

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, extending them into the full range of medical problems which may complicate pregnancy. Works with the Maternal Medicine Network 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 (category B). Refers women with highly complex medical problems (category C) for ongoing care in a Maternal Medicine Centre. Is aware of a possible genetic diagnosis that may not have been diagnosed to date and refer to clinical genetics as appropriate.
Provides tailored pre-pregnancy counselling	<ul style="list-style-type: none"> Is able to advise the woman with complex medical conditions on the impact of pregnancy on her condition. Is able to advise the woman with complex medical conditions on the impact of the condition on 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 formulate a plan so the woman knows what to expect once she becomes pregnant. Is able to advise on the timing of pregnancy. Is able to advise a woman 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 and plan according to the woman's needs	<ul style="list-style-type: none"> Is familiar with the anaesthetic considerations for the women with a variety of medical conditions. Is able to work with anaesthetic colleagues to assess the medically complicated pregnant woman and formulate a plan optimising the safety of the woman and her fetus during pregnancy, delivery and the postnatal period. Demonstrates familiarity with the effect of different choices for intrapartum analgesia to ensure that the labouring woman with complex medical conditions is safe in labour.

	<ul style="list-style-type: none"> • Participates in obstetric anaesthesia clinics.
Can perform a risk benefit analysis for the use of investigations and treatments during pregnancy	<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, ABG and ECG, lung function tests, 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.
Evidence to inform decision	
<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
Knowledge criteria	
<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 for referral and MDT involvement, when it is appropriate to manage locally, to manage locally with Maternal Medicine Centre support and when referral to centres is advised • Criteria for referral to Maternal Medicine Centres • Structure of the Maternal Medicine Networks • Categories for level of care within the Maternal Medicine Networks ie category A, B & 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 the woman with 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 associated with the woman's medical condition.



	<ul style="list-style-type: none">• Can construct a plan for pregnancy, delivery and 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 construct 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 the pregnant woman.• Understands when tests pose an additional risk to the mother or fetus, and is able to discuss the relative risk/benefits of this, supporting the women who deems the risk too high.• Has a good working knowledge of medical treatments for renal conditions that are safe in pregnancy, is able to modify treatment when they are not and how to access advice on safety.
Is able to manage the woman with haematological 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 associated with the woman's medical condition.• Can construct a plan for pregnancy, delivery and neonatal period to minimise 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 construct 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 the pregnant woman.• Understands when tests pose an additional risk to the mother or fetus, and is able to discuss the relative risk/benefits of this, supporting the women who deems the risk too high.• Has a good working knowledge of medical treatments for haematological conditions that are safe in pregnancy, is able to modify treatment when they are not and how to access advice on safety.
Is able to manage the woman with congenital and acquired cardiac conditions in pregnancy	<ul style="list-style-type: none">• Can construct an appropriate plan for pregnancy, delivery and the postnatal period to minimise the risks associated with the woman's medical condition.• Can construct a plan for pregnancy, delivery and 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 construct a suitable management plan for pre-existing or new onset conditions.

	<ul style="list-style-type: none"> • Understands which tests are appropriate in pregnancy for diagnosis and monitoring, 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/benefits of this, supporting the women who deems the risk too high. • Has a good working knowledge of medical treatments for cardiac conditions that are safe in pregnancy, is able to modify treatment when they are not and how to access advice on safety.
<p>Is able to manage the woman with 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 minimise the risks associated with the woman's medical condition. • Can construct a plan for pregnancy, delivery and 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 construct 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 the pregnant woman. • Understands when tests pose an additional risk to the mother or fetus, and is able to discuss the relative risk/benefits of this, supporting the women 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 and how to access advice on safety.
<p>Is able to manage the woman with 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 construct a plan for pregnancy, delivery and 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 construct a suitable management plan for pre-existing or new onset conditions. • Counsels the woman with epilepsy in the safeguarding of her baby.



<p>Is able to manage the woman with liver disorders in pregnancy</p>	<ul style="list-style-type: none">• Can construct an appropriate plan for pregnancy, delivery and the postnatal period to minimise the risks associated with the woman's medical condition.• Can construct a plan for pregnancy, delivery and 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 construct 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 the pregnant woman.• Understands when tests pose an additional risk to the mother or fetus, and is able to discuss the relative risk/benefits of this, supporting the women who deems the risk too high.• Has a good working knowledge of medical treatments for liver conditions that are safe in pregnancy, is able to modify treatment when they are not and how to access advice on safety.
<p>Is able to manage the woman with HIV in pregnancy</p>	<ul style="list-style-type: none">• Can construct an appropriate plan for pregnancy, delivery and the postnatal period to minimise the risks associated with the HIV in pregnancy.• Can construct a plan for pregnancy, delivery and 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 the pregnant woman.• Understands when tests pose an additional risk to the mother or fetus, and is able to discuss the relative risk/benefits of this, supporting the women who deems the risk too high.• Has a good working knowledge of medical treatments for HIV conditions that are safe in pregnancy, is able to modify treatment when they are not, how to access advice on safety and the criteria for commencing treatment during pregnancy.
<p>Is able to manage the woman with respiratory compromise in pregnancy</p>	<ul style="list-style-type: none">• Can construct an appropriate plan for pregnancy, delivery and the postnatal period to minimise the risks associated with the woman's medical condition.• Can construct a plan for pregnancy, delivery and neonatal period to minimise 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 construct a suitable management plan for pre-existing or new onset conditions.

	<ul style="list-style-type: none"> • Understands which tests are appropriate in pregnancy for diagnosis and monitoring, 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/benefits of this, supporting the women who deems the risk too high. • Has a good working knowledge of medical treatments for respiratory conditions that are safe in pregnancy, is able to modify treatment when they are not and how to access advice on safety.
<p>Is able to manage the woman with current or past malignancy in pregnancy</p>	<ul style="list-style-type: none"> • When malignancy is diagnosed in pregnancy, is able to support the woman through a tailored plan for treatment during pregnancy and provide reassurance of the suitability of this plan during pregnancy. • Is able to weigh the timing of delivery around the 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, 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/benefits of this, supporting the women who deems the risk too high.
Evidence to inform decision	
<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 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 various body systems during pregnancy (cardiovascular, respiratory, gastrointestinal, endocrine, haematological) • The pathological changes in the function of these body systems in pregnancy • Renal - Understand the risk factors, presentation, investigation, differential diagnosis management and outcomes of renal conditions predating and arising de novo in pregnancy and the effect of labour and birth 	

- Acute renal impairment
- Hydronephrosis
- Renal disease and hypertension
- Glomerulonephritis
- Reflux nephropathy
- Renal transplant
- Haematological- Understand the risk factors, presentation, investigation, differential diagnosis management and outcomes of renal conditions predating and arising de novo in pregnancy and the effect of labour and birth
 - Sickle disease and crisis
 - Thalassaemia
 - Thromboembolic disease
 - Bleeding disorders
 - Disorders of platelets
- Cardiac - Understand the risk factors, presentation, investigation, differential diagnosis management and outcomes of cardiac conditions predating and arising de novo in pregnancy and the effect of labour and birth
 - Congenital cardiac disease
 - Ischaemic cardiac disease
 - Mechanical and tissue valve replacements
 - Peripartum cardiomyopathy
- Connective tissue disorders- Understand the risk factors, presentation, investigation, differential diagnosis management and outcomes of connective tissue disorders predating and arising de novo in pregnancy and the effect of labour and birth
 - SLE
 - Rheumatoid arthritis
 - APLS
- Gastrointestinal- Understand the risk factors, presentation, investigation, differential diagnosis management and outcomes of gastrointestinal conditions predating and arising de novo in pregnancy and the effect of labour and birth
 - Acute fatty liver
 - Crohn's disease
 - Ulcerative colitis
 - Obstetric cholestasis
 - Hyperemesis gravidarum
 - Immune and infective hepatitis
 - Liver transplant
- Dermatological conditions- Understand the risk factors, presentation, investigation, differential diagnosis management and outcomes of dermatological conditions predating and arising de novo in pregnancy and the effect of labour and birth
 - 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 de novo in pregnancy and the effect of labour and birth
 - Multiple sclerosis
 - Epilepsy
 - Bell's palsy
 - Migraine
 - Stroke
 - Cerebral palsy
- HIV infection - Understand the risk factors, presentation, investigation, differential diagnosis management and outcomes of HIV predating and arising de novo in pregnancy
- Current pharmacological management of HIV, and drug side effects
- Respiratory disease- Understand the risk factors, presentation, investigation, differential diagnosis management and outcomes of respiratory conditions predating and arising de novo in pregnancy and the effect of labour and birth
 - Asthma
 - Cystic fibrosis
- Malignancy - Understand the risk factors, presentation, investigation, differential diagnosis management and outcomes of malignancy predating and arising de novo in pregnancy and the effect of labour and birth
 - Breast cancer
 - Leukaemia
 - Lymphoma
- Genetics and disease inheritance of medical disorder – the risk to the mother and the risk to the fetus and screening options eg 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 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 optimal 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

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 the woman with medical conditions in pregnancy or planning a pregnancy		X	X	X	X	X
2: The 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