

# **Curriculum 2024 Guide for Special Interest Training Module (SITM): Fetal Care (FC)**

**May 2024 V1.0**



Version Control		
Version	Modifications	Date
1.0	Final version for publication	May 2024



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# 1. The Fetal Care SITM

This SITM is aimed at learners who have an interest in fetal care. It provides training on how to use ultrasound to recognise, monitor and manage compromise to fetal wellbeing, fetal haemolytic disease and the complications of multiple pregnancy. This module is a 'Foundation' SITM, which means that for learners who are interested in a career in fetal medicine, adequate progress through this SITM is required before they can register for the Prenatal Diagnosis SITM. For learners who are interested in a more general future career, the Fetal Care SITM combines well with the other obstetric and some of the gynaecology SITMs.

This SITM is one of four that contribute to the subspecialty training (SST) curriculum for Maternal and Fetal Medicine. Learners who have completed part, or all, of this SITM will not need to evidence these key skills and competencies again if they go on to take the Maternal and Fetal Medicine SST.

Learners will learn how to provide initial counselling to patients when a fetal anomaly is suspected or identified. They will work closely with the local tertiary unit and as part of a regional Fetal Medicine network. They will learn when tertiary subspecialty input is required for more complex cases, and assist with the surveillance of complex pregnancies managed primarily by the subspecialty team in the tertiary referral unit. This approach allows local scanning expertise to be used where appropriate. Learners will have the opportunity to establish and maintain close liaison with their own neonatal services, and recognise which babies should be born in a tertiary unit. Learners will develop a high level of ultrasound scanning skill for fetal growth, but will be able to recognise their limitations with this, and know when and how to refer to tertiary subspecialty services. Those who complete this SITM will need to work closely with local prenatal screening services, and lead in the audit of local services and quality management. No additional ultrasound scanning competencies are required to commence this SITM beyond those of the Core Curriculum and training matrix.

As a learner progresses through the SITM, they will learn how to handle a variety of scenarios. Learners will also participate in educational events to further develop their training. Throughout training, learners will need to reflect on whether a project has gone well, learn from positive and negative experiences, and use this to improve their own skills.

Before signing off on this SITM, the Educational Supervisor will decide the level of supervision required for each Fetal Care Capability in Practice (CiP), and whether this has been met. More detail is provided in Section 5.2 of the [Special Interest Training Definitive Document](#).

# 2. Design of the SITM

The Fetal Care 2024 SITM is made up of three Fetal Care (FC) CiPs.



If undertaking the module full time, it is expected to take 18–24 months of training. However, this timeframe is indicative as training is entirely competency based.

Learners must complete a minimum of two SITMs to obtain a certificate of completion of training (CCT).

The Fetal Care SITM is the foundation SITM for the Prenatal Diagnosis SITM and good progress in this SITM must be demonstrated before registering for the Prenatal Diagnosis SITM if the learner is aiming for a special interest post in fetal medicine.

Alternatively, learners can undertake any obstetrics or gynaecology SITM as the second SITM, depending on whether they are aspiring to a combined obstetrics and gynaecology or obstetrics-only special interest post.

Here is the GMC-approved Fetal Care SITM:

### 3. Capabilities in Practice (CiPs)

<b>Fetal Care CiP 1: Uses ultrasound skills to recognise, monitor and manage compromise to fetal wellbeing.</b>	
<b>Key skills</b>	<b>Descriptors</b>
Uses ultrasound to screen, diagnose and manage fetal compromise	<ul style="list-style-type: none"> <li>• Understands the principles of transabdominal and transvaginal scanning, using ultrasound safely.</li> <li>• Able to measure fetal biometry to monitor the fetus at risk of growth restriction.</li> <li>• Able to recognise and manage early and late severe fetal growth restriction (FGR), referring cases of early FGR to tertiary services.</li> <li>• Able to recognise disorders of amniotic fluid volume and plan accordingly.</li> </ul>
Uses Doppler studies to screen, diagnose and manage fetal compromise	<ul style="list-style-type: none"> <li>• Able to perform uterine artery Dopplers to assess the risk of placental dysfunction.</li> <li>• Able to perform umbilical artery Dopplers to assess fetal resilience.</li> <li>• Able to perform middle cerebral artery (MCA) Dopplers to evaluate fetal compromise.</li> <li>• Able to perform ductus venosus Dopplers to evaluate fetal compromise.</li> </ul>
Uses ultrasound to assess placental location	<ul style="list-style-type: none"> <li>• Able to use transvaginal scanning to diagnose and manage low-lying placenta.</li> </ul>



Discusses their findings with the pregnant woman	<ul style="list-style-type: none"> <li>• Demonstrates the ability to communicate their findings and the degree of risk effectively so that the woman can be involved in an informed decision-making process.</li> </ul>
Assesses and plans the management and delivery of a fetus with severe growth restriction	<ul style="list-style-type: none"> <li>• Provides ongoing assessment of fetal biometry over time when severe FGR is identified.</li> <li>• Able to use fetal Dopplers – umbilical, MCA and ductus venosus – to assess fetal wellbeing and plan the timing of delivery.</li> <li>• Able to discuss gestation-related risk of delivery versus continuation of pregnancy with the pregnant woman and facilitate informed decision-making.</li> </ul>
Provides support and counselling post birth and for future pregnancies	<ul style="list-style-type: none"> <li>• Provides follow up after the birth and accesses support services for the parents, where outcomes are complicated or poor.</li> <li>• Explains additional information learned after the birth e.g. placental histology.</li> <li>• Able to make a plan for future pregnancies, outlining recurrence risks and preventive strategies.</li> </ul>
<b>Evidence to inform decision – examples of evidence (not mandatory requirements)</b>	
<ul style="list-style-type: none"> <li>• NOTSS</li> <li>• TO2</li> <li>• Cbd</li> <li>• Mini-CEX</li> </ul>	<ul style="list-style-type: none"> <li>• Reflective practice</li> <li>• Attendance at appropriate courses e.g. ultrasound theory/practice</li> <li>• Log of cases with outcomes</li> </ul>
<b>Mandatory requirements</b>	
<ul style="list-style-type: none"> <li>• OSATS             <ul style="list-style-type: none"> <li>○ fetal biometry and liquor volume</li> <li>○ transvaginal placental localisation</li> <li>○ umbilical artery Doppler</li> <li>○ middle cerebral artery Doppler</li> <li>○ ductus venosus Doppler</li> <li>○ uterine artery Doppler</li> </ul> </li> </ul>	
<b>Knowledge criteria</b>	
<ul style="list-style-type: none"> <li>• The risks associated with the different ultrasound modalities and how to limit them – mechanical index (MI) and thermal index (TI)</li> <li>• How to use machine controls to optimise the image, including: power, gain, focal length, magnification, sector width, frame rate, pulse repetition frequency, colour and power Doppler modes.</li> <li>• The difference between small for gestational age (SGA) and fetal growth restriction (FGR)</li> <li>• The differential diagnosis for fetal growth restriction</li> <li>• How Doppler assessments are used to monitor growth restriction, timing of birth and detect fetal anaemia</li> <li>• National guidance on monitoring for FGR, the timing of birth and signs that a referral need to be made to a subspecialist when managing FGR</li> </ul>	



- How fetal anomalies may influence the Doppler waveforms (e.g. cardiac arrhythmias, fetal anaemia, hydrops and twin-to-twin transfusion syndrome (TTTS))
- Definition of low-lying placenta and how to make the diagnosis using ultrasound
- Management of placenta praevia
- The risk factors for abnormal placental invasion (AIP) and vasa praevia and how to diagnose them using ultrasound, and/or when to refer to a regional AIP service
- Definition of oligohydramnios and polyhydramnios and the differential diagnosis, investigation and management

**Fetal Care CiP 2: The doctor demonstrates the skills and attributes required to assess the fetus at risk of red cell alloimmunisation.**

Key skills	Descriptors
Safely manages the pregnancy where there is a risk of red cell immunisation	<ul style="list-style-type: none"> <li>• Provides appropriate antenatal care to the woman with a pregnancy at risk.</li> <li>• Recognises when there is a risk of fetal anaemia.</li> <li>• Explains the potential fetal and maternal risks of red cell antibodies.</li> <li>• Liaises with blood transfusion and neonatal services.</li> <li>• Classifies the risks for any pregnancy complicated by red cell antibodies.</li> <li>• Performs and interprets the findings of a MCA Doppler.</li> <li>• Monitors the pregnancy at risk and understands the thresholds for referral to tertiary units with transfusion services.</li> </ul>
<b>Evidence to inform decision – examples of evidence (not mandatory requirements)</b>	
<ul style="list-style-type: none"> <li>• NOTSS</li> <li>• TO2</li> <li>• Cbd</li> <li>• Mini-CEX</li> </ul>	<ul style="list-style-type: none"> <li>• Reflective practice</li> <li>• Evidence of MDT working</li> <li>• RCOG Learning:               <ul style="list-style-type: none"> <li>○ observation of fetal blood transfusion</li> </ul> </li> </ul>
<b>Mandatory requirements</b>	
<ul style="list-style-type: none"> <li>• OSATS               <ul style="list-style-type: none"> <li>○ middle cerebral artery Doppler</li> </ul> </li> </ul>	
<b>Knowledge criteria</b>	
<ul style="list-style-type: none"> <li>• Differential diagnosis for fetal anaemia</li> <li>• Ultrasound and cardiotocography (CTG) changes secondary to severe fetal anaemia</li> <li>• Which red cell antibodies may cause haemolytic disease of the fetus and newborn, and threshold antibody levels that carry significant risk</li> <li>• When and how surveillance for fetal anaemia should be instituted</li> <li>• How MCA velocities are used to monitor signs of anaemia</li> </ul>	



- Triggers for referral to a tertiary level unit capable of performing intrauterine transfusion
- Treatment of fetal anaemia
- The role of intravenous immunoglobulin (IVIgG) in haemolytic disease of the fetus and newborn
- Management of the newborn risk of kernicterus

**Fetal Care CiP 3: The doctor demonstrates the skills and attributes required to assess complications of twin pregnancies.**

Key skills	Descriptors
Uses ultrasound to monitor twin pregnancies	<ul style="list-style-type: none"> <li>• Able to determine the chorionicity of a twin pregnancy when scanning in first trimester.</li> <li>• Able to assess and monitor a twin pregnancy using biometry and Doppler scanning techniques.</li> </ul>
Manages complicated twin pregnancies	<ul style="list-style-type: none"> <li>• Able to diagnose and make an initial assessment of growth discordancy in twin pregnancies.</li> <li>• Able to discuss effectively the timing of delivery with parents and facilitate informed decision-making, considering the risk to both twins of delivery or continuing the pregnancy when there is growth discordancy.</li> <li>• Refers to tertiary services when early and severe growth discordancy occurs.</li> <li>• Able to assess and monitor the monochorionic twin pregnancy for presence and evolution of TTTS.</li> <li>• Refers to tertiary services when there is evidence of TTTS or selective FGR in monochorionic twins.</li> <li>• Assists with follow up after treatments for TTTS.</li> <li>• Recognises the possibility of other complications of monozygotic twinning, including selective FGR, discordant anomalies, twin reversed arterial perfusion sequence (TRAP) and single intrauterine death, and refers appropriately to fetal medicine tertiary services.</li> <li>• Is aware of the principles of management of higher multiples.</li> </ul>
Evidence to inform decision – examples of evidence (not mandatory requirements)	
<ul style="list-style-type: none"> <li>• NOTSS</li> <li>• TO2</li> <li>• CbD</li> <li>• Mini-CEX</li> </ul>	<ul style="list-style-type: none"> <li>• Reflective practice</li> <li>• Attendance at specialist twin clinics</li> <li>• Log of cases with outcomes</li> </ul>



	<ul style="list-style-type: none"><li>• Observation of advanced procedures in the management of complicated twin pregnancies e.g. fetal reduction and laser ablation</li></ul>
<b>Mandatory requirements</b>	
<ul style="list-style-type: none"><li>• OSATS<ul style="list-style-type: none"><li>○ multiple gestation chorionicity</li><li>○ twin pregnancy assessment</li></ul></li></ul>	
<b>Knowledge criteria</b>	
<ul style="list-style-type: none"><li>• Definition of significant growth discordance in twin gestations and the importance of chorionicity</li><li>• Management of growth discordancy in twin pregnancies</li><li>• The clinical and ultrasound features of TTTS, and referral triggers for fetal medicine subspeciality input</li><li>• Short and long-term outcomes from TTTS</li><li>• The management of TTTS and follow up regimes, following treatment</li><li>• The ultrasound features of TRAP and conjoined twins</li><li>• Ongoing management of a pregnancy complicated by co-twin death</li><li>• Other complications of multiple gestations that necessitate discussion with, or referral to, a tertiary fetal medicine service, e.g. discordant anomaly</li></ul>	

## 4. GMC Generic Professional Capabilities (GMCs)

The key skills in the Fetal Care CiPs also map to a variety of [generic professional capabilities](#) (GPCs). When providing evidence of their progress in this SITM, learners should make sure that it also displays progress/capability in the GMC GPCs, such as dealing with complexity, teamwork and leadership, and knowledge of patient safety issues.

### Mapping to the GPCs

**Domain 1: Professional values and behaviours**

**Domain 2: Professional skills**

**Domain 3: Professional knowledge**

**Domain 4: Capabilities in health promotion and illness prevention**

**Domain 5: Capabilities in leadership and team-working**

**Domain 6: Capabilities in patient safety and quality improvement**



**Domain 7: Capabilities in safeguarding vulnerable groups**

**Domain 8: Capabilities in education and training**

**Domain 9: Capabilities in research and scholarship**

Learners can expect to be assessed on their wider skills as a medical professional, their skills in leadership and teamwork, and their level of clinical competence. Evidence showing progress in these areas will result in the learner progressing through the SITM.

To help learners and Educational Supervisors determine what acceptable progress looks like, there is a Statement of Expectations for each Fetal Care CiP.

<b>Statement of Expectations for the Fetal Care SITM</b>	
<b>Meeting expectations for the Fetal Care CiP1</b>	Learners are meeting expectations and can use ultrasound to confirm normal and abnormal fetal growth and wellbeing. Learners can communicate with their patients effectively, discuss their findings and plan care. They will engage with a multidisciplinary network, and recognise when referral is required to a subspecialist.
<b>Meeting expectations for the Fetal Care CiP2</b>	Learners are meeting expectations and can discuss and plan management with a pregnant person whose fetus is at risk from red cell alloimmunisation. They are also able to assess the likelihood of fetal anaemia, and liaise with tertiary units when intervention is indicated.
<b>Meeting expectations for the Fetal Care CiP3</b>	Learners are meeting expectations and can provide care for pregnant people with mono- or dichorionic twin pregnancies, using ultrasound assessment to monitor growth and wellbeing. Learners can screen for twin-to-twin transfusion syndrome and other complications of monochorionic twinning. They can also plan effective care with a pregnant person with a multiple pregnancy, and in more complex cases, liaise with, and refer to, subspecialty centres.

The CiP knowledge criteria show the processes/frameworks a learner should understand and the clinical knowledge they must have if they want to work in fetal medicine. This is more in-depth than the knowledge base expected for the MRCOG. The key skills and descriptors outline the expected learning outcomes for the SITM. However, learners will not experience the entire range of possible scenarios during their training for this SITM; therefore, after completing the module they should continue their learning and skill development through their independent practice as a Fetal Medicine special interest doctor and at multidisciplinary team (MDT) meetings.

## 5. Procedures associated with the Fetal Care CiPs

The procedures required to complete this SITM are listed below. A learner can show progress in these procedures through OSATS, procedure logs and other forms of evidence.

If a procedure is marked with \*, the learner will require three summative competent OSATS to demonstrate the level of competency needed to complete the SITM. All procedures for this SITM require three summative competent OSATS.

Procedures	Level by end of training	CiP1	CiP2	CiP3
Fetal biometry and liquor volume*	5	X		
Transvaginal placental localisation*	5	X		
Umbilical artery Doppler*	5	X		
Middle cerebral artery Doppler*	5	X	X	
Ductus venosus Doppler*	5	X		
Uterine artery Doppler*	5	X		
Multiple gestation chorionicity*	5			X
Twin pregnancy assessment*	5			X

The 'level by end of training' corresponds to the levels of entrustability defined in Section 5.4 of the [Special Interest Training Definitive Document](#). Level 5 indicates that a learner should be able to perform the procedure independently.

OSATS are not assigned a level of entrustability, rather they are assessed as being *competent* or *working toward competence*. The entrustability levels here are given to guide the assessor in judging whether the learner has reached the required degree of independence at the end of training.

**Subspecialty trainees in Maternal and Fetal Medicine will be expected to acquire the procedural skills listed in this table as well as the subspecialty-specific procedures listed in the Maternal and Fetal Medicine subspecialty-specific procedure table.**

## 6. Evidence required

As learners progress through SITM training, they are expected to collect evidence that demonstrates development and acquisition of the key skills, procedures and knowledge. This evidence will be reviewed by the SITM Educational Supervisor when they are making their assessment for each CiP. Examples of types of evidence a learner may use to show progress in the SITM are given below. **Please note that this list shows possible, not mandatory, types of evidence** (see Section 5.6 in the [Special Interest Training Definitive Document](#) for more detail).

If workplace-based assessments are listed, then at least one must be presented as evidence. The emphasis should be firmly on the **quality** of evidence, not the quantity.

<ul style="list-style-type: none"> <li>Objective Structured Assessment of Technical Skills (OSATS) (<b>mandatory</b>)</li> </ul>	<ul style="list-style-type: none"> <li>Case presentations</li> </ul>
<ul style="list-style-type: none"> <li>Case-based discussions (CbD)</li> </ul>	<ul style="list-style-type: none"> <li>Log of cases with outcomes</li> </ul>
<ul style="list-style-type: none"> <li>Mini-Clinical Evaluation Exercise (Mini-CEX)</li> </ul>	<ul style="list-style-type: none"> <li>Quality improvement activity</li> </ul>
<ul style="list-style-type: none"> <li>NOTSS</li> </ul>	<ul style="list-style-type: none"> <li>Certification of training courses</li> </ul>
<ul style="list-style-type: none"> <li>Reflective practice</li> </ul>	<ul style="list-style-type: none"> <li>Attendance at relevant meetings, specialist twin clinics and appropriate courses e.g. ultrasound theory/practice</li> </ul>
<ul style="list-style-type: none"> <li>Team observation (TO2), including self-observation (SO)</li> </ul>	<ul style="list-style-type: none"> <li>Participation at QA visits</li> </ul>
<ul style="list-style-type: none"> <li>Local, Deanery and National Teaching</li> </ul>	<ul style="list-style-type: none"> <li>Evidence of MDT working</li> </ul>
<ul style="list-style-type: none"> <li>RCOG (and other) eLearning:               <ul style="list-style-type: none"> <li>observation of fetal blood transfusion</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Observation of advanced procedures in the management of complicated twin pregnancies e.g. fetal reduction and laser ablation</li> </ul>
<ul style="list-style-type: none"> <li>Procedural log</li> </ul>	

The table below may be useful for learners to see whether a specific workplace-based assessment can be used as evidence of progress in a specific Fetal Care CiP:

Fetal Care CiP	OSATS	Mini-CEX	CbD	NOTSS	TO1/ TO2	Reflective practice
1: Uses ultrasound skills to recognise, monitor and manage compromise to fetal wellbeing.	X	X	X	X	X	X



Fetal Care CiP	OSATS	Mini-CEX	CbD	NOTSS	TO1/ TO2	Reflective practice
2: The doctor demonstrates the skills and attributes required to assess the fetus at risk of red cell alloimmunisation.	X	X	X	X	X	X
3: The doctor demonstrates the skills and attributes required to assess complications of twin pregnancies.	X	X	X	X	X	X

## 7. Career guidance

Learners can only undertake two SITMs at any one time, and a minimum of two SITMs are required to obtain a CCT in obstetrics and gynaecology.

The Fetal Care SITM is the foundation SITM for the Prenatal Diagnosis SITM, and good progress must be demonstrated before undertaking the Prenatal Diagnosis SITM. This combination is recommended if a learner aspires to a special interest post in fetal medicine. Otherwise, learners can undertake any obstetrics or gynaecology SITM with the Fetal Care SITM. The choice of second SITM depends on whether a learner is aspiring to a combined obstetrics and gynaecology or obstetrics-only future career. However, this will also depend on the training opportunities available for their chosen SITMs.

If the learner wants to become a subspecialist in Maternal and Fetal Medicine, both the Fetal Care and Prenatal Diagnosis SITMs are suitable to undertake before appointment to a MFM SST training programme. The subspecialty curriculum builds on these SITMs, and they are both included in the subspecialty curriculum for Maternal and Fetal Medicine. Any evidence collected during SITM training and/or completed CiPs will count toward completion of SST. This will make the learner more competitive to succeed at subspecialty interview.

For further career advice, learners should have a discussion with their SITM Director.



## 8. Further resources

The further resources listed below can be found on the [RCOG Curriculum 2024 webpages](#):

- [Essential Curriculum Guide](#)
- [Special Interest Training Definitive Document](#) (containing the 2024 curricula for SITMs and SIPMs)
- [British Maternal and Fetal Medicine Society \(BMFMS\)](#)

Find out more at  
[rcog.org.uk/curriculum2024](https://rcog.org.uk/curriculum2024)



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