FETAL ECHOCARDIOGRAPHY (INCLUDING DOPPLER, PULSED WAVE AND COLOR FLOW MAPPING)

Policy Number: HS-114

Original Effective Date: 7/2/2009


APPLICATION STATEMENT

The application of the Clinical Coverage Guideline is subject to the benefit determinations set forth by the Centers for Medicare and Medicaid Services (CMS) National and Local Coverage Determinations and state-specific Medicaid mandates, if any.
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DISCLAIMER

The Clinical Coverage Guideline is intended to supplement certain standard WellCare benefit plans. The terms of a member's particular Benefit Plan, Evidence of Coverage, Certificate of Coverage, etc., may differ significantly from this Coverage Position. For example, a member's benefit plan may contain specific exclusions related to the topic addressed in this Clinical Coverage Guideline. When a conflict exists between the two documents, the Member’s Benefit Plan always supersedes the information contained in the Clinical Coverage Guideline. Additionally, Clinical Coverage Guidelines relate exclusively to the administration of health benefit plans and are NOT recommendations for treatment, nor should they be used as treatment guidelines. The application of the Clinical Coverage Guideline is subject to the benefit determinations set forth by the Centers for Medicare and Medicaid Services (CMS) National and Local Coverage Determinations and state-specific Medicaid mandates, if any. Note: The lines of business (LOB) are subject to change without notice; consult www.wellcare.com/Providers/CCGs for list of current LOBs.

BACKGROUND

Fetal echocardiography is the ultrasonic evaluation of the human fetal cardiovascular system. General antepartum obstetrical ultrasound has become a standard part of gestational care and is commonly used for the determination of fetal age, size, gender, or well-being and for the detection of congenital anomalies. A variety of maternal or fetal disorders may result in abnormality of the fetal cardiovascular system to a degree which demands evaluation at a level above and beyond that attainable with standard antepartum obstetrical ultrasound. In these circumstances, a fetal echocardiogram should be performed.

Definition of fetal cardiac structures is currently possible at 10 to 12 weeks of gestation with the use of vaginal probes with high-resolution transducers. With current technologies, accurate segmental analysis of cardiac structures and blood flow across valves, shunts, and the ductus arteriosus is possible with a conventional transabdominal approach by 16 to 18 weeks of gestation.

Members are referred for fetal echocardiography because of an abnormality of structure or rhythm noted on ultrasound examination or because the patient is in a high-risk group for fetal heart disease. Treatment of the patient is facilitated by the early recognition of the exact nature of the cardiac problem in the fetus. The correct diagnosis may be difficult because of fetal physiology, the effect on flow across defects and valves, inability to see the fetus for orientation reference, and inability to examine the fetus for clinical findings. For these reasons, fetal echocardiography should be performed only by trained fetal echocardiographers.

As fetal heart disease is typically associated with structural abnormalities and consequent aberrant blood flow through the heart, it is necessary to perform Doppler studies and color flow mapping when such abnormalities are detected with 2D fetal echocardiography.

Position Statements

The American Society of Echocardiography's support the use of fetal echocardiography for the following maternal indications:

- Family history of congenital heart disease (CHD)
- Metabolic disorders (e.g., diabetes, PKU)
- Exposure to teratogens
- Exposure to prostaglandin synthetase inhibitors (eg, ibuprofen, salicylic acid, indomethacin)
- Rubella infections
- Autoimmune disease (eg, SLE, Sjögren's)
- Familial inherited disorders (Ellisvan Creveld, Marfan, Noonan's, etc)
- In vitro fertilization

In addition, the ASE supports the use of fetal echocardiography for the following fetal indications:

- Abnormal obstetrical ultrasound screen
- Extracardiac abnormality
- Chromosomal abnormality
- Arrhythmia
• Hydrops
• Increased first trimester nuchal translucency
• Multiple gestation and suspicion of twin-twin transfusion syndrome

The American College of Cardiology and the American Heart Association\(^2\) issued a report supporting the use of fetal echocardiography; the report was in conjunction with the American College of Physicians - American Society of Internal Medicine task Force on Clinical Competence.

The International Society of Ultrasound in Obstetrics and Gynecology (ISUOG)\(^3\) state that a fetal echocardiogram should be performed if CHD is suspected, if the normal four-chamber and outflow tract views described above cannot be obtained at the time of screening or if recognized risk factors indicate increased risk for CHD. A high proportion of cases of CHD detectable prenatally occurs in patients without any risk factors or extracardiac anomalies; hence the importance of screening. In addition to the information provided by the basic screening examination, a detailed analysis of cardiac structure and function further characterizes viscerocorrial situs, systemic and pulmonary venous connections, foramen ovale mechanism, atrioventricular connection, ventriculoarterial connection, great vessel relationships and sagittal views of the aortic and ductal arches.

**POSITION STATEMENT**

**Applicable To:**
- Medicaid – Florida, Georgia, Hawaii, Kentucky

For markets noted below, please refer to Care Core National Radiology / Imaging criteria (program effective August 2014) available at www.wellcare.com/provider/CCGs.

- Medicaid – Illinois, Missouri, New Jersey, New York, South Carolina

CPT 76825 Fetal echocardiography, CPT 76827 Doppler fetal echocardiography, pulsed wave Doppler, and CPT 93325 color flow mapping are considered medically necessary for the following indications:

- unspecified viral infection, other viral disease complicating pregnancy – coxsackie, cytomegalovirus, parvovirus, rubella; OR,
- pregestational/gestational poorly controlled diabetes mellitus; diabetes mellitus treated with anti-hyperglycemics; OR,
- drugs and teratogen exposure – lithium; retinoic acid; carbamezpine; hydantoin; trimethadione; thalidomide; radiation; valproic acid; amphetamines; alcohol; cocaine; OR,
- epilepsy/other seizure disorders with documented medication use; OR,
- endomyocardial fibrosis; OR,
- hereditary hemorrhagic telangiectasia; OR,
- other specified infectious and parasitic diseases complicating pregnancy – toxoplasmosis; OR,
- maternal PKU; OR,
- systemic lupus erythematosus/other specified diffuse connective tissue disease with elevated SSA and/or SSB antibodies; OR,
- other cardiovascular diseases complicating pregnancy such as ductus arteriosus dependent lesions and/or with other known complex congenital heart disease; OR,
• families with a first degree relative with a history of congenital heart disease; OR,
• any fetal extracardiac structural abnormalities found on standard OB ultrasound or targeted/comprehensive OB US (CNS defects, omphalocele, TE fistula, diaphragmatic hernia, gastrointestinal, genitourinary, increased nuchal translucency); OR,
• known or suspected fetal chromosomal abnormalities; OR,
• Rh isoimmunization and other blood group incompatibility (fetal hydrops/non-immune hydrops); OR,
• abnormal first trimester screens for chromosomal abnormalities and/or abnormal fetal anatomy; and/or abnormal multiple marker screens; OR,
• documented fetal arrhythmia: to define the rhythm and its significance; to identify structural heart disease and cardiac function; OR,
• following an abnormal or incomplete cardiac evaluation on an anatomic scan, four-chamber study (NOTE: When the 4 chamber view is adequate and there are no other indications of a cardiac abnormality, a fetal echocardiogram is NOT considered medically necessary); OR,
• single umbilical artery; OR,
• member is of advanced maternal age and has declined amniocentesis

CPT 76826 Repeated/Follow-Up fetal echocardiography, CPT 76828 Doppler fetal echocardiography, pulsed wave Doppler, and CPT 93325 color flow mapping are considered medically necessary for the following indications:

• a ductus arteriosus dependent lesion; OR,
• tachycardia other than sinus tachycardia or heart block; OR,
• structural heart disease with hemodynamic compromise

**CODING**

**Covered CPT® Code**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tr>
<td>76825</td>
<td>Echocardiography, fetal, cardiovascular system, real time with image documentation (2D), with or without M-Mode recording</td>
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<tr>
<td>76826</td>
<td>Echocardiography, fetal, cardiovascular system, real time with image documentation (2D), with or without M-Mode recording Follow-up or repeat study</td>
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<tr>
<td>76827</td>
<td>Doppler echocardiography, fetal, pulsed wave and/or continuous wave with spectral display; complete Follow-up or repeat study</td>
</tr>
<tr>
<td>76828</td>
<td>Doppler echocardiography, fetal, pulsed wave and/or continuous wave with spectral display; complete Follow-up or repeat study</td>
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<tr>
<td>93325+</td>
<td>Doppler echocardiography color flow velocity mapping</td>
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**HCPCS Codes** - No applicable codes.

**Covered ICD-9-CM Procedure Code**

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<th>Code</th>
<th>Description</th>
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<tr>
<td>75.35</td>
<td>Other Diagnostic procedures on fetus and amnion</td>
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**Covered DRAFT ICD-10-PCS Codes**

<table>
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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>10J0XXZ</td>
<td>Inspection of Products of Conception, External Approach</td>
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</table>

Clinical Coverage Guideline
Covered ICD-9-CM Diagnosis Codes - This list may not be all inclusive.

270.1 Maternal PKU; phenylketonuria;
use in combination with code 648.93 Current Condition complicating pregnancy; antepartum
647.03 Syphilis - Infectious & Parasitic conditions in the mother; complicating pregnancy; antepartum
647.13 Gonorrhea - Infectious & Parasitic conditions in the mother; complicating pregnancy; antepartum
647.23 Other Venereal Diseases - Infectious & Parasitic conditions in the mother; complicating pregnancy; antepartum
647.33 Tuberculosis - Infectious & Parasitic conditions in the mother; complicating pregnancy; antepartum
647.43 Malaria - Infectious & Parasitic conditions in the mother; complicating pregnancy; antepartum
647.53 Rubella - Infectious & Parasitic conditions in the mother; complicating pregnancy; antepartum
647.63 Other viral diseases - Infectious & Parasitic conditions in the mother; complicating pregnancy; antepartum
647.83 Other specified infectious & parasitic diseases and unspecified infection or infestation; antepartum
648.03 Diabetes Mellitus – Current condition in the mother complicating pregnancy; antepartum
648.33 Drug Dependence - Current condition in the mother complicating pregnancy; antepartum
648.53 Congenital Cardiovascular Disorders - Current condition in the mother complicating pregnancy; antepartum
648.63 Other Cardiovascular Disease - Current condition in the mother complicating pregnancy; antepartum
648.83 Gestational Diabetes - Current condition in the mother complicating pregnancy; antepartum
649.43 Epilepsy - in the mother complicating pregnancy; antepartum
655.13 Chromosomal abnormality in fetus
655.23 Hereditary disease in family possibly affecting fetus
655.33 Suspected damage to fetus from viral disease in the mother
655.43 Suspected damage to fetus from other disease in the mother
655.53 Suspected damage to fetus from drugs
655.63 Suspected damage to fetus from radiation
655.73 Decreased fetal movements
655.83 Other known or suspected fetal abnormality, not elsewhere classified
656.13 Rhesus Isoimmunization; Rh incompatibility
656.23 ABO incompatibility; isoimmunization other and unspecified blood group incompatibility
659.53 Elderly primigravida; First pregnancy in a woman who will be 35 years of age or older at delivery
659.63 Elderly multigravida; Second or more pregnancy in a woman who will be 35 years of age or older at delivery
659.73 Abnormality in fetal heart rate or rhythm
747.5 Absence or hypoplasia of umbilical artery
793.99 Other nonspecific abnormal findings on radiological and other examinations of body structure
V19.5 First degree relative with history of congenital heart disease

Covered Draft ICD-10-CM Diagnosis Codes

E70.1 Maternal phenylketonuria
O09.511 - O09.512 Supervision of elderly primigravida
O09.521 - O09.523 Supervision of elderly multigravida
O24.011 - O24.013 Pre-existing diabetes mellitus, type 1, in pregnancy
O24.111 - O24.113 Pre-existing diabetes mellitus, type 2 in pregnancy
O24.311 - O24.313 Unspecified pre-existing diabetes mellitus in pregnancy
O24.410 - O24.419 Gestational diabetes mellitus in pregnancy
O24.811 - O24.813 Other pre-existing diabetes mellitus in pregnancy
O24.911 - O24.913 Unspecified diabetes mellitus in pregnancy
O35.1XX0 - O35.1XX9 Maternal care for (suspected) chromosomal abnormality in fetus
O35.2XX0 - O35.2XX9 Maternal care for (suspected) hereditary disease in fetus
O34.3XX0 - O35.3XX9 Maternal care for (suspected) damage to fetus from viral disease in mother, unspecified
O35.4XX0 - O35.4XX9 Maternal care for (suspected) damage to fetus from alcohol
O35.5XX0 - O35.5XX9 Maternal care for (suspected) damage to fetus by drugs
O35.6XX0 - O35.6XX9 Maternal care for (suspected) damage to fetus by radiation
O35.7XX0 - O35.7XX9 Maternal care for (suspected) damage to fetus by other medical procedures
O35.8XX0 - O35.8XX9 Maternal care for other (suspected) fetal abnormality and damage

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O35.9XX0 - O35.9XX9 Maternal care for (suspected) fetal abnormality and damage, unspecified
O36.0110 - O36.0139 Maternal care for anti-D [Rh] antibodies
O36.1110 - O36.1139 Maternal care for other isoimmunization
O36.8120 - O36.8139 Decreased fetal movements in pregnancy
O76 Abnormality in fetal heart rate and rhythm complicating labor and delivery
O98.0110 - O98.0139 Tuberculosis complicating pregnancy
O98.1110 - O98.1139 Syphilis complicating pregnancy
O98.2110 - O98.2139 Gonorrhea complicating pregnancy
O98.3110 - O98.3139 Other infections with a predominantly sexual mode of transmission complicating pregnancy
O98.4110 - O98.4139 Viral hepatitis complicating pregnancy
O98.5110 - O98.5139 Other viral diseases complicating pregnancy
O98.6110 - O98.6139 Protozoal diseases complicating pregnancy
O98.7110 - O98.7139 Human immunodeficiency virus [HIV] disease complicating pregnancy
O98.8110 - O98.8139 Other maternal infectious and parasitic diseases complicating pregnancy
O98.9110 - O98.9139 Unspecified maternal infectious and parasitic disease complicating pregnancy
O99.3120 - O99.3139 Drug use complicating pregnancy
O99.3410 - O99.3439 Other mental disorders complicating pregnancy, specifically, G40.00 - G40.919 Epilepsy
O99.4110 - O99.4139 Diseases of the circulatory system complicating pregnancy
Q27.0 Congenital absence and hypoplasia of umbilical artery
R90.89 Other abnormal findings on diagnostic imaging of central nervous system
R93.8 Abnormal findings on diagnostic imaging of other specified body structures
Z82.79 Family history of other congenital malformations, deformations & chromosomal abnormalities


REFERENCES

MEDICAL POLICY COMMITTEE HISTORY AND REVISIONS

<table>
<thead>
<tr>
<th>Date</th>
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<tr>
<td>7/1/2014, 8/7/2014</td>
<td>Approved by MPC. No changes.</td>
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<tr>
<td>8/9/2013</td>
<td>Reinstituted for markets where CareCore is not a vendor.</td>
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<tr>
<td>5/3/2012</td>
<td>Retired by MPC; covered by CareCore criteria.</td>
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<td>12/1/2011</td>
<td>New template design approved by MPC.</td>
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<td>8/2/2011</td>
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