I. VCHCP considers fetal echocardiograms medically necessary for any of the following conditions:

1. In suspected or documented fetal arrhythmia: to define the rhythm and its significance, to identify structural heart disease and cardiac function; or

2. As a screening study in families with a first degree relative with a history of congenital heart disease; or

3. In case of suspected or known fetal chromosomal abnormalities; or

4. Non-immune fetal hydrops; or

5. A mother with diabetes mellitus or systemic lupus erythematosus; or

6. Following an abnormal or incomplete cardiac evaluation on an anatomic scan, four-chamber study.

(Note: When the four-chambered view is adequate and there are no other indications of a cardiac abnormality, a fetal echocardiogram is not considered medically necessary); or

7. When other structural abnormalities are found on ultrasound; or

8. When members' fetuses have been exposed to drugs known to increase the risk of cardiac abnormalities including but not limited to:
   - Lithium; or
   - Anti-seizure medications; or
   - Excessive alcohol intake

9. Members with seizure disorders, even if they are not presently taking anti-seizure medication; or

10. For ductus arteriosus dependent lesions and/or with other known complex congenital heart disease; or

11. Fetal nuchal translucency measurement of 3.5 mm or greater in the first trimester.

II. VCHCP considers repeat studies of fetal echocardiograms medically necessary when the initial screening study indicates any of the following:
1. A ductus arteriosus dependent lesion; or
2. Tachycardia other than sinus tachycardia or heart block; or
3. Structural heart disease with a suggestion of hemodynamic compromise.

**Background**

Definition of fetal cardiac structures is currently possible at 10 to 12 weeks of gestation with the use of vaginal probes with high-resolution transducers. With current technologies, accurate segmental analysis of cardiac structures and blood flow across valves, shunts, and the ductus arteriosus is possible with a conventional transabdominal approach by 16 to 18 weeks of gestation.

Patients are referred for fetal echocardiography because of an abnormality of structure or rhythm noted on ultrasound examination or because the patient is in a high-risk group for fetal heart disease. Treatment of the patient is facilitated by the early recognition of the exact nature of the cardiac problem in the fetus. The correct diagnosis may be difficult because of fetal physiology, the effect on flow across defects and valves, inability to see the fetus for orientation reference, and inability to examine the fetus for clinical findings. For these reasons, fetal echocardiography should be performed only by trained fetal echocardiographers.

In a practice bulletin on screening for fetal chromosomal anomalies, ACOG (2007) has stated that patients who have a fetal nuchal translucency measurement of 3.5 mm or greater in the first trimester, despite a negative result on an aneuploidy screen, normal fetal chromosomes, or both, should be offered a targeted ultrasound examination, fetal echocardiogram, or both, because such fetuses are at a significant risk for nonchromosomal anomalies, including congenital heart defects, abdominal wall defects, diaphragmatic hernias, and genetic syndromes.

**Procedure**

A treatment authorization request (TAR) must be submitted to UR for review and approval by the UR staff.

A. **Attachments : None**

B. **History:**

Reviewer: Richard Ashby, MD, QA Committee; Date: July 2002
Reviewed/Revised: Cynthia Wilhelmy MD; Date October 2005
Committee Review: UM: October 24 2006; QAC: November 15, 2006
Reviewed/Revised: Cynthia Wilhelmy, MD; Date: Dec 2006
Committee Review: UM: February 20, 2007; QAC: February 27, 2007
Reviewed/Revised: Albert Reeves, MD; Date: Nov 1, 2011
Committee Review: UM: November 1, 2011; QAC: November 22, 2011
Reviewed/No Updates: Albert Reeves, MD; Date: April 17, 2012
 Reviewed/No Updates: Albert Reeves, MD; Date: January 28, 2013  
Reviewed/No Updates: Catherine Sanders, MD  
Reviewed/No Updates: Catherine Sanders, MD  
Reviewed/No Updates by: Faustine Dela Cruz, RN & Catherine Sanders, MD  
Reviewed/No Updates: Catherine Sanders, MD & Robert Sterling, MD  
Committee Review: UM: February 8, 2018; QAC: February 27, 2018  
Reviewed/No Updates: Catherine Sanders, MD & Robert Sterling, MD  
Committee Review: UM: February 14, 2019; QAC: February 26, 2019  
Reviewed/No Updates: Howard Taekman, MD & Robert Sterling, MD  
Reviewed/No Updates: Howard Taekman, MD & Robert Sterling, MD  
Reviewed/No Updates by: Howard Taekman, MD & Robert Sterling, MD  
Committee Review: UM: February 17, 2022; QAC: February 22, 2022  
Reviewed/No Updates by: Howard Taekman, MD & Robert Sterling, MD  
Committee Review: UM: February 2, 2023; QAC: February 7, 2023

<table>
<thead>
<tr>
<th>Revision Date</th>
<th>Content Revised (Yes/No)</th>
<th>Contributors</th>
<th>Review/Revision Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/9/17</td>
<td>No</td>
<td>Catherine Sanders, MD; Robert Sterling, MD</td>
<td>Annual Review</td>
</tr>
<tr>
<td>2/8/18</td>
<td>No</td>
<td>Catherine Sanders, MD; Robert Sterling, MD</td>
<td>Annual Review</td>
</tr>
<tr>
<td>2/14/19</td>
<td>No</td>
<td>Catherine Sanders, MD; Robert Sterling, MD</td>
<td>Annual Review</td>
</tr>
<tr>
<td>2/13/20</td>
<td>No</td>
<td>Howard Taekman, MD; Robert Sterling, MD</td>
<td>Annual Review</td>
</tr>
<tr>
<td>2/11/21</td>
<td>No</td>
<td>Howard Taekman, MD; Robert Sterling, MD</td>
<td>Annual Review</td>
</tr>
<tr>
<td>2/17/22</td>
<td>No</td>
<td>Howard Taekman, MD; Robert Sterling, MD</td>
<td>Annual Review</td>
</tr>
<tr>
<td>2/2/23</td>
<td>No</td>
<td>Howard Taekman, MD; Robert Sterling, MD</td>
<td>Annual Review</td>
</tr>
</tbody>
</table>

C. References:


