Contraception options for women with cardiovascular disease

NOTES

This document will use the term ‘women’/‘woman’ throughout. It is important to highlight that it is not only those who identify as women who require access to women’s health and reproductive services. For example, some transgender men, non-binary people, and intersex people or people with variations in sex characteristics may also experience pregnancy. All healthcare services should be respectful and responsive to individual needs.

This guidance is not intended to be construed or to serve as a standard of care. Standards of care are determined based on all clinical data available for an individual case and are subject to change as scientific knowledge and technology advance and patterns of care evolve. Adherence to guidance recommendations will not ensure a successful outcome in every case, nor should they be construed as including all proper methods of care or excluding other acceptable methods of care aimed at the same results. The ultimate judgement must be made by the appropriate healthcare professional(s) responsible for clinical decisions regarding a particular clinical procedure or treatment plan. This judgement should only be arrived at following discussion of the options with the patient, covering the diagnostic and treatment choices available. It is advised, however, that significant departures from the national guideline or any local guidelines derived from it should be fully documented in the patient’s case notes at the time the relevant decision is taken.

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NSD610-025.01 V1 Unless this guidance document is being accessed from www.socn.scot.nhs.uk it may not be the current version

Contents

This document has been prepared by Public Services Delivery Scotland (PSD Scotland) on behalf of the Scottish Obstetric Cardiology Network (SOCN). Accountable to Scottish Government, PSD Scotland works at the heart of the health service providing national strategic services to the rest of NHS Scotland and other public sector organisations to help them deliver their services more efficiently and effectively. SOCN is a collaboration of stakeholders involved in obstetric cardiology care, who are supported by a PSD Scotland Programme Team to drive improvement across the care pathway.

Introduction

Facilitating informed decision-making concerning pregnancy involves providing preconception counselling and contraceptive guidance. This empowers women and their partners to access information regarding pregnancy risks, contraceptive options, and supports pregnancy planning and avoidance of an unplanned pregnancy. Only 50% of young women with heart disease recall ever discussing contraception, and fewer than half of all teenagers with heart disease have talked about contraception before they become sexually active[1].

Contraceptive choice for women with heart disease are impacted by pregnancy intention, maternal pregnancy risk, contraceptive risk, and lifestyle factors. Information on maternal pregnancy risk in the context of heart disease can be accessed on the SOCN website (www.socn.scot.nhs.uk).

Many clinicians are not well informed about which contraceptive methods can be safely used by women with heart disease and often err on the side of caution suggesting methods such as condoms which are associated with high failure rates. The College of Sexual and Reproductive Health (CoSRH) Medical Eligibility Criteria for Contraceptive Use offers guidance to clinicians regarding who can use contraceptive methods safely (UKMEC_2025.pdf). In addition to heart disease it is important to consider co-morbidities and lifestyle factors that increase risk associated with certain methods of contraception.

Some medical conditions are associated with potential or theoretical increased health risks when certain contraceptive methods are used, either because the method adversely affects the condition or because the condition or its treatment affects the safety of the contraceptive. Since most trials of new contraceptive methods deliberately exclude subjects with chronic medical conditions, there is often little direct evidence on which to base accurate prescribing advice. The UKMEC is updated on a regular basis reviewing new evidence and reaching decisions through a formal consensus process.

For each of the personal characteristics or medical conditions considered by the UKMEC a Category 1, 2, 3 or 4 is given. The definitions of the categories are shown below.

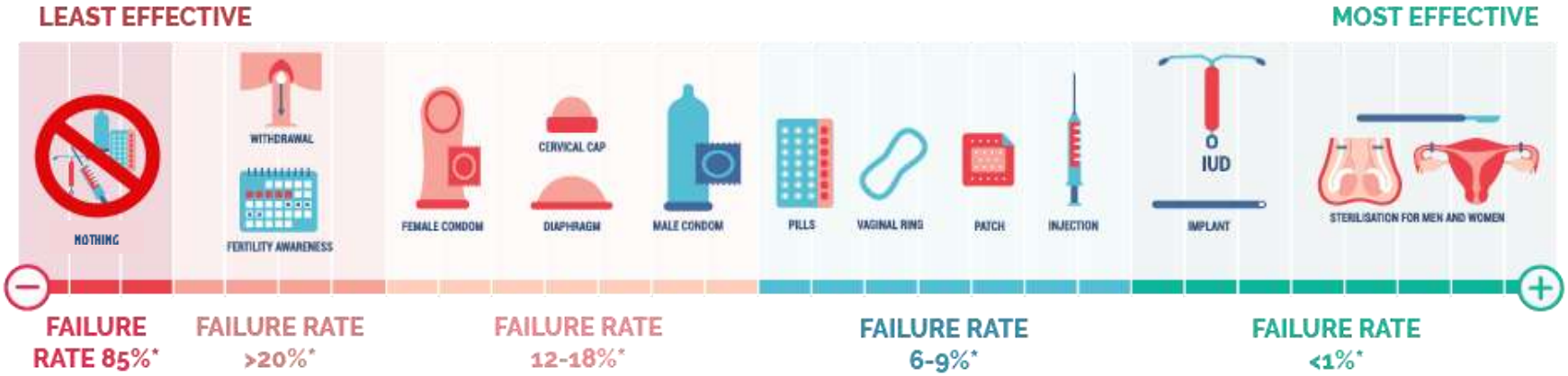
UKMEC	Definition of Category
1	A condition for which there is no restriction for the use of the method
2	A condition where the advantages of using the method generally outweigh the theoretical or proven risks
3	A condition where the theoretical or proven risks usually outweigh the advantages of using the method. The provision of a method requires expert clinical judgement and/or referral to a specialist contraceptive provider, since use of the method is not usually recommended unless other more appropriate methods are not available or not acceptable
4	A condition which represents an unacceptable health risk if the method is used

	Implant 	Hormonal Coil 	Copper Coil 	Injection 	Combined hormonal contraception (pill, patch or vaginal ring) 	Progestogen only Pill 	Barrier Method 
Current/history of VTE	2	2	1	3	4	2	1
Known thrombogenic mutation	2	2	1	3	4	2	1
Family history of VTE (1st degree relative)	1	1	1	2	<45 years 3 >45 years 2	1	1
Multiple risk factors for CV (age, smoking, diabetes, hypertension)	2	2	1	3	3	2	1
Known hyperlipidaemia	2	2	1	2	2	2	1
Atrial fibrillation	2	2	1	2	4	2	1
Long QT* [C- continuation; I-initiation]	1	C – 1 I - 3	C -1 I - 3	2	2	1	1
Cardiomyopathy (normal cardiac function)	1	1	1	1	2	1	1
Cardiomyopathy (impaired cardiac function)	2	2	2	2	4	2	1
Uncomplicated valvular & congenital heart disease	1	1	1	1	2	1	1
Complicated valvular & congenital heart disease (eg: pulmonary hypertension, history of subacute bacterial endocarditis)	1	2	2	1	4	1	1
Adequately controlled hypertension	1	1	1	2	3	1	1
Systolic BP <140-159mmHg or diastolic BP >90-99mmHg	1	1	1	2	3	1	1
Systolic BP >160mmHg or diastolic BP >100mmHg	1	1	1	2	4	1	1
Vascular disease	2	2	1	3	4	2	1

C: continuation of contraceptive method I: initiation of contraceptive method *For more information on contraception in Long QT please see useful resources.

When providing advice about contraception it is important consider the effectiveness and the duration of action of the available methods as well as their impact on menstruation and other factors.

Method	Typical Use Efficacy (%)	Duration of use	Other considerations e.g. effect on bleeding pattern
No method	85	-	
Fertility awareness-based method (including apps)	24	-	Requires daily monitoring. More difficult to use if irregular cycles. If pregnancy poses significant health risk then FAM should not be advised
Female diaphragm	12	Ad hoc	
Male condoms	18	Ad hoc	Reduce risk of STI transmission
Combined hormonal contraception	9	Can be continued until age 50 if no other contraindications	Periods will usually be lighter. Option for bleeding pattern control with tailored regimens Need to remember to take pill daily.
Progestogen-only pills	9	Can be continued until maximum age 55 if no other contraindications	Bleeding can be unpredictable. (For Desogestrel POP users after 12 months 50% will have amenorrhoea/infrequent bleeding) Need to remember to take pill daily
Progestogen injectables	6	Dosing interval 13-14 weeks	Bleeding disturbances are common May make periods lighter or stop periods. Rates of amenorrhoea increase with increased duration of use (50% at 12 months)
Copper intrauterine device	0.8	Effective for 5 or 10 years depending on device used	Bleeding can be heavier and more painful
Hormonal IUD	0.2	Effective for 3-8 years depending on device used and indication	Frequent bleeding/spotting is common in the first few months after insertion. At 1 year, infrequent bleeding is usual with the 52mg LNG-IUD and some women will be amenorrhoeic. No periods or lighter periods (may be particularly advantageous for women on anti-platelet/anti-coagulation)
Progestogen-only implant	0.05	Effective for 3 years	Bleeding disturbances common. Bleeding pattern in first 3 months often predictive of future bleeding pattern
Female sterilisation	0.5	Lifelong	No effect on bleeding pattern
Vasectomy	0.15	Lifelong	



Typical use efficacy (% of women experiencing an unintended pregnancy within the first year of use)

Emergency contraception

No contraindications. There may be some individual circumstances (i.e. if using barrier methods of contraception) where it is appropriate to consider offering EC in advance. Advice should be given about efficacy, alternative EC, follow up after use and advice about STI testing associated with unprotected sex. Please see CoSRH guidance for further information. https://www.cosrh.org/Public/Documents/ceu-clinical-guidance-emergency-contraception-march-2017.aspx

Intrauterine contraception (IUD) special considerations

- Antibiotic prophylaxis is not routinely required for those at increased risk of infective endocarditis
- Small risk of vasovagal reaction during procedure
- Due to risk of vasovagal reaction causing a significant cardiac event IUD insertions should be undertaken in hospital setting for the following individuals:
    - Pre-existing arrythmia
    - Eisenmenger physiology
    - Long QT syndrome
    - Single ventricle (or Fontan) circulation
    - Other heart conditions who would not tolerate a vasovagal reaction
- Majority of insertions for individuals with Postural Orthostatic Tachycardia Syndrome (PoTS) should be straightforward and low risk providing consideration is given to precautions (adequate hydration, salt intake and postural awareness). If there is a history of postural syncope then insertion in hospital setting should be considered.

Individuals on anticoagulants special considerations

- IUD and implant insertion should be performed by specialist contraceptive providers holding relevant FSRH certification. This can in general be done in community sexual and reproductive health clinic setting or in general practice
- Patients using LMWH should have their procedure timed to coincide with lowest anticoagulant effect ie: if dose taken in the evening then insertion performed in the afternoon is associated with lowest risk
- Consider giving POP as bridging contraception if it is more appropriate to bring a patient back to a separate appointment to better time the procedure
- Avoid fitting IUD or implant in the community within the first 2 weeks of Apixaban use when the dose will be higher

For individuals with a target INR >3.5 or on higher doses of LMWH IUD fitting should be done in a hospital setting. Implant fitting can be done in a community setting. Heavy menstrual bleeding is not uncommon for individuals who are anticoagulated. Progestogen-only methods will reduce bleeding but can also be associated with unpredictable bleeding patterns.

Resources

- Scottish Obstetric Cardiology Network www.socn.scot.nhs.uk
- Contraception Choices https://www.contraceptionchoices.org/
- West of Scotland Postnatal management of infants born to parents affected by LQT syndrome https://clinicalguidelines.scot.nhs.uk/ggc-paediatric-guidelines/ggc-paediatric-guidelines/cardiac/postnatal-management-of-infants-born-to-parents-affected-by-lqt-syndrome/

References

1. Lindley KJ, Bairey Merz CN, Davis MB, Madden T, Park K, Bello NA. Cardio-Obstetrics Part 5: Contraception and Reproductive Planning for Women with Cardiovascular Disease: JACC Focus Seminar. J Am Coll Cardiol. 2021 Apr 13; 77(14): 1823–1834. doi: 10.1016/j.jacc.2021.02.02 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8041063/.

2. The College of Sexual and Reproductive Health. Medical Eligibility Criteria for Contraceptive Use 2025 https://www.cosrh.org/Common/Uploaded%20files/documents/UKMEC_2025.pdf

3. The College of Sexual and Reproductive Health. UKMEC 2025 Summary Tables. UKMhttps://www.cosrh.org/Common/Uploaded%20files/documents/UKMEC_2025_Summary_Tables.pdf

4. The College of Sexual and Reproductive Health. FSRH Clinical Guideline: Intrauterine contraception (March 2023, Amended July 2023). fsrh-clinical-guideline-intrauterine-contraception-mar-23-amended.pdf

5. The College of Sexual and Reproductive Health. FSRH Clinical Guideline: Contraceptive Choices for Women with Cardiac Disease (June 2014). https://www.cosrh.org/Common/Uploaded%20files/documents/ceuguidancecontraceptivechoiceswomencardiacdisease.pdf

6. The College of Sexual and Reproductive Health. FSRH CEU Statement: Management of women taking anticoagulants or antiplatelet medications who request intrauterine contraception or subdermal implants (March 2017) https://www.cosrh.org/Public/Public/Documents/fsrh-guidance-fsrh-guidance-management-of-women-taking-anticoagulants.aspx

Appendix 1 - Document governance

Authors	Developed by: Dr Helena Young, Dr Janine Simpson, Prof Anna Glasier, Dr Michelle Cooper, Prof Sharon Cameron, Kylie Barclay and Maggie Simpson on behalf of SG WHP Implementation Group/HDTF Women's Heart Health Subgroup.
Stakeholders involved	A wide range of health care professionals working in the area of obstetric cardiology were involved in the development of this document. This includes Obstetricians, Cardiologists, Anaesthetists, Pharmacists, Clinical Geneticists, Specialist Nurses, Midwives and Sexual Health consultants. Feedback from patients throughout the development of all of the SOCN materials was sought.
Methodology used	Evidence-based literature reviews and engagement with clinical experts within the field of obstetric cardiology across Scotland.
Rationale	Cardiac disease remains the leading indirect cause of death in pregnancy. The network was established to support and develop Obstetric Cardiology services throughout Scotland in improving standards of clinical care for pregnant women and their families affected by heart disease in pregnancy. The network supports the delivery of evidence based, patient centred care for both mother and baby through the development and implementation of clinical guidelines, care pathways, clinical standards and information resources.
Scope	The aim of this document is to support the delivery of services to improve outcomes for women with cardiac disease and support implementation of optimal care to any women with a cardiac condition who is contemplating a pregnancy or has a pregnancy in Scotland.
Approval process	Members of the Scottish Perinatal Network and Network for Inherited Cardiac Conditions Scotland were able to review and provide feedback on the final draft of this document. The SOCN Steering Group endorsed this document on 1 April 2026. Full membership of the group is available in Appendix 2.

Network contact details

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Appendix 2 - Group membership

SOCN Steering Group Membership (2025/2026)		
Name	**Job Title**	**Organisation**
Dr Ros Burns	Obstetric Anaesthetist	NHS Lothian
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Dr Vera Lennie	Consultant Cardiologist	NHS Grampian
Dr Lynn Miller	Consultant Cardiologist	NHS Fife
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