## Case Study Submission Requirements: Fetal Echocardiography

### From the main site

Submit a total of **3 NORMAL** fetal echo cases showing **ALL** components in the practice parameters with their corresponding final reports as outlined below:

- **ALL** anatomic structures or designated views must be labeled (e.g. 4 chamber view, 3V-trachea view, short axis ventricles, etc.)
- **ALL** required items listed under Gray Scale Imaging and Color Doppler Ultrasound in the practice parameters must be demonstrated and labeled.
- **Pulsed Doppler Ultrasound**: evaluation of the atrioventricular valves, semilunar valves, pulmonary veins, and the ductus venosus is required.
- **Heart Rate and Rhythm Assessment**: M-mode evaluation of heart rate demonstrating the atria, ventricles, and their relationship to each other is required.
- **Cardiac Biometry**:
  - Biometry of the four cardiac valves is now required.
  - Additionally, for the purpose of accreditation, cardiac biometry of the following components must also be demonstrated and labeled in at least ONE of your NORMAL case submissions: the ventricular lengths, outflow tracts including the branch pulmonary arteries, atria and ventricular dimensions and cardiothoracic ratio. (See page 2 for imaging checklist.)
- **Video Clips**: In addition to the still images, the following clips are required (keep clips short and do not send extra videos for review):
  - One comprehensive clip (or 4 separate clips) of an axial sweep from stomach to 3VTV demonstrating 1.) situs, 2.) atrioventricular junction, 3.) ventriculoarterial junction, 4.) 3VV and 3VTV.

### From each additional site or mobile unit:

Submit **1 NORMAL** fetal echo case with its corresponding final report:

Refer to the description for a NORMAL case submission as described for the main site.

### And, from any site

Submit **1 ABNORMAL** fetal echo study containing a major structural congenital heart defect involving one of the 4 chambers and/or outflow tracts (e.g. HLHS, ToF, TGA, AV Canal, Ebstein anomaly, etc.) with its corresponding final report:

- For the purpose of accreditation, the following ARE NOT considered to be major structural anomalies: isolated arrhythmia, isolated VSD (or ASD), echogenic intracardiac focus, isolated pericardial effusion.
- **Video Clips**: In addition to the still images, the following clips are required (keep clips short and do not send extra videos for review):
  - One comprehensive clip (or 4 separate clips) of an axial sweep from stomach to 3VTV demonstrating 1.) situs, 2.) atrioventricular junction, 3.) ventriculoarterial junction, 4.) 3VV and 3VTV.
  - Additional video clips of any salient features (positive and negative) of the cardiac pathology contributory in determining the final diagnosis.

### Additional Notes:

- **DO NOT SEND** an unedited video of the entire exam. If your practice only stores video (and not 2D images) or if you find your cases or video files exceed 50 MB each, contact us at accreditation@aium.org for assistance.
- All anatomy must be appropriately labeled (for example – SAX OUTFLOW).
- All cases must follow the General Requirements for the Submission of Case Studies.
Fetal Echocardiography Imaging Checklist

- All cases must include a finalized corresponding report. For reporting criteria, refer to the Documentation Practice Parameter.
- For the purpose of accreditation, all anatomy must be appropriately labeled (for example – SAX OUTFLOW).
- For abnormal submissions (i.e. AVSD, HLHS, TGA, ToF), you may contact us at accreditation@aium.org, if needed.

Normal Fetal Echo

**Video Clips (required) — may be submitted as a single comprehensive clip of an axial sweep from stomach to 3VTV, or as 4 separate clips as listed below:**

- □ 1. Short, labeled video clip of visceral / abdominal situs
- □ 2. Short, labeled video clip of atrioventricular junction
- □ 3. Short, labeled video clip of ventriculoarterial junction between the ventricles and the great arteries
- □ 4. Short, labeled video clip of the 3VV and 3VTV

**Labeled, still images of the following:**

- □ 5. Four chamber
- □ 6. Left ventricular outflow tract
- □ 7. Right ventricular outflow tract
- □ 8. Branch pulmonary artery bifurcation
- □ 9. Three-vessel and trachea
- □ 10. Short axis views of ventricles
- □ 11. Short axis views of outflow tracts
- □ 12. Aortic arch (sagittal view)
- □ 13. Ductal arch (sagittal view)
- □ 14. SVC and IVC entering RA (bicaval view)

**M-Mode**

- □ 15. M-mode assessment of rhythm

**Doppler**

- □ 16. Color and spectral Doppler of the pulmonary veins
- □ 17. Color Doppler of the foramen ovale
- □ 18. Color and spectral Doppler of the tricuspid valve
- □ 19. Color and spectral Doppler of the mitral valve
- □ 20. Color and spectral Doppler of the pulmonary valve
- □ 21. Color and spectral Doppler of the aortic valve
- □ 22. Color Doppler of the aortic arch
- □ 23. Color Doppler of the ductal arch
- □ 24. Color Doppler of the SVC and IVC
- □ 25. Color and spectral Doppler of the ductus venosus

**Cardiac Biometry – 26, 27, 28 are REQUIRED. 29-38** MUST also be demonstrated in at least ONE of your normal case submissions.

- □ 26. Aortic artery diameter at the level of the valve annulus in systole (REQUIRED)
- □ 27. Pulmonary artery diameter at the level of the valve annulus in systole (REQUIRED)
- □ 28. Dimensions of tricuspid and mitral valve annulus in diastole (REQUIRED)
- □ 29. Aortic and/or isthmus diameter**
- □ 30. Main pulmonary artery and/or ductus arteriosus diameter**
- □ 31. Right and left ventricular lengths**
- □ 32. End-diastolic ventricular dimensions just inferior to the AV valve leaflets**
- □ 33. Thickness of ventricular free walls**
- □ 34. Interventricular septum just inferior to the AV valves**
- □ 35. Systolic dimensions of theventricles**
- □ 36. Transverse diameters of the atria**
- □ 37. Diameter of the branch pulmonary arteries**
- □ 38. Cardiothoracic ratio**