HACKETTSTOWN REGIONAL MEDICAL CENTER CARDIO PULMONARY POLICY MANUAL PEDIATRIC ECHOCARDIOGRAM

Effective Date: March 2010 Policy No: 6.005

Cross Referenced: Origin: Cardio Pulmonary

Reviewed Date: 02/16 Authority: Cardio/Pulmonary Manager

Revised Date: 04/12 Page: 1 of 2

Purpose: To perform pediatric echocardiograms by the technologists during the hours of operation and are then interpreted by the assigned pediatric cardiologist.

Procedure:

- 1. Attach ECG electrodes to patient and attach ECG cable if possible
- 2. If possible have patient turn into a left lateral position
- 3. Apply ultrasound gel to the transducer and position transducer on patient's chest
- 4. Select optimal setting for exam
- 5. Input patient information
- 6. Images are as follows:

PARASTERNAL LONG AXIS VIEW

- 1. Acquire long axis view
- 2. Acquire M-mode tracing through aortic valve, mitral valve and left ventricle
- 3. M-mode measurements can also be obtained from short axis views
- **4.** Measure left heart if obtainable measure M-mode
 - **A.** LV septal thickness at end diastole
 - **B.** LV internal dimension at end diastole
 - C. LV posterior wall thickness at end diastole
 - **D.** AO root dimension at end diastole
 - **E.** LV internal dimension at end systole
 - **F.** LA dimension end systole
- 5. Color flow Doppler across parasternal long axis view (a ortic and mitral valve)
- **6.** Color Along the septum to rule out VSD

SHORT AXIS VIEW

- 1. Acquire aortic valve level (M-mode measure)
- 2. Color flow Doppler into pulmonary artery utilize PW/CW Doppler rule out PDA
- 3. Color flow across AO valve
- 4. Color Flow across tricuspid valve and intra arterial septum
- 5. Acquire LV level at papillary
- **6.** Acquire LV level at papillary level and into apex (M-mode measure)

APICAL 4 CHAMBER VIEW

- 1. Acquire apical 4 chamber
- **2.** Acquire apical 5 chamber
- 3. Color and Doppler MV
- 4. Color and Doppler AO valve and LVOT
- 5. Color and Doppler tricuspid valve
- **6.** Color along the Septum
- 7. Invert apical 4 and 5

APICAL 2 CHAMBER VIEW

- 1. Acquire apical 2 chamber view
- 2. Color flow in apical 3
- 3. Doppler if needed

SUB COSTAL VIEW

- 1. Acquire sub costal view
- 2. Color on Atrial septum and ventricular septum
- 3. Acquire IVC

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SUPRASTERNAL NOTCH VIEW

1. Acquire Aortic arch

2. Color and Doppler throughout arch (ascending transverse and descending)

Pediatric cardiologists will interpret and finalize all pediatric reports in Heartlab and the finalized report will be faxed to non-staff referring physicians or nursing unit. The Pediatric Echo task will be placed in Cerner by the clerk and after completing the Echo the technician will finalize the task and that will charge it. For out-patients the technician will place a task and finalize after completion.