

SITM: Maternal Medicine (MM)

SECTION 1: CAPABILITIES IN PRACTICE

MM 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 with the team providing care	<ul style="list-style-type: none"> Builds on the key skills of the Pregnancy Care SITM and 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-pregnancy counselling	<ul style="list-style-type: none"> Can advise the person with complex medical conditions of the impact of pregnancy on their condition. 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 anaesthetic implications of maternal conditions, liaise with anaesthetic colleagues	<ul style="list-style-type: none"> Is familiar with the anaesthetic considerations for the person with a variety of medical conditions. Is able to work with anaesthetic colleagues to assess pregnant persons with complicated medical conditions and put together a

<p>and plan according to someone's needs</p>	<p>plan to keep the person and the baby safe during pregnancy, delivery and the postnatal period.</p> <ul style="list-style-type: none"> • 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.
<p>Can perform a risk benefit analysis of investigations and treatments that could be used during pregnancy</p>	<ul style="list-style-type: none"> • Knows which investigations and medications are appropriate and can discuss the safety of these for the mother and fetus. • 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 pharmacokinetics of any drugs used.
<p>Evidence to inform decision</p>	
<ul style="list-style-type: none"> • Reflective Practice • NOTSS • TO2 • Cbd • Mini-CEX 	<ul style="list-style-type: none"> • RCOG Learning • Local and deanery teaching • Attendance at obstetric anaesthesia clinics • Attendance at maternal medicine network meetings
<p>Knowledge criteria</p>	
<ul style="list-style-type: none"> • 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. 	

MM 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	<ul style="list-style-type: none"> • 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.
Is able to manage care for someone who has haematological problems in pregnancy	<ul style="list-style-type: none"> • 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 to access advice on safety.

<p>Is able to manage care for someone who congenital and acquired cardiac conditions in pregnancy</p>	<ul style="list-style-type: none"> • 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 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.
<p>Is able to care for someone who has inflammatory conditions (connective tissue disorders, inflammatory bowel disease and dermatological problems) in pregnancy</p>	<ul style="list-style-type: none"> • 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.

<p>Is able to manage care for someone who has epilepsy and other common neurological problems in pregnancy</p>	<ul style="list-style-type: none"> • 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.
<p>Is able to care for someone who has liver disorders in pregnancy</p>	<ul style="list-style-type: none"> • 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 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.
<p>Is able to manage care for someone who has HIV in pregnancy</p>	<ul style="list-style-type: none"> • Can construct an appropriate plan for pregnancy, delivery and the postnatal period to reduce the risks associated 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 HIV conditions that are safe in pregnancy and is able to modify

	<p>treatment when they are not. Knows how to access advice on safety and the criteria for commencing treatment during pregnancy.</p>
<p>Is able to care for someone who has respiratory compromise in pregnancy</p>	<ul style="list-style-type: none"> • Can construct an appropriate plan for pregnancy, delivery 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.
<p>Is able to manage care for someone who has current or past malignancy in pregnancy</p>	<ul style="list-style-type: none"> • 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.
<p>Evidence to inform decision</p>	
<ul style="list-style-type: none"> • Reflective Practice • NOTSS 	<ul style="list-style-type: none"> • RCOG Learning • Local and deanery teaching

<ul style="list-style-type: none"> • TO2 • CbD • Mini-CEX 	<ul style="list-style-type: none"> • Attendance at appropriate courses and conferences (eg BMFMS, MOMS) • Log of cases with outcomes • Attendance at non-obstetric specialist medical clinics • Attendance at maternal medicine MDTs
Knowledge criteria	
<ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> ○ acute renal impairment ○ hydronephrosis ○ renal disease and hypertension ○ glomerulonephritis ○ reflux nephromathy ○ 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: <ul style="list-style-type: none"> ○ sickle cell disease and crisis ○ thalassaemia ○ 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: <ul style="list-style-type: none"> ○ congenital cardiac disease ○ ischaemic cardiac disease ○ mechanical and tissue valve replacements ○ 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: <ul style="list-style-type: none"> ○ 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: <ul style="list-style-type: none"> ○ 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:
 - psoriasis
 - eczema
 - pemphigoid
 - polymorphic eruption of pregnancy
 - prurigo
 - 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
 - bell's palsy
 - migraine
 - 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:
 - asthma
 - 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
 - lymphoma
- 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

SECTION 2: PROCEDURES

There are no procedures in this SITM

SECTION 3: GMC GENERIC PROFESSIONAL CAPABILITIES (GPCs)

Mapping to GPCs

Domain 1: Professional values and behaviours

Domain 2: Professional skills

- Practical skills
- Communication and interpersonal skills
- Dealing with complexity and uncertainty
- Clinical skills (history taking, diagnosis and management, consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable diseases)

Domain 3: Professional knowledge

- Professional requirements
- National legislative requirements
- The health service and healthcare systems in the four countries

Domain 4: Capabilities in health promotion and illness prevention

Domain 5: Capabilities in leadership and teamworking

Domain 6: Capabilities in patient safety and quality improvement

- Patient safety
- Quality improvement

Domain 7: Capabilities in safeguarding vulnerable groups

SECTION 4: MAPPING OF ASSESSMENTS TO MM CiPs

MM 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 someone with		X	X	X	X	X

MM CIP	OSATS	Mini-CEX	CbD	NOTSS	TO1/ TO2	Reflective practice
medical conditions in pregnancy or who is planning a pregnancy						
2: The doctor has a high level of understanding of the impact that medical conditions have on pregnancy and can provide the best care for the affected woman		X	X	X	X	X