

# Care Management of Non-emergent Echocardiographic Diagnosis in Newborns

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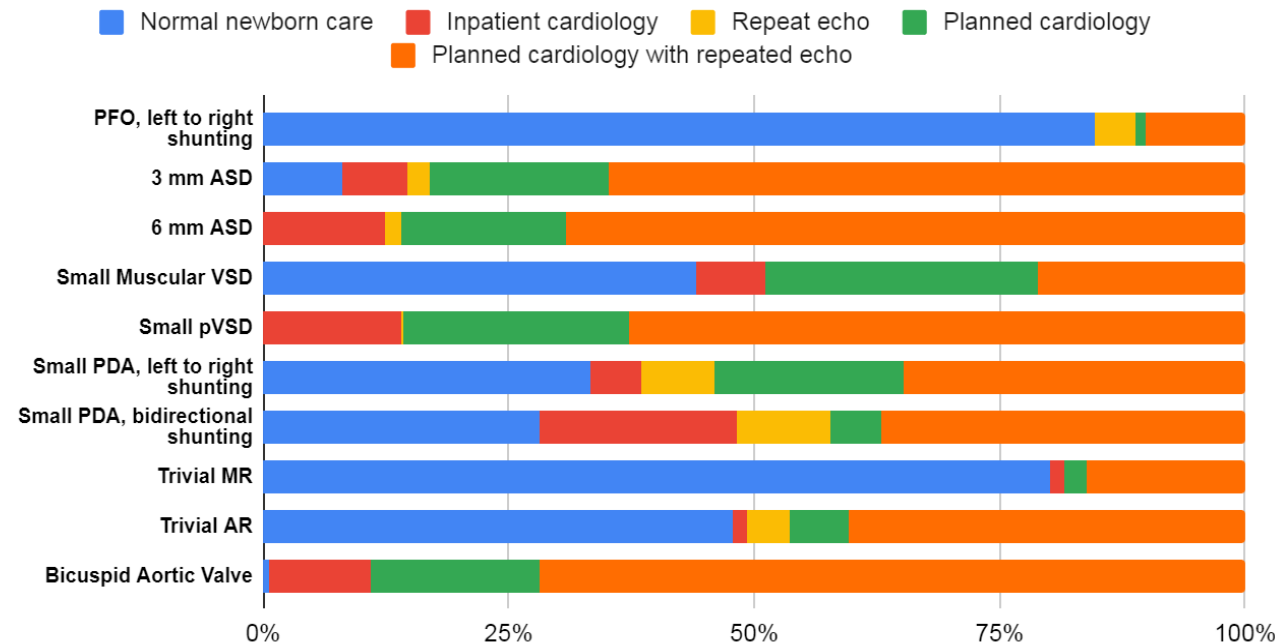
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Figure 1: Planned Cardiology Assessments Based on Echocardiographic Diagnosis



Normal Newborn Care without further assessment (blue), Inpatient Cardiology Consultation (red), Repeat Echocardiography without Cardiology Consultation (yellow), Cardiology Consultation without Echocardiography (green), and Cardiology Consultation with Echocardiography (orange).

## Results

Ongoing cardiology care was always recommended in asymptomatic newborns with a 6 mm ASD, pVSD, or BAV. However, in asymptomatic newborns with a PFO or trivial MR ongoing cardiology care was recommended by less than 20% of respondents. Of the providers surveyed 34% would change their recommendations in the setting of prematurity. While 47% would change their recommendations in newborns with Trisomy 21.

## Conclusion

Pediatric cardiology practitioners recommend follow up cardiology care or echocardiography for most asymptomatic neonates with non-emergent echocardiographic findings. Our survey shows a wide variation in the level of care recommended in full term newborn, premature newborns and full term newborns with Trisomy 21.

## Information

ASD= atrial septal defect, VSD = ventricular septal defect, pVSD = perimembranous VSD  
PDA = patent ductus arteriosus, MR = mitral regurgitation, AR = aortic regurgitation, BAV = bicuspid aortic valve

## Background

Echocardiography is the primary tool used by clinicians to identify cardiovascular problems that need immediate attention in the newborn. More commonly, neonatal echocardiography identifies issues where the need for or timing of cardiology assessment is unclear.

## Method

An email survey was sent to members of American Academy of Pediatrics Sections on Cardiology and to the on-line Pediheart community.

Participants were asked about their recommended level of care in asymptomatic newborns with non-emergent echocardiography findings. Participants were also asked if their recommended level of care would change for asymptomatic premature newborns of 34 weeks gestation or asymptomatic term newborn with Trisomy 21.