Universal Fetal Cardiac Ultrasound-
At the Heart of Newborn Well-Being
HUDSON VALLEY RADIOLOGY ASSOCIATES

Dear Colleague,

The communication which follows provides an evidence based framework for ICD-10 coding of maternal-fetal imaging studies.

HVRA's new referral pads incorporate ICD-10 revisions.

Background: AIUM, ACOG, and ACR recommend *nondetailed* 76805 obstetrical ultrasound studies for pregnancies that have no pretest identifiable risk factors. Detailed 76811 studies are recommended for "known or *suspected* fetal anatomic or genetic abnormalities."

This stratification based on pretest clinical risk factors to determine whether a nondetailed versus detailed study is most appropriate for a particular patient is ***not*** based on disease demographics but is based on economics and the availability of imaging specialists who can perform detailed noncardiac and cardiovascular fetal ultrasound assessment.

Why is this stratification <u>not</u> based on disease demographics?

- Because most noncardiac and cardiovascular malformations occur in the absence of family history or known risk factors, "every pregnancy must be considered at risk for birth defects." *(Diagnostic Imaging of Fetal Anomalies. Nyberg. p.xii).*

- The profound majority of congenital heart disease occurs in the low-risk population. *(Prenatal detection of congenital heart disease in south Nevada. The need for universal fetal cardiac evaluation. J. Ultrasound Med. 26:2007. P1715-1719. Acherman; see also Improving detection of fetal cardiac anomalies - A fetal echocardiogram for every fetus? J. Ultrasound Med. 26:2007. p1639- 1641. Behtiyar and Copel.)*

- AMA patients have a 1.7% incidence of clinically significant genetic abnormalities that will only be detected by microarray technology from CVS or amniocentesis specimens. These abnormalities will not be detected by fetal DNA screenings and may or may not have sonographically detectable stigmata. *(Chromosomal microarray versus karyotyping for prenatal diagnosis. Wapner. N Engl J Med 2012; 367:2175-2184.)*

This stratification recommending a *nondetailed* obstetrical ultrasound (76805) to the patient population which has the *greatest* incidence of birth defects – those with no identifiable pretest risk factors – runs counter to achieving ACOG and Medicaid's own published Prenatal Care Guidelines which state the following –

- Invasive testing for aneuploidy should be made available for ***all*** women regardless of maternal age.
- Screening for fetal anomalies and aneuploidy is an indication for obstetrical ultrasound.
- All pregnant women should be offered ultrasound to identify birth defects
- Pregnant women who choose not to undergo invasive testing should be offered aneuploidy screening regardless of maternal age.
  (New York State Medicaid Prenatal Care Guidelines: I – section 6; II-section 7)

The contradiction between ACOG and Medicaid's Prenatal Care Guidelines and the recommendation of a *nondetailed* obstetrical ultrasound (76805) study for patients with no pretest identifiable risk factors is as follows –

- A nondetailed obstetrical ultrasound is an incomplete assessment of noncardiac and cardiovascular fetal anatomy. A *partial* list of pathologies whose diagnosis would alter obstetrical management include the following –
  - Micrognathia and neonatal airway obstruction
  - Transposition of the great vessels and aortic coarctation
  - Enophthalmos, microphthalmia
  - Arthrogryposis
  - Velamentous cord insertion/vasa previa

  Alterations in obstetrical management would include performance of amniocentesis and alteration in site of delivery.
- Nondetailed 76805 study has not been studied as to its screening value for aneuploidy.
- Detailed 76811 study has demonstrated a 50% Down syndrome detection rate. Cardiovascular Genetic ultrasound increases Down syndrome detection rate to 90%.

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