

## FoCUS for Obstetric Settings

### Qualitative assessment criteria for valvular stenosis and regurgitation

Valvular abnormality	Assessment criteria
<b>Mitral valve stenosis</b> <ul style="list-style-type: none"> <li>Parasternal long axis view</li> <li>Apical four-chamber view</li> </ul>	<p><b>Significant (moderate-severe):</b> abnormal valve morphology and mobility (thickened / fused leaflets / restricted mobility) with the presence of large turbulent mitral flow during diastole with or without left atrial enlargement.</p> <p><b>Non-significant (mild):</b> normal or abnormal valve morphology and mobility with the presence of a small turbulent mitral flow during diastole, and normal left atrial size.</p> <p><b>Absent (none):</b> normal valve morphology and mobility with no turbulent flow seen at the mitral valve in colour flow Doppler.</p>
<b>Mitral valve regurgitation</b> <ul style="list-style-type: none"> <li>Parasternal long axis view</li> <li>Apical four-chamber view</li> </ul>	<p><b>Significant (moderate-severe):</b> abnormal valve morphology and mobility (thickened / obvious coaptation defect / flail or restricted mobility) with the presence of a large central or eccentric regurgitation jet with or without left atrial and/or ventricular enlargement.</p> <p><b>Non-significant (mild):</b> normal or abnormal valve morphology and mobility with the presence of a small central regurgitation jet, and normal left atrial and ventricular size.</p> <p><b>Absent (none):</b> normal valve morphology and mobility with no regurgitation jet seen in colour flow Doppler.</p>
<b>Aortic valve stenosis</b> <ul style="list-style-type: none"> <li>Parasternal long axis view</li> </ul>	<p><b>Significant (moderate-severe):</b> abnormal valve morphology and mobility (thickened / fused leaflets / restricted mobility) with the presence of large turbulent aortic flow during systole with or without increased left ventricular wall thickness.</p> <p><b>Non-significant (mild):</b> normal or abnormal valve morphology and mobility with the presence of a small turbulent aortic flow during systole, and normal left ventricular wall thickness.</p> <p><b>Absent (none):</b> normal valve morphology and mobility with no turbulent flow seen at the aortic valve in colour flow Doppler.</p>
<b>Aortic valve regurgitation</b> <ul style="list-style-type: none"> <li>Parasternal long axis view</li> </ul>	<p><b>Significant (moderate-severe):</b> abnormal valve morphology and mobility (thickened / obvious coaptation defect / flail or restricted mobility) with the presence of a large central or eccentric regurgitation jet with or without aortic root and/or left ventricular enlargement.</p> <p><b>Non-significant (mild):</b> normal or abnormal valve morphology and mobility with the presence of a small central regurgitation jet, and normal aortic root and left ventricular size.</p> <p><b>Absent (none):</b> normal valve morphology and mobility with no regurgitation jet seen in colour flow Doppler.</p>

Valvular abnormality	Assessment criteria
<p><b>Tricuspid valve stenosis</b></p> <ul style="list-style-type: none"> <li>Parasternal long axis view</li> <li>Apical four-chamber view</li> </ul>	<p><b>Significant (moderate-severe):</b> abnormal valve morphology and mobility (thickened / fused leaflets / restricted mobility) with the presence of large turbulent tricuspid flow during diastole with or without right atrial enlargement.</p> <p><b>Non-significant (mild):</b> normal or abnormal valve morphology and mobility with the presence of a small turbulent tricuspid flow during diastole, and normal right atrial size.</p> <p><b>Absent (none):</b> normal valve morphology and mobility with no turbulent flow seen at the tricuspid valve in colour flow Doppler.</p>
<p><b>Tricuspid valve regurgitation</b></p> <ul style="list-style-type: none"> <li>Parasternal long axis view</li> <li>Apical four-chamber view</li> </ul>	<p><b>Significant (moderate-severe):</b> abnormal valve morphology and mobility (thickened / obvious coaptation defect / flail or restricted mobility) with the presence of a large central or eccentric regurgitation jet with or without right atrial and/or ventricular enlargement.</p> <p><b>Non-significant (mild):</b> normal or abnormal valve morphology and mobility with the presence of a small central regurgitation jet, and normal right atrial and ventricular size.</p> <p><b>Absent (none):</b> normal valve morphology and mobility with no regurgitation jet seen in colour flow Doppler.</p>

**Note:** Large and small jets were judged based on the jet size relative to the corresponding chamber size (e.g. the size of mitral regurgitation jet relative to left atrial size). The criteria used for chamber enlargement assessment is described in the **MaathRI FoCUS qualitative criteria for atrial size and function, & other pathologies.**

Alsharqi, M., V. A. Ismavel, L. Arnold, S. S. Choudhury, C. Solomi V, S. Rao, T. Nath, A. Rani, I. Goel, S. D. Kakoty, P. Mahanta, I. Roy, R. Deka, C. Opondo, C. Baigent, P. Leeson and M. Nair. Focused cardiac ultrasound to guide the diagnosis of heart failure in pregnant women in India. *Journal American Society of Echocardiography*.2022; doi.org/10.1016/j.echo.2022.07.014