

Cardiology Conditions

Consideration of referral for an MDT opinion or transfer of care

The woman may need to be referred for care or discussion to the nearest specialist unit (as indicated in the table) either:

1. Maternal Medicine Centres (MMC)

The MMCs have the responsibility for hosting the MDT, the regional guidelines and standards of care

2. Regional Unit (RU)-

The RU has expertise and can manage pregnant women with the condition.

Condition	Specialist level for maternal care	Maternal Medicine Centre (MMC)	Regional Unit (RU)	Pre-pregnancy counselling	Notes – e.g. Geographical variants
<p>LOW RISK Congenital Heart Disease/Aortopathy (mWHO I): Small/repared patent ductus arteriosus Anomalous pulmonary venous drainage repair Repaired atrial or ventricular septal defect Mild/moderate pulmonary stenosis Mild mitral/aortic regurgitation Mild aortic stenosis</p> <p>AORTOPATHY Bicuspid aortic valve, no aortopathy</p>	<p>Local expertise</p> <p>Advice and guidance from Cardiac Obstetric MDT if required by unit</p>	Bristol-UHBW	Plymouth	Advised local unit +/- visiting obstetric cardiologist	Swindon refer to Bristol
<p>MODERATE RISK Congenital Heart Disease/Aortopathy (mWHO II/II-III): Repaired coarctation Repaired Tetralogy of Fallot Unoperated atrial or ventricular septal defect Atrioventricular septal defect Ebstein's anomaly Transposition of the great arteries: arterial switch repair</p>	<p>Discuss with Cardiac Obstetric MDT about most appropriate further care and place of delivery</p> <p>Likely to be shared care with MMC/RU</p>	Bristol-UHBW	Plymouth	Advised local unit with visiting obstetric cardiologist or MMC/RU	<p>Swindon refer to Bristol</p> <p>Truro has obstetric cardiology, so MDT discussion with UHB, usually without visits</p> <p>NBT to consider transfer booking to UHB</p>

<p>Moderate to severe mitral/aortic regurgitation Severe pulmonary stenosis/ regurgitation Mild mitral stenosis Moderate aortic stenosis</p> <p>AORTOPATHY Bicuspid aortic valve aortopathy < 45mm</p>	<p>Delivery wherever possible at the local unit with MDT plan</p>				
<p>HIGH RISK Congenital Heart Disease / Aortopathy (mWHO III) Transposition of the great arteries: following Mustard or Senning repair or congenitally corrected transposition Fontan circulation Cyanotic heart disease (without pulmonary hypertension) Moderate mitral stenosis Severe asymptomatic aortic stenosis</p> <p>AORTOPATHY Marfan syndrome/hereditary thoracic aortopathy <45mm Turner syndrome aortic size index 20–25 mm/m² Bicuspid aortic valve aortopathy 45–50 mm</p>	<p>Refer to MMC / RU Antenatal care and delivery at MMC/RU</p>	<p>Bristol-UHBW</p>		<p>Strongly advised MMC/RU</p>	<p>Swindon refer to Bristol</p> <p>Truro has obstetric cardiology, so MDT discussion with UHB, interval visits and transfer to UHB for delivery</p> <p>For ACHD Yeovil may transfer to UHB or Southampton (dependent on usual cardiac care)</p> <p>For ACHD, Plymouth likely to liaise with Southampton (dependent on usual cardiac care)</p> <p>NBT to transfer care to UHBW</p>
<p>VERY HIGH RISK Congenital Heart Disease/ Aortopathy (mWHO IV) – pregnancy contraindicated</p>	<p>Refer to MMC / RU within 6 weeks of conception</p>	<p>Bristol-UHBW</p>		<p>Strongly advised</p>	<p>Swindon refer to Bristol</p>

<p>Systemic right ventricle with moderate or severely decreased ventricular function Severe (re)coarctation Fontan with any complication Severe mitral stenosis Severe symptomatic aortic stenosis Pulmonary arterial hypertension (including Eisenmenger syndrome) AORTOPATHY Marfan syndrome/hereditary thoracic aortopathy >45mm Bicuspid aortic valve aortopathy >50 mm Turner syndrome aortic size index >25 mm/m² Vascular Ehlers-Danlos Syndrome</p>	<p>Antenatal care and delivery at MMC/RU</p>	<p>National Centre for PAH</p>		<p>MMC/RU</p>	<p>Truro has obstetric cardiology, so MDT discussion with UHB, some visits and transfer to UHB for delivery</p> <p>For ACHD, Plymouth likely to liaise with Southampton (dependent on usual cardiac care)</p> <p>NBT to transfer care to UHBW</p>
<p>Acquired mitral and aortic valve disease (including rheumatic heart disease and bioprosthetic valves)</p>	<p>Review or advice and guidance from Cardiac Obstetric MDT if required (as per mWHO criteria above for similar valve disease)</p>	<p>Bristol-UHBW</p>	<p>Plymouth</p>	<p>Advised as for categories above MMC/RU</p>	<p>Swindon refer to Bristol</p> <p>Truro has obstetric cardiology, so MDT discussion with UHB, frequency of visits and delivery as per congenital valve disease above</p>
<p>Mechanical Heart Valves</p>	<p>Refer to MMC / RU within 6 weeks of conception</p> <p>Antenatal care and delivery at MMC/RU</p>	<p>Bristol-UHBW</p>	<p>Plymouth</p>	<p>Strongly advised MMC/RU</p>	<p>Swindon refer to Bristol</p> <p>Truro has obstetric cardiology, so MDT discussion with UHB, some</p>

					visits and transfer to UHB for delivery
Cardiomyopathy Dilated, hypertrophic, arrhythmogenic, peripartum cardiomyopathy	Discuss with Cardiac Obstetric MDT about most appropriate further care and place of delivery Refer to MMC/RU within 6 weeks of conception if severe (EF <30%) or previous PPCM with residual LV impairment (mWHO Class IV)	Bristol-UHBW	Plymouth	Advised MMC/RU	Swindon refer to Bristol NBT to transfer care to UHBW
Coronary artery disease	Discuss with Cardiac Obstetric MDT about most appropriate further care and place of delivery	Bristol-UHBW	Plymouth	Advised MMC/RU	Swindon refer to Bristol NBT to transfer care to UHBW Delivery needed in unit with 24-hour access to coronary intervention
Arrhythmias		Bristol-UHBW			Swindon refer to Bristol if indicated (as below) Truro has obstetric cardiology, so MDT

Supraventricular arrhythmias, atrial or ventricular ectopic beats	Local expertise appropriate		Gloucester, Bath, Swindon, NBT, Exeter, Taunton, Plymouth, Truro	Local expertise sufficient	discussion with UHB if indicated (as below)
Postural orthostatic tachycardia syndrome (POTS)	Local expertise appropriate		Local expertise sufficient Plymouth	Local expertise sufficient	
Ventricular tachycardia (mWHO III)	Refer to Cardiac Obstetric MDT Antenatal care and delivery at MMC/RU				
Inherited arrhythmias e.g. long QT/ Brugada	Discuss with Cardiac Obstetric MDT about most appropriate further care and place of delivery		Plymouth	Local expertise sufficient May need discussion with MMC/RU	
Pacemakers	Discussion with MMC/RU if required		Plymouth	Local expertise	

Heart Transplant	Care led by MMC/RU and delivery in MMC/RU	UHB In conjunction with original transplant centre	Plymouth In conjunction with original transplant centre	Strongly advised MMC /RU in conjunction with transplant centre	Cardiac obstetric MDT Swindon refer to Bristol
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Guidelines to be used for SW MMN management of women with heart disease in pregnancy:

2018 European Society of Cardiology (ESC) guidelines on cardiovascular diseases during pregnancy <https://www.escardio.org/Guidelines/Clinical-Practice-Guidelines/Cardiovascular-Diseases-during-Pregnancy-Management-of>