

Coding Tip: Required Components for Coding Fetal Echocardiograms

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Maternal-Fetal Medicine subspecialists often perform fetal echocardiograms – a detailed evaluation of cardiac structure and function. When performing a fetal echocardiogram, according to the current [AIUM Practice Parameter for the Performance of Fetal Echocardiography](#), at a minimum the following components are required:

Initial Assessment: Basic Views

An initial assessment of the fetal right/left orientation, followed by an assessment of the following segments and their relationships:

- Visceral/abdominal situs:
 - Position of the stomach, portal vein, descending aorta, and inferior vena cava in the axial view of the abdomen
 - Cardiac apex position and cardiac axis in the axial view of the chest
- Atria:
 - Situs
 - Systemic and pulmonary venous connections
 - Systemic venous anatomy, including normal/abnormal variations (eg, ductus venosus)
 - Pulmonary venous anatomy, noting normal connection of at least one right and one left pulmonary vein
 - Atrial anatomy (including the septum, foramen ovale, and septum primum)
- Ventricles:
 - Position
 - Atrioventricular connections (including offsetting of the mitral and tricuspid valves)
 - Right and left ventricular anatomy (including the septum)
 - Relative and absolute sizes
 - Systolic function
 - Pericardium
- Great arteries (aorta, main and branch pulmonary arteries, and ductus arteriosus):
 - Ventricular connections
 - Vessel size, patency, and flow (both velocity and direction)
 - Relative and absolute sizes of the aortic isthmus and ductus arteriosus
 - Pulmonary artery bifurcation
 - Position of the transverse aortic arch and ductus arteriosus relative to the trachea

The following connections should be also evaluated as part of a segmental analysis:

- Atrioventricular junction: anatomy, size, and function (stenosis or regurgitation) of atrioventricular (eg, mitral and tricuspid or common atrioventricular) valves
- Ventriculoarterial junction: anatomy, size, and function (stenosis or regurgitation) of semilunar (eg, aortic and pulmonary or truncal) valves, including assessments of both the subpulmonary and subaortic regions

Heart Rate and Rhythm Assessment:

Documentation of the heart rate and rhythm should be made by cardiac cycle length measurements obtained by the Doppler technique or M-mode interrogation. A normal fetal heart rate at mid-gestation is 120 to 180 beats per minute. If bradycardia or tachycardia is documented, or if the rhythm is noted to be irregular, a detailed assessment of atrial and ventricular contractions should be performed.

Grayscale imaging including:

- Four-chamber view, including pulmonary veins
- Left ventricular outflow tract
- Right ventricular outflow tract
- Branch pulmonary artery bifurcation
- Three-vessel view (including a view with pulmonary artery bifurcation and a more superior view with the ductal arch)
- Short-axis views (“low” for ventricles and “high” for outflow tracts)
- Long-axis view (if clinically relevant)
- Aortic arch
- Ductal arch
- Superior and inferior venae cavae

Color Doppler ultrasound including:

- Systemic veins (including superior and inferior venae cavae and ductus venosus)
- Pulmonary veins (at least two: one right vein and one left vein)
- Atrial septum and foramen ovale
- Atrioventricular valves
- Ventricular septum
- Semilunar valves
- Ductal arch
- Aortic arch

Pulse Doppler Imaging of:

- Right and left atrioventricular valves
- Right and left semilunar valves
- Pulmonary veins (at least two: one right vein and one left vein)
- Ductus venosus
- Suspected structural or flow abnormality on color Doppler imaging

- Pulsed-wave Doppler ultrasound may also be clinically relevant for evaluating the ductus arteriosus, systemic veins (eg, superior vena cava, inferior vena cava, and hepatic veins), aortic arch at the isthmus, branch pulmonary arteries, middle cerebral artery, and umbilical artery or vein.

Cardiac biometry including:

- Aortic and pulmonary valve annulus in systole (absolute size with comparison of left- to right-sided valves)
- Tricuspid and mitral valve annulus in diastole (absolute size with comparison of left- to right-sided valves)

Motion video documentation including:

- Axial sweep from the stomach to the upper mediastinum, to include the 4-chamber view, arterial outflow tracts, as well as the 3-vessel and trachea view
- Four-chamber view: 2D and color Doppler ultrasound
- Left ventricular outflow tract view: 2D and color Doppler ultrasound
- Right ventricular outflow tract view: 2D and color Doppler ultrasound
- Three-vessel and trachea view: 2D and color Doppler ultrasound
- Sagittal view of the aortic and ductal arches: 2D and color Doppler ultrasound

Additional imaging views are described in the practice parameter and may be included based on your institution protocol and/or as clinically relevant. Accurate and complete documentation, appropriate clinical indication, acquisition and storage of images, and technical and equipment specifications are essential. These are further explained in the practice parameter.

If all of these components are included, the following codes can be billed:

- 1) 76825 Echocardiography, fetal, cardiovascular system, real time with image documentation (2D), with or without M-mode recording
- 2) 93325 Doppler echocardiography color flow velocity mapping (List separately in addition to codes for echocardiography)
- 3) 76827 Doppler echocardiography, fetal, pulsed wave and/or continuous wave with spectral display; complete

Please note that some third-party payers may not allow 76827 (fetal Doppler echocardiography) along with 76825 (fetal echocardiography). Be sure that the results of the fetal Doppler echocardiography and color flow are included in the report. Ductus venosus, umbilical artery, middle cerebral artery. and other Pulsed-wave Doppler ultrasound measurements as noted above are included in these codes noted and not billed separately when part of the fetal echocardiogram study.

For limited/follow-up fetal echocardiogram, please see the following CPT codes:

- 1) 76826 Echocardiography, fetal, cardiovascular system, real time with image documentation (2D), with or without M-mode recording; follow-up or repeat study
- 2) 76828 Doppler echocardiography, fetal, pulsed wave and/or continuous wave with spectral display; follow-up or repeat study
- 3) 93325 Doppler echocardiography color flow velocity mapping (List separately in addition to codes for echocardiography)

Please submit any questions you may have to the SMFM Coding Committee Ask a Coding Question website (<https://www.smfm.org/coding/questions/new>). Additional information and resources are also available on our coding website. Thank you very much.