

Curriculum 2024 Guide for Special Interest Training Module (SITM): Maternal Medicine (MM)

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1. The Maternal Medicine SITM

This SITM is aimed at learners with an interest in maternal medicine who want to be able to safely and sensitively care for women with medical problems during their pregnancy. It builds on the key skills of the Pregnancy Care SITM, extending them across the full range of possible pregnancy complications. This includes pre-pregnancy counselling and antenatal, intrapartum and postnatal care. This is a 'Contingent' SITM and is paired with the Pregnancy Care SITM. This means that if a learner is interested in a career in maternal medicine, they must have started the Pregnancy Care SITM and demonstrated appropriate aptitude before they can register for the Maternal Medicine SITM.

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. An additional obstetric medicine CiP, found only in the SST, takes these key skills and competencies to the highest level.

During training, learners will learn how to risk stratify pregnant women with medical problems into those who can be managed using local expertise, those who require clinical review and ongoing advice and guidance by the Maternal Medicine Centre (in England this will be the Maternal Medicine Network), and those where care is best led by the Maternal Medicine Centre. Learners will work within the Maternal Medicine Centre and have the opportunity to lead a local maternal medicine multidisciplinary team (MDT). They will develop the skills and knowledge to manage a range of renal, haematological, cardiac, neurological, hepatic, respiratory, inflammatory and infective conditions in pregnancy. They may also look after women who have had previous or current malignancy.

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 Maternal Medicine Capability in Practice (CiP), and whether this has been met. More detail is provided in Section 5 of the Special Interest Training Definitive Document.

2. Design of the SITM

The Maternal Medicine 2024 SITM is made up of two Maternal Medicine (MM) CiPs. If undertaking the module full time, it is expected to take 12–24 months of training. However, this timeframe is indicative as training is entirely competency based.



The Maternal Medicine SITM is the contingent SITM for the Pregnancy Care SITM. The Pregnancy Care SITM must have been commenced and appropriate aptitude demonstrated in the Pregnancy Care SITM, before undertaking the Maternal Medicine SITM.

Learners must complete a minimum of two SITMs to obtain a certificate of completion of training (CCT). They can undertake any obstetrics or gynaecology SITM as their 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 Maternal Medicine SITM:

3. Capabilities in Practice (CiPs)

Maternal Medicine CiP 1: The doctor is able to work with others to provide high quality care to the woman with medical conditions in pregnancy or planning a pregnancy. **Key skills Descriptors** Effectively communicates Builds on the key skills of the Pregnancy Care SITM and with the team providing care uses them when working on the full range of medical problems which may complicate pregnancy. Works collaboratively across specialties and, where relevant, manages clinical networks through MDT meetings to construct pre-pregnancy, antepartum, intrapartum and postpartum management plans to ensure that high quality care is available locally to women with complex medical problems. Plans care for women with complex medical problems in collaboration with other specialties. Makes appropriate referral to a regional maternal medicine clinic, where relevant. (In England this will be through the Maternal Medicine Networks either through MDTs for category B medical problems or referral for ongoing care to a Maternal Medicine Centre for category C medical problems). Is aware of a possible genetic diagnosis that may not have been diagnosed to date. Refers to clinical genetics as appropriate.



Provides tailored pre-	Can advise the person with complex medical conditions of				
pregnancy counselling	the impact of pregnancy on their condition.				
pregnamely counselling	Is able to advise the person with complex medical				
	conditions on the impact of the condition on their				
	pregnancy.				
	 Is able to advise on modifications that will optimise her 				
	health before embarking on pregnancy.				
	Is able to adjust medication to the safest regime for				
	pregnancy.				
	 Is able to put together a plan so the person knows what 				
	to expect once they become pregnant.				
	 Is able to advise on the timing of pregnancy. 				
	Is able to advise someone against conception in				
	circumstances where the risk of pregnancy is too great.				
Is able to consider the	Is familiar with the anaesthetic considerations for the				
anaesthetic implications of	person with a variety of medical conditions.				
maternal conditions, liaise	Is able to work with anaesthetic colleagues to assess				
with anaesthetic colleagues	pregnant persons with complicated medical conditions				
and plan according to	and put together a plan to keep the person and the baby				
someone's needs	safe during pregnancy, delivery and the postnatal period.				
	Demonstrates familiarity with the effect of different				
	intrapartum analgesia to make sure persons with				
	complex medical conditions are safe in labour.				
	Participates in obstetric anaesthesia clinics.				
Can perform a risk benefit	Knows which investigations and medications are				
analysis of investigations and	appropriate and can discuss the safety of these for the				
treatments that could be	mother and fetus.				
used during pregnancy	Is able to interpret tests e.g. chest x-ray, artificial blood				
	gas (ABG) and electrocardiogram (ECG), lung function				
	tests and echocardiogram.				
	Demonstrates understanding of the effects of drugs used				
	for maternal indications on the fetus.				
	Understands and accommodates the physiological effects				
	of pregnancy on interpreting laboratory results and the				
Fulldamenta informa decision	pharmacokinetics of any drugs used.				
	examples of evidence (not mandatory requirements)				
Reflective practice	RCOG Learning				
NOTSS TO3	Local and deanery teaching Attendance at abotetric and eath acid				
• TO2	Attendance at obstetric anaesthesia Alinios				
• CbD	clinics				
Mini-CEX	Attendance at maternal medicine network meetings				
Mandatory requirements	network meetings				
Mandatory requirements					



No mandatory evidence

Knowledge criteria

- Local team structures, networks and guidelines for the management of medical conditions in pregnancy and outside of pregnancy.
- Awareness and understanding of local Maternal Medicine Networks and regional thresholds when to make referrals and include the MDT. Knows when it is appropriate to manage locally, or to manage locally with input from the regional maternal medicine clinic/the Maternal Medicine Centre and when referral to regional clinics/centres is advised.
- Criteria for referral to Maternal Medicine Centres/regional clinics.
- Structure of the Maternal Medicine Networks/regional clinics.
- In England categories for level of care within the Maternal Medicine Networks i.e. category A, B and C.
- When to seek specialist input.
- The structure and organisation of high dependency, intensive care and outreach teams.
- Indications for high dependency and intensive care.
- Methods of invasive monitoring for oxygenation, acid base balance, intra-arterial pressure, cardiac output, preload and contractility.
- The principles and practice of palliative care.

Maternal Medicine CiP 2: The doctor has a high level of understanding of the impact that

medical conditions have on pregnancy and is able to optimise care for the affected woman.					
Key skills	Descriptors				
Is able to manage care for the pregnant person who has renal problems in pregnancy	 Can construct an appropriate plan for pregnancy, delivery and the postnatal period to minimise the risks the woman's medical condition. Can construct a plan for pregnancy, delivery and the neonatal period to minimise the risk to the fetus/baby. Is able to recognise the presentation of renal disorders in pregnancy, can construct a differential diagnosis and work with the MDT to put together a suitable management plan for pre-existing or new onset conditions. Understands which tests are appropriate in pregnancy for diagnosis and monitoring, and which are not valid or have different reference ranges in a pregnant woman. Understands when tests pose an additional risk to the mother or fetus, and is able to discuss the relative risk and benefits of this. Can support a woman who deems the risk too high. Has a good working knowledge of medical treatments for renal conditions that are safe in pregnancy, and can 				



	modify treatments when they are not safe. Knows how to access advice on safety.			
	access advice on safety.			
Is able to manage care for someone who has haematological problems in pregnancy	 Can construct an appropriate plan for pregnancy, delivery and the postnatal period to reduce the risks associated with the woman's medical condition. Can construct a plan for pregnancy, delivery and the neonatal period to reduce the risk to the fetus/baby. Is able to recognise the presentation of haematological disorders in pregnancy, can construct a differential diagnosis and work with the MDT to put together a suitable management plan for pre-existing or new onset conditions. Understands which tests are appropriate in pregnancy for diagnosis and monitoring of haematological disorders, and which are not valid or have different reference ranges in a pregnant woman. Understands when tests pose an additional risk to the mother or fetus, and is able to discuss the relative risk and benefits of this. Can support a woman who deems the risk too high. Has a good working knowledge of medical treatments for haematological conditions that are safe in pregnancy, and can modify treatment when they are not safe. Knows how 			
Is able to manage care for	 to access advice on safety. Can construct an appropriate plan for pregnancy, delivery 			
someone who congenital and acquired cardiac conditions	and the postnatal period to reduce the risks associated with the woman's medical condition.			
in pregnancy	 Can construct a plan for pregnancy, delivery and the neonatal period to minimise the risk to the fetus/baby. Is able to recognise the presentation of cardiac disorders in pregnancy, can construct a differential diagnosis and work with the MDT to put together a suitable management plan for pre-existing or new onset conditions. Understands which tests are appropriate in pregnancy for diagnosis and monitoring of cardiac disorders, and which are not valid or have different reference ranges in the pregnant woman. Understands when tests pose an additional risk to the 			
	mother or fetus and is able to discuss the relative risk and benefits of this. Can support a woman who deems the risk too high.			



	 Has a good working knowledge of medical treatments for cardiac conditions that are safe in pregnancy and is able to modify treatment when they are not safe and knows how to access advice on safety.
Is able to care for someone who has inflammatory conditions (connective tissue disorders, inflammatory bowel disease and dermatological problems) in pregnancy	 Can construct an appropriate plan for pregnancy, delivery and the postnatal period to reduce the risks associated with the woman's medical condition. Can construct a plan for pregnancy, delivery and the neonatal period to minimise the risk to the fetus/baby. Is able to recognise the presentation of inflammatory or dermatological conditions in pregnancy, can construct a differential diagnosis and work with the MDT to put together a suitable management plan for pre-existing or new onset conditions. Understands which tests are appropriate in pregnancy for diagnosis and monitoring of inflammatory disorders, and which are not valid or have different reference ranges in a pregnant woman. Understands when tests pose an additional risk to the mother or fetus and is able to discuss the relative risk and benefits of this. Can support a woman who deems the risk too high. Has a good working knowledge of medical treatments for inflammatory disorders that are safe in pregnancy, including biologics. Is able to modify treatment when they are not safe and knows how to access advice on safety.
Is able to manage care for someone who has epilepsy and other common neurological problems in pregnancy	 Can construct an appropriate plan for pregnancy, delivery and the postnatal period for women with epilepsy, multiple sclerosis, idiopathic intracranial hypertension and chronic headache. Can put together a plan for pregnancy, delivery and the neonatal period to minimise the risk to the fetus/baby. Is able to recognise the presentation of neurological disorders in pregnancy, can construct a differential diagnosis and work with the MDT to put together a suitable management plan for pre-existing or new onset conditions. Can counsel a woman with epilepsy and other neurological problems to safeguard her baby. Can construct an appropriate plan for pregnancy, delivery
who has liver disorders in pregnancy	and the postnatal period to reduce the risks associated with the woman's medical condition.



	 Can construct a plan for pregnancy, delivery and the neonatal period to minimise the risk to the fetus/baby. Is able to recognise the presentation of liver disorders in pregnancy, can construct a differential diagnosis and work with the MDT to put together a suitable management plan for pre-existing or new onset conditions. Understands which tests are appropriate in pregnancy for diagnosis and monitoring of liver disorders, and which are not valid or have different reference ranges in the pregnant woman. Understands when tests pose an additional risk to the mother or fetus, and is able to discuss the relative risk and benefits of this. Can support a woman who deems the risk too high. Has a good working knowledge of medical treatments for liver conditions that are safe in pregnancy, and is able to modify treatment when they are not safe. Knows how to access advice on safety.
Is able to manage care for	 Can construct an appropriate plan for pregnancy, delivery
someone who has HIV in	and the postnatal period to reduce the risks associated
pregnancy	with the HIV in pregnancy.
	 Can construct a plan for pregnancy, delivery and the neonatal period to minimise the risk to the fetus/baby.
	 Understands which tests are appropriate in pregnancy for diagnosis and monitoring, and which are not valid or have different reference ranges in a pregnant woman. Understands when tests pose an additional risk to the mother or fetus and is able to discuss the relative risk and benefits of this. Can support a woman who deems the risk too high.
	Has a good working knowledge of medical treatments for Wy conditions that are safe in prognancy and is able to
	HIV conditions that are safe in pregnancy and is able to modify treatment when they are not. Knows how to access advice on safety and the criteria for commencing treatment during pregnancy.
Is able to care for someone	Can construct an appropriate plan for pregnancy, delivery and the postpatal period to reduce the risks associated.
who has respiratory compromise in pregnancy	and the postnatal period to reduce the risks associated with the woman's medical condition.
	Can put together a plan for pregnancy, delivery and the
	neonatal period to reduce the risk to the fetus/baby.Is able to recognise the presentation of respiratory
	disorders in pregnancy, can construct a differential

	diagnosis and work with the MDT to put together a suitable management plan for pre-existing or new onset conditions. Understands which tests are appropriate in pregnancy for diagnosis and monitoring, and which are not valid or have different reference ranges in a pregnant woman. Understands when tests pose an additional risk to the mother or fetus and is able to discuss the relative risk and benefits of this. Can support a woman who deems the risk too high. Has a good working knowledge of medical treatments for respiratory conditions that are safe in pregnancy and is able to modify treatment when they are not safe. Knows how to access advice on safety.			
Is able to manage care for someone who has current or past malignancy in pregnancy	 When malignancy is diagnosed in pregnancy, is able to support a woman through a tailored plan for treatment during pregnancy and provide them with reassurance of the suitability of this plan during. Is able to weigh up the timing of delivery around someone's treatment needs. When malignancy has been treated prior to pregnancy, is aware of the implications for maternal health during pregnancy and is able to mitigate against these. Is mindful of the fetal considerations when managing malignancy in pregnancy. Understands which tests are appropriate in pregnancy for diagnosis and monitoring of cancer, and which are not valid or have different reference ranges in a pregnant woman. Understands when tests pose an additional risk to the mother or fetus and is able to discuss the relative risk and benefits of this. Can support a woman who deems the risk too high. 			
 Evidence to inform decision – e Reflective practice NOTSS TO2 CbD Mini-CEX 	RCOG Learning Local and deanery teaching Attendance at appropriate courses and conferences (e.g. BMFMS, MOMS) Log of cases with outcomes Attendance at non-obstetric specialist medical clinics			



Attendance at maternal medicine **MDTs**

Mandatory requirements

No mandatory evidence

Knowledge criteria

- The normal functional and anatomical changes of the different body systems during pregnancy (e.g. cardiovascular, respiratory, gastrointestinal, endocrine and haematological)
- The pathological changes in the function of these body systems in pregnancy
- Renal conditions understands the risk factors, presentation, investigation, differential diagnosis, management and outcomes of renal conditions predating and arising in pregnancy, and the effect of labour and birth on these conditions:
 - o acute renal impairment
 - hydronephrosis
 - renal disease and hypertension
 - o glomerulonephritis
 - reflux nephropathy
 - renal transplant
- Haematological understands the risk factors, presentation, investigation, differential diagnosis management and outcomes of renal conditions predating and arising in pregnancy and the effect of labour and birth on these conditions:
 - sickle cell disease and crisis
 - o thalassaemia
 - o thromboembolic disease
 - bleeding disorders
 - disorders of platelets
- Cardiac understands the risk factors, presentation, investigation, differential diagnosis management and outcomes of cardiac conditions predating and arising in pregnancy and the effect of labour and birth on these conditions:
 - o congenital cardiac disease
 - o ischaemic cardiac disease
 - mechanical and tissue valve replacements
 - o peripartum cardiomyopathy
- Connective tissue disorders understands the risk factors, presentation, investigation, differential diagnosis management and outcomes of connective tissue disorders predating and arising in pregnancy and the effect of labour and birth on these conditions:
 - System lupus erythematosus (SLE)
 - rheumatoid arthritis
 - autoimmune lymphoproliferative syndrome (APLS)
- Gastrointestinal understands the risk factors, presentation, investigation, differential diagnosis, management and outcomes of gastrointestinal conditions predating and



arising in pregnancy and the effect of labour and birth on these conditions:

- acute fatty liver
- Crohn's disease
- ulcerative colitis
- obstetric cholestasis
- hyperemesis gravidarum
- immune and infective hepatitis
- liver transplant
- Dermatological conditions understands the risk factors, presentation, investigation, differential diagnosis, management and outcomes of dermatological conditions predating and arising in pregnancy and the effect of labour and birth on these conditions:
 - o psoriasis
 - o eczema
 - o pemphigoid
 - o polymorphic eruption of pregnancy
 - o prurigo
 - o pruritic folliculitis
- Neurology understand the risk factors, presentation, investigation, differential diagnosis, management and outcomes of neurological conditions predating and arising in pregnancy and the effect of labour and birth on these conditions:
 - multiple sclerosis
 - epilepsy
 - o bell's palsy
 - o migraine
 - o stroke
 - cerebral palsy
- HIV infection understands the risk factors, presentation, investigation, differential diagnosis, management and outcomes of HIV predating and arising in pregnancy and the effect of labour and birth on these conditions
- Current pharmacological management of HIV, and drug side effects
- Respiratory disease understands the risk factors, presentation, investigation, differential diagnosis, management and outcomes of respiratory conditions predating and arising in pregnancy and the effect of labour and birth on these conditions:
 - o asthma
 - o cystic fibrosis
- Malignancy understands the risk factors, presentation, investigation, differential diagnosis, management and outcomes of malignancy predating and arising in pregnancy and the effect of labour and birth on malignancy:
 - breast cancer
 - leukaemia
 - lvmphoma
- Genetics and disease inheritance of medical disorders the risk to the mother and to the fetus and screening options e.g. haemoglobinopathy



- How pregnancy can influence the findings of investigations and may alter treatment effects
- How the medical problem may deteriorate during pregnancy, how this might present, and how it would be managed
- Paediatric network guidelines for the management of newborn problems, including frameworks around extreme prematurity and antenatal parallel care planning
- The pharmacology of drugs used to manage these conditions
- The pregnancy and breastfeeding safety profile of drugs, chemotherapy and radiotherapy used to manage these medical conditions
- Recurrence risks for future pregnancies
- The best forms of contraception for women with these specific medical disorders

4. GMC Generic Professional Capabilities (GMCs)

The key skills in the Maternal Medicine 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 Maternal Medicine CiP.

	Statement of Expectations for the Maternal Medicine SITM
Meeting	Learners are meeting expectations and can work with other professionals
expectations	within their own and other specialties to optimise the care and well-being
for the	of the pregnant person with medical conditions, assessing them through
Maternal	focused history taking, examination and choice of investigations. They can
Medicine CiP1	work with pregnant people when considering the risk-benefit analysis of
	possible treatment and management options. They are also able to give
	effective advice and pregnancy plans to people who are considering
	pregnancy and have pre-existing medical conditions.
Meeting	Learners are meeting expectations and are able to consider the impact of
expectations	pre-existing disease on pregnancy, and pregnancy on pre-existing disease.
For the	They can plan with a pregnant person with specific medical conditions, to
Maternal	optimise their care and birth experience. They are also competent in
Medicine CiP2	evaluating the pregnant person who presents with a new condition during
	pregnancy.

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 maternal 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 Maternal Medicine special interest doctor and at MDT meetings.

5. Procedures associated with the Maternal Medicine CiPs

There are no procedures associated with this SITM.

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.

•	Case-based discussions	Quality improvement activity
• CEX)	Mini-Clinical Evaluation Exercise (Mini-	Certification of training courses
•	Reflective practice	Attendance at relevant meetings
• observ	Team observation (TO2), including self-vation	Attendance at Maternal Medicine Network meetings
•	Local, Deanery and National Teaching	Attendance at appropriate courses and conferences (e.g. BMFMS, MOMS)
•	RCOG (and other) eLearning	Log of cases with outcomes
•	Procedural log	Attendance at obstetric anaesthesia clinics and non-obstetric specialist medical clinics
•	Case presentations	Attendance at maternal medicine MDTs

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 Maternal Medicine CiP:

Maternal Medicine CiP	OSATS	Mini-CEX	CbD	NOTSS	TO1/ TO2	Reflective practice
1: The doctor is able to work with others to provide high quality care to the woman with medical conditions in pregnancy or		X	X	X	X	X

Maternal Medicine CiP	OSATS	Mini-CEX	CbD	NOTSS	TO1/ TO2	Reflective practice
planning a pregnancy.						
2: The doctor has a high level of understanding of the impact that medical conditions have on pregnancy and is able to optimise care for the affected woman.		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 Maternal Medicine SITM is the contingent SITM for the Pregnancy Care SITM. The latter must be undertaken and appropriate aptitude demonstrated before undertaking the Maternal Medicine SITM. This combination is recommended if a learner aspires to a special interest career in maternal medicine.

If the learner wants to become a subspecialist in Maternal and Fetal Medicine, both the Pregnancy Care and Maternal Medicine SITMs are suitable to undertake before appointment to a maternal and fetal medicine 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.

Further resources 8.

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)
- MacDonald Obstetric Medicine Society (MOMS)

Find out more at rcog.org.uk/curriculum2024

