/or**
 - ◆ CPT® 76817 for a transvaginal ultrasound
- If pregnancy is greater than or equal to 24 weeks, initial evaluation is usually done by fetal non-stress test (CPT® 59025) with: 1) AFI (CPT® 76815); or ultrasound (CPT® 76815) to document fetal heart activity or BPP (CPT® 76818 or CPT® 76819) if 24 weeks or greater; or 3) contraction stress test (CST) and AFI. No imaging is necessary if:
 - ◆ NST is reactive and AFI is normal **or**
 - ◆ CST is negative
- If NST is non-reactive or CST is positive:
 - ◆ CPT® 76805 if a complete fetal anatomic scan is planned and has not yet been performed during this pregnancy (plus CPT® 76810 if more than one fetus) **or**
 - ◆ CPT® 76816 if a complete ultrasound was done previously **or**
 - ◆ CPT® 76815 for limited ultrasound

Reference

1. Practice Bulletin 145: Antepartum fetal surveillance. *Obstet Gynecol.* 2014;124(1):182-192, reaffirmed in 2016. Accessed November 15, 2017.
http://journals.lww.com/greenjournal/Citation/2014/07000/Practice_Bulletin_No_145_Antepartum_Fetal.35.aspx.

OB-7: Fetal Echocardiography (ECHO)

OB-7.1: Indications for Fetal Conditions	25
OB-7.2: Indications for Maternal Conditions	26

The minimal use of color Doppler alone, when performed for anatomical structure identification during a standard ultrasound procedure, is not separately reimbursable.

OB-7.1: Indications for Fetal Conditions

<ul style="list-style-type: none"> ➤ Fetal echocardiography (Initial study-CPT® 76825 or follow-up-CPT® 76826) (follow-up echo must go to MD review)
<ul style="list-style-type: none"> ➤ Doppler echocardiography (Initial study-CPT® 76827 or follow-up-CPT® 76828) (repeat echo must go to MD review) and
<ul style="list-style-type: none"> ➤ Doppler color flow velocity mapping (CPT® 93325) can be ordered together or separately for the following conditions:
<ul style="list-style-type: none"> ➤ Transabdominal fetal echo is usually not performed prior to 16 weeks
<ul style="list-style-type: none"> ➤ Abnormal or suspected abnormal fetal cardiac evaluation on fetal anatomic scan. <ul style="list-style-type: none"> ◆ There must be documentation (provided as hard copy or acknowledged verbally by provider) that the four chamber cardiac study was abnormal or suspected abnormal on the anatomic scan in order for fetal echo to be indicated
<ul style="list-style-type: none"> ➤ If a heart abnormality is found, a fetal ECHO (CPT® 76825 and/or CPT® 76827) may be approved for preparation of delivery
<ul style="list-style-type: none"> ➤ Suspected or known fetal arrhythmia (to define the rhythm and its importance)
<ul style="list-style-type: none"> ➤ If fetal structural cardiac disease is suspected, fetal echo can be performed to evaluate fetal cardiac structure and function
<ul style="list-style-type: none"> ➤ Known fetal extra-cardiac anomaly, excluding cardiac echogenic foci and choroid plexus cyst (See: OB-11.2.b: High Risk Group Two b)
<ul style="list-style-type: none"> ➤ Congenital heart disease (CHD) or cardiac anomaly in a 1st degree relative of the fetus (maternal, paternal, or sibling)
<ul style="list-style-type: none"> ➤ As a screening study typically performed at 22 to 26 weeks gestation (may be performed earlier if anomaly is suspected on prior ultrasound) <ul style="list-style-type: none"> ◆ if maternal non-diet-controlled diabetes is present (See: OB-11: High Risk Pregnancy)
<ul style="list-style-type: none"> ➤ Known fetal chromosomal abnormalities (fetal aneuploidy) or ultrasound findings of a suspected chromosomal abnormality.
<ul style="list-style-type: none"> ➤ Single umbilical artery (two vessel cord), abnormality of umbilical cord, placenta or intraabdominal venous anomaly (persistent right umbilical vein)
<ul style="list-style-type: none"> ➤ Fetal hydrops (See: OB-3: Alloimmunization/Rh Isoimmunization/Other Causes of Fetal Anemia)
<ul style="list-style-type: none"> ➤ Monochorionic twins/TTTS
<ul style="list-style-type: none"> ➤ IVF pregnancies
<ul style="list-style-type: none"> ➤ Exposure of fetus to: <ul style="list-style-type: none"> ◆ Lithium ◆ Excessive alcohol ◆ Anti-seizure medication, e.g. hydantoin ◆ Paroxetine ◆ Birth control pills ◆ Ace inhibitors ◆ Folate antagonists (methotrexate) ◆ Anticonvulsants ◆ Retinoic acid ◆ Thalidomide ◆ Amphetamines

<ul style="list-style-type: none"> ◆ Cocaine ◆ NSAIDS (Ibuprofen, Indomethacin) 2nd and 3rd trimester ◆ Vitamin A greater than 10,000 units per day ◆ Opiates ◆ Benzodiazepines ◆ Other teratogen exposure to the fetus with a known association for cardiac anomalies
<ul style="list-style-type: none"> ➤ Abnormal Fetal Nuchal Translucency scan ($\geq 3.0\text{mm}$) during current pregnancy. <ul style="list-style-type: none"> ◆ Can also perform CPT® 76811 if not previously performed or if patient is being referred to another specialist (MFM, Perinatologist or Radiologist) for a second opinion. Otherwise, perform CPT® 76816
<ul style="list-style-type: none"> ➤ Polyhydramnios

OB-7.2: Indications for Maternal Conditions

For Maternal Conditions:
All diabetes except gestational diabetes mellitus not on medication unless HbA1C is > 7% Systemic lupus erythematosus with Anti-Ro/SSA or anti-La/SSB antibodies present Rubella infection Collagen vascular diseases (RA, Scleroderma, Sjogren’s Syndrome) Phenylketonuria
Presence of other maternal conditions associated with cardiac anomalies (such as parvovirus, CMV, Coxsackie virus, Toxoplasmosis)
Family history of a first degree relative to the fetus with a congenital heart defect (such as family history of Marfan syndrome or Noonan syndrome)
Seizure disorder

Coding Notes

- Requests for repeat fetal echo will be forwarded to Medical Director review
- CPT® 76825 and CPT® 76827 are performed only once per fetus
- Follow-up echocardiograms are reported as CPT® 76826
- Follow-up Doppler fetal echocardiograms are reported as CPT® 76828
- If a Fetal Echo is ordered for an individual who has not had a previous echo in the pregnancy, and the clinical criteria are met, then the Fetal Echo may be approved using the following CPT® codes for the initial echo:
- CPT® 76825 and/or CPT® 76827 and/or CPT® 93325 (add on code for color mapping)
- Requests for follow-up studies CPT® 76826 and/or CPT® 76828 (limited/follow-up study) will be forwarded to Medical Director for review.

Practice Note

There are no formal guidelines for the type or the frequency of testing to detect fetal heart block, but performing weekly pulsed Doppler fetal echocardiography from the 18th through the 26th week of pregnancy and then every other week until 32 weeks should be strongly considered. 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.

References

1. Donofrio MT, Moon-Grady AJ, Hornberger LK et al. Diagnosis and treatment of fetal cardiac disease: a scientific statement from the American Heart Association. *Circulation*. 2014;129(21):2183-242. Accessed November 15, 2017. <https://www.medscape.com/medline/abstract/24763516>.
2. Gewillig M, Brown SC, De Catte L, et al. Premature foetal closure of the arterial duct: clinical presentations and outcome. *Eur Heart J* 2009;30(12):1530-1536. Accessed November 15, 2017. <http://www.pcssa.org/test/wp-content/uploads/2013/12/Premature-foetal-closure-of-the-arterial.pdf>.
3. Brucato A. Prevention of congenital heart block in children of SSA-positive mothers. *Rheumatology*. 2008;47(3):iii35-iii37. Accessed November 15, 2017. <https://academic.oup.com/rheumatology/article-lookup/doi/10.1093/rheumatology/ken153>.
4. Clur SA, Ottenkamp, and Bilardo CM. The nuchal translucency and the fetal heart: a literature review. *Prenat Diagn*. 2009;29(8):739-48. Accessed November 15, 2017. <http://onlinelibrary.wiley.com/doi/10.1002/pd.2281/epdf>.

OB-8: Fetal Growth Problems

OB-8.1: Fetal Growth Restriction-Small for dates Current Pregnancy	29
OB-8.2: Macrosomia-Large for Dates Current Pregnancy	30

OB-8.1: Fetal Growth Restriction-Small for Dates 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. “Abdominal Circumference $\leq 10^{\text{th}}$ percentile” also defines FGR.

For Suspected FGR:

One ultrasound can be performed if there is more than a 3 week difference in fundal height and gestational age report **one** of the following:

- ◆ CPT® 76805 (plus CPT® 76810 if more than one fetus) if a complete ultrasound has not yet been performed during this pregnancy **or**
- ◆ CPT® 76816 if a complete ultrasound was performed previously.

In order to evaluate fetal growth and confirm the diagnosis of FGR following the initial ultrasound, one follow-up ultrasound (CPT® 76816) can be performed 2 to 4 weeks following the initial ultrasound

For clinical situations that have a higher probability of FGR such as maternal hypertension, maternal diabetes, previous stillbirth, etc.

See: **OB-11: High Risk Pregnancy**, or the specific guidelines for these clinical entities for guidance regarding follow-up ultrasounds to assess fetal growth

For Known FGR:

Ultrasound (CPT® 76816) every 2 to 4 weeks to assess fetal growth starting at 22 to 24 weeks

Starting at 22 to 24 weeks, weekly BPP (CPT® 76818 or CPT® 76819) or CPT® 76815 for AFI with NST

Starting at 22 to 24 weeks, weekly umbilical artery Doppler (CPT® 76820); if umbilical artery dopplers are abnormal, daily BPPs (CPT® 76818 or CPT® 76819) may be considered

MCA Doppler (CPT® 76821) start at 34 weeks, weekly if the doppler CPT® 76820 is normal.

OB-8.2: Macrosomia-Large for Dates Current Pregnancy

The ACOG definition of macrosomia: Estimated fetal weight of greater than 4000 grams (DM) or 4500 grams (non-DM); $\geq 90^{\text{th}}$ percentile or greater for gestational age.

See also: **OB-11.4.a: Prior Pregnancy with Macrosomia**

For Suspected Macrosomia:

In a low risk pregnancy, ultrasound is generally not indicated to estimate fetal weight before 30 weeks gestation

At 30 weeks gestation or greater, if there is more than a 3 week difference in fundal height and gestational age, one ultrasound can be performed to evaluate for macrosomia if clinically indicated report **one** of the following:

CPT® 76805 [plus CPT® 76810 if more than one fetus] if a complete fetal anatomic scan is planned and has not yet been performed **or**

CPT® 76816 if a complete ultrasound was done previously

(See also: **OB-22: Unequal Fundal Size and Dates**)

For Known Macrosomia $\geq 90^{\text{th}}$ percentile

Repeat imaging is generally not necessary unless needed to plan for delivery or if there are other high risk indications. At > 30 weeks gestation, (CPT®76816) every 2 to 4 weeks only if other high risk indication(s) are present.

Imaging recommendations are usually guided by the cause of the fetal macrosomia (obesity, DM, etc. See appropriate GL for indication)

If no other high risk indication present, one CPT® 76816 at 37 weeks to plan for delivery.

References

1. Practice Bulletin No. 134: Fetal Growth Restriction. *Obstet Gynecol.* 2013, reaffirmed 2015;121(5):1122-1133. Accessed November 15, 2017.
http://journals.lww.com/greenjournal/Abstract/2013/05000/Practice_Bulletin_No_134_Fetal_Growth_Restriction.45.aspx.
2. Practice Bulletin No. 173: Fetal Macrosomia. *Obstet Gynecol.* 2013; reaffirmed 2015; 128(5):e195-e209. Accessed November 15, 2017.
http://journals.lww.com/greenjournal/Abstract/2016/11000/Practice_Bulletin_No_173_Fetal_Macrosomia.51.aspx.
3. Copel JA and Bahtiyar MO. A practical approach to fetal growth restriction. *ObstetGynecol.* 2014;123(5):1057-1069. Accessed November 15, 2017.
http://journals.lww.com/greenjournal/Abstract/2014/05000/A_Practical_Approach_to_Fetal_Growth_Restriction.22.aspx.

4. Oros D, Figueras F, Cruz-Martinez R, et al. Longitudinal changes in uterine, umbilical and fetal cerebral Doppler indices in late-onset small-for-gestational age fetuses. *Ultrasound Obstet Gynecol* 2011 Feb;37(2):191–195. Accessed January 30, 2018.
<http://onlinelibrary.wiley.com/doi/10.1002/uog.7738/abstract;jsessionid=9CADB1297CC59C7DD4C7472016BBED65.f01t02?systemMessage=Please+be+advised+that+we+experienced+an+unexpected+issue+that+occurred+on+Saturday+and+Sunday+January+20th+and+21st+that+caused+the+site+to+be+down+for+an+extended+period+of+time+and+affected+the+ability+of+users+to+access+content+on+Wiley+Online+Library.+This+issue+has+now+been+fully+resolved.+We+apologize+for+any+inconvenience+this+may+have+caused+and+are+working+to+ensure+that+we+can+alert+you+immediately+of+any+unplanned+periods+of+downtime+or+disruption+in+the+future.>
5. Cohen E, Baerts W, and van Bel F. Brain-Sparing in intrauterine growth restriction: considerations for the neonatologist. *Neonatology*. 2015;108:269-276. Accessed November 15, 2017.
<https://www.karger.com/Article/Pdf/438451>.
6. Practice Bulletin 145: Antepartum surveillance 2016. *Obstetrics and Gynecology*. 2014;124(1):182-192, reaffirmed in 2016. Accessed November 15, 2017.
http://journals.lww.com/greenjournal/Citation/2014/07000/Practice_Bulletin_No_145_Antepartum_Fetal.35.aspx.

OB-9: Placental or Cord Abnormalities	
OB-9.1: Vasa Previa	33
OB-9.2: Placental or Cord Abnormalities	33
OB-9.3: Subchorionic Hematoma or Placental Hematoma	33
OB-9.4: Suspected Abruptio Placentae	34
OB-9.5: Placenta Previa	34
OB-9.6: Placenta Accreta/Placenta Percreta	34
OB-9.6.a: Suspected	34
OB-9.6.b: Known	35

OB-9.1: Vasa Previa

- Vasa previa occurs when membranes that contain fetal blood vessels connecting the umbilical cord and placenta overlie the internal cervical os. Vasa previa can occur on its own or with placental abnormalities, such as a velamentous cord insertion.
- Ultrasound (CPT® 76817 and/or CPT® 76815 or CPT® 76816) every 2 to 4 weeks to assess cervical length starting at 28 weeks. If earlier, requests will be sent to Medical Director review.
- Amniocentesis is no longer required or recommended for lung maturity.

OB-9.2: Placental or Cord Abnormalities

- For the following conditions, ultrasound (CPT® 76817 and/or CPT® 76815 or CPT® 76816) every 2 to 4 weeks starting at 28 weeks until delivery and weekly BPP (CPT® 76818 or CPT® 76819) or CPT® 76815 for AFI with NST starting at 32 weeks. If earlier, requests will be sent for Medical Director review.
 - ◆ Placental infarction
 - ◆ Circumvallate shape
 - ◆ Placental hemangioma
 - ◆ Succenturiate placenta or accessory lobe
 - ◆ Chorioangioma
 - ◆ Marginal Cord Insertion
 - ◆ Velamentous insertion of the umbilical cord

OB-9.3: Subchorionic Hematoma or Placental Hematoma

Subchorionic Hematoma or Placental Hematoma
First, Second and Third Trimester
Ultrasound can be performed for follow-up of a known subchorionic hematoma or placental hematoma (CPT® 76815, or CPT® 76816 if a complete fetal anatomic scan was done previously, and/or CPT® 76817) if the last ultrasound was performed greater than seven days ago.
Ultrasound 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 ultrasound is needed if the follow-up ultrasound 7 days following the hemorrhage shows that the hemorrhage has resolved, and there is no further cramping and/or bleeding, and the fetus is growing as determined by size equal dates, in the first trimester.
If pregnancy is in second or third trimester follow <u>OB- 9.4: Suspected Abruption Placentae</u>

OB-9.4: Suspected Abruption Placentae

Suspected Abruption Placentae
Second and Third Trimesters
<p>Ultrasound is appropriate for suspected abruption placentae CPT® 76805 [plus CPT® 76810 if more than one fetus] and/or CPT® 76817 if a complete fetal anatomic scan has not yet been performed during this pregnancy, or</p> <ul style="list-style-type: none"> ◆ CPT® 76815 for limited ultrasound and/or CPT® 76817, or ◆ CPT® 76816 if a complete fetal anatomic scan was done previously, and/or CPT® 76817 for a transvaginal ultrasound
<p>Ultrasound is appropriate to follow-up a known abruption (CPT® 76815 or CPT® 76816 and/or CPT® 76817).</p> <ul style="list-style-type: none"> ◆ 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-9.5: Placenta Previa

Placenta Previa
Second and Third Trimesters
<p>For suspected placenta previa ultrasound can be performed (CPT® 76805 [plus CPT® 76810 if more than one fetus] (and/or CPT® 76817) if a complete fetal anatomic scan has not yet been performed during this pregnancy or CPT® 76815 for limited ultrasound and/or CPT® 76817 or CPT® 76816 if a complete fetal anatomic scan was done previously and/or CPT® 76817 for a transvaginal ultrasound)</p>
<p>For known placenta previa, one routine follow-up ultrasound can be performed at 28 to 32 weeks (CPT® 76815 or CPT® 76816 and/or CPT® 76817). If placenta previa is still present, one follow-up ultrasound (CPT® 76815 or CPT® 76816 and/or CPT® 76817) can be performed at 35 to 37 weeks. Amniocentesis is no longer required or recommended for lung maturity. If persistent placenta previa, BPP (CPT® 76818 or CPT® 76819) or CPT® 76815 for AFI with NST 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 and/or CPT® 76817).</p>

OB-9.6: Placenta Accreta/Placenta Percreta

OB-9.6.a: Suspected

- For **suspected** placenta accreta, ultrasound can be performed at > 32 weeks, or 1 to 2 weeks prior to planned delivery for surgical planning (CPT® 76805 [plus CPT® 76810 if more than one fetus] (and/or CPT® 76817) if a complete fetal anatomic scan has not yet been performed **or**
 - ◆ CPT® 76815 for limited ultrasound and/or, CPT® 76817, **or**
 - ◆ CPT® 76816 if a complete fetal anatomic scan was done previously, **and/or** CPT® 76817 for a transvaginal ultrasound)
- If the ultrasound is inconclusive or equivocal, send to MD review

OB-9.6.b: Known

- For **known** placenta accrete/percreta, follow up growth ultrasounds can be performed every 2 to 4 weeks (CPT® 76816 and/or CPT® 76817)
- BPP (CPT® 76818 or CPT® 76819) or CPT® 76815 for AFI with NST weekly, starting at 32 weeks
- Follow-up ultrasound can be performed at any time if bleeding occurs (CPT® 76815 and/or CPT® 76817)
- MD can approve Pelvic MRI without contrast (CPT® 72195) if indicated the ultrasound is indeterminate or advanced imaging is needed for surgical planning. If only placenta or maternal pelvis is imaged without fetal imaging

Practice Note

When there are ambiguous ultrasound findings or suspicion of a posterior placenta accreta, with or without placenta previa, ultrasound may be insufficient. MRI is able to outline the anatomy of the invasion and relate it to the regional anastomotic vascular system and enable confirmation of parametrial invasion and possible ureteral involvement.

References

1. Committee Opinion No. 560: Medically indicated late-preterm and early-term deliveries. *Obstet Gynecol.* 2013 May;121(4):908-910. reaffirmed 2015. Accessed November 3, 2017. http://journals.lww.com/greenjournal/Fulltext/2013/04000/Committee_Opinion_No_560_Medically_Indicated.45.aspx.
2. Practice Bulletin 134: Fetal Growth Restriction. *Obstet Gynecol.* 2013, reaffirmed 2015; 121(5):1122-1133. Accessed November 15, 2017. http://journals.lww.com/greenjournal/Abstract/2013/05000/Practice_Bulletin_No_134_Fetal_Growth_Restriction.45.aspx.
3. Committee Opinion No. 529: Placenta accrete. *Obstet Gynecol.* 2012;120:207–11, reaffirmed 2017. Reaffirmed 2017 Accessed November 3, 2017. http://journals.lww.com/greenjournal/Citation/2012/07000/Committee_Opinion_No_529_Placenta_Accreta.42.aspx.
4. Kilcoyne A, Shenoy-Bhangle AS, Roberts DJ, et al. MRI of placenta accreta, placenta increta, and placenta percreta: pearls and pitfalls. *Am J Roentgenol.* 2017 Jan;208(1):214-221. Accessed January 30, 2018. <https://www.ajronline.org/doi/abs/10.2214/AJR.16.16281>.

OB-10: Fetal Aneuploidy and Anomaly Screening

OB-10.1: First Trimester Screening	37
OB-10.2: Second Trimester Screening	38

OB-10.1: First Trimester Screening

- First trimester nuchal translucency is not necessary if cfDNA is done
 - ◆ First trimester screening includes biochemical markers and fetal nuchal translucency (FNT) (CPT® 76813). Conducted together, these screenings can identify risk for specific chromosomal abnormalities (e.g. Down's syndrome, Trisomy-18)
 - ◆ Nuchal translucency is completed between 11 and 13 6/7 weeks (CRL between 44 and 83 millimeters). An abnormal Fetal Nuchal Translucency scan, with a nuchal translucency measurement of ≥ 3.0 mm, may indicate an increased risk for cardiac defects, abdominal wall defects, diaphragmatic hernia, and genetic syndromes in euploid fetuses; whereas, a nuchal translucency ≥ 2.5 mm may indicate an increased risk for aneuploidy (imaging should be based upon the MOM for NT and biochemical markers).
 - ◆ "... 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 indeed be billed along with the nuchal translucency screening (CPT® 76813/ CPT® 76814)." (Society for Maternal-Fetal Medicine)

First Trimester Screening:

- Ultrasound is the initial imaging for the first trimester screening, to evaluate fetal nuchal translucency
- If the nuchal translucency is abnormal, the following tests can be performed:
 - ◆ Fetal anatomic ultrasound(CPT® 76811) at 16 weeks or greater weeks
 - ◆ Amniocentesis
 - ◆ CVS
 - ◆ Fetal echocardiogram (NT ≥ 3.0 mm)
- Abnormal FNT with normal aneuploidy screen and normal chromosomes (as measured by chorionic villus sampling or amniocentesis) should be evaluated with a fetal echo (CPT® 76825 and/or CPT® 76827 and/or CPT® 93325) and fetal ultrasound (CPT® 76811)

Coding Notes

- CPT® 76813 and CPT® 76814 should be performed only by those certified by the Fetal Medicine Foundation or Nuchal Translucency Quality Review Program (NTQR)
- Report as CPT® 76813 (plus CPT® 76814 if more than one fetus)
- CPT® 76813 can be performed once per pregnancy if the pregnancy is 11 to 13 6/7 weeks
- If FNT is abnormal, CPT® 76811 is usually performed by a Maternal Fetal Medicine (MFM) specialist, Perinatologist, Radiologist, or facility/physician with AIUM certification (with advanced training in fetal imaging) after 16 weeks
- 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 indeed be billed along with the nuchal translucency screening (CPT®76813/CPT®76814)

OB-10.2: Second Trimester Screening

See also: **OB-5.1: Initial Screening for Fetal Anomalies**

Two studies, a quad screen and ultrasound, are done during the second trimester to detect fetal aneuploidy, neural tube defects, and other anatomical defects.

1.	A fetal anatomic scan to screen for anomalies is ideally performed at 18 to 20 weeks, but may be performed after week ≥ 16 . If less than 16 weeks, send to MD review.
2.	If the quad screening is abnormal, an ultrasound (CPT® 76811) may also be performed.

Practice Notes

Multiple marker screening is used in the second trimester (15 to 20 weeks) to screen for trisomies 21 and 18 as well as open neural tube defects (ONTD).

The “quad” screen is the most commonly used test for the second trimester.

The quad screen measures four substances:

1. AFP (alpha-fetoprotein)
2. hCG (human chorionic gonadotropin)
3. uE (Unconjugated estriol)
4. dimeric inhibin-A

A penta screen may be done in lieu of a quad screen, the penta screen includes hyperglycosylated hCG in addition to the quad screen markers.

The “penta” screen measures five substances:

1. AFP
2. hCG
3. hyperglycosylated hCG
4. uE
5. dimeric inhibin-A

Maternal serum alpha-fetoprotein (MSAFP) can be done at 15 to 20 weeks to screen for neural tube defects if quad or penta is not performed.

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.

Cell Free DNA Testing-cfDNA

First trimester nuchal translucency screening is not necessary if cfDNA is performed.

Testing can be offered as early as the 10 week of pregnancy.

Cell free fetal DNA (cfDNA) has been noted to be the most sensitive test for Down syndrome per the American College of Medical Genetics and Genomics.

With a negative cfDNA test, it is very unlikely the fetus has trisomy 21, 13 or 18. Other chromosomal abnormalities may also be identified. The sex and Rh status of the baby may be included. The American College of Medical Genetics and Genomics (ACMG) recommends against using this test to screen for microdeletions or any autosomal aneuploidies other than 13, 18 and 21.

A woman with a positive cfDNA should be offered diagnostic testing (amniocentesis or CVS). A detailed anatomy scan 76811 is indicated at 16 weeks or greater. (See also: **OB-11.1: High Risk Group One-Risk Factors**).

A “no call” or indeterminate result can occur (risk is higher with maternal obesity), but this has a higher risk of chromosomal abnormality than a normal result. The patient should be offered amniocentesis or CVS testing.

Note that cfDNA does not screen for neural tube defects. Patients should be offered screening for open neural tube defects with maternal serum AFP (MSAFP) or ultrasound (usual anatomy scan-76805 or 11 depending on risk factors)

References

1. Practice Bulletin: No.187: Neural Tube Defects. *Obstet Gynceol.* 2017 Dec;130(6):e279-e290. Accessed January 30, 2018.
https://journals.lww.com/greenjournal/Abstract/2017/12000/Practice_Bulletin_No_187_Neural_Tube_Defects.41.aspx
2. Society for Maternal and Fetal Medicine (SMFM), coding committee, October 2017. SMFM's white paper on billing combination of 76801 and 76813.
3. Practice Bulletin No.162: Prenatal diagnostic testing for genetic disorders. *Obstet Gynecol.* 2016 May; 127(5):e108-e122. Accessed November 15, 2017.
http://journals.lww.com/greenjournal/Citation/2016/05000/Practice_Bulletin_No_2_Prenatal_Diagnostic.40.aspx.
3. Practice Bulletin No. 163: Screening for fetal aneuploidy. *Obstet Gynecol.* 2016 May;127(5):e123-e137. Accessed November 15, 2017.
http://journals.lww.com/greenjournal/Abstract/2016/05000/Practice_Bulletin_No_163_Screening_for_Fetal.41.aspx.
4. Practice Bulletin No. 175: Ultrasound in pregnancy. 2016 Dec;128(6):e241-e256. Accessed November 15, 2017.

- <http://journals.lww.com/greenjournal/pages/articleviewer.aspx?year=2016&issue=12000&article=00053&type=Fulltext>.
5. Committee Opinion No. 640: Cell-free DNA screening for fetal aneuploidy. Date of Origin: September 2015, reaffirmed 2017. Accessed November 15, 2017. <https://www.acog.org/-/media/Committee-Opinions/Committee-on-Genetics/co640.pdf?dmc=1&ts=20171115T1734510447>.
 6. Gregg AR, Skotko BG, Benkendorf JL et al. Noninvasive prenatal screening for fetal aneuploidy 2016 update: a position statement of the ACMGG. American College of Medical Genetics and Genomics. Accessed November 15, 2017. <https://www.nature.com/articles/gim201697.pdf>.
 7. AJOG/SMFM: Consult series number 42. The role of ultrasound in women who undergo cell-free DNA screening. 2017; 216(3)B2-B7. Accessed November 15, 2017. <https://www.sciencedirect.com/science/article/pii/S0002937817301059>.
 8. Society for Maternal-Fetal Medicine (SMFM), Norton ME, Bittio JR, Juller, JA, et al. The role of ultrasound in women who undergo cell-free DNA screening. Am J Obstet Gynecol. 2017 Mar;216(3):B2-B7. Accessed January 30, 2018. [http://www.ajog.org/article/S0002-9378\(17\)30105-9/fulltext](http://www.ajog.org/article/S0002-9378(17)30105-9/fulltext).
 9. Donofrio MT, Moon-Grady AJ, Hornberger LK et al. Diagnosis and treatment of fetal cardiac disease: A scientific statement from the American Heart Association. Circulation, 2014;129(21):2183-242. Accessed November 15, 2017. <https://www.medscape.com/medline/abstract/24763516>.

OB-11: High Risk Pregnancy	
High Risk Pregnancy Special Considerations	42
OB-11.1: High Risk Group One-Risk Factors	43
Socio-Demographic Risk Factors	43
Lifestyle Related Risk Factors	43
Health Condition Related Risk Factors	43
Previous pregnancy related risk factors	44
Current pregnancy related risk factors	44
Maternal Infections	44
OB-11.2: High Risk Group Two – Findings on Ultrasound	45
11.2.a: High Risk Group Two a.	45
11.2.b: High Risk Group Two b.	45
OB-11.3: High Risk Group Three – BMI	45
11.3.a: Pre-pregnancy BMI 30 to 34	45
11.3.b: Pre-pregnancy BMI 35-39	46
11.3.c: Pre-pregnancy BMI \geq 40	46
OB-11.4: High Risk Group Four	47
11.4.a: Prior Pregnancy with Macrosomia	47
11.4.b: Current Pregnancy with Macrosomia	47
OB-11.5: High Risk Group Five: Zika Virus	47
OB-11.6: High Risk Group 6- Pre-Gestational Diabetes On oral medications or insulin	48
OB-11.7: High Risk Group Seven Gestational Diabetes	50
OB-11.7.a: Gestational Diet Controlled	50
OB-11.7.b: Gestational Diabetes on Oral Medications or Insulin	51
OB-11.8: Hypertension	52
OB-11.9: Single Umbilical Artery	53
OB-11.10: History of Pre-Term Delivery/History Of PPRM	53
OB-11.10.a: Preterm Delivery \leq 34 Weeks History Of PPRM \leq 34 weeks	53
OB-11.10.b: History of Preterm Delivery $>$ 34 weeks	54
OB-11.11: History of Stillbirth	54

OB-11: High Risk Pregnancy Special Considerations

For the following conditions, please follow the links for appropriate imaging.

Abnormal nuchal translucency - thickened nuchal fold \geq 5 mm at 16 to 20 weeks or \geq 6 mm at 20 to 22 weeks (if CPT[®] 76811 shows adequate heart views, then no indication for echo) See: **OB-10.1: First Trimester Screening**

Fetal Growth Restriction and Macrosomia

History of late fetal death (greater than or equal to 20 weeks) See: **OB-11.11: Stillbirth History**

History of Prior C-section See: **OB-17: Previous C-section**

Multiple Gestations See: **OB-16: Multiple Pregnancies**

Oligohydramnios or polyhydramnios See **OB-4: Amniotic Fluid Abnormalities/Oligohydramnios/Polyhydramnios**

Premature rupture of membranes (PROM) See: **OB-19.1: Preterm Premature Rupture of Membranes (PPROM)**

Rh sensitization/isoimmunization See: **OB-3: Alloimmunization/Rh Isoimmunization. Other Causes of Fetal Anemia/Parvo/Hydrops**

Vasa previa/placenta accrete/placental abnormalities See: **OB-9: Placental or Cord Abnormalities**

OB-11.1: High Risk Group One-Risk Factors

HIGH RISK PREGNANCY – Risk Factors
Socio-Demographic Risk Factors
Age greater than or equal to 35 years of age at the estimated date of confinement (EDC)
Lifestyle Related Risk Factors
Recreational drug or alcohol use during current pregnancy (excluding marijuana) See: <u>OB-25: High Risk Medications and Substances</u>
10 or more cigarettes a day (1/2 pack a day)
Maternal history of IV drug abuse
Health Condition Related Risk Factors
Anemia severe, less than 8 grams Hgb or 24% HCT
Antiphospholipid Syndrome/Autoimmune disease
Asthma (poorly controlled or steroid dependent)
Bariatric surgery
Cardiac
Cholestasis of pregnancy (abn bile acids, 2 to 3 times normal)
Chronic liver disease
Chronic medical condition that may affect fetal growth due to utero-placental insufficiency
Connective tissue disorders (lupus, RA, scleroderma, Sjogren's)
Cystic Fibrosis/Known carrier of Spinal muscular Atrophy (SMA), CF, Tay-Sachs genetic diseases
Fetal congenital heart disease
Heart disease (Maternal) – New York Heart Association class III or IV greater or arrhythmia
Hemoglobinopathies
History of endometrial ablation
Hyperthyroidism
Hypothyroidism (poorly controlled)
Maternal malnutrition (BMI < 18.5), for poor weight gain send to MD Review
Maternal blood clotting disorder/thrombophilia (Antiphospholipid Syndrome, Factor V Leiden mutation, Antithrombin III deficiency, Protein C/Protein S deficiency, etc.)
PKU
Renal disease such as pyelonephritis, glomerulonephritis, lupus, or persistent protein in the urine renal insufficiency
Seizure disorders
Sickle cell disease (SS), including sickle cell trait (AS, SC, etc)
Systemic lupus
Systemic malignancy
Thrombophilia - hereditary and acquired such as Factor V Leiden Mutation

Previous pregnancy related risk factors
If no known cause of miscarriages < 20 weeks: 2 or more miscarriages and currently ≥ 35 years old; or 3 or more miscarriages and currently < 35 years old
Prior pregnancy with placental abnormality (Infarcts, Accreta)
Prior pregnancy with SGA (baby weighing < 2500 grams at term or FGR less than the 10 th percentile of expected weight)
Prior pregnancy with adverse outcome (early onset preeclampsia ≤ 34 weeks, , abruption, or FGR at any gestational age)
Rh sensitization/Isoimmunization in prior pregnancy. In current pregnancy (See: OB-3: Alloimmunization/Rh Isoimmunization/Other Causes of Fetal Anemia/Parvo/Hydrops)
Current pregnancy related risk factors
Abnormal MSAFP/Low PAPP_A/Known chromosomal abnormalities/abnormal FNT, or abnormal cfDNA
Gastroschisis in current pregnancy
History of fertility drugs and treatment/ART Conception with assisted reproductive technologies/ART
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)
Thickened nuchal fold ≥ 5 mm at 16 to 20 weeks; ≥ 6mm at 20 to 22 weeks (if CPT® 76811 shows adequate heart views, then no indication for echo)
No prenatal care prior to 28 weeks
Maternal Infections
Acquired Immune Deficiency Syndrome/HIV Positive
Cytomegalovirus (CMV)
Malaria
Known parvovirus in current pregnancy. See: OB-3.2: for Exposure to Parvovirus B-19
Rubella
Syphilis, untreated
Toxoplasmosis
Tuberculosis

Imaging For Above Conditions
<ul style="list-style-type: none"> ➤ Perform one ultrasound in the first trimester to establish dates, and report one of the following: <ul style="list-style-type: none"> ◆ CPT® 76801 [plus CPT® 76802 if more than one fetus] if a complete ultrasound has not yet been performed, and/or CPT® 76817 for a transvaginal ultrasound indicated. ➤ CPT® 76813 if between 11 0/7 to 13 6/7 weeks gestation and fetal nuchal translucency scan is being performed
<ul style="list-style-type: none"> ➤ Detailed Fetal Anatomic Scan CPT® 76811 ideally performed between 18 to 20 weeks, but be performed after 16 weeks when criteria is met: <ul style="list-style-type: none"> ◆ Performance of the specialized fetal anatomic evaluation should be limited to those with special skills to perform this study, such as Maternal Fetal Medicine specialists, Perinatologists, and Radiologists (with advanced training in fetal imaging) ◆ There is no prior approval for a CPT® 76811 for the current pregnancy
<ul style="list-style-type: none"> ➤ Starting at 22 to 24 weeks, follow-up growth scans (CPT® 76816) every 3 to 6 weeks ➤ Starting at 32 weeks, weekly BPP (CPT® 76818 or CPT® 76819) or CPT® 76815 for AFI with NST
<ul style="list-style-type: none"> ➤ Starting at 32 weeks, weekly BPP (CPT® 76818 or CPT® 76819) or AFI (CPT® 76815) with NST

OB-11.2: High Risk Group Two – Findings on Ultrasound That May Require Further Imaging

OB-11.2.a: High Risk Group Two a.

If the following conditions are found upon routine imaging:

Shortened femur identified in fetus of current pregnancy
 Shortened humerus identified in fetus of current pregnancy
 Pyelectasis of > 4 mm at 20 weeks identified in fetus of current pregnancy
 Echogenic bowel identified in fetus of current pregnancy
 Ventriculomegaly
 Hypoplastic nasal bone in current pregnancy.

Fetal anatomic scan is ideally performed at 18 to 20 weeks, but must be performed after 16 weeks (CPT® 76811)

One follow-up scan (CPT® 76816) in third trimester

OB-11.2.b: High Risk Group Two b.

If the following conditions are found upon routine imaging:

Choroid plexus cyst (present in 30% to 50% of all Trisomy 18 fetuses). Follow-up imaging not needed if targeted scan is normal

Echogenic intracardiac foci (present in 15% to 30% of all Down syndrome fetuses). Fetal echo or follow-up ultrasound are not warranted

Prior pregnancy with a congenital anomaly

Chromosomal abnormalities with previous pregnancy

Fetal anatomic scan is ideally performed at 18 to 20 weeks, but must be performed after 16 weeks (CPT® 76811)

OB-11.3: High Risk Group Three – BMI

OB-11.3.a: Pre-pregnancy BMI 30 to 34

Obesity (BMI 30-34)

Perform one ultrasound in the first trimester to establish dates and report one of the following: CPT® 76801 [plus CPT® 76802 if more than one fetus] if a complete ultrasound has not yet been performed, **and/or** CPT® 76817 for a transvaginal ultrasound indicated
 CPT® 76813 if between 11 0/7 to 13 6/7 weeks gestation and fetal nuchal translucency scan is being performed

Fetal anatomic scan is ideally performed at 18 to 20 weeks but must be performed after 16 weeks (CPT® 76811)

One follow-up scan (CPT® 76816) between 32 to 36 weeks

OB-11.3.b: Pre-pregnancy BMI 35-39**Obesity (BMI 35-39)**

- Perform one ultrasound in the first trimester to establish dates, and report one of the following:
 - ◆ CPT® 76801 [plus CPT® 76802 if more than one fetus] if a complete ultrasound has not yet been performed, **and/or** CPT® 76817 for a transvaginal ultrasound indicated
- CPT® 76813 if between 11 0/7 to 13 6/7 weeks gestation and fetal nuchal translucency scan is being performed
- Fetal anatomic scan is ideally performed at 18 to 20 weeks but must be performed after 16 weeks (CPT® 76811)
- Growth scan (CPT® 76816) at 32 and 36 weeks, **and** CPT® 76818 **or** CPT® 76819 **or** CPT® 76815 for AFI with NST weekly starting at 36 weeks

OB-11.3.c: Pre-pregnancy BMI ≥ 40**Obesity (BMI ≥ 40)**

- Perform one ultrasound in the first trimester to establish dates, and report one of the following:
 - ◆ CPT® 76801 [plus CPT® 76802 if more than one fetus] if a complete ultrasound has not yet been performed, **and/or** CPT® 76817 for a transvaginal ultrasound indicated
- CPT® 76813 if between 11 0/7 to 13 6/7 weeks gestation and fetal nuchal translucency scan is being performed.
- Fetal anatomic scan is ideally performed at 18 to 20 weeks, but must be performed after 16 weeks (CPT® 76811)
- Growth scan (CPT® 76816) at 32 and 36 weeks
- CPT® 76818 **or** CPT® 76819 **or** CPT® 76815 for AFI with NST weekly starting at 32 weeks
- If A1C is greater than 7, fetal echo CPT® 76825 **and/or** CPT® 76827 **and/or** CPT® 93325 after 18 weeks

Practice Note

The obesity protocol that was introduced in 2011 included recommendations for early gestational diabetes mellitus screening and an overall pregnancy weight gain of 11 to 20 pounds in all classes of obesity. A baseline 24 hour urine protein collection was recommended for class II and class III obese patients based on their increased risk of developing gestational diabetes mellitus and preeclampsia^{6,7,8,9} in addition to serial growth scans and nonstress tests also being utilized.

Delivery by the estimated due date was recommended for each class of obesity meeting the following criteria: (1) class III obese (pre-pregnancy body mass index of 40 kg/m² or greater) alone, (2) class II obese (pre-pregnancy body mass index of 35 to 39.9 kg/m²) and a diagnosis of gestational diabetes mellitus or large for gestational age, or (3) class I obese (pre-pregnancy body mass index of 30 to 34.9 kg/m²) plus a diagnosis of gestational diabetes mellitus and large for gestational age fetus. Large for gestational

age/macrosomia was defined as an estimated fetal weight of greater than the 95th percentile.

OB-11.4: High Risk Group Four

OB-11.4.a: Prior Pregnancy with Macrosomia

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

- Perform one ultrasound in the first trimester to establish dates, and report one of the following:
 - ◆ CPT® 76801 [plus CPT® 76802 if more than one fetus] if a complete ultrasound has not yet been performed, **or** CPT® 76815 for limited ultrasound if complete ultrasound has already been performed **and/or** CPT® 76817 for a transvaginal ultrasound indicated if less than 14 weeks.
 - ◆ CPT® 76813 if between 11 0/7 to 13 6/7 weeks gestation and fetal nuchal translucency scan is being performed.
- One targeted scan (CPT® 76811) in second trimester ≥ 16 weeks
- One growth scan (CPT® 76816) at > 30 weeks

OB-11.4.b: Current Pregnancy with Macrosomia

- See: **OB-8.2: Macrosomia-Large for Dates Current Pregnancy**

OB-11.5: High Risk Group Five: Zika Virus

Suspected exposure without symptoms:

- CPT® 76801 [plus CPT® 76802 if more than one fetus] if a complete ultrasound has not yet been performed, **or** CPT® 76815 for limited ultrasound if complete ultrasound has already been performed **and/or** CPT® 76817 for a transvaginal ultrasound indicated if less than 14 weeks
- Starting at 16 weeks, Growth scan (CPT® 76816) every 3 to 4 weeks to monitor for findings such as intracranial calcifications and microcephaly

Suspected exposure with symptoms or known disease:

- CPT® 76801 [plus CPT® 76802 if more than one fetus] if a complete ultrasound has not yet been performed, **or** CPT® 76815 for limited ultrasound if complete ultrasound has already been performed **and/or** CPT® 76817 for a transvaginal ultrasound indicated if less than 14 weeks;
- Detailed fetal anatomic scan (CPT® 76811) may be performed at 16 weeks gestation or greater.
- Growth scan, (CPT® 76816) every 3 to 4 weeks to monitor for findings such as intracranial calcifications and microcephaly, starting at 16 weeks.
- If diagnosed FGR or abdominal circumference ≤ 10 percentile then follow FGR imaging **OB-8.1: Fetal Growth Restriction-Small for Dates Current Pregnancy**

If intracranial calcifications, microcephaly or other abnormalities emerge, send to MD review. In these cases, imaging would follow the algorithm of other viruses that cause congenital infection **OB 11.1.f: Maternal Infections.**

OB-11.6: High Risk Group 6 – Pre-Gestational Diabetes on Oral Medications or Insulin

If patient has pre-gestational diabetes and is on oral medication or insulin:			
Test	When	Frequency	Codes
First Trimester Ultrasounds	< 14 weeks	Once	CPT® 76801 and/or CPT® 76817
Fetal anatomic scan	16 to 20 weeks	Once	CPT® 76811
Fetal echo (initial) Requests for follow-up go to MD review	Starting at 18 to 24 weeks	Once	CPT® 76825 and/or CPT® 76827 and/or CPT® 93325
Ultrasound (for fetal growth)	Starting at viability 23 to 24 weeks	Every 2 to 4 weeks	CPT® 76816*
Biophysical Profile (BPP) or AFI with NST*	If complicated by additional risk factors, perform between 26 and 28 weeks	Up to twice weekly	CPT® 76818 or CPT® 76819 or CPT® 76815 for AFI with NST*
Biophysical Profile* (BPP) or AFI with NST**	Starting at 32 weeks	Up to twice weekly	CPT® 76818 or CPT® 76819 (BPP) or CPT® 76815 for AFI with NST*
Umbilical artery Doppler (if FGR diagnosed)	Upon diagnosis of FGR	Weekly	CPT® 76820
For a poorly controlled diabetic, requests for a repeat fetal echocardiogram will be sent to MD review. (HbA1C > 6.5 is associated with fetal anomalies and adverse outcomes. Reference Table 1 below)			
*Starting at 32 weeks, AFI CPT® 76815 can be substituted for BPP but not for the same day of service.			
**NST is not currently prior authorized by eviCore healthcare for any health plan.			
***If there has not been a prior anatomical scan, this can be done at greater than 20 weeks.			

Practice Note**Table 1**

Serious adverse outcomes (congenital malformations and/or perinatal mortality) in offspring of women with type 1 diabetes and background population according to peri-conceptual glycemic control

A1C (%) [±]	z score (SD > mean)	Number of patients	Congenital malformations (%)	RR (95% CI) vs. background population	Perinatal mortality (%)	RR (95% CI) vs. background population	Serious adverse outcome (%)	RR (95% CI) vs. background population
≥ 10.4	≥10	55	10.9	3.9 (1.8 to 7.8) [‡]	5.5	7.3 (2.5 to 19.8) [‡]	16.3	4.7 (2.5 to 8.1) [‡]
8.9 to 10.3	7.0 to 9.9	128	3.9	1.4 (0.6 to 3.1)	6.3	8.3 (4.2 to 15.9) [‡]	7.8	2.2 (1.2 to 3.9) [‡]
7.9 to 8.8	5.0 to 6.9	182	5.0	1.8 (0.9 to 3.3)	3.3	4.4 (2.0 to 9.4) [‡]	7.7	2.2 (1.3 to 3.6) [‡]
6.9 to 7.8	3.0 to 4.9	284	4.9	1.8 (1.0 to 2.9)	2.8	3.8 (1.9 to 7.3) [‡]	7.7	2.2 (1.5 to 3.3) [‡]
< 6.9	< 3.0	284	3.9	1.4 (0.8 to 2.4)	2.1	2.8 (1.3 to 6.1) [‡]	5.6	1.6 (1.0 to 2.6)
Background population (n = 70,089)			2.8	1.0	0.75	1.0	3.5	1.0

*Standard reference 5.4 ± 1.0 (mean \pm 2 SD) in the nondiabetic background population.

*Significantly higher than background population at significance level of 0.05 relative risk (Jensen DM et al, 2017)

OB-11.7: High Risk Group Seven Gestational Diabetes

OB-11.7.a: Gestational Diet-Controlled

If patient has gestational diabetes and it is diet controlled:			
Test	When	Frequency	Codes
Fetal anatomic scan	16 to 20 weeks***	Once	CPT® 76811
Ultrasound (for fetal growth)	Starting at 32 weeks	Every 4 weeks	CPT® 76816*
Biophysical Profile* (BPP) or AFI with NST**	Starting at 34 to 36 weeks	Once weekly if diet controlled.	CPT® 76818 or CPT® 76819 or CPT® 76815 for AFI with NST**
<p>Maternal diet-controlled diabetes refers to patients that have a diagnosis of any type of diabetes (including diet-controlled gestational diabetes mellitus (GDM) and diet controlled pre-gestational diabetes mellitus), but require no medication for their diabetes. If HbA1C is > 6.5%, then they are not controlled and should follow guidelines for medication utilized for control see also <u>OB-11.6: High Risk Group 6- Pre-Gestational Diabetes On oral medications or insulin</u></p>			
<p>*Starting at 35 weeks, AFI CPT® 76815 can be substituted for BPP but not for the same day of service. **NST is not currently prior authorized by eviCore healthcare for any health plan. ***If there has not been a prior anatomical scan, this can be done at greater than 20 weeks.</p>			

OB-11.7.b: Gestational Diabetes on Oral Medications or Insulin

If patient has gestational diabetes and is on oral medication or insulin:			
Test	When	Frequency	Codes
Fetal anatomic scan	16 to 20 weeks***	Once	CPT® 76805 CPT® 76811
Fetal echo (initial) Requests for follow-up go to MD review	Starting at 18 to 24 weeks	Once	CPT® 76825 and/or CPT® 76827 and/or CPT® 93325
Ultrasound (for fetal growth)	Starting at viability 23 to 24 weeks	Every 2 to 4 weeks	CPT® 76816*
Biophysical Profile (BPP) or AFI with NST*	If complicated by additional risk factors perform between 26 and 28 weeks	Up to twice weekly	CPT® 76818 or CPT® 76819 or CPT® 76815 for AFI with NST**
Biophysical Profile* (BPP) or AFI with NST**	Starting at 32 weeks	Up to twice weekly	CPT® 76818 or CPT® 76819 or CPT® 76815 for AFI with NST**
Umbilical artery Doppler (if FGR diagnosed)	Upon diagnosis of FGR	Weekly	CPT® 76820
For a poorly controlled diabetic, requests for a repeat fetal echocardiogram will be sent to MD review. (If HbA1C is > 6.5%, fetal echo can be performed in the third trimester to assess for ventricular hypertrophy)			
*Starting at 32 weeks, AFI CPT® 76815 can be substituted for BPP but not for the same day of service. **NST is not currently prior authorized by eviCore healthcare for any health plan. ***If there has not been a prior anatomical scan, this can be done at greater than 20 weeks.			

OB-11.8: Hypertension

Current chronic hypertension, on and not on prescribed medications, and/or History of preeclampsia, and/or History of FGR:

- One time uterine artery Doppler (CPT® 93976) evaluation prior to < 16 weeks gestation. Uterine artery Doppler is not indicated > 16 weeks.
- If test is abnormal at less than 16 weeks, a repeat test can be considered at 20 to 22 weeks gestation after starting baby aspirin. (CPT® 93976) (See: **OB-24.10: Duplex Scan (Uterine Artery)**)

If patient has one of the following hypertension-related conditions:

Chronic hypertension not on prescribed hypertension medication:

Perform one ultrasound in the first trimester to establish dates, and report one of the following:

- CPT® 76801 [plus CPT® 76802 if more than one fetus] if a complete ultrasound has not yet been performed, or CPT® 76815 for limited ultrasound if complete ultrasound has already been performed and/or CPT® 76817 for a transvaginal ultrasound indicated if less than 14 weeks.
- CPT® 76813 if between 11 0/7 to 13 6/7 weeks gestation and fetal nuchal translucency scan is being performed.
- One US at 16 to 20 weeks (CPT® 76811- Detailed fetal anatomic section); and one US (CPT® 76816) at 30 to 34 weeks only.

(If blood pressure is elevated from baseline, see Gestational Hypertension(GH) below)

Chronic hypertension on prescribed hypertension medication:

Perform one ultrasound in the first trimester to establish dates, and report one of the following:

- CPT® 76801 [plus CPT® 76802 if more than one fetus] if a complete ultrasound has not yet been performed, or CPT® 76815 for limited ultrasound if complete ultrasound has already been performed and/or CPT® 76817 for a transvaginal ultrasound indicated if less than 14 weeks.

One Fetal Nuchal Translucency between 11 0/7 to 13 6/7 weeks gestation	CPT® 76813
One Detailed Fetal Anatomic Scan at 16 weeks gestation or greater	CPT® 76811
US every 3 to 4 weeks starting at viability 23 to 24 weeks gestation	CPT® 76816
Starting at 32 weeks, weekly biophysical profile (BPP) or AFI with NST* If other risk factors are present, may start at 26 to 28 weeks.	CPT® 76818 or CPT® 76819 or CPT® 76815 for AFI
If diagnosed FGR, weekly umbilical artery Doppler (See: OB-8.1: Fetal Growth Restriction – Small for Dates Current Pregnancy)	CPT® 76820

Gestational Hypertension (GH, preeclampsia, toxemia):	
Starting at time of diagnosis, growth US every 3 to 4 weeks If FGR, Oligohydramnios, or Severe preeclampsia, growth US every 2 to 4 weeks.	CPT® 76816
Starting at time of diagnosis, weekly BPP or AFI with NST* If FGR or Oligohydramnios is also present, twice weekly BPP or AFI with NST*	CPT® 76818 or CPT® 76819 or CPT® 76815 for AFI
Only if FGR or Oligohydramnios is present, twice weekly umbilical artery Doppler	CPT® 76820
MCA Doppler (CPT® 76821), starting at 34 weeks. Once weekly only following a normal 76820 Doppler	
*NST (CPT® 59025) is not currently prior authorized by eviCore health care for any health plan	

OB-11.9: Single Umbilical Artery

If single umbilical artery is found on initial imaging:	
Detailed anatomic ultrasound at 16 weeks or greater	CPT® 76811
Fetal echocardiogram at 22 to 24 weeks	CPT® 76825 and/or CPT® 76827 and/or CPT® 93325
Follow-up ultrasound to evaluate fetal growth at 28 to 32 weeks and then every 3 to 6 weeks if more than one clinical high risk factors is documented	CPT® 76816
Weekly BPP or AFI with NST starting at 36 weeks	CPT® 76818 or CPT® 76819 (BPP) or CPT® 76815 (AFI) with NST

OB-11.10: History of Pre-Term Delivery/History of PPROM

OB-11.10.a: Preterm Delivery ≤ 34 Weeks; History of PPROM ≤ 34 weeks

- Ultrasound CPT® 76801 [plus CPT® 76802 if more than one fetus] if a complete ultrasound has not yet been performed once in first trimester, **or** CPT® 76815 for limited ultrasound if a complete ultrasound CPT® 76801 has already been performed **and/or** CPT® 76817 for transvaginal ultrasound once in first trimester (less than 14 weeks) for any one of the following:
- Ultrasound is supported at 16 weeks or greater: CPT® 76811 [plus CPT® 76812 if more than one fetus] **and/or** CPT® 76817 once, if a complete detailed fetal anatomic scan has not yet been performed during this pregnancy for any one of the above conditions
 - ◆ Starting after the fetal anatomic scan at 16 weeks or greater, ultrasound (CPT® 76816) can be performed every 3 to 6 weeks until delivery
 - ◆ (CPT® 76815 and/or CPT® 76817) every 2 weeks, starting at 16 weeks or greater until 24 weeks
 - ◆ Starting at 32 weeks, weekly BPP CPT® 76818 or CPT® 76819 or CPT® 76815 for AFI

OB-11.10.b: History of Preterm Delivery > 34 weeks

Ultrasound is supported at 16 weeks or greater: CPT® 76805 [plus CPT® 76810 if more than one fetus] **and/or** CPT® 76817 once, if a complete fetal anatomic scan has not yet been performed during this pregnancy.

OB-11.11: History of Stillbirth

Women with a history of stillbirth:

CPT® 76801 [plus CPT® 76802 if more than one fetus] if a complete ultrasound has not yet been performed, **or** CPT® 76815 for limited ultrasound if complete ultrasound has already been performed **and/or** CPT® 76817 for a transvaginal ultrasound indicated if less than 14 weeks

Fetal anatomic scan at 16 weeks or greater (CPT® 76811)

Ultrasound (CPT® 76816) every 2 to 4 weeks to assess fetal growth starting at 23 to 24 weeks or two weeks before prior pregnancy loss.

Weekly BPP (CPT® 76818 or CPT® 76819) **or** CPT® 76815 for AFI with NST starting at 32 weeks or two weeks before prior pregnancy loss

References

1. Practice Bulletin No. 175: Summary. Ultrasound in pregnancy. *Obstet Gynecol.* 2016; 128(6):1459-1460. Accessed November 3, 2017. http://journals.lww.com/greenjournal/Abstract/2016/12000/Practice_Bulletin_No_175_Summary_Ultrasound_in.50.aspx.
2. Practice Bulletin No. 132: Antiphospholipid Syndrome. *Obstetrics & Gynecology.* 2012; 120:1514–21, reaffirmed in 2017 . Accessed November 15, 2017 http://journals.lww.com/greenjournal/Abstract/2012/12000/Practice_Bulletin_No_132_Antiphospholipid.44.aspx.
3. Practice Bulletin No. 145: Antepartum Fetal Surveillance. *Obstetrics & Gynecology.* 2014;124(1):182-192, reaffirmed in 2016. Accessed November 15, 2017. http://journals.lww.com/greenjournal/Citation/2014/07000/Practice_Bulletin_No_145_Antepartum_Fetal.35.aspx.
4. Practice Bulletin No. 78: Hemoglobinopathies in Pregnancy. *Obstetrics & Gynecology.* 2007, reaffirmed 2015; 109(1):229-238. Accessed November 15, 2017. http://journals.lww.com/greenjournal/Citation/2007/01000/ACOG_Practice_Bulletin_No_78_Hemoglobinopathies.55.aspx.
5. Dawood F. Inherited and Acquired Thrombophilia in Pregnancy. *Thrombophilia.* September 2011. Accessed November 15, 2017. <https://www.intechopen.com/books/thrombophilia/inherited-and-acquired-thrombophilia-in-pregnancy>.
6. Copel JA, Bahtiyar MO. A practical approach to fetal growth restriction. *Obstetrics & Gynecology,* 2014; ;123(5):1057-1069. Accessed November 15, 2017. http://journals.lww.com/greenjournal/Abstract/2014/05000/A_Practical_Approach_to_Fetal_Growth_Restriction.22.aspx.
7. ACOG Practice Bulletin No. 102: Management of Stillbirth. *Obstetrics & Gynecology.* 2009, reaffirmed 2016; 113(3):748-761. Accessed November 15, 2017. http://journals.lww.com/greenjournal/Citation/2009/03000/ACOG_Practice_Bulletin_No_102_Management_of.32.aspx.

8. Towers CV, Carr MH. Antenatal fetal surveillance in pregnancies complicated by fetal gastroschisis. *Am J Obstet Gynecol* 2008;198(6):686. Accessed November 15, 2017. [http://www.ajog.org/article/S0002-9378\(08\)00288-3/pdf](http://www.ajog.org/article/S0002-9378(08)00288-3/pdf).
9. Silver RM, Varner MW, Reddy U et al. Work-up of stillbirth: a review of the evidence. *Am J Obstet Gynecol*, 2007; 196(5):433-444. Accessed November 15, 2017. <https://www.medscape.com/medline/abstract/17466694>.
10. Garodosi J, Madurasinghe V, Williams M et al. Maternal and fetal risk factors for stillbirth: population based study. *BMJ*, 2013;346. Accessed November 15, 2017. <http://www.bmj.com/content/346/bmj.f108>.
11. 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. Accessed November 15, 2017. http://journals.lww.com/obgynsurvey/Abstract/2014/08000/Fetal_Imaging_Executive_Summary_of_a_Joint.4.aspx.
12. Donofrio MT, Moon-Grady AJ, Hornberger LK et al. Diagnosis and treatment of fetal cardiac disease: A scientific statement from the American Heart Association. *Circulation*, 2014; 129(21):2183-242. Accessed November 15, 2017. <https://www.medscape.com/medline/abstract/24763516>.
13. Baschat AA, Cosmi E, Bilardo CM et al. Predictors of neonatal outcome in early-onset placental dysfunction. *Obstet Gynecol*, 2007;109:253–61. Accessed November 15, 2017. <http://journals.lww.com/greenjournal/Pages/articleviewer.aspx?year=2007&issue=02000&article=00004&type=Fulltext>.
14. Oros D, Figueras F, Cruz–Martinez R et al. Longitudinal changes in uterine, umbilical and fetal cerebral Doppler indices in late-onset small-for-gestational age fetuses. *Ultrasound Obstet Gynecol*, 2011;37:191–5. Accessed November 15, 2017. <http://onlinelibrary.wiley.com/doi/10.1002/uog.7738/pdf>
15. Reddy UM, Filly RA, Copel JA. Prenatal Imaging: Ultrasonography and Magnetic Resonance Imaging. *Obstetrics and Gynecology*, 2008;112(1):145-157. Accessed November 15, 2017. <http://onlinelibrary.wiley.com/doi/10.1002/uog.7738/pdf>.
16. Sciscione AC, Hayes EJ. Uterine artery Doppler flow studies in obstetric practice. *American J Obstet Gynecol*, 2009; 201(2):121-126. Accessed November 15, 2017. [http://www.ajog.org/article/S0002-9378\(09\)00283-X/fulltext](http://www.ajog.org/article/S0002-9378(09)00283-X/fulltext).
17. Practice Bulletin No. 134. Fetal Growth Restriction. *Obstetrics & Gynecology*. 2013, reaffirmed 2015; 121(5):1122-1133 Accessed November 15, 2017. http://journals.lww.com/greenjournal/Abstract/2013/05000/Practice_Bulletin_No_134_Fetal_Growth_Restriction.45.aspx.
18. Copel JA, Bahtiyar MO. A practical approach to fetal growth restriction. *Obstetrics & Gynecology*, 2014;123(5):1057-1069. Accessed November 16, 2017. http://journals.lww.com/greenjournal/Abstract/2014/05000/A_Practical_Approach_to_Fetal_Growth_Restriction.22.aspx.
19. Velauthar L, Plana MN, Kalidindi M, et al. First-trimester uterine artery Doppler and adverse pregnancy outcome: a meta-analysis involving 55 974 women. *Ultrasound in Obstetrics & Gynecology*. 2014;43(5):500-507. Accessed November 16, 2017. <http://onlinelibrary.wiley.com/doi/10.1002/uog.13275/epdf>.
20. ACOG Practice Advisory: *Interim Guidance for Care of Obstetric Patients During a Zika Virus Outbreak*. February 2016, reaffirmed: September 13, 2017. Accessed November 16, 2017. <https://www.acog.org/About-ACOG/News-Room/Practice-Advisories/Practice-Advisory-Interim-Guidance-for-Care-of-Obstetric-Patients-During-a-Zika-Virus-Outbreak>
21. Schuster M, Madueke-Laveaux OS, Mackeen AD, et al. The effect of the MFM obesity protocol on cesarean delivery rates. *Am J Obstet Gynecol*. 2016;215:492.e1-6. Accessed November 16, 2017. <https://www.deepdyve.com/lp/elsevier/the-effect-of-the-mfm-obesity-protocol-on-cesarean-delivery-rates-8qCwH0fw6q>.

22. Jensen DM, Korsholm L, Ovesen P, et al. Peri-conceptual A1C and risk of serious adverse pregnancy outcome in 933 women with type 1 diabetes. *Diabetes Care*, 2009;32(6):1046-1048. Accessed November 16, 2017. <http://care.diabetesjournals.org/content/diacare/32/6/1046.full.pdf>.
23. Practice Bulletin No.180: Gestational Diabetes Mellitus. *Obstetrics & Gynecology*. 2017; 130(1)e17-e37. Accessed November 16, 2017. http://journals.lww.com/greenjournal/Abstract/2017/07000/Practice_Bulletin_No_180_Gestational_Diabetes.51.aspx.
24. Cavazos-Rehg PA, Krauss MJ, Spitznagel EL, et al. Maternal age and risk of labor and delivery complications. *Maternal and child health journal*. 2015;19(6):1202-1211. Accessed November 16, 2017. <https://link.springer.com/article/10.1007/s10995-014-1624-7>.
25. McCarthy FP, O'Brien U, Kenny LC. The management of teenage pregnancy. *BMJ*. 2014;349:g5887. Accessed November 16, 2017. <http://www.bmj.com/content/349/bmj.g5887>.
26. Machado JB, Filho PV, Petersen GO et al. Quantitative effects of tobacco smoking exposure on the maternal-fetal circulation. *BMJ* 2011 11:24. Accessed November 16, 2017. <https://bmcpregnancychildbirth.biomedcentral.com/track/pdf/10.1186/1471-2393-11-24?site=bmcpregnancychildbirth.biomedcentral.com>.
27. 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. Accessed November 16, 2017. <https://academic.oup.com/humupd/article-lookup/doi/10.1093/humupd/dmr022>.
28. Adams J. Statement of the Public Affairs Committee of the Teratology Society on the Importance of Smoking cessation in pregnancy. 2003;67(11):895-899. Accessed November 16, 2017. <http://onlinelibrary.wiley.com/doi/10.1002/bdra.10140/abstract>
29. Practice Bulletin No.150: Early Pregnancy Loss. *Obstetrics & Gynecology* 2015; 125(5)1258-1267, reaffirmed 2017. Accessed November 16, 2017. <https://www.acog.org/-/media/Practice-Bulletins/Committee-on-Practice-Bulletins---Gynecology/Public/pb150.pdf?dmc=1&ts=20171116T1423413474>.
30. Warner TD, Roussos-Ross D, Behnke M. It's Not Your Mother's Marijuana: Effects on Maternal-Fetal Health and the Developing Child. *Clinics in perinatology*. 2014;41(4):877-894. Accessed November 16, 2017. <http://www.manuellosses.cl/pneo/5.%20Efectos%20de%20la%20marihuana%20madre%20feto%20rn.pdf>.
31. Lengyel CS, Ehrlich S, Iams JD et al. It's not your mothers marijuana. Effect of modifiable risk factors on preterm birth. *Maternal Child Health Journal*. (2017)21:777–785. Accessed November 16, 2017. <http://www.manuellosses.cl/pneo/5.%20Efectos%20de%20la%20marihuana%20madre%20feto%20rn.pdf>.
32. Committee Opinion No. 722: Marijuana Use During Pregnancy and Lactation. 2017; 130(3):e205-e209. Accessed November 16, 2017. <https://www.acog.org/-/media/Committee-Opinions/Committee-on-Obstetric-Practice/co722.pdf?dmc=1&ts=20171116T1445207875>.
33. Pfeifer S, Fritz M, Goldberg J et al. Evaluation and treatment of recurrent pregnancy loss: a committee opinion. *Fertility and Sterility*. 2012; 98(5):1103-11. Accessed November 16, 2017. http://www.asrm.org/globalassets/asrm/asrm-content/news-and-publications/practice-guidelines/for-non-members/evaluation_and_treatment_of_recurrent_pregnancy_loss_a_committee_opinion-noprint.pdf.
34. Jeve YB, Davies W. Evidence-based management of recurrent miscarriages. *Journal of Human Reproductive Sciences*. 2014;7(3):159-169. Accessed November 16, 2017. <http://www.jhrsonline.org/article.asp?issn=0974-1208;year=2014;volume=7;issue=3;spage=159;epage=169;aulast=Jeve>.
35. McIntosh J, Feltovich H, Berghella V et al. The role of routine cervical length screening in selected high- and low-risk women for preterm birth prevention. *SMFM Consult #40*. 2016;215(3):B2-B7. Accessed November 16, 2017. <https://www.scribd.com/document/330602388/MMF-Cervical-Length-16>.
36. Practice Bulletin No. 90: Asthma in Pregnancy. *Obstetrics & Gynecology*. 2008; 111(2):457-464, reaffirmed 2016. Accessed November 16, 2017. http://journals.lww.com/greenjournal/Citation/2008/02000/ACOG_Practice_Bulletin_No_90_Asthma_in.34.aspx.

37. Practice Bulletin No. 60: Pregestational Diabetes Mellitus. *Obstetrics & Gynecology*. 2005; 105(3):675-685, reaffirmed 2016. Accessed November 16, 2017. http://journals.lww.com/greenjournal/Citation/2005/03000/ACOG_Practice_Bulletin_60_Pregestational.49.aspx.
38. Practice Bulletin No. 156: Obesity in Pregnancy. *Obstetrics & Gynecology* 2016; 126:e112–26). Replaces Committee Opinion Number 549, January 2013 Accessed November 16, 2017. http://journals.lww.com/greenjournal/Fulltext/2016/12000/Practice_Bulletin_No_156_Obesity_in_Pregnancy_.45.aspx.
39. Practice Bulletin No. 171: Management of Preterm Labor. *Obstetrics & Gynecology*. October 2016 ; 128(4):e155–64. Replaces Practice Bulletin Number 159, January 2016 (Interim Update) Accessed November 16, 2017. <https://www.medscape.com/medline/abstract/27661654>.
40. Wax J, Minkoff H, Johnson A et al. Consensus report on detailed fetal anatomic ultrasound examination. *Journal ultrasound medicine*. 2014;33(2):189-195. Accessed November 16, 2017. <http://onlinelibrary.wiley.com/doi/10.7863/ultra.33.2.189/abstract>.

OB-12: History of Infertility

OB-12.1: History of Infertility	59
OB-12.2: Present Pregnancy with Use of Fertility Drugs and Treatment (ART)	59

OB-12.1: History of Infertility

- Ultrasound imaging is supported if there is a history of infertility treatment (CPT® 76801 [plus CPT® 76802 if more than one fetus] and/or CPT® 76817 for transvaginal ultrasound)
- Repeat ultrasound is not usually necessary unless there are new clinical indications

OB-12.2: Present Pregnancy with use of Fertility Drugs and Treatment (ART)

- Follow high risk imaging, **OB-11: High Risk Pregnancy**

OB-13: Cervical Insufficiency/Current Preterm Labor

OB-13.1: Cervical Insufficiency	61
OB-13.2: Cerclage in place in current pregnancy	61
OB-13.3: Current Preterm Labor	62

For history of pre-term labor see: **OB-11.10: History of Pre-Term Labor/History of PPROM**

OB-13.1: Cervical Insufficiency

Ultrasound is supported at 16 weeks or greater: CPT® 76805 [plus CPT® 76810 if more than one fetus] **and/or** CPT® 76817 once, if a complete fetal anatomic scan has not yet been performed during this pregnancy.

Starting after the fetal anatomic scan at 16 weeks or greater, ultrasound (CPT® 76815) every 2 to 4 weeks **and/or** transvaginal ultrasound (CPT® 76817) every 2 weeks until 24 weeks

History of prior precipitous delivery

Presence of uterine anomaly (See: **OB-23.1: Uterine Anomalies or Adnexal/Pelvic Masses**)

Personal history of cervical insufficiency (without cerclage placement in the current pregnancy)

Over dilation of cervix during a termination of pregnancy

Cervical obstetrical laceration from a previous delivery

Surgical trauma to cervix (e.g. conization [CKC—cold-knife conization] or Loop Electrosurgical Excision Procedure [LEEP])

If funneling or abnormally shorten cervix ≤ 25 mm (2.5 cm) is found, ultrasound (CPT® 76816) every 2 to 4 weeks for the duration of the pregnancy **and/or** (CPT® 76817) for transvaginal ultrasound every 1 to 2 weeks until 32 weeks.

OB-13.2: Cerclage in place in current pregnancy

- Ultrasound CPT® 76801[plus CPT® 76802 if more than one fetus] if a complete ultrasound has not yet been performed once in first trimester, or CPT® 76815 for limited ultrasound if a complete ultrasound 76801 has already been performed and/or CPT® 76817 for transvaginal ultrasound once in first trimester (less than 14 weeks) for any one of the following:
- Ultrasound is supported at 16 weeks or greater: CPT® 76811 [plus CPT® 76812 if more than one fetus] and/or CPT® 76817 once, if a complete detailed fetal anatomic scan has not been done.
- Starting after the fetal anatomic scan at 16 weeks or greater, ultrasound (CPT® 76815 or CPT® 76816) can be performed every 3 to 6 weeks.
- Transvaginal (CPT® 76817) every 2 weeks, starting at 16 weeks or greater until 30 weeks if a rescue cerclage was placed.

OB-13.3: Current Preterm Labor

- For contractions, CPT® 76805 [plus CPT® 76810 if more than one fetus] **and/or** CPT® 76817 if a complete fetal anatomic scan has not yet been performed during this pregnancy; if a complete fetal anatomic scan was performed previously, CPT® 76815 **or** CPT® 76816 (76816 no more than every 2 weeks) when symptomatic
- CPT® 76817 once or when symptomatic.
- Once or when symptomatic, biophysical profile (BPP) (CPT® 76818 **or** CPT® 76819) **or** AFI CPT® 76815 with NST, starting at 30 weeks; if less than 30 weeks send to MD review.

References

1. Miller ES, Tita AT, and Grobman WA. Second-trimester cervical length screening among asymptomatic women. *Obstetrics & Gynecology*, 2015; 126:61-66.
2. ACOG Practice Bulletin No. 142: Cerclage for the management of cervical insufficiency. February 2014, reaffirmed 2016.
3. Orzechowski KM, Boelig RC, Baxter JK, et al. A universal transvaginal cervical length screening program for preterm birth prevention. *Obstetrics and Gynecology*. 2014;124:520-525.
4. ACOG Practice Bulletin No. 130: Prediction and Prevention of Preterm Birth. October 2012, reaffirmed 2016.
5. ACOG Practice Bulletin 171: Management of Pre-Term Labor. October 2016.
6. Practice Bulletin No. 175: Summary: Ultrasound in pregnancy. *Obstetrics & Gynecology*. 2016;128(6):1459-1460. Accessed November 15, 2017. http://journals.lww.com/greenjournal/Abstract/2016/12000/Practice_Bulletin_No_175_Summary_Ultrasound_in.50.aspx.
7. 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. Accessed November 15, 2017. <https://www.ncbi.nlm.nih.gov/pubmed/22542113>.
8. Cho, H.J. and Roh, H.J. Correlation Between Cervical Lengths Measured by Transabdominal and Transvaginal Sonography for Predicting Preterm Birth. *Journal of Ultrasound in Medicine*. 2016; 35:537–544. Accessed November 15, 2017. <http://onlinelibrary.wiley.com/doi/10.7863/ultra.15.03026/epdf>.
9. McIntosh J, Feltovich H, Berghella V et al. 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):B2-B7. Accessed November 15, 2017. [http://www.ajog.org/article/S0002-9378\(16\)30112-0/fulltext](http://www.ajog.org/article/S0002-9378(16)30112-0/fulltext).
10. Khalifeh, Adeeb, Vincenzo Berghella, David Stamilio, and Laura Carlson Ultrasound approach for cervical length screening in preterm birth prevention. Dec 2016; 215(6) *American Journal of Obstetrics & Gynecology* 739-744.
11. 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):1047-1056. Accessed December 6, 2017. <https://www.rtihs.org/sites/default/files/28462%20Hunter%202017%20Predictive%20accuracy%20of%20serial%20transvaginal%20cervical%20lengths%20and%20quantitative%20vaginal%20fetal%20fibronectin%20levels%20for%20spontaneous%20preterm%20birth%20among%20nulliparous%20women.pdf>.
12. Jain S, Kilgore M, Edwards, RK, et al. Revisiting the cost-effectiveness of universal cervical length screening: importance of progesterone efficacy. *A J Obstet Gynecol*. 2016 Jul;215(1):101.e1-101.e7. Accessed December 6, 2017. [http://www.ajog.org/article/S0002-9378\(16\)00215-5/fulltext](http://www.ajog.org/article/S0002-9378(16)00215-5/fulltext)

OB-14: Intrauterine Device (IUD)

OB-14.1: Locate an Intrauterine Device

64

OB-14.1: Locate an Intrauterine Device

- Ultrasound can be performed to locate an intrauterine device (IUD) (CPT® 76801 and/or CPT® 76817 if a complete ultrasound has not yet been performed)
 - ◆ CPT® 76815 for limited ultrasound, if complete ultrasound has already been performed, **and/or** CPT® 76817 for a transvaginal ultrasound

OB-15: Macrosmia

- See: OB-8.2: Macrosomia-Large for Dates Macrosomia
- See: OB-11.4: High Risk Group Four

OB-16: Multiple Pregnancies

OB-16.1: For Suspected multiple pregnancies:	67
OB-16.2: For Known dichorionic multiple pregnancies	67
OB-16.3: For Known monochorionic-diamniotic or monochorionic-monoamniotic multiple pregnancies	68

OB-16: Multiple Pregnancies

OB-16.1: For Suspected multiple pregnancies:

- Ultrasound is appropriate to confirm **suspected** multiple pregnancy (CPT® 76801[plus CPT® 76802 if more than one fetus]) if less than 14 weeks.

OB-16.2: For Known dichorionic multiple pregnancies:

- CPT® 76811[plus CPT® 76812 if more than one fetus] if greater than 14 weeks if a complete detailed anatomic scan CPT® 76811 has not yet been performed during this pregnancy
- Follow-up ultrasounds for all known dichorionic multiple pregnancies (CPT® 76816 and/or CPT® 76817):
 - ◆ Ultrasound (CPT® 76816) every 4 to 6 weeks to assess fetal growth starting at 23 to 24 weeks gestation
 - ◆ Transvaginal ultrasound (CPT® 76817) is recommend only in twin gestations with significant cervical shortening ≤ 1.5 cm on a transabdominal evaluation if rescue cerclage is a consideration. Send all these requests to MD Review
 - ◆ Weekly BPP (CPT® 76818 or CPT® 76819) **or** 76815 for AFI with NST, starting at 32 weeks or sooner if additional risk factors
 - ◆ Twice weekly BPP can be considered in rare clinical circumstances. These requests will be forwarded for Medical Director review
 - ◆ If discordant twins $\geq 20\%$. See practice note below. Twice weekly BPP plus ultrasound (CPT® 76816) every 2 to 4 weeks, **and** umbilical artery Doppler (CPT® 78620) weekly; for twice weekly imaging send to MD review
 - ◆ If FGR is diagnosed, weekly umbilical artery Doppler **and/or** Middle Cerebral Artery Doppler (CPT® 76820 and/or CPT® 76821)
 - ◆ If IVF dichorionic twins, report initial fetal echo as CPT® 76825 and/or CPT® 76827 and/or CPT® 93325. Transabdominal fetal echo is usually not performed prior to 16 weeks. Follow-up echo requests will be sent to Medical Director review
 - ◆ If other high risk factors, see **OB-11: High Risk Pregnancy**

OB-16.3: For Known monochorionic-diamniotic or monochorionic-monoamniotic multiple pregnancies

- CPT® 76811 [plus CPT® 76812 if more than one fetus] if greater than 14 weeks if a complete detailed anatomic scan CPT® 76811 has not yet been performed during this pregnancy.
 - ◆ Ultrasound (CPT® 76816) every 2 to 4 weeks to assess fetal growth starting at 16 weeks gestation
 - ◆ Transvaginal ultrasound (CPT® 76817) is recommend only in twin gestation with significant cervical shortening ≤ 1.5 cm on a transabdominal evaluation if rescue cerclage is a consideration. Send all these requests to MD Review
 - ◆ Weekly BPP (CPT® 76818 or CPT® 76819) or CPT® 76815 for AFI with NST, starting at 32 weeks, sooner if additional risk factors are present.
 - ◆ Fetal middle cerebral artery (MCA) Doppler (CPT® 76821) every 2 to 3 weeks starting at 16 weeks to monitor for twin-twin transfusions syndrome (TTTS) and may be continued every 2 to 3 weeks to monitor for twin anemia polycythemia sequence (TAPS) until delivery. If Twin to Twin Transfusion syndrome is suspected due to one twin failing to grow compared with the other twin, daily evaluation (CPT® 76815), **and/or** CPT® 76818 or CPT® 76819) **and/or** umbilical artery Doppler (CPT® 76820) can be performed to aid in planning intervention and/or imminent delivery
 - ◆ If discordant twins $\geq 20\%$. See practice note below Twice weekly BPP plus ultrasound (CPT® 76816) every 2 to 4 weeks, **and** umbilical artery Doppler (CPT® 76820) weekly.
 - ◆ Daily fetal testing may be indicated if umbilical Doppler is abnormal. These requests will be forwarded for Medical Director for review.
 - ◆ Fetal echo CPT® 76825 and/or CPT® 76827 and/or CPT® 93325 for initial echo. Transabdominal fetal echo is usually not performed prior to 16 weeks. For follow-up echo, send to MD review.
 - ◆ If FGR is diagnosed, weekly umbilical artery Doppler and/or Middle Cerebral Artery Doppler (CPT® 76820 and/or CPT® 76821)
 - ◆ If other high risk factors, see **OB-11: High Risk Pregnancy**
- Triplets or higher Multiple Pregnancy receive same imaging as monochorionic-diamniotic- and monochorionic- monoamniotic- twins.
- These requests will be forwarded for Medical Director review.

Practice Notes

Discordant twins

Birth weight discordance = (larger twin weight minus smaller twin weight) divided larger twin weight $\times 100$.

Cervical length screening is not recommended in twin gestation. The use of a rescue cerclage when cervical dilation is present has shown to be beneficial. For this reason a cervical length under 1.5 cm is required for evaluation. In select cases a TV ultrasound may be indicated. These require approval from the Medical Director. Cerclage is use for TTTS case due to polyhydramnios causing the short cervix. Also rescue cerclage is still use in those with a dilated cervix.

References

1. Practice Bulletin No. 169: Multiple gestations: twin triplet and higher order multi fetal pregnancies. 2016;128(4):e131-146. *Obstetrics & Gynecology*. Accessed November 16, 2017.
http://journals.lww.com/greenjournal/Abstract/2016/10000/Practice_Bulletin_No_169_Multifetal_Gestations.59.aspx.
2. Practice Bulletin No. 175 Summary: Ultrasound in Pregnancy. *Obstet Gynecol*. 2016;128(6):1459-1460. Accessed November 3, 2017.
http://journals.lww.com/greenjournal/Abstract/2016/12000/Practice_Bulletin_No_175_Summary_Ultrasound_in.50.aspx
3. Khalil A, Rodgers M, Baschat A, et al. *ISUOG Practice Guidelines: role of ultrasound in twin pregnancy*. *Ultrasound Obstet Gynecol*. 2016;47(2):247–263. Accessed November 16, 2017.
<http://onlinelibrary.wiley.com/doi/10.1002/uog.15821/epdf>.

OB-17: Previous C-section

OB-17.1: Previous C-section

71

OB-17.1: Previous C-section**If patient has had a previous Cesarean section**

One ultrasound can be performed to confirm dates

CPT® 76801 [plus CPT® 76802 if more than one fetus] if a complete ultrasound has not yet been performed, OR CPT® 76815 for limited ultrasound if complete ultrasound has already been performed and/or CPT® 76817 for a transvaginal ultrasound indicated if less than 14 weeks.

76805 for fetal anatomic scan is ideally performed between 18 to 20 weeks, but must be performed after 16 weeks, if earlier send to MD Review.

One growth scan (CPT® 76816) at 32 weeks and one growth scan between 36 and 38 weeks (CPT® 76816)

OB-18: Post Date Pregnancy

OB-18.1: Post Date Pregnancy

73

OB-18.1: Post Date Pregnancy

Follow-up ultrasound (CPT® 76816) every 2 weeks (\geq 40 weeks gestation) to evaluate fetal growth

Weekly biophysical profile (CPT® 76818 or CPT® 76819) or CPT® 76815 for AFI with NST, starting at 40 weeks
Then twice weekly, BPP (CPT® 76818 or CPT® 76819) or CPT® 76815 for AFI with NST at 41 weeks or greater

Practice Note

In post-date pregnancy, uterine artery Doppler velocimetry (CPT® 93976) has not been found to be useful.

Reference

1. Practice Bulletin No. 146: Management of Late-Term and Post-Term Pregnancies. *Obstetrics & Gynecology*. 2014;124(2):390-396, reaffirmed 2016. Accessed November 16, 2017.
http://journals.lww.com/greenjournal/Abstract/2014/08000/Practice_Bulletin_No_146_Management_of.34.aspx.

OB-19: Preterm/Premature Rupture of Membranes

OB-19.1: Preterm Premature Rupture of Membranes (PPROM)	75
OB-19.2: Premature Rupture of Membranes (PROM)	75

See also: **OB-4: Amniotic Fluid Abnormalities/ Oligohydramnios/ Polyhydramnios**

See also: **OB-13.2: Cerclage in place in current pregnancy**

OB-19.1: Preterm Premature Rupture of Membranes (PPROM)

- Less than or equal to 36 6/7 weeks. Requests will be forwarded to Medical Director review.
 - ◆ This is likely a hospital admission for evaluation and monitoring until delivery.
 - ◆ In rare cases outpatient monitoring has been performed (refer to Medical Director for review)

OB-19.2: Premature Rupture of Membranes (PROM)

- Greater than or equal to 37 weeks. Requests will be forwarded to Medical Director for review.

References

1. Practice Bulletin No. 130: Prediction and Prevention of Preterm Birth. *Obstetrics & Gynecology*. 2012;120(4):964-973, reaffirmed 2016. Accessed November 15, 2017. http://journals.lww.com/greenjournal/Citation/2012/10000/Practice_Bulletin_No_130_Prediction_and_Prevention_of_Preterm_Birth.aspx.
2. Practice Bulletin No. 172: Premature Rupture of Membranes. *Obstet Gynecol*. 2016 Oct;128(4):e165-77. Accessed November 16, 2017. <http://journals.lww.com/greenjournal/Pages/articleviewer.aspx?year=2016&issue=10000&article=00062&type=Fulltext>.
3. Practice Bulletin No. 171: Management of Pre-term Labor. *Obstetrics & Gynecology*. October 2016;128(4):e155–64. Replaces Practice Bulletin Number 159, January 2016 (Interim Update) Accessed November 16, 2017. <https://www.medscape.com/medline/abstract/27661654>.

OB-20: Third Trimester Imaging

OB-20.1: Third Trimester Imaging - Ultrasound

77

OB-20.1: Third Trimester Imaging – Ultrasound

Imaging in the third trimester is indicated for bleeding, pain, absent fetal heart tone, decreased fetal movement and/or other high-risk indications.

(see: **OB-11: High Risk Pregnancy**)

For suspected breech position, see: **OB-2: Abnormal Fetal Position or Presentation**

Reference

1. Practice Bulletin No. 175 Summary: Ultrasound in pregnancy. *Obstet & Gynecol.* 2016;128(6):1459-1460. Accessed November 3, 2017.
http://journals.lww.com/greenjournal/Abstract/2016/12000/Practice_Bulletin_No_175_Summary_Ultrasound_in.50.aspx.

OB-21: Uncertain Dates

OB-21.1: Uncertain Dates/Unknown Last Menstrual Period (LMP) 79

OB-21.1: Uncertain Dates/Unknown Last Menstrual Period (LMP)

The **low risk pregnancy** that has no other indications for ultrasound should have a Fetal Nuchal translucency (CPT® 76813 completed between 11 and 13 6/7 weeks and a fetal anatomic ultrasound (CPT® 76805) performed at 16 weeks or greater. The timing can be determined by fundal height. (See: **OB-5: Fetal Anatomic Scan**).

If the patient has had **irregular menstrual periods** in the year prior to the current pregnancy OR **an unknown LMP and** has inconsistency in dates between the clinical pelvic exam and history stated dates, one ultrasound can be performed to confirm dates: (CPT® 76801) [plus CPT® 76802 if more than one fetus] and/or CPT® 76817 for a transvaginal ultrasound if less than 14 weeks and a complete ultrasound has not yet been performed.

CPT® 76805 plus CPT® 76810 if more than one fetus) if equal to or greater than 14 weeks, when complete fetal anatomic scan CPT® 76805 is planned and has not yet been performed.

CPT® 76815 or CPT® 76816 (if a complete anatomy ultrasound was done previously and was inconclusive for confirming pregnancy dates, and/or CPT® 76817 for a transvaginal ultrasound)

References

1. Practice Bulletin No. 175 Summary: Ultrasound in pregnancy. *Obstet & Gynec.* 2016;128(6):1459-1460. Accessed November 16, 2017.
http://journals.lww.com/greenjournal/Abstract/2016/12000/Practice_Bulletin_No_175_Summary_Ultrasound_in.50.aspx.
2. 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. Accessed November 16, 2017.
http://journals.lww.com/obgynsurvey/Abstract/2014/08000/Fetal_Imaging_Executive_Summary_of_a_Joint.4.aspx.

OB-22: Unequal Fundal Size and Dates

OB-22.1: Unequal Fundal Size and Dates

81

OB-22.1: Unequal Fundal Size and Dates

Unequal fundal size is defined as more than a 3 week difference in fundal height and gestational age at **23 weeks gestation or greater**.

- | | |
|----|---|
| 1. | One ultrasound can be performed (CPT® 76805) if complete fetal anatomic scan is planned and has not been performed or CPT® 76816 if CPT® 76805 complete anatomic scan or detailed ultrasound CPT® 76811 has been done previously. |
|----|---|

References

1. Pay A, Frøen JF, Staff AC, et al. Prediction of small-for-gestational-age status by symphysis-fundus height: a registry-based population cohort study. *BJOG*. 2016;123:1167
2. BMC Pregnancy Childbirth. 2015 Feb 10;15:22. Symphysis-fundus height measurement to predict small-for-gestational-age status at birth: a systematic review.
3. ACOG practice bulletin 134. Fetal growth restriction. May 2013, reaffirmed in 2015

OB-23: Uterine Anomalies/Adnexal/Pelvic Masses/Ovarian Cysts or Mass

OB-23.1: Uterine Anomalies or Adnexal/Pelvic Masses

83

OB-23.1: Uterine Anomalies or Adnexal/Pelvic Masses

Ultrasound can be performed for a known or suspected uterine anomaly and/or adnexal/pelvic mass.
First trimester: CPT® 76801 [plus CPT® 76802 if more than one fetus] and/or CPT® 76817 for a transvaginal ultrasound if a complete ultrasound has not yet been performed. If a complete ultrasound was done previously CPT® 76815 and/or CPT® 76817 for a transvaginal ultrasound.
Second or third trimester: CPT® 76805 [plus CPT® 76810 if more than one fetus] if a complete fetal anatomic scan has not yet been performed, or CPT® 76815 or CPT® 76816 if a complete fetal anatomic scan was done previously.
Moderate (> 200 cm ³) and Large (over 600 cm ³) Leiomyomata (fibroid) Fetal anatomic scan at 16 weeks or greater (CPT® 76805 or if meets criteria in OB-11: High Risk Pregnancy — CPT® 76811) Transvaginal ultrasound (CPT® 76817) if pre-term labor or cervical insufficiency is of concern. If follow-up of cervical length is needed, see: OB-13: Cervical Insufficiency/Current Preterm Labor Ultrasound (CPT® 76815 or CPT® 76816) may be considered at 28 to 30 weeks and a repeat ultrasound at 34 to 36 weeks gestation (for those with fibroid volume > 200cm ³ – associated with increased risk of FGR see below). If FGR is present then proceed with monitoring per guidelines.
Advanced imaging requests will be sent to Medical Director review.

Practice Note

The true incidence of fibroids during pregnancy is unknown. The reported rates vary from as low as 0.1% of all pregnancies to higher rates of 12.5%. It seems that pregnancy has little or no effect on the overall size of fibroids despite the occurrence of red degeneration in early pregnancy. Fibroids, however, affect pregnancy and delivery in several ways, with abdominal pain, miscarriage, malpresentation, and difficult delivery being the most frequent complications. The major concerns occur late in pregnancy. 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.

Placentation over a fibroid appears to be strong risk factor for abruption. There does not appear to be any association of fetal growth restriction with small fibroids. However, when the fibroid volume is >200 cm³ fetal growth restriction appears more commonly. Fetal compression syndrome is a direct result of large fibroids and is not associated with commonly found small fibroids. Finally, malposition or obstructed labor is associated with fibroids of the lower uterine segment.

References

1. Qidwai GI, Caughey AB, and Jacoby AF. Obstetric outcomes in women with sonographically identified uterine leiomyomata. *Obstet Gynecol.* 2006;22(2):114. Accessed November 16, 2017. http://journals.lww.com/ultrasound-quarterly/Citation/2006/06000/Obstetric_Outcomes_in_Women_with_Sonographically.10.aspx.
2. Laughlin SK, Baird DD, Savitz DA, et al. Prevalence of uterine leiomyomas in the first trimester of pregnancy: an ultrasound-screening study. *Obstet Gynecol.* 2009; 113(3):630-635. Accessed November 16, 2017. <https://insights.ovid.com/pubmed?pmid=19300327>.
3. Stout MJ, Odibo AO, Graseck AS, et al. Leiomyomas at routine second-trimester ultrasound examination and adverse obstetric outcomes. *Obstet Gynecol.* 2010;116(5):1056. Accessed November 16, 2017. <http://www.fibroidsecondopinion.com/2010/11/fibroids-leiomyomas-at-routine-second-trimester-ultrasound-examination-and-adverse-obstetric-outcomes/>.
4. Klatsky PC, Tran ND, Caughey AB, et al. Fibroids and reproductive outcomes: a systematic literature review from conception to delivery. *Am J Obstet Gynecol.* 2008;198(4):357-66. Accessed November 16, 2017. <https://www.ncbi.nlm.nih.gov/pubmed/18395031>.
5. Lee HJ, Norwitz ER, and Shaw J. Contemporary Management of Fibroids in Pregnancy. *Reviews in Obstetrics and Gynecology.* 2010;3(1):20-27. Accessed November 16, 2017. <https://www.scribd.com/document/329485720/Contemporary-Management-of-Fibroids-in-Pregnancy>.

OB-24: Procedure Coding Basics for Established Pregnancy

OB-24.1: OB Ultrasound Code Selection	87
OB-24.2: Required Elements for First Trimester OB Ultrasound	88
OB-24.3: Required Elements for Second or Third Trimester Fetal Anatomic Evaluation OB Ultrasound	89
OB-24.4: Required Elements for a Detailed Fetal Anatomic Evaluation OB Ultrasound	91
OB-24.5: Fetal Nuchal Translucency	94
OB-24.6: Limited and Follow-Up Studies	95
OB-24.7: Obstetric Transvaginal Ultrasound	96
OB-24.8: Biophysical Profile (BPP)	96
OB-24.9: Fetal Doppler	97
OB-24.10: Duplex Scan (Uterine Artery)	99
OB-24.11: Fetal Echocardiography	101
OB-24.12: 3D and 4D Rendering	102
OB-24.13: Fetal MRI	104

Procedure Coding Basics for Established Pregnancy General Considerations

A Duplex scan describes:

1. An ultrasonic scanning procedure for characterizing the pattern and direction of blood flow in arteries and veins with the production of real time images integrating B-mode two dimensional vascular structure, and
2. Doppler spectral analysis, and
3. Color flow Doppler imaging

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. This exclusion includes devices that produce a record that does not permit analysis of bi-directional vascular flow.

The minimal use of color Doppler alone, when performed for anatomical structure identification, during a standard ultrasound procedure, is not separately reimbursable.

- All obstetric ultrasound studies require permanently recorded images:
 - ◆ These images may be stored on film or in a Picture Archiving and Communication System (PACS).
 - ◆ Obstetric ultrasound services may not be billed without image recording.
 - ◆ 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 reimbursable.
- 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.

OB-24.1: OB Ultrasound Code Selection

It is not appropriate to report non-obstetrical pelvic ultrasound procedure codes (CPT® 76830, CPT® 76856, and CPT® 76857) if pregnancy has already been diagnosed.

CPT® Code Guidance	
The OB ultrasound CPT® codes should be selected based on the following criteria.	
<ul style="list-style-type: none"> ➤ The length of gestation: <ul style="list-style-type: none"> ◆ CPT® 76801 and CPT® 76802 are reported for complete studies performed during the first trimester (< 14 weeks). ◆ CPT® 76801 and CPT® 76802 should only be used once per pregnancy unless the mother changes to a new medical caregiver at a new office and there is a medical indication for ultrasound. ◆ CPT® 76805 and CPT® 76810 are used to report complete studies (anatomy scan) performed during the second and third trimester. ◆ CPT® 76805 and CPT® 76810 should only be used once per pregnancy unless the mother changes to a new medical caregiver at a new office and there is a medical indication for ultrasound. 	
<ul style="list-style-type: none"> ➤ The number of fetuses: <ul style="list-style-type: none"> ◆ CPT® 76802, CPT® 76810, CPT® 76812, and CPT® 76814 are “add-on” codes used to report each additional fetus. 	
<ul style="list-style-type: none"> ➤ The imaging approach: <ul style="list-style-type: none"> ◆ CPT® 76817 is used to report a transvaginal ultrasound. The other OB ultrasound codes are used for transabdominal studies. 	
<ul style="list-style-type: none"> ➤ Whether the study is Complete or Limited: <ul style="list-style-type: none"> ◆ CPT® 76816 is used to report follow up studies requiring more information, such as growth scans or follow up on anatomy when more than one area is examined. ◆ CPT® 76815 is used to report limited follow-up studies. 	
<ul style="list-style-type: none"> ➤ Whether a detailed fetal anatomic evaluation is performed: <ul style="list-style-type: none"> ◆ CPT® 76811 and CPT® 78612 describe an extensive fetal ultrasound evaluation and detailed anatomic survey and are used only when the study includes this service. ◆ CPT® 76812 is an add-on for each additional fetus. ◆ Any follow-up ultrasound for CPT® 76811 should be coded as CPT® 76816 	

OB-24.2: Required Elements for First Trimester OB Ultrasound

- Determination of the number of gestational sacs and fetuses
- Gestational sac/fetal measurements appropriate for gestation (< 14 weeks)
- 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

A complete first trimester transabdominal ultrasound (CPT® 76801 and CPT® 76802) is defined in CPT® as including the following elements:

CPT® Code Guidance
It may not be possible to visualize the placenta during the early weeks of pregnancy. CPT® 76801 and/or CPT® 76802 may still be appropriately billed if the report documentation indicates placental anatomic structure could not be evaluated due to gestational age.
CPT® 76802 is an 'add-on' code reported in conjunction with the 'primary procedure' CPT® 76801 to report each additional gestation.
CPT® 76801 and CPT® 76802 should only be reported once per pregnancy unless the mother changes to a new medical caregiver at a new office and there is a medical indication for ultrasound. Follow-up studies to CPT® 76801 and CPT® 76802 should be reported as CPT® 76815

OB-24.3: Required Elements for Second or Third Trimester Fetal Anatomic Evaluation OB Ultrasound

CPT® Code Guidance

A complete second or third trimester transabdominal ultrasound (CPT® 76805 and CPT® 76810) is defined in CPT® as including the following elements:

- ◆ Head, face, and neck
- ◆ Lateral cerebral ventricles;
- ◆ Choroid plexus;
- ◆ Midline falx;
- ◆ Cavum septi pellucidi;
- ◆ Cerebellum;
- ◆ Cistern magna; and
- ◆ 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 ventricular outflow tract; and
- ◆ Right ventricular outflow tract.
- ◆ Abdomen:
- ◆ Stomach (presence, size, and situs);
- ◆ Kidneys;
- ◆ Urinary bladder;
- ◆ Umbilical cord insertion site into the fetal abdomen; and
- ◆ Umbilical cord vessel number.
- ◆ 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)
- ◆ Standard evaluation
- ◆ Fetal number
- ◆ Presentation
- ◆ Qualitative or semi qualitative estimate of amniotic fluid
- ◆ Maternal anatomy
- ◆ Cervix (transvaginal if cervical length is ≤ 3 cm)
- ◆ Uterus
- ◆ Adnexa
- ◆ Biometry
- ◆ Biparietal diameter
- ◆ Head circumference
- ◆ Femur length

- ◆ Abdominal circumference
- ◆ Fetal weight estimate

CPT® 76810 is an ‘add-on’ code used with the ‘primary procedure’ CPT® 76805 to report each additional gestation.

CPT® 76805 and CPT® 76810 **should only be used once per pregnancy** unless the mother changes to a new medical caregiver at a new office and there is a medical indication for ultrasound. Follow-up studies to CPT® 76805 and CPT® 76810 should be coded as CPT® 76815 or CPT® 76816.

References

1. Practice Bulletin No. 130 Prediction and prevention of pre-term birth. *Obstetrics & Gynecology*, reaffirmed 2016. Accessed November 15, 2017. http://journals.lww.com/greenjournal/Citation/2012/10000/Practice_Bulletin_No_130_Prediction_and.42.aspx.
2. Cho, H.J. and Roh H.J. Correlation between cervical lengths measured by transabdominal and transvaginal sonography for predicting preterm birth. *Journal of Ultrasound in Medicine*. 2016;35:537–544. Accessed November 15, 2017. <http://onlinelibrary.wiley.com/doi/10.7863/ultra.15.03026/epdf>.
3. McIntosh J, Feltovich H, Berghella V, et al. 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):B2-B7. Accessed November 15, 2017. [http://www.ajog.org/article/S0002-9378\(16\)30112-0/fulltext](http://www.ajog.org/article/S0002-9378(16)30112-0/fulltext).
4. Khalifeh Adeeb, Vincenzo Berghella, David Stamilio, et al. Ultrasound approach for cervical length screening in preterm birth prevention. *American Journal of Obstetrics & Gynecology*. Dec 2016;215(6) 739-744.
5. ACOG Practice Bulletin 175. Ultrasound in Pregnancy, 2016. Summary. *Obstetrics & Gynecology*. 2016; 128(6):1459-1460. doi:10.1097/aog.0000000000001812
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):1047-1056. Accessed December 6, 2017. <https://www.rtihs.org/sites/default/files/28462%20Hunter%202017%20Predictive%20accuracy%20of%20serial%20transvaginal%20cervical%20lengths%20and%20quantitative%20vaginal%20fetal%20fibronectin%20levels%20for%20spontaneous%20preterm%20birth%20among%20nulliparous%20women.pdf>.
7. Jain S, Kilgore M, Edwards RK, et al. Revisiting the cost-effectiveness of universal cervical length screening: importance of progesterone efficacy. *A J Obstet Gynecol*. 2016 Jul;215(1):101.e1-101.e7. Accessed December 6, 2017. [http://www.ajog.org/article/S0002-9378\(16\)00215-5/fulltext](http://www.ajog.org/article/S0002-9378(16)00215-5/fulltext)

OB-24.4: Required Elements for a Detailed Fetal Anatomic Evaluation

OB Ultrasound

CPT® Code Guidance

Performance of the specialized fetal anatomic evaluation (CPT® 76811 and CPT® 76812) should be limited to those with special skills to perform this study, such as Maternal Fetal Medicine specialists, Perinatologists, and 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 ventricle
- ◆ 4th ventricle
- ◆ Lateral ventricles
- ◆ Cerebellar lobes, vermis, and cisterna magna
- ◆ Corpus callosum
- ◆ Integrity and shape of cranial vault
- ◆ Brain parenchyma
- ◆ Neck
- ◆ Profile
- ◆ Coronal face (nose/lips/lensa)
- ◆ 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

CPT® Code Guidance

- ◆ Genitalia
- ◆ Sex
- ◆ 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 ≤ 3.0 cm)
- ◆ Uterus
- ◆ Adnexa

- CPT® 76812 is an 'add-on' code used with the 'primary procedure' CPT® 76811 to report each additional gestation.
 - ◆ These studies are usually performed at 18 to 20 weeks and are most often completed at tertiary referral centers with perinatology departments.
 - ◆ Only one medically indicated procedure CPT® 76811 per pregnancy, per practice (per NPI) is appropriate. *Follow-up studies should be coded as CPT® 76815 or CPT® 76816

References

1. Practice Bulletin No.130: Prediction and prevention of pre-term birth. *Obstetrics & Gynecology*. 2012;120(4):964-973 reaffirmed 2016. Accessed November 15, 2017. http://journals.lww.com/greenjournal/Citation/2012/10000/Practice_Bulletin_No_130_Prediction_and.42.aspx.
2. Wax J, Minkoff H, Johnson A, et al. Consensus report on detailed fetal anatomic ultrasound anatomic ultrasound examination indications, components, and qualifications. *Journal of Ultrasound in Medicine*. 2014;33(2):189-195. Accessed November 15, 2017. http://api.ning.com/files/cZ399qCqOaHeuZzVLVyhIBxiUetrbLyKO3Bw9Tt6vH2VZjNDiuNoRV*TfNUrgT5k4qdLfS6J8OIAGmAHfkKiXIDZdpW4U1-u/consensus768112014.pdf.
3. Practice Bulletin No. 175 Summary: Ultrasound in Pregnancy. *Obstet Gynecol*. 2016;128(6):1459-1460. Accessed November 3, 2017. http://journals.lww.com/greenjournal/Abstract/2016/12000/Practice_Bulletin_No_175_Summary_Ultrasound_in.50.aspx.
4. Cho, H.J. and Roh, H.J. Correlation between cervical lengths measured by transabdominal and transvaginal sonography for predicting preterm birth. *Journal of Ultrasound in Medicine*. 2016;35:537-544. Accessed November 15, 2017. <http://onlinelibrary.wiley.com/doi/10.7863/ultra.15.03026/epdf>.
5. McIntosh J, Feltovich H, Berghella V, et al. 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):B2-B7. Accessed November 15, 2017. [http://www.ajog.org/article/S0002-9378\(16\)30112-0/fulltext](http://www.ajog.org/article/S0002-9378(16)30112-0/fulltext).
6. Khalifeh, Adeeb, Vincenzo Berghella, et al. Ultrasound approach for cervical length screening in preterm birth prevention. *American Journal of Obstetrics & Gynecology*. Dec 2016;215(6),739-744 739.
7. Reddy UM, Abuhamad AZ, Levine D, et al. 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. *J Ultrasound Med*. 2014;33:745-757.
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):1047-1056. Accessed December 6, 2017. <https://www.rtihs.org/sites/default/files/28462%20Hunter%202017%20Predictive%20accuracy%20of%20serial%20transvaginal%20cervical%20lengths%20and%20quantitative%20vaginal%20fetal%20fibronectin%20levels%20for%20spontaneous%20preterm%20birth%20among%20nulliparous%20women.pdf>.
9. Jain S, Kilgore M, Edwards, RK, et al. Revisiting the cost-effectiveness of universal cervical length screening: importance of progesterone efficacy. *A J Obstet Gynecol*. 2016 Jul;215(1):101.e1-101.e7. Accessed December 6, 2017. [http://www.ajog.org/article/S0002-9378\(16\)00215-5/fulltext](http://www.ajog.org/article/S0002-9378(16)00215-5/fulltext)

OB-24.5: Fetal Nuchal Translucency

CPT® Code Guidance

- **CPT® 76813** and **CPT® 76814** describe 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.
 - ◆ NT is 44-83 mm in CRL. Gestational age approximately is 11 to 13 6/7 weeks.
 - ◆ Biochemistry testing is 10 to 14 weeks.
- The sonographer performing the study and the physician interpreting the study must be credentialed by the Maternal Fetal Medicine Foundation **or** Nuchal Translucency Quality Review Program (NTQR).
 - ◆ CPT® 76814 is an add-on for each additional fetus.

Follow-up studies to CPT® 76813 and CPT® 76814 should be coded as CPT® 76815 or CPT® 76816 (if a complete anatomic ultrasound was done previously).

Criteria for Nuchal Translucency (NT) Measurement

1. The first trimester screening is typically done between 11 and 13 6/7 weeks (CRL between 44 and 83 millimeters); abnormal Fetal Nuchal Translucency scan (if ≥ 2.5 mm there is an increased risk for aneuploidy, imaging should be based upon the MOM for NT and biochemical markers, ≥ 3.5 mm increased risk for cardiac defects, abdominal wall defects, diaphragmatic hernia, and genetic syndromes in euploid fetuses) during current pregnancy.
 - ◆ Margins of NT edges are clear
 - ◆ Clear image
 - ◆ Angle of insonation is perpendicular to NT space
 - ◆ Clear NT lines
 - ◆ Fetus in Mid Sagittal plane
 - ◆ Midsagittal view of fetal spine seen in cervical & thoracic region
 - ◆ Tip of nose seen in fetal profile
 - ◆ Third & fourth ventricle seen in CNS
 - ◆ Should not see ribs, stomach or heart
 - ◆ Fetus occupies majority of image
 - ◆ Image predominately filled by fetal head neck and thorax
 - ◆ The fetus should occupy $> 50\%$ of image
 - ◆ Fetal head in neutral position
 - ◆ Amniotic fluid seen between chin and chest
 - ◆ Angle < 90 degrees
 - ◆ Fetus observed away from amnion
 - ◆ Measurement
 - ◆ Use the + calipers
 - ◆ Place crosshairs on the inner edge, but not in the clear space
 - ◆ Measurement is perpendicular to long axis of the fetus
 - ◆ Measure at the widest space and use largest of 3 technically correct measurements

Adapted from Steven L. Warsof, MD, Prof. Ob-Gyn, Eastern Virginia Medical School - Director, Center for Advanced Fetal Therapy

Practice Note**Required elements of the 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
- At least three separate measurements of the largest distance between the inner borders of the fetal nuchal translucency
- Comparison of the largest nuchal translucency measurement from an acceptable image to crown-rump length and gestational age specific medians
- Written documentation of each component of the examination and permanent documentation of ultrasound images.

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 indeed be billed along with the nuchal translucency screening (CPT® 76813/ CPT® 76814).

References

1. Society for Maternal and Fetal Medicine (SMFM), coding committee. SMFM Coding Committee White Paper: Billing of 76801 and/or 76813 with cfDNA . October 2017 .

OB-24.6: 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 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 and CPT® 76805/ CPT® 76810.
- **CPT® 76816** describes a **follow-up** study designed to reassess fetal size or re-evaluate one or more abnormalities previously revealed on ultrasound.
 - ◆ CPT® 76816 should be reported once per fetus evaluated in follow-up.
 - ◆ Modifier -59 is appropriately used on subsequent codes. For example, a follow-up of a twin pregnancy is reported: CPT® 76816 and CPT® 76816-59.
 - ◆ CPT® 76816 should never be reported with complete studies CPT® 76801, CPT® 76802 and CPT® 76805, CPT® 76810.
 - ◆ CPT® 76816 should not be performed prior to an anatomy scan CPT® 76805 (normal pregnancy) or Detailed anatomy scan CPT® 76811 (high risk pregnancy).

OB-24.7: Obstetric Transvaginal Ultrasound

CPT® Code Guidance

CPT® 76817 is used to report an obstetrical transvaginal ultrasound.

CPT® 76817 is reported only once regardless of the number of fetuses.

Although an obstetrical transvaginal ultrasound and transabdominal ultrasound can be performed at the same sitting and reported as two codes, there is rarely a medical indication to perform both studies at once.

OB-24.8: Biophysical Profile (BPP)

The BPP combines data from ultrasound imaging and fetal heart rate (FHR) monitoring and is designed to predict the presence or absence of fetal asphyxia and, ultimately the risk of fetal death in the antenatal period (appropriately performed > 24 weeks; should NOT be performed prior to the time when the fetus would be viable outside of the uterus).

Typically all components of the BPP, such as breathing, are not present until 26 weeks gestation. However, BPP may be utilized below 26 weeks in cases of FGR (with Doppler studies). The following parameters are evaluated:

- ◆ Fetal breathing movements
- ◆ Gross fetal body movements
- ◆ Fetal tone
- ◆ Qualitative amniotic fluid volume, at least one vertical pocket 2 x 2 cm
- ◆ Reactive FHR (non-stress testing portion)

CPT® Code Guidance

CPT® 76818 includes non-stress testing.

CPT® 76819 does not include the non-stress testing portion.

If non-stress testing is performed without BPP, the appropriate code to use is **CPT® 59025** (Fetal non-stress test). **CPT® 59025** should not be reported with codes **CPT® 76818** or **CPT® 76819**.

Although obstetrical ultrasound (CPT® codes: **CPT® 76805**, **CPT® 76810**, **CPT® 76815**, **CPT® 76816**, **CPT® 76820**) and BPP (**CPT® 76818** and **CPT® 76819**) can be performed at the same sitting and reported as two codes, it is generally not necessary to perform both studies at once.

- ◆ There are certain clinical circumstances in which it would be medically indicated to perform both studies at once.
- ◆ Each study must have a separate images, interpretations and reports

BPP and/or non-stress testing, performed on more than one fetus, should be reported separately. The use of modifier -59 on the second and subsequent studies is appropriate, depending on payer policy.

Practice Note

If BPP \leq 6, repeat BPP in 24 hours

OB-24.9: Fetal Doppler**CPT® Code Guidance**

- CPT® 76820 describes Doppler velocimetry of the umbilical artery
 - ◆ Utilized for known FGR; see: **OB-8.1 Cerclage in Place in Current Pregnancy** and known oligohydramnios See: **OB-4.1 Amniotic Fluid Abnormalities**, performed > 22 weeks gestation
 - ◆ Known twin to twin transfusion; see: **OB-16.1 Suspected multiple Pregnancies** or known discordant twins (See: **OB-16.1 Suspected multiple Pregnancies**) Its use to predict preeclampsia, and stillbirth is considered investigational.
- CPT® 76821 describes Doppler velocimetry of the middle cerebral artery.
- MCA Doppler (CPT® 76821), starting at 34 weeks, if Doppler CPT® 76820 is normal.
 - ◆ Performed as a substitute for amniocentesis to evaluate a fetus at risk for anemia due to Rhesus isoimmunization/alloimmunization, 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-3.1 Alloimmunization/RH Isoimmunization/Other Causes of Fetal Anemia -3.4 Fetal Hydrops Associated with Polyhydramnios**

Practice Notes

- Middle Cerebral Artery Doppler (MCA): Doppler flow studies of the MCA are used in the assessment of the fetus at risk for anemia see: **OB-3: Alloimmunization/RH Isoimmunization/Other Causes of Fetal Anemia/Parvo/Hydrops** and mono chorionic twin pregnancies see: **OB-16.7: Multiple Pregnancies**
- In the preterm SGA/FGR fetus, middle cerebral artery (MCA) Doppler has limited accuracy to predict acidemia and adverse outcome; it should not be used to time delivery. Most studies investigating MCA Doppler as a predictor of adverse outcome in preterm SGA/FGR fetuses have reported low predictive value, especially when umbilical artery Doppler is abnormal. In the largest study of predictors of neonatal outcome in SGA/FGR neonates of less than 33 weeks gestational age (n = 604), it was not a statistically significant predictor of outcome on logistic regression, although MCA PI < -2 SDs was associated with neonatal death (LR 1.12, 95% CI 1.04–1.21) and major morbidity (LR 1.12, 95% CI 1.1–1.33).
- In the near-term SGA/FGR fetus with normal umbilical artery Doppler, an abnormal middle cerebral artery Doppler (PI <5th centile) has moderate predictive value for acidosis at birth and should be used to time delivery. MCA Doppler may be a more useful test in SGA/FGR fetuses detected after 34 weeks of gestation when umbilical artery Doppler is normal. Based on this evidence it is reasonable to use MCA Doppler to time delivery in the near term-term (34 weeks gestation or greater) SGA/FGR fetus with normal umbilical artery Doppler.

References

1. Reddy UM, Filly RA, and Copel JA. Prenatal Imaging: Ultrasonography and Magnetic Resonance Imaging. *Obstetrics and Gynecology*. 2008;112:145-157. Accessed November 14, 2017. <http://journals.lww.com/greenjournal/pages/articleviewer.aspx?year=2008&issue=07000&article=00024&type=abstract>.
2. Sciscione AC, Hayes EJ. Uterine artery Doppler flow studies in obstetric practice. *American J of Obstet and Gynecol*. 2009;201(2):121-126. Accessed November 15, 2017. [http://www.ajog.org/article/S0002-9378\(09\)00283-X/fulltext](http://www.ajog.org/article/S0002-9378(09)00283-X/fulltext).
3. Velauthar L, Plana MN, Kalidindi M, et al. First-trimester uterine artery Doppler and adverse pregnancy outcome: a meta-analysis involving 55 974 women. *Ultrasound in Obstetrics & Gynecology*. 2014;43(5):500-507. Accessed November 16, 2017. <http://onlinelibrary.wiley.com/doi/10.1002/uog.13275/epdf>.
4. Oros D, Figueras F, Cruz-Martinez R, et al. Longitudinal changes in uterine, umbilical and fetal cerebral Doppler indices in late-onset small-for-gestational age fetuses. *Ultrasound Obstet Gynecol*. 2011;37:191-5. Accessed November 15, 2017. <http://onlinelibrary.wiley.com/doi/10.1002/uog.7738/pdf>.
5. Practice Bulletin No. 145: Antepartum Fetal Surveillance. *Obstetrics & Gynecology*. 2014, reaffirmed 2016. Accessed November 15, 2017. http://journals.lww.com/greenjournal/Citation/2014/07000/Practice_Bulletin_No_145_Antepartum_Fetal.35.aspx.
6. Practice Bulletin No. 175: Summary: Ultrasound in pregnancy. *Obstetrics & Gynecology*. 2016;128(6):1459-1460. Accessed November 15, 2017. http://journals.lww.com/greenjournal/Abstract/2016/12000/Practice_Bulletin_No_175_Summary_Ultrasound_in.50.aspx.
7. Practice Bulletin No. 134: Fetal Growth Restriction. *Obstetrics & Gynecology*. 2013; 121(5):1122-1133. Accessed November 15, 2017. http://journals.lww.com/greenjournal/Abstract/2013/05000/Practice_Bulletin_No_134_Fetal_Growth.45.aspx.

OB-24.10: Duplex Scan (Uterine Artery)

- Uterine artery Duplex (Doppler) scan (CPT® 93976), evaluation has been shown to predict adverse outcomes when utilized in the first and second trimester, prior to 16 weeks. The clinical utility however is limited to the first trimester when low dose Aspirin therapy can be instituted to decrease the risk of adverse outcomes (chronic hypertension, preeclampsia, and possibly FGR). Provider certification, study technique, and abnormal test thresholds have been established by the Fetal Medicine Foundation (similar to certification process for Nuchal Translucency screening). The Society of Maternal Fetal Medicine (SMFM) has recommended the use of CPT® 93976 only.
- Treatment is now possible if started prior to 16 weeks gestation. Therefore, the use of Uterine Artery Doppler evaluation is now justified when utilized before 16 weeks gestation for patients with chronic hypertension or who are at risk for preeclampsia.
- The CPT® code recommended by SMFM is CPT® 93976 only. Send to Medical Director review if beyond 16 weeks gestation. One time only study.

CPT® Code Guidance

CPT® 93975 describes a complete duplex scan and should be reported if an organ is evaluated in its entirety. A complete study involves the evaluation of the inflow and outflow vessels of one or more organs. This code is not used for obstetric imaging.

CPT® 93976 describes a limited duplex scan and should be reported when a complete study is not documented, for example, in the case of a follow-up study or a study of only the arterial flow.

CPT® 93976 is used to report a **fetal umbilical-placental flow study**.

References

1. Vergani P, Roncaglia N, Ghidini A, et al. Can adverse neonatal outcome be predicted in late preterm or term fetal growth restriction? *Ultrasound Obstet Gynecol.* 2010;36(2):166–70. Accessed November 16, 2017. <http://onlinelibrary.wiley.com/doi/10.1002/uog.7583/abstract>.
2. Baschat AA, Cosmi E, Bilardo CM, et al. Predictors of neonatal outcome in early-onset placental dysfunction. *Obstet Gynecol.* 2007;109:253–61. Accessed November 16, 2017. <http://journals.lww.com/greenjournal/Pages/articleviewer.aspx?year=2007&issue=02000&article=00004&type=Fulltext>.
3. Oros D, Figueras F, Cruz-Martinez R, et al. Longitudinal changes in uterine, umbilical and fetal cerebral Doppler indices in late-onset small-for-gestational age fetuses. *Ultrasound Obstet Gynecol.* 2011;37:191–5. Accessed November 16, 2017. <http://onlinelibrary.wiley.com/doi/10.1002/uog.7738/pdf>.
4. Hershkovitz R, Kingdom JC, Geary M, et al. Fetal cerebral blood flow redistribution in late gestation: identification of compromise in small fetuses with normal umbilical artery Doppler. *Ultrasound Obstet Gynecol.* 2000;15(3):209–12. Accessed November 15, 2017. <http://onlinelibrary.wiley.com/doi/10.1046/j.1469-0705.2000.00079.x/epdf>.
5. Severi FM, Bocchi C, Visentin A, et al. Uterine and fetal cerebral Doppler predict the outcome of third-trimester small-for-gestational age fetuses with normal umbilical artery Doppler. *Ultrasound Obstet Gynecol.* 2002;19:225–8. Accessed November 15, 2017. https://www.researchgate.net/publication/11466710_Uterine_and_fetal_cerebral_Doppler_predict_the

- [outcome of third-trimester small-for-gestational age fetuses with normal umbilical artery Doppler.](#)
6. Reddy UM, Filly RA, and Copel JA. Prenatal Imaging: Ultrasonography and Magnetic Resonance Imaging. *Obstetrics and Gynecology*. 2008;112(1):145-157. Accessed November 14, 2017. <http://journals.lww.com/greenjournal/pages/articleviewer.aspx?year=2008&issue=07000&article=00024&type=abstract>.
 7. Sciscione AC, and Hayes EJ. Uterine artery Doppler flow studies in obstetric practice. *American J Obstet Gynecol*. 2009;201(2):121-126. Accessed November 15, 2017. [http://www.ajog.org/article/S0002-9378\(09\)00283-X/fulltext](http://www.ajog.org/article/S0002-9378(09)00283-X/fulltext).
 8. Stampalija T, Alfirevic Z, and Gyte G. Cochrane Reviews' summaries and their relevance for imaging. *Ultrasound Obstet Gynecol*. 2010;36(6):779-80. Accessed November 15, 2017. <http://onlinelibrary.wiley.com/doi/10.1002/uog.8863/epdf>.
 9. Practice Bulletin No. 134: Fetal Growth Restriction. *Obstetrics & Gynecology*. 2013; 121(5):1122-1133. Accessed November 15, 2017. http://journals.lww.com/greenjournal/Abstract/2013/05000/Practice_Bulletin_No_134_Fetal_Growth_Restriction.45.aspx.
 10. Practice Bulletin No. 145: Antepartum Fetal Surveillance. *Obstetrics & Gynecology*. 2014, reaffirmed 2016;124(1):182-192, reaffirmed in 2016. Accessed November 15, 2017. http://journals.lww.com/greenjournal/Citation/2014/07000/Practice_Bulletin_No_145_Antepartum_Fetal_Surveillance.35.aspx.
 11. Copel JA, and Bahtiyar MO. A practical approach to fetal growth restriction. *Obstetrics & Gynecology*. 2014;123(5):1057-1069. Accessed November 16, 2017. http://journals.lww.com/greenjournal/Abstract/2014/05000/A_Practical_Approach_to_Fetal_Growth_Restriction.22.aspx.
 12. Velauthar L, Plana MN, Kalidindi M, et al. First-trimester uterine artery Doppler and adverse pregnancy outcome: a meta-analysis involving 55 974 women. *Ultrasound in Obstetrics & Gynecology*. 2014; 43(5):500-507. Accessed November 16, 2017. <http://onlinelibrary.wiley.com/doi/10.1002/uog.13275/epdf>.

OB-24.11: Fetal Echocardiography

CPT® Code Guidance
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® 76825 describes fetal echocardiography, real time with image documentation (2D), with or without M-mode recording
<ul style="list-style-type: none"> ➤ CPT® 76826: <ul style="list-style-type: none"> ◆ is a follow-up or repeat fetal echocardiogram ◆ should never be billed with CPT® 76825 ◆ should never be billed more than once on any date of service
CPT® 76827 describes a complete Doppler echocardiography, fetal, pulsed wave and/or continuous wave with spectral display
CPT® 76828: is a follow up or repeat Doppler fetal echocardiogram
CPT® 93325 is used to report color mapping in conjunction with fetal echocardiography procedures CPT® 76825 – CPT® 76828.

Practice Notes

Doppler of the ductus venosus, Doppler of the ductus arteriosus, and PR Interval measurement.

- **Ductus venosus Doppler:** This is billable when sampled as part of a fetal echocardiogram study. Initial evaluation is reported as 76827; follow-up as 76828. Ductus Venosus Doppler is not billed when it is the sole assessment performed.
- **Ductus arteriosus Doppler:** This is often performed after another ultrasound study, so it is billed as 76828. If performed as part of an initial fetal echocardiogram evaluation, it is billed as 76827 then, and 76828 on subsequent studies.
- **PR interval measurement:** This is often performed after another ultrasound study, so it is billed as 76828. If performed as part of an initial fetal echocardiogram evaluation, it is billed as 76827 then, and 76828 on subsequent studies.

Reference

1. SMFM Coding Committee July 2017 Coding Tip #1: When and how are Ductus Venosus, Ductus Arteriosus and PR Intervals reported.

OB-24.12: 3D and 4D Rendering

- There is currently insufficient data to generate appropriateness criteria for the use of 3D and 4D rendering in conjunction with ultrasound.
- Current guidelines on ultrasonography in pregnancy from ACOG state: "The technical advantages of 3-dimensional ultrasonography include its ability to acquire and manipulate an infinite number of planes and to display ultrasound planes traditionally inaccessible by 2-dimensional ultrasonography. Despite these technical advantages, proof of a clinical advantage of 3-dimensional ultrasonography in prenatal diagnosis in general is still lacking. Potential areas of promise include fetal facial anomalies, neural tube defects, and skeletal malformations where 3-dimensional ultrasonography may be helpful in diagnosis as an adjunct to, but not a replacement for, 2-dimensional ultrasonography."
- Yagel et al described the state of the science of 3D/4D ultrasound (3D/4D US) applications in fetal medicine. They noted that 3D/4D US applications are many and varied. Their use in fetal medicine varies with the nature of the tissue to be imaged and the challenges each organ system presents, versus the advantages of each ultrasound application. The investigators stated that 3D/4D US has been extensively applied to the study of the fetus. Fetal applications include all types of anatomical assessment, morphometry and volumetry, as well as functional assessment. The authors concluded that 3D/4D US provides many advantages in fetal imaging; however, its contribution to improving the accuracy of fetal scanning over rates achieved with 2D US, remains to be established.
- Clinical use of 3D ultrasound should be on an individual basis. There can be specific reasons that require 3D ultrasound when 2D cannot be utilized. Such as determination of fetal growth when there is absence of lower limbs / femurs. Since, the femur length is vital in determination of fetal weight and growth. Fractional limb volume measurement of the humerus is required to evaluate for FGR.
- A second clinical scenario is seen with gastroschisis. Since the fetal abdomen is small due to the defect present, there is artificially high rate of FGR. The cause of this is the use of the fetal abdominal circumference to determine growth. 3D Fractional limb volume measurement eliminates this issue and decreases false positives.

References

1. Lee W, Deter R, Sangi-Haghpeykar H, et al. Prospective validation of fetal weight estimation using fractional limb volume. *Ultrasound Obstet Gynecol.* 2013;41(2):198-203. Accessed November 16, 2017. <http://onlinelibrary.wiley.com/doi/10.1002/uog.11185/epdf>.
2. Reddy UM, Filly RA, and Copel JA. Prenatal Imaging. Ultrasonography and Magnetic Resonance Imaging. *Obstetrics & Gynecology.* 2008;112(1):145-157. Accessed November 14, 2017. <http://journals.lww.com/greenjournal/pages/articleviewer.aspx?year=2008&issue=07000&article=00024&type=abstract>.
3. Practice Bulletin No. 175 Summary: Ultrasound in pregnancy. *Obstet & Gynecol.* 2016;128(6):1459-1460. Accessed November 3, 2017. http://journals.lww.com/greenjournal/Abstract/2016/12000/Practice_Bulletin_No_175_Summary_Ultrasound_in.50.aspx.
4. Merz E, Abramowicz JS. 3D/4D ultrasound in prenatal diagnosis: is it time for routine use? *Clin Obstet Gynecol.* Mar 2012;55(1):336-51. Accessed November 16, 2017. <https://www.medscape.com/medline/abstract/22343249>.

OB-24.13: Fetal MRI

- Fetal MRI (CPT® 74712; CPT® 74713 for each additional gestation)
- 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)

Indications for fetal MRI

Fetal MRI may be considered for surgical planning (re: fetal anomalies) and/or if an ultrasound is equivocal and additional information is needed for counseling purposes

Fetal organs	Indication main category	Indication sub category
Brain	Congenital anomalies	Ventriculomegaly; corpus callosal dysgenesis; holoprosencephaly; posterior fossa anomalies; malformations of cerebral cortical development
	Screening fetuses with a family risk for brain anomalies	E.g. tuberous sclerosis; corpus callosal dysgenesis; malformations of cerebral cortical development
	Vascular abnormalities	Vascular malformations; hydranencephaly; infarctions; monochorionic twin pregnancy complications
Spine	Congenital anomalies	Neural tube defects; sacrococcygeal teratomas; caudal regression/sacral agenesis; sirenomelia; vertebral anomalies
Skull, face and neck	Masses of the face and neck	Venolymphatic 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
	Volumetric assessment of lung	Cases at risk for pulmonary hypoplasia secondary to oligohydramnios, chest mass, or skeletal dysplasias
Abdomen, retroperitoneal and pelvis	Mass	Abdominal–pelvic cyst.; tumors (e.g. hemangiomas, neuroblastomas, sacrococcygeal teratomas, and suprarenal or renal masses); complex genitourinary anomalies (e.g. cloaca); renal anomalies in cases of severe oligohydramnios; and bowel anomalies such as megacystis microcolon
Complications of monochorionic twins		Delineation of vascular anatomy prior to laser treatment of twins; assessment of morbidity after death of a monochorionic co-twin, and improved delineation of anatomy in conjoined twins

Fetal organs	Indication main category	Indication sub category
Fetal surgery assessment		Meningomyelocele; sacrococcygeal teratomas; processes obstructing the airway (e.g. neck mass or congenital high airway obstruction); complications of monochorionic twins needing surgery; and chest masses.

References

1. Saleem SN. Fetal MRI: An approach to practice: A review. *Journal of Advanced Research*. 2014; 5(5):507-523. ~AAmerican College of Radiology (ACR), Society for Pediatric Radiology (SPR). ACR-SPR practice guideline for the safe and optimal performance of fetal magnetic resonance imaging (MRI). *American College of Radiology (ACR)*; 2010:10. <http://www.guidelines.gov/content.aspx?id=32509>.
2. Kilcoyne A, Shenoy-Bhangle AS, Roberts DJ et al. MRI of placenta Accreta, Placenta Increta and Placenta Percreta: Pearls and Pitfalls. *American Journal of Roentgenology*. 2017; 208(1)214-221. Accessed November 16, 2017. <http://www.ajronline.org/doi/pdf/10.2214/AJR.16.16281>

OB-25: High Risk Medications and Substances

Specific drugs that qualify as risk factors in High Risk Pregnancy and qualify as medical indications for Specialized Fetal Anatomic Scan (CPT® 76811): If another high risk indication see appropriate guideline for any further imaging.

High Risk Medications/Substances
Alcohol
Aminoglycosides (amikacin, gentamycin, kanamycin, tobramycin and other mycins)
Amphetamines
Angiotensin II antagonists or blockers
Anti-neoplastics (cancer drugs)
Accutane/isoretinoin/retinoic acid
Aspirin – only if exposed less than 10 weeks gestation
Atenolol
ACE inhibitors (benzapril, captopril, enalapril, fosinopril, lisinipril, etc)
Anticonvulsants (phenytoin, carbamazepine, valproate, primidone, phenobarbital, Dilantin)
Azathioprine
Benzodiazepines (Diazepam (valium), etc)
Carbon monoxide
Chlordiazepoxide
Cocaine
Codeine
Cortisone
Coumadin/ warfarin
Cyclophosphamide
Cytarabine
Daunorubicin
Dextroamphetamine
Ergotamine
Fluconazole (and other anti-fungals)
Heparin
Lithium
Methimazole
Methotrexate
Methyl mercury
Misoprostol
Oral contraceptives
Paramethadione
Paroxetine/SSRI
Penicillamine
Primidone
Progesterones (exposure less than 12 weeks) and anti-progesterone drug RU486
Pregabalin/lyrica

Quinine
Retinoic acid/retinoid medications
Selective serotonin reuptake inhibitors (SSRI)
Substance abuse (heroin, methadone, subutex, cocaine)
Tetracyclines
Thalidomide
Trifluoperazine
Trimethadione
Valproic acid

References

1. Practice Bulletin No. 92: Use of Psychiatric Medications During Pregnancy and Lactation. 2008; 111(4):1001-1020, Reaffirmed 2016. Accessed November 16, 2017. <http://journals.lww.com/greenjournal/pages/collectiondetails.aspx?TopicalCollectionID=37>.
2. Drugs in Pregnancy and Lactation: Improved Benefit-Risk information. FDA/CDER SBIA Chronicles, January 22, 2015. Accessed November 16, 2017. <https://www.fda.gov/downloads/Drugs/DevelopmentApprovalProcess/SmallBusinessAssistance/UCM431132.pdf>
3. Burkey, B, and Holmes, A. Evaluating Medication Use in Pregnancy and Lactation: What Every Pharmacist Should Know. *J Pediatr Pharmacol Ther.* 2013;18(3): 247-258. Accessed November 16, 2017. <http://www.jppt.org/doi/abs/10.5863/1551-6776-18.3.247?code=ppag-site>

OB-26: Imaging for Planned Pregnancy Termination

- For a planned pregnancy termination, ultrasound can be performed.
 - ◆ One complete ultrasound (CPT® 76801) and/or one transvaginal ultrasound (CPT® 76817), if less than 14 weeks
 - ◆ If ≥ 14 weeks, send to MD review.