Cardiac disease (known congenital / acquired) in pregnancy guideline

Version: 3.0

Date Issued:	4th September 2020
Review Date:	30th September 2023
Document Type:	Guideline Clinical

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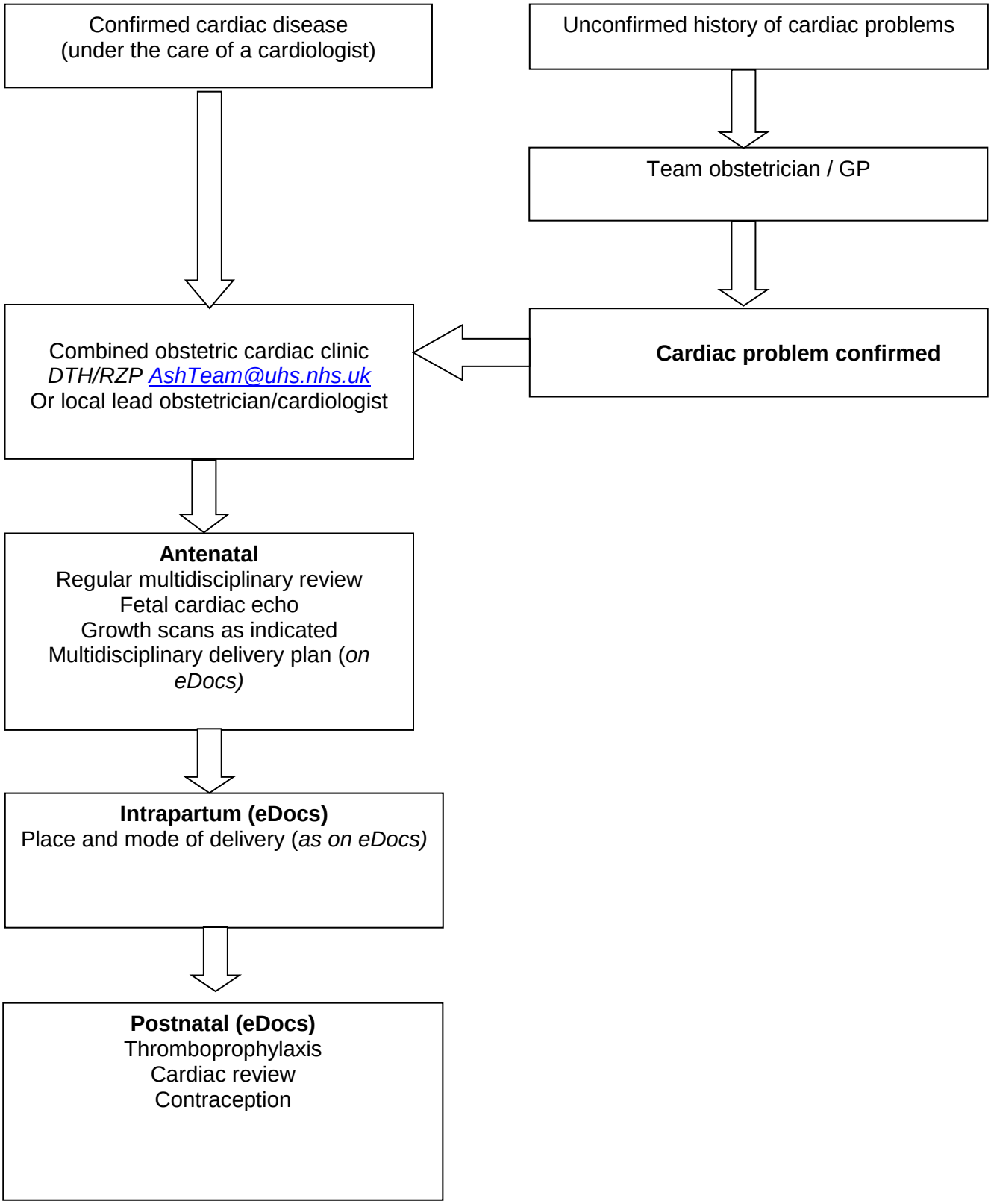
Executive Summary

Referral pathway for local women

(In italics if applicable in Southampton only)



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Regional Referral Pathway for Pregnant Women with Known Cardiac Disease

All women with known cardiac disease should have received pre-conception counselling by a consultant cardiologist or an Adult Congenital Heart Disease (ACHD) consultant in the case of congenital heart disease.

CONGENITAL HEART DISEASE

Low Risk

- Repaired ASD/VSD
- Patent ductus arteriosus (no pulmonary hypertension)
- Mild mitral/aortic stenosis
- Mild/moderate pulmonary stenosis
- Moderate mitral/aortic regurgitation
- Anomalous pulmonary venous drainage repair
- Bicuspid aortic valve without valvular disease or aortopathy

→

- Assessment by consultant cardiologist in local centre with ACHD advice as appropriate
- Do not usually require tertiary assessment
- May require fetal echocardiogram

Moderate Risk

- Repaired coarctation of the aorta
- Repaired Tetralogy of Fallot.
- Severe pulmonary stenosis/regurgitation.
- Severe aortic/mitral regurgitation
- Moderate mitral stenosis
- Transposition of the great arteries: arterial switch repair
- Congenitally corrected transposition of the great arteries with preserved ventricular function
- Marfan syndrome or aortopathy with aortic root dilation <40mm (<45mm in bicuspid aortic valve)

→

- Assessment by consultant cardiologist in local centre with referral or discussion with ACHD cardiologist
- Likely to receive antenatal and intrapartum care locally
- A multidisciplinary plan should be available in the patient's maternity notes
- Will require fetal echocardiogram

High Risk

- Transposition of the great arteries following Mustard /Senning repair
- Congenitally corrected transposition of the great arteries with impaired ventricular function
- Moderate mitral or moderate/severe aortic stenosis
- Fontan circulation
- Cyanotic heart disease (without pulmonary hypertension)
- Ebstein anomaly
- Unrepaired coarctation of the aorta
- Marfan syndrome or aortopathy with aortic root 40-45mm (45-50mm bicuspid)
- Moderate LV impairment (EF 30-45%)

→

- Referral by Obstetrician or Cardiologist to the tertiary centre is advised
- Responsibility for planning cardiac antenatal care and delivery will usually be transferred to the tertiary centre
- A multidisciplinary plan will be available to the local centre
- Will require fetal echocardiogram

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Very High Risk

- Pulmonary arterial hypertension (including Eisenmenger syndrome).
- Marfan syndrome or other aortopathy/CTD (incl Turners with ASI>25mm/M2) with aortic dilatation >45mm, Bicuspid aortic valve >50mm
- Severe mitral stenosis/symptomatic aortic stenosis
- Severe LV impairment (EF 30-45%)

- Full cardiac, antenatal care and delivery at the tertiary centre recommended
- Will require fetal echocardiogram

Acquired Valvular Heart Disease

Acquired mitral and aortic disease including rheumatic heart disease and bio-prosthetic heart valves

- Initial assessment by cardiologist at the local centre
- Place of further antenatal care and delivery dependent upon severity
- Discussion with the tertiary centre may be appropriate. Refer all with moderate aortic or mitral stenosis for assessment

Mechanical heart valves

- Pre-conception counselling highly recommended including detailed anti-coagulation strategy
- Assessment, preferably within 6 weeks of conception, by the local or tertiary centre
- Detailed anticoagulation management plan essential
- Discussion with the tertiary centre for further antenatal care and delivery

Cardiomyopathies

Previous peripartum cardiomyopathy

Dilated / hypertrophic cardiomyopathy

- Initial assessment will usually take place at the local centre. Discussion with the tertiary centre may be appropriate
- Place of further antenatal care and delivery will be dependent upon the severity for management

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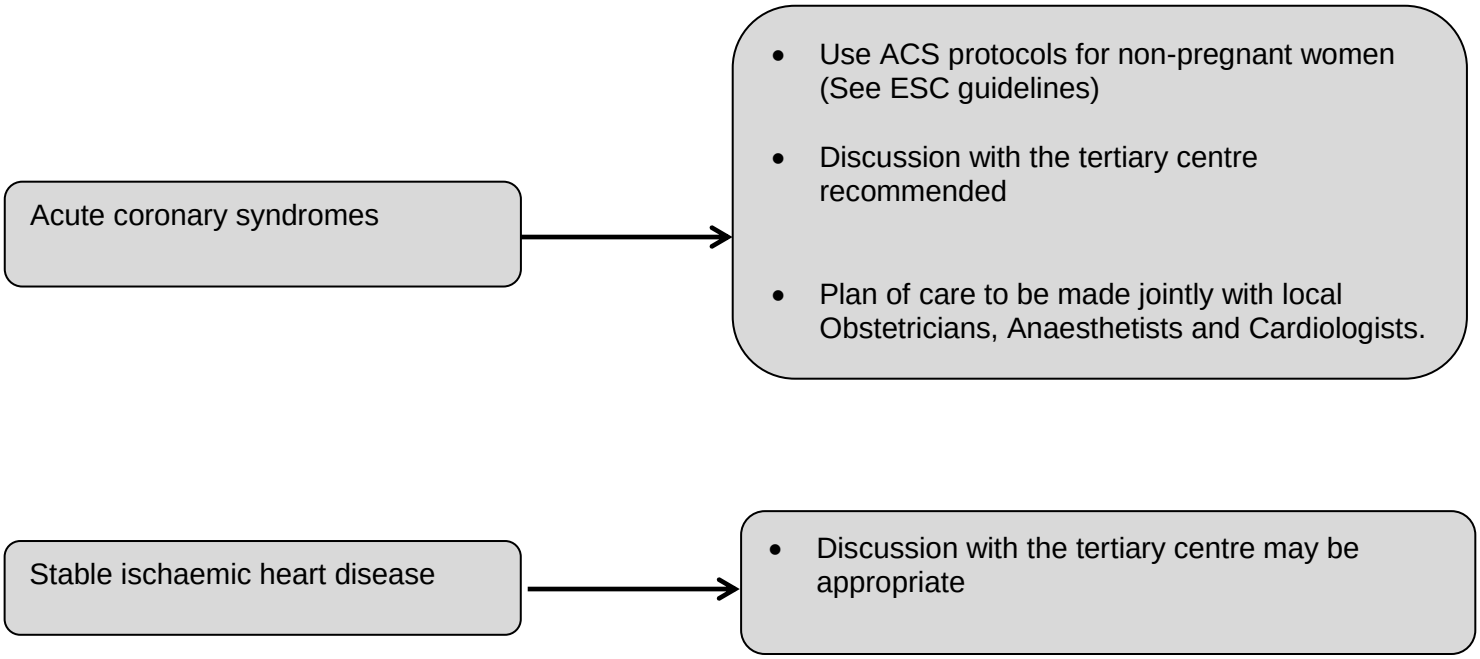
Ischaemic Heart Disease



Arrhythmias/Pacemakers

- Initial cardiology assessment at the local centre.
- Discussion with the tertiary centre may be appropriate.
- Plan of care to be made jointly with local Obstetricians, Anaesthetists and Cardiologists.
- Potential to deliver at local centre dependent on perceived risk and facilities available.

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1. Introduction

Cardiac disease is the leading cause of indirect maternal death. The numbers of pregnant women with cardiac disease will continue to increase as a result of improved care of congenital cardiac disease, increasing incidence of ischaemic heart disease and increased detection of cardiomyopathies

Pre-existing cardiac disease increases the risk of pregnancy to both mothers and their babies, and affected women should be referred to the combined clinic for multidisciplinary care.
Mothers are at risk of adverse cardiovascular events including dysrhythmia, stroke, heart failure, pulmonary oedema and death and the risk is determined by the ability of their cardiovascular system to adapt to the physiological changes of pregnancy. This will depend on the nature of the cardiac abnormality, result of cardiac surgery and current cardiac function.

The risks to the baby include adverse events in pregnancy and at birth and a higher incidence of congenital heart disease in those born to affected parents (either mother or father). There may be an increased risk of fetal growth restriction, prematurity and fetal loss in women with poor cardiac function, cyanosis or restricted left ventricular outflow by reducing flow to the placenta The fetus may also be affected by maternal drugs e.g. anti-hypertensives, anticoagulants, heart failure medications or drugs for rhythm control.

2. Definitions

- NT- Nuchal translucency
- LMWH – Low molecular weight heparin
- TIA – Transient ischaemic attack
- FMU – Fetal Medicine unit
- ACHD – Adult congenital heart disease
- LV- Left ventricle
- CTD- Connective tissue disorder

3. Principles of care

Women with significant congenital or acquired heart disease should:

1. Be referred for pre-pregnancy assessment and advice at the earliest opportunity
2. Receive shared care during pregnancy involving cardiologists with experience of pregnancy, and obstetricians and obstetric anaesthetists with experience of cardiac disease.
3. Have a clear plan of care for their delivery and immediate post-partum period documented on the electronic computer system (e-docs) under the obstetric section.

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4. Preconception counselling

Women should be given information on:

- The risk to mother and baby, including fetal and maternal mortality and morbidity.
- The risk of congenital heart disease in the baby
- Maternal (or paternal if the father is affected) life-expectancy
- The level of care anticipated during pregnancy and risks associated
- Contraception

Women may need optimisation of their cardiac condition.

In some cases this may include surgery to improve function before embarking on pregnancy, or adjustment of drug therapy, including stopping potentially teratogenic drugs including some anti-hypertensives and oral anticoagulants. If so, they need clear advice on contraceptive use until they are ready to embark on pregnancy.

5. Antenatal Care

5.1. Women with a history of congenital or acquired cardiac disease who have not been assessed before pregnancy need early assessment to decide the level of care they require.

5.2. Women with confirmed cardiac disease, already under the care of a cardiologist should be referred to the joint cardiac/obstetric clinic or local lead obstetrician/cardiologist (in Southampton either to Dr Carroll / Dr Fitzsimmons or Mr Howe/ Dr R Parasuraman). The Southampton clinic is held on the afternoon of the second Wednesday of each month.

5.3. Women with an unconfirmed history of cardiac problems (e.g. palpitations or a murmur which has not required previous investigation) should be referred to the GP and team obstetrician, who should assess and consider onward referral for a cardiac assessment. If significant cardiac problems are identified the women should then be referred to the combined clinic. Referral to a cardiologist should be made for:

- Definite history of cardiac problems that do not appear to have been fully investigated by a cardiologist.
- Women presenting with a significant change in symptoms who have previously been investigated for cardiac problems, even if discharged from follow-up.
- History and clinical examination suggestive of new onset cardiac disease

5.4. Mothers with significant cardiac disease need care planned on an individual basis. The following are general guidelines that should be tailored to the individual case. Depending on the severity of disease, this will often involve multidisciplinary discussion including cardiology, anaesthetics (both obstetric and cardiac) and obstetrics.

5.5. The diagnosis, antenatal, delivery and postnatal management plans need to be clearly documented on the e-docs form with a copy held in the mother's hand-held notes.

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5.5.1. Anticoagulation

Women requiring anticoagulants may need increased monitoring and a balance struck between the risk of warfarin to the fetus and the safety of low molecular weight heparin with their particular cardiac abnormality. Where warfarin is changed over to subcutaneous low molecular weight heparin (e.g. enoxaparin 1mg/kg *twice* daily), *weekly* anti-Xa levels are required. The anti-Xa level should be maintained with trough level >0.6 and peak level between 0.8 and 1.2 U/mL depending on the indication and type of prosthetic valve (0.8-1.2 for aortic, 1.0-1.2 for mitral and pulmonary prosthetic valves) determined 4h after administration; the blood sample should be sent to the lab within 30minutes of taking. [3]
For a given dose of enoxaparin, anti-Xa trough levels are affected by volume of distribution, whereas peak anti-Xa levels are mainly determined by creatinine clearance.

5.5.2. Fetal Ultrasound

Routine ultrasound scans for these patients would include

- 11- 13 weeks: First trimester dating /NT scan
- 20 weeks: Anomaly scan including fetal echocardiography
- Growth scans if indicated

5.5.3. Timing and place of delivery

This should be considered as early as possible and may need to be modified in later pregnancy depending on the mother's progress.

For women referred to the regional centre, a back-up plan for care in the event of delivery in a peripheral unit should be drafted for women referred from elsewhere and copies inserted into the handheld antenatal notes. This summary should outline the possible problems and give simple guidance to the caring physicians to help them deal with them.

6. Management in Labour

Care should be individually determined depending on the specific cardiac disease and severity and the mother's condition and the plan for delivery should be recorded on the e-docs proforma. The following general guidelines should be observed.

- Early involvement of senior obstetric and anaesthetic staff. Inform the cardiology team.
- Aim to maintain hemodynamic stability
- Invasive hemodynamic monitoring as specified in the delivery plan
- Aim to reduce pain and its haemodynamic responses
- Epidural analgesia with narcotic/low-dose local technique generally recommended
- Proactive management of the third stage with oxytocin according to the delivery plan sheet and usually avoiding ergometrine.
- The period of highest risk is the early puerperium when there may be large changes in maternal blood volume as a result of autotransfusion as the uterus contracts, or from post-partum haemorrhage. Careful fluid balance should be recorded and maintained throughout labour and birth.

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Delivery in SGH cardiac theatre

If delivery is required in a theatre in SGH the call list in Appendix 2 should be completed to ensure that all the relevant staff have been informed.

7. Postnatal

Postnatal thromboprophylaxis as outlined in the delivery plan, specifying those women who need warfarin, or where either warfarin or LMWH may be suitable.

8. Contraception advice

8.1. "Natural methods" (withdrawal, safe period) and "barrier methods" (condoms, diaphragm) have high failure rates and cannot be recommended for women in whom pregnancy carries a substantial risk.

8.2. Combined oral contraceptives should be avoided in patients at risk of thromboembolism (cyanosis, impaired cardiac function, atrial arrhythmias, Fontan-type circulation, and prosthetic heart valves) because of the thrombophilic properties of oestrogen; they should also be avoided in patients with hypertension.

8.3. Progestogen-only oral contraceptives do not increase the risk for thromboembolism and have few serious side effects (such as irregular uterine bleeding). Depot injections of progestogen or subcutaneous implants are an alternative to the,progestogen-only oral contraceptives especially for adolescents for whom compliance is a concern.

8.4. An intrauterine device impregnated with progestogen has been an important advance in contraception for patients with high risk for pregnancy related complications and thromboembolism. Such devices are highly effective and safe: they reduce menstrual bleeding and carry a low risk of infection and ectopic pregnancy. However in those congenital patients with pulmonary hypertension or Fontan-type circulation, intrauterine device insertion may cause vagal stimulation and would require hospital admission for insertion.

8.5. Sterilisation should be considered for women in whom pregnancy would carry a prohibitively high risk or when a couple decide that they never want to have children. Sterilisation is permanent, although there is still a 1/200 pregnancy rate, and there are surgical risks associated with the procedure.

9. Tertiary referrals

Suh-tr.WessexFMU@nhs.net

10. Roles and Responsibilities

This guideline applies to all clinical staff employed or contracted by University Hospital Southampton (UHS) Foundation Trust who provide care to women. Staff have a

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responsibility to ensure that they are aware of this guideline and its contents. They should clearly document their rationale if they have not complied with the recommendations detailed in this guideline. It is the responsibility of department managers, consultants, team leaders and education leaders to ensure staff are aware of this guideline.

11. Related Trust Documents

- Antenatal Booking Process Referral Guideline
- High Dependency Unit: Guideline
- Timings and Indications for Obstetric Referral at Booking and During Guideline
- Which Obstetrician - Referral Guide for Core Team Midwives: Guideline

12. Implementation

The guideline will be displayed on the Staffnet, and sent to the relevant Care Group clinical teams. The team leaders will be expected to cascade to all relevant staff groups. All medical, nursing and midwifery staff caring for women and newborns should have support and training in implementing the contents of the guideline. In addition, the guidelines will be included in local induction programmes for all new staff members.

The author is responsible for ensuring the effective dissemination of this guideline.
To ensure dissemination takes place and to avoid duplication of work, do not assume others will do this based on their involvement in guideline consultation process.

Methods of dissemination may include:

- Present the guideline at meetings e.g. ICC, MOST, MSG
- Discussion at mQuest
- Email correspondence e.g.
  - midwiferystaff@uhs.nhs.uk,
  - O&Gjuniordoctors@uhs.nhs.uk,
  - consultantobstetricians@uhs.nhs.uk,
  - consultantneonatologists@uhs.nhs.uk, W&Nanaestheticguidelineconsultationgroup@uhs.nhs.uk
- Theme of the Week (bear in mind busy schedule so may need to plan ahead)
- Communication board in birth environments and ward areas for discussion at handover
- Teaching sessions – involve Education team early in guideline consultation process
- Training materials e.g. prompt cards, laminated flowchart
- PGDs – new PGDs need to be read and signed and signature list given to Education team
- Consider how you will audit/measure uptake of new guidance

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13. Process for Monitoring Compliance/Effectiveness

The purpose of monitoring is to provide assurance that the agreed approach in the guidance is being followed to ensure we get things right for patients, use resources well and protect our reputation. Our monitoring will therefore be proportionate, achievable and deal with specifics that can be assessed or measured.

Audit results will be circulated and presented at the multidisciplinary audit meetings, identified in the monitoring table. Any areas of non compliance or gaps in assurance that arise from the monitoring of this guideline will result in an action plan detailing recommendations and proposals to address areas of non compliance and/or embed learning. Monitoring of these plans will be coordinated by the group/committee identified in the monitoring table.

Those responsible for instigating the resulting actions will be identified in the audit meeting minutes and the action plans and results will also reviewed by MSG/ ICC.
The resulting actions will be reviewed or followed up at the subsequent multidisciplinary audit meeting(s).

Key aspects of the procedural document that will be monitored:

What aspects of compliance with the document will be monitored	What will be reviewed to evidence this	How and how often will this be done	Detail sample size (if applicable)	Who will co-ordinate and report findings (1)	Which group or report will receive findings
Women should have shared care during pregnancy involving cardiologists, obstetricians and obstetric anaesthetists	Audit of maternal notes	3 yearly		Nominated Registrar	Departmental audit meeting
Women should be offered fetal echocardiography in the Fetal Medicine unit	Audit of maternal notes	3 yearly		Nominated Registrar	Departmental audit meeting
Women should have a documented plan of care for their delivery using the electronic proforma	Audit of maternal notes	3 yearly		Nominated Registrar	Departmental audit meeting
Women should receive advice about contraception before discharge	Audit of maternal notes	3 yearly		Nominated Registrar	Departmental audit meeting

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(1) State post not person.

Where monitoring identifies deficiencies actions plans will be developed to address them.

14. Arrangements for Review of the Policy

Guideline to be reviewed after three years or sooner as a result of audit findings or as any changes to practice occurs.

15. References

MBBRACE: Saving Lives, Improving Mothers' Care. Dec 2016
2018 ESC Guidelines on the management of cardiovascular diseases during pregnancy
European Heart Journal (2018) 39, 3165–3241

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Appendix 1

Class	Patient Symptoms
Class I (Mild)	No limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, or dyspnea.
Class II (Mild)	Slight limitation of physical activity. Comfortable at rest, but ordinary physical activity results in fatigue, palpitation, or dyspnea.
Class III (Moderate)	Marked limitation of physical activity. Comfortable at rest, but less than ordinary activity causes fatigue, palpitation, or dyspnea.
Class IV (Severe)	Unable to carry out any physical activity without discomfort. Symptoms of cardiac insufficiency at rest. If any physical activity is undertaken, discomfort is increased.

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Appendix 2 – Call list for organising delivery in centre block theatre

Patient name: Hospital Number:

Caesarean booked for _____ in Theatre _____ Centre Block

Aim to book caesarean during an elective caesarean list to ensure a theatre team are available and ask that all other cases are blocked

Service	Usual contact	Contact details	Date contacted
Theatre SGH	Cardiac nurse case managers Cardiac theatre coordinator	Blp 2166 Ext 8686 Bleep 2894	
Ward clerks PAH	Enter name in Apex CS diary and block other cases that list	If cases need to be rearranged contact ward clerks on 6303 ElCSWardClerks@uhs.nhs.uk	
Theatre PAH	Obstetric theatre coordinator	6310	
Obstetrician	David Howe RajiParasuraman Consultant for elective list	4228, or alternative consultant secretary	
Obstetric anaesthetics	Poppy Mackie Sarah Napier Or duty anaesthetist	Bleep 2372	
Cardiac anaesthetics	Andy Curry or duty anaesthetist	Bleep 2251	
Adult congenital cardiologist	Aisling Carroll Sam Fitzsimmons	Through switchboard	
Midwifery	Maternity operational coordinator (*Midwife for elective list should usually cover)*	Bleep 2872	
SGH wards	Cardiac HDU Cardiac ITU Cardiac bed managers	6836 6121 Blp 2365	
Neonatal team 1. Technician 2. Doctors 3. Nurses	 Ian Chapman Service consultant Nurse coordinator	 Blp 1611, Ext 3582 Blp 1082 Blp 1623	

For emergency cases, especially out of hours, the same groups of staff will need to be informed but the individuals listed may not be available so the on-call equivalent will need to be informed. The individuals in bold are most likely to know the background to the women and should be phoned for advice if needed, even if they are not on duty. Information about the patient's condition and delivery plan should be available in the obstetric cardiac notes or, if these are not readily available, on E-Docs.

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Appendix 3:

Proposed standards for care of mothers with cardiac conditions in pregnancy for Wessex Region.

These standards are proposed following the MBRRACE-UK report on "*Saving Lives, Improving Mothers' Care"* published in 2016 which had a topic focus on cardiovascular disease in pregnancy.

The lessons on cardiovascular disease listed in the report included:

- Lack of co-location of obstetric and cardiac services jeopardises interdisciplinary working and communication. Measures such as joint obstetric cardiac clinics, multidisciplinary care plans, copying letters to the woman and all clinicians involved in her care, as well as staff from all specialties writing in the woman's hand-held notes may mitigate against the inherent risk of inadequate communication between specialists.

- Early involvement of senior clinicians from the obstetric and cardiology multidisciplinary team is important, wherever a pregnant or postpartum woman presents with suspected cardiac disease, but particularly if she presents to the Emergency Department.

- A raised respiratory rate, chest pain, persistent tachycardia and orthopnoea are important signs and symptoms which should always be fully investigated. The emphasis should be on making a diagnosis, not simply excluding a diagnosis.

- A normal ECG and/or a negative Troponin does not exclude the diagnosis of an acute coronary syndrome.

- New onset of cardiorespiratory symptoms and/or absence of valve clicks in women with prosthetic heart valves should prompt careful echocardiography and early review by a senior cardiologist to exclude the possibility of valve thrombosis.

Following this report, the Royal College of Physicians and Surgeons of Glasgow published recommended standards of care, which have been supported in subsequent MBBRACE reports. These standards are proposed in the 2016 document *"Addressing the Heart of the Issue: Good clinical practice in the shared obstetric and cardiology care of women of childbearing age".* From these we have taken the following standards for care in the Wessex region.

<u>A: Organisation of Care</u>

1. Each local unit should have a designated team who lead the care of women with cardiac disease. This should consist of an identified lead obstetrician, cardiologist and anaesthetist.

2. Ideally, women with heart disease who are pregnant should be seen jointly by the cardiologist and obstetrician together. This may not be possible or practical at all visits but may be particularly valuable in planning care at the beginning of pregnancy or in planning delivery at around 28 to 32 weeks. If it is not possible to meet jointly there should be prompt telephone or email contact.

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3. There should be clear referral criteria for referral to Southampton regional service (Appendix 1). For women where there is uncertainty about the need for referral there should be discussion with the regional service or the mother could be referred for a consultation and opinion.

4. A delivery plan, including post partum care, should be available and accessible for all pregnant women with heart disease. This includes those with WHO class I heart disease.

5. Pregnant women with WHO class III or IV heart disease should be referred to a regional obstetric service with cardiologist support within 4 weeks of presentation to antenatal services.

6. For women with predicted high risk pregnancy due to heart disease, the delivery location is provisionally determined between 28 to 32 weeks of gestation, with agreement from the MDT (which must include local and tertiary obstetricians, cardiologists and anaesthetists). The place of delivery may be clear earlier in pregnancy for mothers with either minor or complex disease where it is clear they could deliver locally or will need to deliver in the regional centre. The planned place of delivery may need to be changed later in pregnancy if there is a late change in maternal condition.

7. Specialist advice should be taken from the Southampton regional centre if any new triggers develop during pregnancy. Triggers for consideration of a change in location of delivery include:
   a. new cardiac symptoms
   b. deterioration in echo findings during pregnancy
   c. deterioration in WHO class
   d. deterioration in New York Heart Association (NYHA) class
   e. concern from a member of the MDT.

8. For women with heart disease who are pregnant, a pathway should exist for the provision of care within office hours, and also out-with office hours.

9. Contact details for key persons are widely available for referring health professionals. Provisions are made for when that person/ team are on leave.

<u>B: Aspects of pregnancy care</u>

1. All women of child-bearing age who have heart disease, including those pursuing assisted conception, should be offered pre-pregnancy counselling and contraceptive advice by an appropriately trained healthcare professional including those based in primary care.
   a. Women with WHO class II heart disease pre-pregnancy counselling should be assessed by a cardiologist OR obstetrician.
   b. Women who are considered to have WHO class III or IV heart disease should be offered counselling with a cardiologist with expertise in the care of cardiac obstetrics and an obstetrician with a specialist interest in cardiac obstetrics.
   c. Women who are felt to be of uncertain risk category should be discussed further with the appropriate specialist team to establish the appropriate pre-pregnancy advice

2. For women with heart disease considering termination of pregnancy:
   a. Women with heart disease considering termination of pregnancy should be assessed for their WHO class.

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b. For women in WHO class III or IV heart disease, the best method and location of the procedure should be discussed with appropriate specialists in cardiology, obstetrics, anaesthetics and termination of pregnancy services.

3. For women with heart disease presenting acutely to the obstetric service or to other hospital services (e.g. cardiology or Emergency Department):
   a. There should be involvement of senior clinicians from the obstetric and cardiology multidisciplinary team particularly for those with WHO class III or Iv disease.

   b. A raised respiratory rate, chest pain, persistent tachycardia and orthopnoea are important signs and symptoms which should always be investigated. Key investigations must not be delayed because of the pregnancy. The emphasis should be on making a diagnosis, not simply excluding a diagnosis. Traditional referral mechanisms may be too slow in pregnancy. *NB: One in five women who die from a cardiac cause die in an ambulance or Emergency Department*.

   c. During acute admissions all women with cardiac disease admitted during pregnancy are discussed with the admitting consultant and on call obstetric consultant within the time set out in their delivery plan. Women with newly diagnosed cardiac conditions may need urgent discussion.

4. Postnatal care:
   a. All women with heart disease have a postnatal follow up arranged with the cardiology or obstetric team.
   b. Appropriate contraceptive advice should be given prior to discharge.

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Cardiac disease (known congenital / acquired) in pregnancy guideline	Version:	3.0

Document Monitoring Information	
Approval Committee:	Women and Newborn Governance Steering Group
Date of Approval:	4th September 2020
Ratification Committee:	Women and Newborn Governance Steering Group
Date of Ratification:	4th September 2020
Signature of ratifying Committee Group/Chair:	Women and Newborn Governance Steering Group
Lead Name and Job Title of originator/author or responsible committee/individual:	Dr Raji Parasuraman – Consultant in Fetal and Maternal Medicine Dr Aisling Carroll – Consultant Cardiologist Mr David Howe – Consultant in Fetal and Maternal Medicine
Name of responsible individual:	Freya Pearson – Divisional Clinical Director
Policy Monitoring (Section 6) Completion Date:	August 2020
Policy Monitoring to be presented to responsible committee or PRAMG:	W&N Multidisciplinary audit meeting
Target audience:	All staff involved in providing care for women with cardiac disease in pregnancy
Key words:	Cardiac, pregnancy
Main areas affected:	Maternity, Cardiology, Anaesthetics, Neonates
Summary of most recent changes if applicable:	Full review of guideline
First Consultation: **(delete as applicable, include date and/or additional stakeholders)**	**13th July 2020** W&N Anaesthetic Guideline Consultation Group W&N Gynaecology Guideline Consultation Group W&N Midwifery Guideline Consultation Group W&N Neonatal Guideline Consultation Group W&N Obstetric Guideline Consultation Group
Second Consultation: **(delete as applicable, include date and/or additional stakeholders)**	W&N Anaesthetic Guideline Consultation Group W&N Gynaecology Guideline Consultation Group W&N Midwifery Guideline Consultation Group W&N Neonatal Guideline Consultation Group W&N Obstetric Guideline Consultation Group
Comments received from:	**13th July 2020** Matthew Coleman, Marie Cann, Lisa Smith, Hannah Leonard
Is there any non compliance with NICE guidance?	No If yes, where has this been discussed and agreed?

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Equality Impact Assessment completion date:	N/A
Number of pages:	19
Type of document:	Clinical Guideline
Does this document replace or revise an existing document	Cardiac Disease in Pregnancy guideline – version 2.0
Should this document be made available on the public website?	no
Is this document to be published in any other format?	no

The Trust strives to ensure equality of opportunity for all, both as a major employer and as a provider of health care. This document has therefore been equality impact assessed to ensure fairness and consistency for all those covered by it, regardless of their individual differences, and the results are available on request.

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