## GUNDERSEN HEALTH SYSTEM ULTRASOUND DEPARTMENT POLICY AND PROCEDURE MANUAL

SUBJECT: Infant Hip Sonography SECTION: Radiology Ultrasound ORIGINATOR: Deborah L. Richert, BSVT, RDMS, RVT REVISED DATE: January 29, 2018

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## Exam Protocol:

- Both hips should be examined. The exam can be performed with the infant in a supine or lateral decubitus position. The diagnostic exam for DDH includes images of each hip in the coronal plane at rest, and transverse (axial) views of each hip in the flexed position with and without stress. The stress maneuver (posterior pushing) is performed with the knee and hip flexed (at 90 degrees) and the thigh adducted (Barlow maneuver). If the head of the femur is subluxable or dislocatable then the hip should be assessed for reproducibility by abducting and externally rotating the hip (Ortolani maneuver). The stress maneuver may also be performed when the infant is in a Pavlik harness.
- Infant hip sonograms for screening due to breech presentation or family history should be performed no earlier than 6 weeks of age.
- Infant hip sonograms may be performed earlier than 6 weeks of age in instances where the physical exam of the hip(s) is abnormal.
- The maximum age that an infant hip sonogram can be performed is 6 months.

**Imaging Protocol:** The following images represent the minimum requirements for the infant hip ultrasound exam. Additional images of each view may be obtained in order to adequately demonstrate the infant hip anatomy.

- RT hip coronal with the acetabular alpha angle measured (normal is  $\geq 60$  degrees)
- RT hip axial without stress
- RT hip axial with stress
- LT hip coronal with the acetabular alpha angle measured (normal is  $\geq 60$  degrees)
- LT hip axial without stress
- LT hip axial with stress