Procedure Name: Head (Pediatric)

Indications:
May include but not limited to congenital head abnormalities, follow up to prior exam, or any other valid medical reason. Contra-indicator based on patient age (generally performed from 0-4 months age range but evaluation possible up to twice the age range if anterior fontanelle is still open).

General Description:
A complete examination of the Pedi head includes views in multiple planes through the anterior fontanelle.

Patient Preparation:
NPO 3 hrs prior to study. Feeding (with bottle) at start of study to help induce calming effect.

Equipment Selection and Settings:
Select Pedi Head from preset menu. A vector 4.0MHz probe will be used for most patients. The sonographer should use the preprogrammed setting for the appropriate body part and adjust gain, depth and transmit zone settings to optimize images. Fill out any applicable impression or worksheet upon completion of exam.

Imaging Sequence:
The following imaging sequence is for a normal exam. Include additional images of pathology to demonstrate dimensions in three planes, texture, size, shape, and relationship to adjacent anatomy. Utilize color flow to aid in the determination of any possible abnormality and to demonstrate blood flow.
**Image Patient Data (demographics page)**

- **Coronal**: (the transducer notch should be towards the patients right ear)
  - Start anterior and angle posterior.
  - **Landmarks normally visualized**
    - orbital ridge, frontal lobes and interhemispheric fissure
    - anterior horns of lat vents with cavum septum pellucidum
    - 3rd vent, caudate nucleus and thalamus
    - cerebellum
    - choroid plexus
    - posterior cortex
  - decrease depth (do not res per Dr. Barr) and take a couple more images thru the lateral ventricles at the 3rd vent level to evaluate for hemorrhage.

- **Sagittal**: (the transducer notch should now be towards the patients nose)
  - Start Midline scan to RT then back to Midline scan to LT.
  - **Landmarks normally visualized**
    - ML: must include cavum septum pellucidum, corpus callosum, 4th vent and cerebellum.
    - take several images thru the right lateral vent making sure to include the choroid plexus, caudate nucleus, thalamus and caudo-thalamic groove (this is where small grade I hemorrhage will be seen)
    - right sylvian fissure
    - return to midline (take a couple of images at this level) and then scan to LT acquiring
      same slices of the RT.