

## **Universal fetal cardiac ultrasound CPT 76825**

The profound majority of congenital heart disease CHD occurs in pregnancies with no risk factors.

Prenatal detection of CHD significantly alters risk of clinically significant genetic abnormalities, obstetrical management and site of delivery.

CHD is the most common of all fetal malformations, responsible for the greatest degree of neonatal morbidity and mortality and the most frequently missed of all fetal malformations.

\_ 20-55% of infants with CHD are not diagnosed until after hospital discharge.

2D fetal cardiac with interpretation by MDs accredited in fetal echocardiography increases detection of congenital heart disease CHD to greater than 90-95%.

Accredited Detailed obstetrical ultrasound (CPT 76811) with updated cardiovascular protocols but without 2D fetal cardiac 76825 has less than 60-70% detection rate for CHD. Non detailed obstetrical ultrasound (CPT 76805) has less than 40-50% detection rate for congenital heart disease.

\_ it is not the mere performance of 'outflow tract' imaging but the detailed knowledge of fetal cardiac pathology, its recognition and the interpretive expertise that is necessary to detect CHD

Isolated congenital heart disease may be the only prenatal detectable abnormality in patients with a pathogenic copy number variant PCNV genetic abnormality. PCNV are not detected by fetal DNA screening.

\*Sun. Prenatal detection of critical cardiac outflow tract anomalies remains suboptimal despite revised obstetrical imaging guidelines. *Congenital Heart Disease*. volume 13, issue 5. Sep/Oct 2018. p748-756.

\*Behtiyar and Copel. Improving detection of fetal cardiac of fetal cardiac anomalies - a fetal echocardiogram for every fetus? *J Ultrasound Med* 2007. 26:1639-1641.

\*Levey. Improved prenatal detection of congenital heart disease in integrated healthcare system. *Pediatric Cardiology* 2013. 34:670 - 679.

\*Wu. *BMC Pediatric*. 2017; 17:117. Chromosomal microarray analysis in the investigation of children with congenital heart disease.