



# Curriculum 2024

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## Subspecialty Training Reproductive Medicine

### Definitive Document

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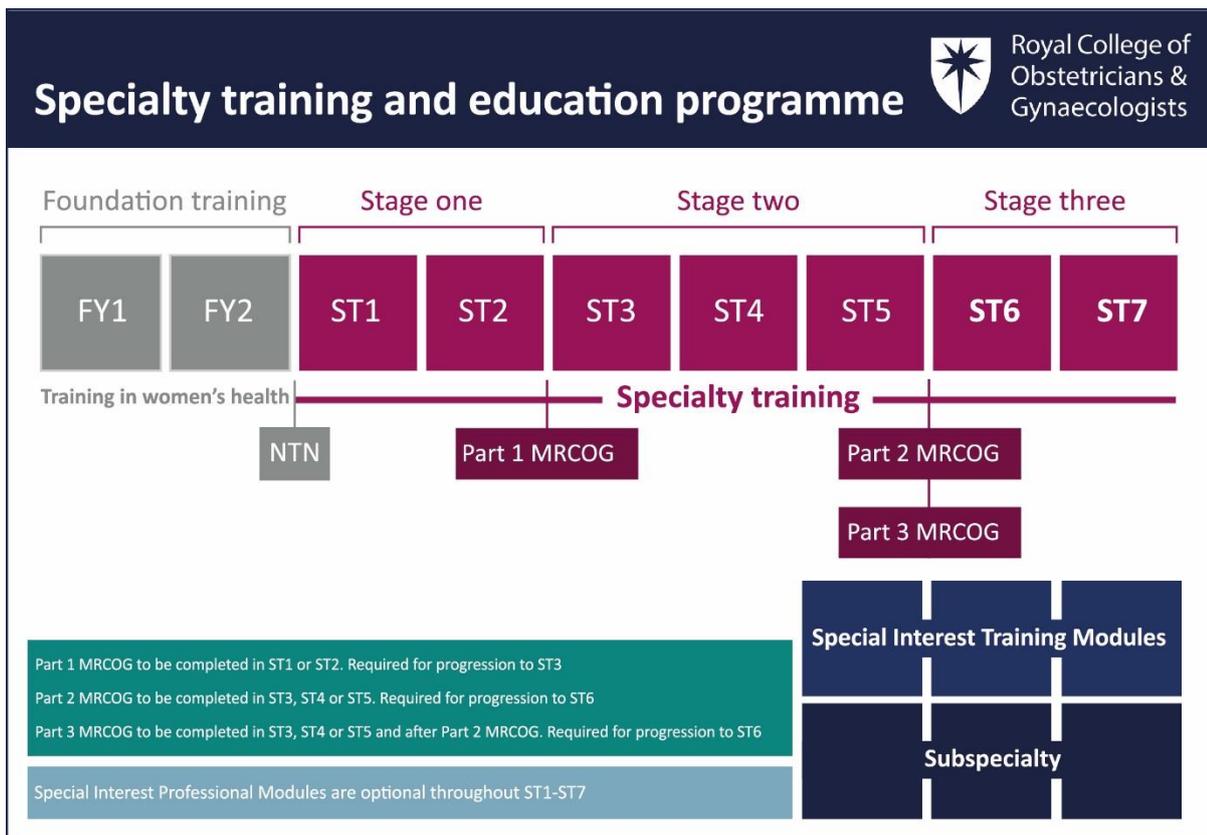
# 1 Introduction

This Definitive Document relates to the subspecialty of Reproductive Medicine (RM) and addresses the purpose, learning outcomes, content of learning, process of training and the programme of assessment for RM, which is in addition to the Curriculum 2024 requirements for CCT.

The Curriculum 2024 covers three stages of training from ST1-7 as detailed in the Curriculum 2024 Definitive Document.

All of these documents are available on the RCOG website.

O&G is a run-through training programme with an indicative time of seven years. The fundamental training structure and waypoints remain the same in the Curriculum 2024. In the final three years of training, trainee doctors have to complete two Special Interest Training Modules (SITMs) OR one of the four subspecialty programmes (Urogynaecology (UG), Gynaecological Oncology (GO), Maternal and Fetal Medicine (MFM) and Reproductive Medicine (RM) to be eligible for CCT. The curriculum acknowledges that the specialist will manage female, transgender and non-binary individuals of all age groups and ethnicities, including young people, and vulnerable adults.





## 2 Purpose of the Reproductive Medicine subspecialty training programme

### 2.1 Background

Over recent years, the RCOG has published a number of strategic reports highlighting the training needs and challenges that surround the O&G workforce. The most recent report, the [O&G Workforce Report \(2022\)](#), highlights the complexity of workforce planning in ensuring the training of the right people with the right skills in the right place at the right time, to provide person-centred care. Population demographics and requirements differ across the UK, and so there is regional variation in the services required to ensure equity of care. For workforce planning to be successful, training opportunities and the skillset of the workforce must be driven by current and predicted patient needs. The Advanced Training Review of 2023, builds on the curriculum reviews in 2013 and 2019 to design and deliver a revised curriculum, fit for our future workforce and able to meet the needs of clinical services across the UK.

In 2015, the RCOG Curriculum Review Group was set up to take forward the recommendations made in the RCOG document *'Becoming Tomorrow's Specialist'*. This Working Party report identified the deficiencies in the curriculum in place at that time, with its undue emphasis on technical skills and lack of focus on the non-technical and professional skills required by a modern consultant. Most importantly, and for the first time, the Review Group developed a definition of the required characteristics of an O&G consultant and, providing the basis for future work.

*The aim of the RM subspecialty curriculum is to produce doctors with the generic professional and subspecialty-specific capabilities needed to advise and treat people presenting fertility, endocrinology and reproductive surgical problems in tertiary referral centres. RM subspecialists should have the skills to organise and supervise services at a local and regional level, contribute to relevant research and academia, lead on the translation of new research findings into clinical practice, be providers of support and guidance to non-subspecialist colleagues, and be active in teaching and quality management. The RM curriculum recognises these clinical and non-clinical skills and provides a framework for training by defining the standards required to work at consultant subspecialist level. It also encourages the pursuit of excellence in all aspects of clinical and professional practice, and expects the trainee to take responsibility for their own learning, as they will need to do as a consultant. The curriculum acknowledges that the specialist will manage female, transgender and non-binary individuals of all age groups and ethnicities, including young people, and vulnerable adults.*

### 2.2 General description of the RM curriculum

RM subspecialty training consists of three years of clinical training, which includes clinical and non-clinical sub-speciality skills, such as leadership and research. It can be commenced from the start



of ST5, or any point of training thereafter. This curriculum is designed so that skills and competencies already achieved during training in the SITMs, which may precede commencement of subspecialty training, will be recognised and need not be repeated, in turn meaning that this indicative training time of three years may be reduced. The trainees must be at ST5 of their training to be eligible to commence SST and will be appointed following a competitive interview process.

To be awarded CCT all subspecialty trainees must complete the generic and specialty-specific CiPs detailed in the Curriculum 2024, and the subspecialty specific clinical and research CiPs detailed in this document.

The revised RM curriculum consists of Capabilities in Practice (CiPs) (high-level statements outlining the expectations of a doctor at the end of training), all of which fall into the Clinical Expert Professional Identity (PI). The Professional Identities, which are a fundamental concept of the Curriculum 2024, are divided into generic (developing the doctor) and specialty-specific (developing the obstetrician & gynaecologist). The CiPs require a judgement to be made by both trainee and trainer, based on the trainee’s overall capability at the end of training. They support a move away from a ‘disease-based’ structure to encourage a more person-centred approach that prioritises the needs and complexities of each individual.

The revised RM curriculum builds on the modular approach detailed in the RCOG submission for the gynaecology SITMs. The gynaecology SITM Management of Subfertility (MoS) acts as a foundation and must be completed before or during RM subspecialty training. It is expected that most trainees entering subspecialty training during the later years of training will have completed some or all of these CiPs, meaning their subspecialty training time will be shortened. In addition to the four CiPs, subspecialty trainees in RM will also need to complete five further subspecialty-specific clinical CiPs that take these skills and competencies to the highest level, and one further CiP which addresses the high-level research skills and understanding expected of a subspecialist managing patients within the NHS.

**Table 1 – Professional Identity and CiPs for RM**

<b>Developing the Obstetrician &amp; Gynaecologist: SST-RM</b>	
<i>PROFESSIONAL IDENTITY: CLINICAL EXPERT</i>	
<b>MoS CiP 1</b>	<b>The doctor recognises, assesses and investigates the infertile woman</b>
<b>MoS CiP 2</b>	<b>The doctor recognises, assesses and investigates the infertile male</b>
<b>MoS CiP 3</b>	<b>The doctor manages infertility</b>



<b>MoS CiP 4</b>	<b>The doctor understands the principles of assisted reproduction techniques (ART) and their possible complications and can counsel patients effectively</b>
<b>SST RM CiP 1</b>	<b>The doctor is competent in recognising, assessing and managing endocrinological disorders.</b>
<b>SST RM CiP 2</b>	<b>The doctor is competent in providing specialist care for women with endometriosis.</b>
<b>SST RM CiP 3</b>	<b>The doctor has the surgical skills appropriate for a subspecialist in reproductive surgery.</b>
<b>SST RM CiP 4</b>	<b>The doctor is competent in recognising, assessing and managing complex fertility problems and assisted conception.</b>
<b>SST RM CiP 5</b>	<b>The doctor is competent in recognising, assessing and managing complex early pregnancy problems.</b>
<b>SSTR CiP</b>	<b>The doctor is able to engage with research and promote innovation within their subspecialty.</b>

Our programme of assessment will include a broad range of evidence drawn from different formats and environments to ascertain minimal standards and competencies, regarding both expectations and attainments, at critical progression points and on completion of training. The programme of assessment will be based on robust and fair assessment principles and processes.

## 2.3 The Advanced Training Review process

High-quality women's healthcare relies on an integrated approach to service and care, to fully meet the needs of women. Therefore a fundamental aim of this curriculum is to develop consultants who work on and lead multidisciplinary teams, from a range of professional groups in a variety of hospital and community settings. RCOG commissioned the Advanced Training Review in 2020 in direct response to feedback from the General Medical Council (GMC) on the 2019 curricula submission and approvals process.

Following this feedback, we have substantially reviewed and updated the ATSMs/APMs training component and aligned the Stages of Training for the structured training programme.

The review of the 2019 advanced training component was conducted by an Advanced Training Steering Group, under the governance of the RCOG Education Board. This group determined the direction of travel and comprised Chairs of the relevant RCOG curriculum committees (Curriculum Committee, Advanced Training Committee, Subspecialty Committee, Specialty Education Advisory



Committee (SEAC), Trainees' representatives and Vice Presidents for Education and Professionalism & Workforce).

O&G subgroups and subgroups for each subspecialty, bringing together relevant clinicians, trainees and lay representatives, undertook the development of the SITM curricula and revision of the subspecialty curricula. Particular effort was made to engage consultants working in both smaller district general hospitals and larger tertiary hospitals, in both special interest and subspecialty posts. The subgroups met on a monthly basis until the revised modules had been finalised.

The development of the revised curricula and recommended training pathway changes have been produced collaboratively with educationalists, trainees, Heads of School and specialist societies.

The Steering Group reported to the Advanced Training Project Board. The outputs from the project have been reported to the Curriculum Committees, SEAC and RCOG Council via the Education Board.

We enabled RCOG Fellows, Members, Associates, Trainees, Specialist Societies, Service Users, other Royal Colleges and Faculties, related charities and employers to feedback views during the consultation period from March to April 2023. The consultation process has resulted in invaluable feedback and has helped to further shape the curriculum.

The training programme aims to develop obstetricians & gynaecologists who work in and lead multidisciplinary teams, and who can work with colleagues from a range of professional groups in a variety of hospital and community settings. This emphasis can be seen in the RM CiPs. The combination of the RM subspecialty CiPs with the other specialty and generic CiPs in the training programme will provide a more integrated approach to service and care, to fully meet the needs of the people using our clinical services.

## 2.4 Flexibility and the transferability of learning

Embedding generic CiPs that are high-level statements setting out the general professional skills that all doctor should have at the end of training. Embedding them within the curriculum enables easier transfer between specialties, as the CiPs have also been mapped to the GMC's Generic Professional Capabilities (GPCs). Evidence can be acquired by experiences in a wide range of posts and environments, allowing flexibility to meet the needs of the service and the individual trainee.

Pre-CCT subspecialty trainees will also be following and completing the Curriculum 2024 at the same time as their subspecialty training, and are required to display a wide range of behaviours and attributes, in addition to their specialist RM clinical skills and knowledge, reflecting the broad nature of this specialty in practice. Subspecialists in RM attaining CCT will also be skilled in managing the labour ward independently, managing acute gynaecological emergencies, as well as caring for people requiring high level sub-specialist skills in reproductive medicine. They will have expertise in practical procedures related to the clinical care of women and will be expert



communicators with strong interpersonal skills, strong emotional awareness and adept at the management of emotionally complex situations. These core areas ensure that doctors in training and beyond the CCT can provide safe care whilst working on a range of challenging and diverse rotas, balancing acute and non-emergency service provision, and encouraging trainees to experience a wide range of hospital and other healthcare environments. Trainees following the RM subspecialty curriculum will also need to demonstrate that they have achieved thorough anatomical knowledge and surgical skills appropriate for an RM subspecialist, and that they have the knowledge, skills and attributes to manage the full range of conditions affecting the reproductive function of their patients.

All obstetricians and gynaecologists achieving the CCT regardless of their SITMs or subspecialty training will therefore have demonstrated achievement of a range of generic and specialty-specific capabilities. Doctors achieving CCT with subspecialist accreditation will also have demonstrated achievement of a set of subspecialist CiPs. These CiPs fully incorporate the GPCs, meeting the requirements set out by the GMC.

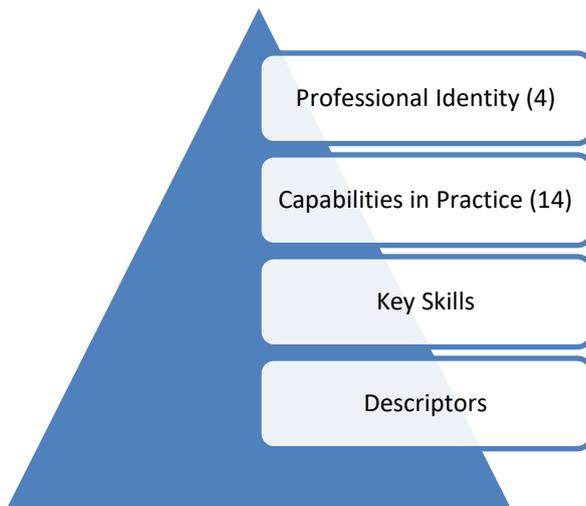
All CCT holders will:

- Be able to develop and apply innovative approaches to teaching in women's health and research.
- Place the principle of informed decision making with women and their families at the heart of their practice.
- Be advocates for women's health.
- Be up to date in their practice and promote and implement evidence-based medicine.
- Be a role model for the highest standards of care and professional behaviours within the specialty and across the medical profession as a whole.

### 3 The organisation and content of the RM curriculum

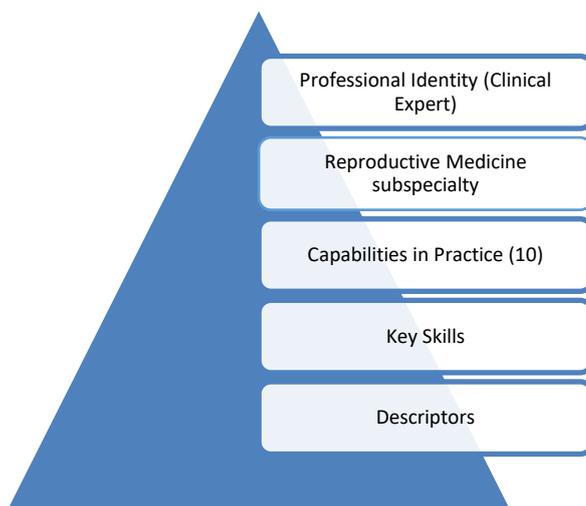
The practice of O&G requires the generic and specialty knowledge, skills and attitudes to advise and treat people presenting with a wide range of gynaecological and obstetric conditions and symptoms. It involves particular emphasis on woman-centred care, diagnostic reasoning, managing uncertainty, dealing with comorbidities, and recognising when specialty opinion or care is required. The modern consultant is defined by four Professional Identities in the Curriculum 2024 that to incorporate all of these elements, as demonstrated in Figure 1 below.

**Figure 1 – Curriculum 2024 design structure**



All the CiPs in the RM curriculum are in the Clinical Expert Professional Identities. This is because the trainee is also completing the Curriculum 2024 that contains all the necessary generic professional skills a CCT-holder will need.

**Figure 2 – RM curriculum design structure**





## 3.1 Curriculum framework features

The curriculum content is structured as follows:

### Section 1 Capabilities in Practice

CiPs are the high-level learning outcomes within each of the Professional Identities. Each CiP is supported by the key skills expected to be demonstrated by an accredited RM subspecialist. Each key skill has a set of descriptors associated with that activity or task. These are intended to help trainees and trainers recognise the minimum level of knowledge, skills and attitudes that should be demonstrated by O&G doctors in the RM subspecialty. Descriptors can be used to provide guidance to trainees when they self-assess their performance against the minimum expected standards for their year of training. They are not a comprehensive list and there are many more examples that would provide equally valid evidence of performance. Many of the descriptors refer to person-centred care and informed decision-making. This is to emphasise the importance of exploring and discussing care or treatment options, including their risks and benefits, with women and their families.

Each CiP gives guidance for the variety of evidence that will be required to demonstrate progress, including a list of the summative OSATS.

Each CiP lists the knowledge criteria relevant to that CiP.

### Section 2 Procedures

All the procedures that are expected to be experienced during the RM subspecialty training programme are listed, with an indication of the final level expected by the end of training, and which CiP they belong to. There are a number of procedural skills in the RM subspecialty in which a trainee must become proficient to the level expected by the end of training, and there are a variety of ways in which the acquisition of these procedural skills can be evidenced. A number of these procedural skills that must be achieved to level 5 competency must be evidenced by three summative competent OSATs (Objective Structured Assessments of Training) and these are clearly marked in the procedure table. Trainees must be able to outline the indications for these procedures and recognise the importance of valid informed consent, and of requesting for help when appropriate. For all practical procedures the trainee must be able to recognise complications and respond appropriately if they arise, including calling for help from colleagues in other specialties when necessary. Trainees will be able to record their procedures in the new ePortfolio. When a trainee has been signed-off as being able to perform a procedure independently, and where three summative OSATs are mandated for competency sign-off, they are not required to have any further assessment (OSATS) of that procedure, unless they or their Educational Supervisor think that this is required (in line with standard professional conduct).

### Section 3 GMC Generic Professional Capabilities



Appropriate professional behaviour should reflect the principles of the GMC's [Good Medical Practice](#) and the GPCs. Therefore, all subspecialty curricula have been mapped to the GMC GPC domains.

#### Section 4 Mapping of assessments to CiPs

The mapping shows the possible formal methods of assessment for each CiP. Section 3.2 outlines more detail on the mapping.

Assessment of the CiPs are underpinned by the descriptors and judged against the requirements articulated in the RM Curriculum Guide(s). The Subspecialty Training Programme Supervisor (STPS) will carry out an annual global judgement, and satisfactory sign-off will indicate that there are no concerns before the trainee can progress to the next assessment point.

To complete training and be recommended to the GMC for the award of CCT and entry onto the specialist register, the doctor must demonstrate that they are capable of unsupervised practice (level 5) in all CiPs except where otherwise indicated, as well as meet the requirements of the O&G Curriculum. This does not mean that all procedural competencies need to be acquired to level 5 (as described above).

## 3.2 Reproductive Medicine subspecialty curriculum

Subspecialty training in Reproductive Medicine (RM) consists of:

- **Management of Subfertility SITM (MoS CiPs 1, 2, 3 and 4)**
- **Five subspecialty specific CiPs (SST RM CiPs 1, 2, 3, 4 and 5)**
- **One subspecialty specific research CiP (SSTR CiP)**

These 10 CiPs are outlined below.

The subspecialty trainee will need to complete all 10 CiPs to achieve subspecialty accreditation. The subspecialty-specific CiPs can only be completed as part of an accredited subspecialty training programme in Reproductive Medicine. A doctor who has completed part or all of the SITM (MoS CiPs 1-4) prior to commencing subspecialty training in RM does not need to repeat any part of the SITM CiPs already completed.

Trainees with previous research experience, such as SIPM Clinical Research can be used as evidence for the Research (SSTR) CiP and does not need to be repeated.



## RM Subspecialty Programme Summary

<b>SITM</b> Management of Subfertility (MoS) – x4 CiPs	4
Subspecialty training – x5 CiPs	5
Subspecialty specific Research CiP	1

# SITM: Management of Subfertility (MoS)

## SECTION 1: CAPABILITIES IN PRACTICE (CiP)

MoS CiP 1: The doctor recognises, assesses and investigates women experiencing infertility	
Key skills	Descriptors
The doctor can safely perform a transvaginal scan of the female genital tract	<ul style="list-style-type: none"> <li>• Able to identify all key pelvic structures, recognises and describes normality and deviations from normality.</li> <li>• Able to construct a differential diagnosis using information obtained from ultrasound examination and understands how the findings may indicate contributions to subfertility.</li> <li>• Able to optimise image quality.</li> <li>• Can store images securely and constructs a clinically useful ultrasound examination report.</li> <li>• Recognises and adheres to infection control and chaperoning policies.</li> </ul>
Assesses women with infertility	<ul style="list-style-type: none"> <li>• Takes a detailed history, including: recording menarche, cycle regularity, past medical and obstetric history.</li> <li>• If cycle is irregular, asks additional questions about hirsutism, acne, alopecia, galactorrhoea, secondary sex characteristics, previous chemotherapy and pelvic radiotherapy.</li> <li>• Screens for associated conditions e.g. autoimmune factors, genetic causes, diabetes mellitus and late onset congenital adrenal hyperplasia.</li> <li>• Takes social and sexual history.</li> <li>• Screens for previous infections e.g. chlamydia and gonorrhoea.</li> </ul>



	<ul style="list-style-type: none"><li>● Performs appropriate physical examination, including checking body mass index, secondary sex characteristics and rectovagino assessment for endometriosis, if appropriate.</li><li>● Understands how visual fields can affect fertility and carries out assessments, if appropriate.</li></ul>
Arranges appropriate endocrine, and other investigations, to make a diagnosis	<ul style="list-style-type: none"><li>● Arranges baseline investigations including luteal phase progesterone, follicle stimulating hormone (FSH) on day 2, luteinizing hormone (LH) and oestradiol, and rubella.</li><li>● Arranges endocrine investigations, if appropriate, including a baseline hormone profile of FSH, LH, oestradiol, prolactin (PRL), thyroid function tests (TFTs), androgens (testosterone, sex hormone binding globulin (SHBG), free androgen index (FAI), dehydroepiandrosterone sulphate (DHEAS), androstenedione and 17<math>\alpha</math>-hydroxyprogesterone) and is able to interpret results appropriately.</li><li>● Organises and interprets appropriate investigations of impaired glucose tolerance and hypercholesterolaemia.</li><li>● Takes vulvo-vaginal swabs.</li><li>● Discusses different techniques to diagnose tubal disease and uterine disease, and any associated risks and complications.</li><li>● Is able to carry out ultrasound scans of the pelvis to assess the shape and size of the uterus, ovarian size and morphology.</li><li>● Is able to diagnose an endometrioma on a pelvic ultrasound scan.</li><li>● Arranges and interprets hysterosalpingogram (HSG), Hysterosalpingo Contrast Sonography (HyCoSy) and saline infusion sonohysterography (SIS).</li><li>● Organises and reviews the results of computerised tomography (CT) scan and magnetic resonance imaging (MRI) scan, including MRI of the pituitary gland, if appropriate.</li><li>● Establishes the likely cause(s) of infertility.</li><li>● Records results appropriately, including the need for referral and/or additional imaging.</li></ul>
Makes a diagnosis of unexplained infertility	<ul style="list-style-type: none"><li>● Understands that it is a diagnosis of exclusion.</li><li>● Explains diagnosis of unexplained fertility to patients.</li></ul>
Demonstrates understanding of association of other medical conditions and	<ul style="list-style-type: none"><li>● Liaises with appropriate specialists for further management of associated medical conditions, such as diabetes with polycystic ovary syndrome (PCOS) and pituitary tumours with hypogonadotropic hypogonadism.</li></ul>



<p>practises a multidisciplinary approach</p>	<ul style="list-style-type: none"> <li>● Advises the patient on lifestyle factors and is sympathetic to the difficulties of overcoming issues such as obesity.</li> <li>● Is able to discuss long-term effects and management of conditions such as PCOS and premature ovarian failure with patients. Arranges appropriate referral, when needed.</li> </ul>
<p><b>Evidence to inform decision – examples of evidence (not mandatory requirements)</b></p>	
<ul style="list-style-type: none"> <li>● CbD</li> <li>● Mini-CEX</li> <li>● Local and deanery teaching</li> <li>● RCOG Learning</li> <li>● NOTSS</li> <li>● Reflective practice</li> <li>● TO2 (including SO)</li> </ul>	<ul style="list-style-type: none"> <li>● Confirmed attendance at specialist clinics, such as menopause, endocrinology, reproductive endocrinology, assisted reproductive technology (ART) and weight loss clinics</li> <li>● Attendance at RCOG and British Fertility Society (BFS) special interest training module course, and advanced hysteroscopy course</li> </ul>
<p><b>Mandatory requirements</b></p>	
<ul style="list-style-type: none"> <li>● OSATS:             <ul style="list-style-type: none"> <li>○ ultrasound examination in gynaecology (non-pregnant patient), including variety of different pathologies</li> </ul> </li> </ul>	
<p><b>Knowledge criteria</b></p>	
<ul style="list-style-type: none"> <li>● Physiology of ovulation and pathophysiology</li> <li>● Female anatomy – abdomen and pelvis</li> <li>● Scoring system for hirsutism</li> <li>● Normal ultrasound appearance of uterus, ovaries and adnexae</li> <li>● Standardised terms and definitions to describe sonographic features of normal pelvis and pelvic pathology</li> <li>● Anatomical classification of ovulation disorders</li> <li>● The association of other medical conditions with anovulation, such as diabetes with polycystic ovaries and pituitary tumours with hypogonadotropic hypogonadism</li> <li>● The influence of lifestyle, including diet and weight, on anovulation</li> <li>● The impact of psychiatric and psychological issues on anovulation</li> <li>● The usefulness of initial screening investigations such as FSH, LH, anti-müllerian hormone (AMH), prolactin, androgens (testosterone, SHBG and FAI), thyroid function tests, pelvic ultrasound (ovarian volume and antral follicle count). Also follow-up investigations such as MRI and karyotype</li> <li>● Aetiology of tubal factor infertility: infection, surgery, endometriosis and congenital abnormalities</li> <li>● Classification of tubal disease relevant to natural and therapeutic prognosis</li> <li>● Classification of uterine disease</li> <li>● Aetiology of uterine factor infertility: infection, surgery, tumours, congenital abnormalities, intrauterine adhesions, fibroids and polyps</li> </ul>	



- Diagnostic techniques available for assessing uterine and tubal disease, any associated risks and complications
- Pathological features of acute and chronic inflammation associated with infertility
- Indications, pre-requisites and possible complications of HyCoSy, sonohysterography and HSG
- The hypotheses on the pathogenesis of endometriosis and mechanism by which endometriosis may have an impact on fertility
- Endometriosis classification systems, their usefulness and limitations
- The relationship between stages of endometriosis and infertility (defective folliculogenesis, ovulatory dysfunction, distorted pelvic anatomy, altered peritoneal function, autoimmune disorders and impaired implantation)
- The usefulness and limitations of MRI of the pelvis and abdomen
- The contribution of preoperative investigations, particularly a CA125 blood test and transvaginal ultrasound scan findings
- The epidemiology and natural history, including prognosis for unexplained infertility
- An understanding of other investigations that could be carried out to arrive at a diagnosis of unexplained infertility and the scientific basis for them
- Other suggested causes of infertility:
  - subtle ovulation defects
  - cervical mucus hostility
  - subclinical pregnancy loss
  - endometriosis
  - occult infection
  - sperm dysfunction
  - immunological causes
- Immunological screening  
Screening of high-risk groups

<b>MoS CiP 2: The doctor recognises, assesses and investigates men experiencing infertility</b>	
<b>Key skills</b>	<b>Descriptors</b>
Takes relevant history and arranges initial investigations to diagnose infertility in men	<ul style="list-style-type: none"> <li>● Arranges semen analysis and interprets results.</li> <li>● Understands the reasons for and timing of a repeat semen analysis and arranges appropriately.</li> <li>● Takes and interprets urethral swabs, and arranges for appropriate management of any abnormality, including referral to genitourinary medicine (GUM) clinics.</li> </ul>
Performs physical examination to assess the male reproductive system	<ul style="list-style-type: none"> <li>● Uses an orchidometer to assess testicular volume.</li> <li>● Assesses the epididymis to detect any abnormalities.</li> <li>● Recognises varicocele, testicular tumours, undescended testicles, hypospadias, absence of vas deferens and inguinal hernia.</li> </ul>



<p>Arranges further investigations to identify the cause of severe infertility in men (azoospermia or severe oligospermia with a sperm density of &lt; 5 million/ml)</p>	<ul style="list-style-type: none"> <li>● Arranges relevant further investigations: repeat semen analysis, urine for retrograde ejaculation, endocrine, microbiological, genetic (karyotype, cystic fibrosis (CF) screening, y chromosome microdeletions), scrotal and testicular ultrasound and testicular biopsy.</li> <li>● Reviews investigations and is able to differentiate between pre-testicular, testicular and post-testicular causes of severe sperm abnormality.</li> </ul>
<b>Evidence to inform decision – examples of evidence (not mandatory requirements)</b>	
<ul style="list-style-type: none"> <li>● CbD</li> <li>● Mini-CEX</li> <li>● Reflective practice</li> <li>● TO2 (including SO)</li> <li>● Attendance at RCOG/BFS SITM course</li> <li>● Local and deanery teaching</li> </ul>	<ul style="list-style-type: none"> <li>● RCOG Learning</li> <li>● Confirmed attendance at Assisted Reproductive Technology (ART) clinics and appropriate urology and andrology clinic</li> <li>● Exposure to specialist clinics: urology, GUM, endocrinology, clinical genetics and oncology</li> <li>● Observes surgical sperm retrieval (SSR) procedures</li> <li>● Observes vasectomy reversal</li> </ul>
<b>Mandatory requirements</b>	
No mandatory evidence	
<b>Knowledge criteria</b>	
<ul style="list-style-type: none"> <li>● The male reproductive system – anatomy, physiology and the process of spermatogenesis</li> <li>● The impact of male factors in the genesis of infertility</li> <li>● The environmental factors influencing male reproductive function</li> <li>● The endocrine disorders affecting male fertility</li> <li>● The effect of reproductive pathologies such as varicocele, undescended testicles, sexually transmitted infections such as chlamydia and gonorrhoea, previous orchitis and chemoradiotherapy</li> <li>● The impact of previous surgery such as vasectomy, reversal of vasectomy, inguinal herniorrhaphy and orchidopexy</li> <li>● Coital dysfunction associated infertility</li> <li>● Y chromosome microdeletion and when to discuss sperm DNA damage and aneuploidy</li> <li>● Idiopathic male infertility</li> <li>● The availability of various advanced sperm function tests and their role in managing infertility in men</li> <li>● When to carry out a vasectomy reversal</li> </ul>	



- The related aspects of male factor infertility, including the sequelae of long-term low testosterone levels and the association with testicular cancer
- Appropriate investigations for ejaculatory failure, impotence, retrograde ejaculation, genital infection, immunological causes, undescended testicles, chromosomal abnormality, chemotherapy, radiotherapy and toxins (including drug effects)
- The causes of severe oligozoospermia (<5 million per ml) and azoospermia (pretesticular, testicular and post testicular)

MoS CiP 3: The doctor manages infertility	
Key skills	Descriptors
Communicates and formulates an appropriate plan to manage infertility	<ul style="list-style-type: none"> <li>● Explains the possible causes of infertility to patients.</li> <li>● Formulates a management plan based on pathological findings, taking into account relevant moral and ethical considerations.</li> <li>● Counsels people about the different treatment options available, taking into account their preferences and expectations.</li> <li>● Discusses treatment-related complications and adverse effects.</li> <li>● Implements management plan and modifies treatment, if necessary.</li> <li>● Manages coital dysfunction related infertility.</li> <li>● Arranges appropriate referrals to: urologist, endocrinologist, andrologist, clinical geneticist, psychosexual counsellor and IVF centre team.</li> </ul>
Manages women with anovulatory dysfunction, including PCOS	<ul style="list-style-type: none"> <li>● Discusses potential consequences of expectant management.</li> <li>● Able to diagnose and manage thyroid disorders and refer appropriately.</li> <li>● Explains treatment regimes of ovulation induction (anti-oestrogens and aromatase inhibitors); success rates (pregnancy rate and live birth rate); and potential side effects of drugs and complications of procedures, including the risk of multiple pregnancy and ovarian hyperstimulation syndrome (OHSS) and the link with ovarian cancer.</li> <li>● Prescribes ovulation induction agents and progestogens for withdrawal bleed appropriately.</li> <li>● Provides appropriate treatment for and monitoring of anovulatory dysfunction to assess effectiveness and minimise the risk of multiple pregnancy.</li> <li>● Provides appropriate advice for the management of a condition, including the risk of developing gestational diabetes in patients with polycystic ovary syndrome, and advises on the effects of medications in pregnancy.</li> </ul>



	<ul style="list-style-type: none"><li>● Recognises the influence of lifestyle, including diet and weight, on anovulation and is able to advise the patient on lifestyle factors, being sympathetic to the difficulties of overcoming issues such as obesity and has an understanding of the long-term health risks of lifestyle issues, metabolic effects and cancer risks.</li></ul>
Manages women with tubal or uterine factor infertility	<ul style="list-style-type: none"><li>● Discusses the impact of hydrosalpinx on natural fertility and assisted conception, including the role of salpingectomy.</li><li>● Discusses the impact of proximal tubal disease on natural fertility and the role of selective salpingography.</li><li>● Discusses with the patient where they can have their sterilisation reversed.</li><li>● Performs effective and safe surgery, where appropriate and refers as necessary.</li><li>● Is able to decide when to operate for diagnosis or surgical management.</li><li>● Keeps accurate notes of operative procedures.</li><li>● Recognises the limitations of their operative laparoscopic, open and hysteroscopic surgery skills and, when appropriate, refers on to colleagues who have advanced laparoscopic skills.</li></ul>
Manages people with endometriosis and infertility	<ul style="list-style-type: none"><li>● Understands and is able to communicate which treatments for endometriosis will improve fertility, and refers when appropriate.</li><li>● Able to decide when to operate for diagnosis or surgical management of endometriosis and infertility.</li><li>● Keeps accurate notes of operative procedures.</li><li>● Refers on to colleagues who have advanced laparoscopic skills, when appropriate.</li><li>● Arranges referral to other specialists when appropriate (e.g. pain clinic or surgeons).</li></ul>
Manages male infertility	<ul style="list-style-type: none"><li>● Explains the possible causes, treatment options, risks and benefits and the need for onward referral.</li><li>● Arranges appropriate referrals to: urologist, endocrinologist, clinical geneticist, psychosexual counsellor and assisted conception.</li><li>● Able to discuss the role of ART.</li><li>● Discusses role of donor sperm in ART.</li></ul>
Manages unexplained infertility	<ul style="list-style-type: none"><li>● Explains the diagnosis to the patient or patients.</li><li>● Discusses options with the patient or patients – to continue to try to conceive naturally, or to move to ART and the timing of this.</li></ul>



- Advises on suitable therapeutic option, taking a patient's or patients' wishes into consideration.
- Devises a care plan with the different treatment options, explaining the risks, benefits and alternatives.

#### Evidence to inform decision – examples of evidence (not mandatory requirements)

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>● CbD</li><li>● Mini-CEX</li><li>● NOTSS</li><li>● TO2 (including SO)</li></ul> | <ul style="list-style-type: none"><li>● Reflective practice</li><li>● Local and deanery teaching</li><li>● RCOG Learning</li><li>● Attendance at RCOG/BFS SITM course</li></ul> |
|---|---|

#### Mandatory requirements

- OSATS:
  - ultrasound examination in gynaecology (non-pregnant) for follicular assessment
  - ultrasound examination in gynaecology (non-pregnant), including variety of different pathologies
  - hysteroscopic surgery – resection of polyp
  - laparoscopic surgery – salpingostomy
  - laparoscopic ovarian diathermy for anovulatory polycystic ovary syndrome

#### Knowledge criteria

- Treatment strategies, including:
  - antiestrogens
  - aromatase inhibitors
  - antiandrogens
  - gonadotrophins
  - laparoscopic ovarian diathermy (LOD)
  - dopamine agonists
  - steroids
  - insulin sensitisers
  - glitazones
  - artificial insemination
  - in vitro fertilisation
  - intracytoplasmic sperm injection
- The range of treatments for anovulation, including risks of multiple pregnancy and OHSS
- The risks and sequelae of hypoestrogenism, and the risk and benefits of antiestrogens, steroids, gonadotrophin analogues, dopamine inhibitors and LOD
- Follicle tracking
- Hysteroscopic techniques, risks and the principles of safe use of energy sources
- The surgical options and alternatives for tubal and uterine factor infertility
- The place of adhesiolysis in the treatment of intrauterine adhesions
- The role of laparoscopy
- Treatment options for uterine fibroids



- When a myomectomy is appropriate and the most appropriate way to do this
- Excision or occlusion of hydrosalpinges prior to starting IVF
- The success rates, limitations and risks of salpingostomy, proximal tubal blockage, adhesiolysis and metroplasty
- Management of intra- and postoperative complications of salpingostomy, surgery for proximal tubal blockage, adhesiolysis and metroplasty
- Knowledge of reversal of sterilisation: patients at risk, pregnancy rates and the place of reversal of sterilisation
- The benefits, risks and alternatives of empirical, non-pharmacological, medical and surgical methods of treating endometriosis
- The limits of hormonal treatment and surgery for endometriosis on fertility outcomes
- The place of assisted conception in unexplained, uterine and tubal factor infertility
- Intrauterine insemination and in vitro fertilisation
- The indications for SSR and vasectomy reversal
- The prerequisites and arrangements for SSR
- The principles of various SSR techniques (Percutaneous epididymal *sperm* aspiration (PESA), Testicular *sperm* extraction (TESE), Microsurgical epididymal *sperm* aspiration (MESA) and Microscopic testicular sperm extraction (micro-TESE))
- Psychological factors in female infertility (e.g. amenorrhoea) and male infertility (e.g. erectile dysfunction)
- Effects of infertility on the family
- The importance of counselling for people experiencing infertility
- Local facilities for counselling, self-help groups and community networks
- Local facilities for adoption

**MoS CiP 4: The doctor understands the principles of assisted reproduction techniques (ART) and their possible complications, and can counsel patients effectively**

Key skills	Descriptors
Demonstrates understanding of psychological aspects of male and female factor subfertility and ART	<ul style="list-style-type: none"> <li>● Recognises psychological factors in female (e.g. amenorrhoea) and male infertility (e.g. erectile dysfunction).</li> <li>● Demonstrates understanding of stress related to infertility, marital disharmony, and difficulties in having intercourse.</li> <li>● Discusses the effects of infertility on the family.</li> <li>● Explains about the stress associated with ART.</li> <li>● Arranges appropriate referral to counsellors and psychosexual medicine.</li> <li>● Discusses the role and value of counselling for people experiencing infertility.</li> <li>● Have spoken to a fertility counsellor about their role; understand the different types of counselling (support, implications and</li> </ul>



	welfare of the child). Preferably have attended a fertility ethics committee meeting.
Discusses pros and cons of different therapeutic options	<ul style="list-style-type: none"><li>● Clearly explains results of investigations. Informs people experiencing infertility of the chances of natural conception and with the different treatment options.</li></ul>
Decides when to proceed with therapeutic options	<ul style="list-style-type: none"><li>● Provides support for people experiencing infertility if expectant treatment is the appropriate way forward.</li><li>● Is aware of local fertility funding policies and variation in them nationally.</li></ul>
Preparation of patients for ART	<ul style="list-style-type: none"><li>● Ensures appropriate assessments are undertaken to confirm suitability for ART.</li><li>● Selects patients appropriately.</li><li>● Where necessary, arranges relevant further investigations in preparation for ART and interprets the results:<ul style="list-style-type: none"><li>○ endocrine including ovarian reserve tests</li><li>○ virology screening to include HIV, hepatitis B and hepatitis C. Be aware of current guidance on timing (within three months of gamete donation)</li><li>○ microbiological screening: chlamydia and gonorrhoea</li><li>○ genetic screening (karyotype, CF)</li></ul></li><li>● Assesses welfare issues of the child</li></ul>
Decides and communicates the timing of assisted conception and recommends an appropriate ART procedure	<ul style="list-style-type: none"><li>● Discusses suitable ART options.</li><li>● Explains the role of ART and what an ART programme entails.</li><li>● Discusses and recommends the most appropriate ART treatment according to the cause of infertility, the results of the investigations and prognostic factors.</li><li>● Explains the need for onward referral to an ART centre.</li><li>● Discusses the benefits, risks, success and limitations of ART.</li><li>● Able to discuss the potential complications of ART, including OHSS, poor response, failed fertilisation, low fertilisation, multiple pregnancy, ectopic pregnancy, risk of infection and bleeding with oocyte retrieval procedure and the risk of genetic disorders after IVF/intracytoplasmic sperm injection (ICSI).</li><li>● Explains the benefits of treating hydrosalpinx, fibroid and ovarian cysts (if any) prior to assisted conception and associated risks.</li><li>● Liaises with tertiary centres to arrange appropriate referrals for ART.</li><li>● Undertakes transvaginal ultrasound scan for monitoring ovarian stimulation.</li></ul>



	<ul style="list-style-type: none"> <li>• Discusses the role of pre-implantation testing.</li> <li>• Is able to discuss fertility preservation for people undergoing medical/surgical treatment that affects fertility and arranges appropriate referrals.</li> <li>• Is aware of local arrangements for fertility preservation categories (e.g. oncology and transitioning).</li> </ul>
Diagnoses and manages OHSS	<ul style="list-style-type: none"> <li>• Discusses the risk factors for developing OHSS and strategies to minimise the risk of OHSS in an ART cycle.</li> <li>• Assesses someone who is presenting with symptoms of OHSS, classifying according to severity.</li> <li>• Formulates a management plan for OHSS (outpatient and inpatient).</li> <li>• Understands the complications of severe OHSS and the importance of multidisciplinary team management.</li> <li>• Advises how to manage pregnancy for women who have had severe OHSS.</li> <li>• Able to discuss subsequent treatment for women who have previously had severe OHSS.</li> </ul>
Directs patients to information sites and patient support groups	<ul style="list-style-type: none"> <li>• Discusses the role and value of self-help groups and community networks of support and arranges appropriate referrals.</li> <li>• Arranges appropriate referral to social services for adoption/fostering and local independent adoption societies.</li> </ul>
Human Fertilisation & Embryology Authority (HFEA) Code of Practice	<ul style="list-style-type: none"> <li>• Has read and understood the HFEA Code of Practice.</li> </ul>
<b>Evidence to inform decision - examples of evidence (not mandatory requirements)</b>	
<ul style="list-style-type: none"> <li>• CbD</li> <li>• Mini-CEX</li> <li>• Attend ART clinics</li> <li>• TO2 (including SO)</li> <li>• Reflective practice</li> <li>• Local and deanery teaching</li> </ul>	<ul style="list-style-type: none"> <li>• Observe psychosexual medicine clinics or equivalent</li> <li>• RCOG Learning</li> <li>• Attendance at RCOG/BFS SITM course</li> </ul>
<b>Mandatory requirements</b>	
<ul style="list-style-type: none"> <li>• OSATS:             <ul style="list-style-type: none"> <li>○ ultrasound examination in gynaecology (non-pregnant) for follicular assessment</li> </ul> </li> </ul>	
<b>Knowledge criteria</b>	



- The UK legal and regulatory aspects of fertility treatment
- Clinical prognostic factors that should be considered when selecting appropriate patients for ART i.e. gender, age, duration of infertility, ovarian reserve, past reproductive history and pelvic organ abnormalities
- Stress associated with assisted conception treatment
- Preparation of patients for assisted reproduction: treating or managing hydrosalpinx and fibroids; screening for HIV, hepatitis B and hepatitis C, and the place of counselling
- How to assess the welfare of the child, including communication and consent
- The HFEA and its role

## SECTION 2: PROCEDURES

Procedures marked with \* require three summative competent OSATS

<i>Procedures</i>	<i>Level by end of training</i>	<i>CIP 1</i>	<i>CIP 3</i>	<i>CIP 4</i>
Ultrasound examination in gynaecology (non-pregnant patient), including variety of different pathologies*	5	X	X	
Ultrasound examination in gynaecology (non-pregnant) for follicular assessment*	5		X	X
Hysterosalpingography (HSG)	2	X		
HyCoSy or saline infusion sonohysterography (SIS)	5	X		
Hysteroscopic surgery – resection of polyp*	5		X	
Hysteroscopic proximal tubal catheterisation	3	X		
Hysteroscopic surgery – resection of fibroid	3		X	
Hysteroscopic surgery – division of adhesions	3		X	
Laparoscopic surgery – salpingostomy*	5		X	
Laparoscopic ovarian diathermy for anovulatory polycystic ovary syndrome*	5		X	

**Subspecialty trainees in Reproductive Medicine will be expected to achieve the procedural competencies in this table, as well as those in the SST-specific procedures table.**



## SECTION 3: GMC GENERIC PROFESSIONAL CAPABILITIES (GPCs)

### Mapping to 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**

## SECTION 4: MAPPING OF ASSESSMENTS TO MoS CiPs

MoS CiP	OSATS	Mini-CEX	CbD	NOTSS	TO1/ TO2	Reflective practice
1: The doctor recognises, assesses and investigates women experiencing infertility	X	X	X	X	X	X
2: The doctor recognises, assesses and investigates		X	X		X	X



MoS CiP	OSATS	Mini-CEX	CbD	NOTSS	TO1/ TO2	Reflective practice
men experiencing infertility						
3: The doctor manages infertility	X	X	X	X	X	X
4: The doctor understands the principles of assisted reproduction techniques (ART) and their possible complications, and can counsel patients effectively	X	X	X		X	X

## SECTION 5: RESOURCES (OPTIONAL)

1. British Infertility Counselling Association [[www.bica.net](http://www.bica.net)].
2. European Society of Human Reproduction and Embryology guidelines [[www.eshre.eu](http://www.eshre.eu)].
3. Fertility Network UK [[www.fertilitynetworkuk.org](http://www.fertilitynetworkuk.org)].
4. Human Fertilisation & Embryology Authority documents [[www.hfea.gov.uk](http://www.hfea.gov.uk)].
5. Royal College of Obstetricians & Gynaecologists guidelines [[www.rcog.org.uk](http://www.rcog.org.uk)].
6. The National Institute for Health and Care Excellence. *Fertility problems: assessment and treatment. Clinical guideline [CG156]*. London: NICE; 2013 [<https://www.nice.org.uk/guidance/cg156>].
7. British Fertility Society. *Human Fertility* Milton Keynes: Taylor & Francis Online.
8. *Human Reproduction* Oxford: Oxford Academic.
9. American Society for Reproductive Medicine. *Fertility and Sterility* Amsterdam: Elsevier.
10. American Society of Andrology. *Journal of Andrology* New York City: Wiley Online Library.

## RM SST specific CiPs

### SECTION 1: CAPABILITIES IN PRACTICE (CiP)



<b>SST RM CiP 1: The doctor is competent in recognising, assessing and managing endocrinological disorders.</b>	
<b>Key skills</b>	<b>Descriptors</b>
Is able to evaluate various endocrine systems that affect reproductive health	<ul style="list-style-type: none"><li>• Is able to interpret dynamic endocrinological testing.</li></ul>
Can counsel patients with endocrine disorders appropriately	<ul style="list-style-type: none"><li>• Communicates the results clearly to patients and discusses the possible cause and its impact on fertility.</li><li>• Puts together an appropriate personalised management plan, taking into account people's preferences.</li><li>• Works effectively with colleagues in other disciplines, including clinical and non-clinical staff.</li><li>• Offers appropriate support to people with endocrine disorders and provides information on local and national support groups.</li></ul>
Is able to diagnose and manage polycystic ovary syndrome (PCOS)	<ul style="list-style-type: none"><li>• Understands the criteria for diagnosis in adolescents and adults and the need to exclude other disorders.</li><li>• Uses ultrasound as a diagnostic tool to diagnose PCOS.</li><li>• Recognises the influence of lifestyle, including diet and weight, on anovulation and is able to advise the patient on lifestyle factors. They are sympathetic to the difficulties of overcoming lifestyle issues such as obesity.</li><li>• Is able to discuss and manage obesity, including advising on the efficacy of pharmacological and non-pharmacological treatments.</li></ul>
Is able to manage hyperandrogenism (hirsutism/acne/alopecia)	<ul style="list-style-type: none"><li>• Puts together an appropriate individualised management plan for hyperandrogenism (hirsutism, acne and alopecia), taking into account patient preferences.</li><li>• Demonstrates understanding of the psychological impact of hirsutism.</li><li>• Is able to initiate the medical management of hyperandrogenism.</li><li>• Discusses and manages hyperandrogenism, including advising on the efficacy of pharmacological and non-pharmacological treatments.</li><li>• Liaises effectively with colleagues in other disciplines, both clinical and non-clinical, including endocrinology, dermatology and plastic surgery.</li></ul>



<p>Is able to diagnose and manage hypothalamic-pituitary disorders: Hypogonadotropic hypogonadism.</p> <p>Is able to manage anorexia nervosa/exercise and lifestyle-related disorders which can cause hypogonadotropic hypogonadism</p>	<ul style="list-style-type: none"><li>• Takes a focused history, recording menarche, cycle regularity, hirsutism, acne, alopecia, BMI, galactorrhoea, secondary sex characteristics and previous chemotherapy/pelvic radiotherapy.</li><li>• Performs an appropriate examination of the secondary sex characteristics.</li><li>• Arranges and interprets appropriate investigations: baseline hormone profile to include follicle-stimulating hormone (FSH), luteinizing hormone (LH), oestradiol, prolactin (PRL), thyroid function tests (TFTs) and androgens (testosterone, sex hormone binding globuli (SHBG) and free androgen index (FAI)).</li><li>• Formulates a differential diagnosis.</li><li>• Is able to organise and review the results of CT/MRI scans and pelvic/abdominal ultrasound.</li><li>• Is able to screen for associated conditions, e.g. autoimmune factors, genetic causes, diabetes mellitus, visual fields and late onset adrenal hyperplasia.</li><li>• Discusses diagnosis in a sensitive manner, including the impact it will have on future fertility, fertility options and treatment strategies.</li><li>• Escalates care to senior colleagues and other specialities when appropriate.</li><li>• Appreciates the association of other medical conditions with anovulation and liaises with appropriate specialists to further manage someone's care.</li><li>• Is able to openly explain the complications and adverse effects of treatment.</li></ul>
<p>Is able to diagnose and manage primary and secondary amenorrhoea</p>	<ul style="list-style-type: none"><li>• Takes a focused history, recording menarche, cycle regularity, hirsutism, acne, alopecia, BMI, galactorrhoea, secondary sex characteristics, and previous chemotherapy/pelvic radiotherapy.</li><li>• Performs an appropriate examination of secondary sex characteristics.</li><li>• Arranges and interprets appropriate investigations, including a baseline hormone profile to include FSH, LH, oestradiol, PRL, TFTs and androgens (testosterone, SHBG, FAI, dehydroepiandrosterone sulfate (DHEAS), androstenedione and 17<math>\alpha</math>-hydroxyprogesterone).</li><li>• Is able to differentiate between primary and secondary amenorrhoea.</li><li>• Interprets test results used to evaluate amenorrhoea.</li><li>• For children and adolescents, is able to ascertain the patient's and parent's/carer's/guardian's understanding of the condition.</li></ul>



	<ul style="list-style-type: none"><li>• Sensitively addresses adolescent's concerns about sexuality and/or sexual functioning</li><li>• Discusses treatment options.</li><li>• Can counsel someone on the impact of the diagnosis on long-term fertility.</li><li>• Informs patients about support networks for primary and secondary amenorrhoea.</li></ul>
Is able to diagnose and manage adrenal dysfunction: Cushing's syndrome, Addison's disease and Congenital adrenal hyperplasia	<ul style="list-style-type: none"><li>• Takes a focused history, recording menarche, cycle regularity, hirsutism, BMI, galactorrhoea, secondary sex characteristics and previous chemotherapy/pelvic radiotherapy.</li><li>• Performs an appropriate examination of secondary sex characteristics.</li><li>• Arranges and interprets appropriate investigations, including a baseline hormone profile, PRL, TFTs, androgens (testosterone, SHBG, FAI, DHEAS, androstenedione and 17<math>\alpha</math>HPA).</li><li>• Arranges dexamethasone suppression test, if appropriate, to exclude Cushing's syndrome.</li><li>• Formulates a differential diagnosis.</li><li>• Is able to organise and review the results of CT/MRI scans and pelvic/abdominal ultrasound.</li><li>• Formulates management plan for endocrinological findings.</li><li>• Is able to implement a management plan and modify, if necessary.</li><li>• Liaises effectively with colleagues in other disciplines, both clinical and non-clinical.</li><li>• Discusses the impact on future fertility and fertility options and can counsel patients accordingly.</li><li>• Is able to openly explain about treatments, complications and adverse effects of treatment.</li></ul>
Is able to diagnose and manage ambiguous genitalia/genital anomalies	<ul style="list-style-type: none"><li>• Organises appropriate investigations, including baseline hormone profile, radiological investigations and genetic testing as appropriate, and interprets the results.</li><li>• Formulates a differential diagnosis.</li><li>• Is able to ascertain patient's and parent's/carer's/guardian's understanding of the condition by listening and requesting them to articulate their understanding.</li><li>• Liaises effectively with colleagues in other disciplines, such as paediatric endocrinology or adolescent gynaecology.</li><li>• Can counsel patients and parent(s)/carer/guardian sensitively about options available and invites patient and parents' opinion.</li><li>• Informs patients about support networks for ambiguous</li></ul>



	genitalia/genital anomalies.
Is able to diagnose and manage disorders of sexual development/difference, including Turner syndrome	<ul style="list-style-type: none"><li>• Organises appropriate investigations to include baseline hormone profile, ultrasound scan and genetic testing, as appropriate, and interprets the results.</li><li>• Formulates a differential diagnosis.</li><li>• Is able to ascertain patient's and parent's/carer's/guardian's understanding of the condition.</li><li>• Is aware of the importance of disclosure and liaising with clinical psychology to support the patient.</li><li>• Formulates and implements a management plan to address various aspects of the condition.</li><li>• Liaises effectively with colleagues in other disciplines, such as endocrinology, psychology, cardiology, obstetrics, audiology and renal physicians.</li><li>• Discusses the impact on future fertility and fertility options.</li><li>• Can counsel patient and parent(s)/carer/guardian sensitively about options available and invites patient and parents' opinion.</li><li>• Informs patients about support networks for disorders of sexual development.</li></ul>
Promotes non-discriminatory practice	<ul style="list-style-type: none"><li>• Understands the specific needs of transgender and non-binary people and is able to perform consultations and refer them appropriately to specialist services. This includes discussing and undertaking egg or sperm storage fertility preservation, including surrogacy screening, where indicated.</li></ul>
Is able to diagnose and manage precocious puberty	<ul style="list-style-type: none"><li>• Organises appropriate investigations to include baseline hormone profile.</li><li>• Liaises effectively with colleagues in other disciplines to formulate and implement a management plan.</li><li>• Can counsel patients and parent(s)/carer/guardian sensitively about options available and invites patient and parents' opinion.</li><li>• Offers appropriate support for people with precocious puberty.</li></ul>
Is able to diagnose and manage delayed puberty	<ul style="list-style-type: none"><li>• Organises appropriate investigations, including baseline hormone profile and ultrasound assessment.</li><li>• Liaises effectively with colleagues in other disciplines to formulate and implement a management plan.</li><li>• Can counsel patients and parent(s)/carer/guardians sensitively about options available and invites patient and parents' opinion.</li><li>• Offers appropriate support.</li></ul>



<p>Is able to diagnose and manage premature ovarian insufficiency</p>	<ul style="list-style-type: none"> <li>• Organises and interpret tests, including endocrine assessment, dual-energy X-ray absorptiometry (DEXA) bone scans, immunological investigations and genetic testing.</li> <li>• Can counsel someone on the treatment options for young women, including the advantages and disadvantages, risks and benefits of hormone replacement therapy (HRT).</li> <li>• Discusses the impact of premature ovarian insufficiency on future fertility and fertility options, including IVF using donor eggs.</li> <li>• Liaises effectively with colleagues in other disciplines, both clinical and non-clinical, and refers a patient for formal psychological or psychosexual counselling.</li> <li>• Liaises with reproductive endocrinologists, haematologists and other specialists for complex cases with medical comorbidities.</li> <li>• Arranges appropriate follow up care.</li> <li>• Offers appropriate support and provides information on local and national support groups.</li> </ul>
<p>Is able to diagnose and manage the perimenopause and menopause</p>	<ul style="list-style-type: none"> <li>• Discusses various forms of HRT, including the benefits, risks and adverse effects, the available preparations and their routes of administration.</li> <li>• Discusses alternatives to HRT and supports non-hormonal methods, including lifestyle and dietary advice.</li> <li>• Is able to report and interpret DEXA scan results.</li> <li>• Liaises effectively with colleagues in other disciplines, both clinical and non-clinical.</li> <li>• Liaises with reproductive endocrinologists, haematologists and other specialists for complex cases with medical comorbidities.</li> <li>• Arranges appropriate follow up for someone going through perimenopause or the menopause.</li> <li>• Offers appropriate counselling and provides information on local and national support groups.</li> </ul>
<p>Managing survivors of childhood cancer</p>	<ul style="list-style-type: none"> <li>• Understands the impact of the patient’s diagnosis on their long-term health, including on their ability to reproduce.</li> <li>• Works with a MDT team and liaises with the oncologist, paediatric oncologist and medical genetics for long-term management.</li> <li>• Discusses impact on future fertility and fertility options, including fertility preservation techniques.</li> </ul>
<p><b>Evidence to inform decision – examples of evidence (not mandatory requirements)</b></p>	
<ul style="list-style-type: none"> <li>• CbD</li> <li>• Mini-CEX</li> </ul>	<ul style="list-style-type: none"> <li>• Attendance at specialist clinics – menopause clinic including DEXA bone scanning; endocrinology, Paediatric and</li> </ul>



<ul style="list-style-type: none"><li>• Reflective practice</li><li>• TO2 (including SO)</li><li>• Local and deanery teaching</li><li>• RCOG Learning</li><li>• Preceptor assessment of knowledge</li><li>• Personal study</li></ul>	<p>Adolescent Gynaecology, combined fertility and oncology, and ate effects.</p> <ul style="list-style-type: none"><li>• Appropriate postgraduate education courses: Paediatric and Adolescent Gynaecology Annual Update and Training Day and Subfertility and Reproductive Endocrinology course</li></ul>
<b>Mandatory requirements</b>	
No mandatory evidence	
<b>Knowledge criteria</b>	
<ul style="list-style-type: none"><li>• The standardised terms and definitions to describe sonographic features of normal pelvis and pelvic pathology</li><li>• Endocrinological measurement of hormones in biological fluids to evaluate the various endocrine systems:<ul style="list-style-type: none"><li>○ neuroendocrine anatomy and physiology</li><li>○ hypothalamic-pituitary dysfunction</li><li>○ hypogonadotropic hypogonadism</li><li>○ Kallmann syndrome</li><li>○ pituitary adenoma</li><li>○ hypoprolactinaemia</li></ul></li><li>• Disorders of growth hormone</li><li>• Adrenal dysfunction:<ul style="list-style-type: none"><li>○ Cushing's syndrome</li><li>○ Addison's disease</li><li>○ adrenal hyperplasia</li></ul></li><li>• Thyroid disorders</li><li>• PCOS and disorders of androgen secretion</li></ul> <p><i>Neuroendocrine function:</i></p> <ul style="list-style-type: none"><li>• The anatomical and functional aspects of the hypothalamus, neurovascular relationships, hypothalamo-hypophyseal portal circulation and target cells of the pituitary</li><li>• Suprahypothalamic structures and neuronal systems relevant to regulation of reproductive processes</li><li>• The site of production, biological action and control of secretion of oxytocin, vasopressin and neurophysins</li><li>• The biochemical basis of neuroendocrine action of neuropharmacology of agonists and antagonists</li><li>• Pineal gland</li><li>• Blood-brain barrier</li><li>• Sex steroid-concentrating neurones</li></ul>	



- The distribution and cellular characteristics of pituitary hormone-producing cells with special reference to gonadotroph and lactotroph
- Anatomical and functional aspects of the peptidergic and catecholaminergic system and their control of the pituitary hormone secretion
- Structure and function of pituitary reproductive hormones and neuropeptides
- Control of secretory activities of the pituitary hormones, including long- and short-term rhythms and their target organs and feedback systems
- Neuroendocrine regulation of the menstrual cycle
- Neuroendocrine function of the fetus and placenta
- Hypothalamic and pituitary hypopituitarism and disorders of over secretion of pituitary hormones
- Organic lesions and/or functional disorders of the hypothalamic-pituitary system
- Ectopic hormone syndromes

*Thyroid function and disease states:*

- Thyrotrophin-releasing hormone, thyroid-stimulating hormone and thyroid physiology
- Diagnostic value of thyroid-stimulating hormone, thyroid hormones total and free, thyroid-stimulating immunoglobulins and related diagnostic tests
- Biosynthesis, control and metabolism of thyroid hormones
- Clinical and pathophysiological correlates of hypo- and hyperthyroidism, particularly in relation to menstrual disorders and fertility
- Pregnancy- and hormone-induced changes of thyroid function in the mother and the effect of abnormal maternal thyroid function on the fetus
- Thyroid physiology in the newborn and identification of cases at high risk of neonatal thyrotoxicosis
- Effects of thyroid replacement and anti-thyroid drug therapy on the fetus
- Pathophysiology of thyroiditis
- Thyroid function in struma ovarii, molar pregnancy and choriocarcinoma
- Medical and surgical management of non-toxic goitre, and hypo- and hyperthyroidism

*Adrenal function and disease states:*

- Regulation and secretion of adrenocortical hormones
- Clinical and laboratory assessment of adrenocortical function
- Pharmacology of naturally occurring and synthetic glucocorticoids and mineralocorticoids
- Adrenocortical hypo- and hyperactivity (e.g. Cushing's syndrome, adenoma and carcinoma)
- Congenital adrenal hyperplasia
- Effects of aberrations of adrenocortical function on hypothalamic-pituitary-ovarian function
- Aldosterone and disorders of the rennin–angiotensin system
- Catecholamine disorders



*Androgen disorders:*

- Production, physiology and metabolism of androgens in normal women
- Mechanisms of action of androgens
- Symptoms and signs of androgen excess, together with any causes based on pathophysiology of androgen excess
- Physiology of normal and abnormal hair growth
- The scoring system for hirsutism
- Ovarian tumours, benign and malignant, which secrete androgens
- Benign stromal changes in the ovary which may result in increased androgen production
- Relation between PCOS and abnormal hormone production
- Androgen-resistant states
- Congenital and acquired adrenal hyperplasia, in terms of aetiology, genital morphology, general metabolic effects and differentiate action and treatment
- Management of androgen excess and hirsutism
- Pharmacology of anti-androgens

*Endocrinology of pregnancy:*

- Fetoplacental unit: physiology and pathophysiology of steroid hormones (e.g. oestrogen, progesterone and corticosteroids)
- Physiology of decidua-chorionic-placental peptide hormones (e.g. gonadotrophins, somatomammotrophin, thyrotrophin, adrenocorticotrophic hormone/opioid peptides and prolactin)
- Initiation of parturition, including physiology, pathophysiology and pharmacology of prostaglandins
- Physiology of fetal adrenal gland
- Endocrine and cytokine pathophysiology of preeclampsia and eclampsia
- Pathophysiology of altered maternal thyroid, adrenal and pancreatic status during pregnancy

*The ovary and PCOS:*

- Ovarian anatomy, physiology, pathophysiology and endocrinology
- Normal physiology of ovulation and classification of ovulation disorders anatomically
- The causes of anovulation, such as syndromes of inappropriate prolactin secretion and central nervous system-hypothalamic-pituitary
- The various treatment strategies to address fertility issues for those with hypothalamic-pituitary and hypothalamic disorders, including ovulation induction with gonadotropins and IVF
- Diagnosis of PCOS:
  - imaging of PCOS
  - management of anovulation
  - management of hyperandrogenism (hirsutism, acne and alopecia)



- management of obesity, including an understanding of long-term health risks, metabolic effects and cancer risks
- Management of ovulation induction in PCOS:
  - dietary advice
  - anti-oestrogens
  - gonadotrophin therapy
  - aromatase inhibitors
  - ovarian diathermy

*Ovarian function and diseased states:*

- Cyclic changes in endocrine activities within the ovary
- Synthesis and secretion of hormone substances by the various compartments and cell types of the ovary, including intra- and extraovarian control mechanisms
- The mechanism of protein/steroid hormone action in the ovary
- The regulation of hormone receptors
- Atresia and selection of the dominant follicle
- Luteolysis
- Hormone-producing tumours of the ovary
- Ovarian activity during gestation
- Age-related changes in ovarian structure and function
- The clinical and pathophysiological correlation of disorders of the human ovary (structure and function)

*Ovarian pathology:*

- Gross and microscopic findings and natural history of ovarian tumours in relation to reproductive function (e.g. follicular cysts, luteoma, corpus luteum, PCOS, endometrioma, granulosa-theca cell tumour, Sertoli-Leydig cell tumour, gynandroblastoma, cystic teratoma, dysgerminoma, gonadoblastoma and mixed germ cell or gonadal tumours)
- Different compartments of the Graafian follicle (e.g. granulosa cells, theca and adjacent stroma) and the primordial, preantral, antral and Graafian follicles, including the dynamic changes which occur in the ovary from embryo to menopause
- Specific staining techniques and cellular ultrastructure in relation to function

*Paediatric and adolescent gynaecology:*

- Embryology: the development of embryo and abnormalities which will have an influence on reproduction, in particular the development of the genital tract
- Factors controlling male and female development of the gonadal primordia, internal duct system and external genitalia



- Developmental abnormalities of the genital tract, including ambiguous genitalia, imperforate hymen and vaginal septa, uterine anomalies, Müllerian and Wolffian dysgenesis, Rokitansky syndrome and gonadal dysgenesis
- Embryology of hypothalamic-pituitary and other pertinent endocrine systems
- Developmental disorders:
  - ambiguous genitalia
  - disorders of sexual development
  - complete androgen insensitivity syndrome
  - endocrine disturbance
  - precocious puberty
  - delayed puberty
  - congenital Adrenal hyperplasia
- Surgical management:
  - developmental disorders
  - ambiguous genitalia
  - disorders of sexual development
- Awareness of patient support networks
- Normal sequence of pubertal changes in the female and male, and their chronology
- Effects of hormones on bone growth and epiphyseal closure
- How hormonal changes and gametogenesis relate to the reproductive cycle, from intrauterine life to the development of normal reproductive cycles (e.g. gonadotropin secretion in the fetus and the neonate, sensitivity of the feedback system during fetal and neonatal life and childhood; and the role of adrenal androgens)
- Delayed puberty, indicating the differential diagnosis, evaluation and appropriate therapy
- Sexual precocity, indicating the differential diagnosis, evaluation and appropriate therapy
- Developmental disorders, including those of the:
  - vagina: vaginal reconstruction by dilatation or surgery
  - uterus: knowledge of Müllerian anomalies with obstruction of drainage
- Ambiguous genitalia, including:
  - assigning of sex of rearing for an infant with ambiguous genitalia
  - techniques for surgically constructing of unambiguous functioning female external genitalia and vagina (e.g. vaginoplasty, clitoridectomy and clitoral resection),
  - laparoscopic techniques for gonadectomy
- Embryonic development of the genital tract, including the factors controlling male and female development of the gonadal primordia, internal duct system and external genitalia
- Gross and microscopic findings and the development of gonadal structures found in various forms of gonadal dysgenesis and disorders of sexual development
- Diagnosing and managing patients with developmental abnormalities of the genital tract, including ambiguous genitalia, imperforate hymen and vaginal septa, uterine anomalies, Müllerian agenesis and gonadal dysgenesis
- Embryology of the hypothalamic-pituitary and other pertinent endocrine systems
- Embryology of the urological system



*Menopause and premature menopause:*

- Management of someone who is going through the menopause:
  - the indications for and choice of HRT
  - non-hormonal methods, including lifestyle and dietary advice
  - adverse effects and risks of HRT
- The sequelae of long-term low oestrogen levels for primary ovarian insufficiency (POI)
- The indications and principles of performing DEXA scanning
- The potential causes of amenorrhea including POI, congenital endocrine disorders (e.g. Turner syndrome, complete androgen insensitivity syndrome, ovarian agenesis, polyglandular endocrinopathy and fragile X syndrome) and iatrogenic (e.g. post-surgery, chemo/radiotherapy)
- Interpretation of tests used to evaluate amenorrhoea
- A rational diagnostic and therapeutic approach to patients with amenorrhoea
- Premature menopause:
  - causes of premature ovarian failure, congenital endocrine disorders (e.g. Turner syndrome, complete androgen insensitivity syndrome, ovarian agenesis, polyglandular endocrinopathy and fragile X syndrome) and atrogenic (e.g. post-surgery and chemo/radiotherapy)
  - Treatment options for young women with ovarian failure, with a focus on future fertility
  - Advantages, disadvantages, risks and benefits of HRT



**SST RM CiP 2: The doctor is competent in providing specialist care for women with endometriosis.**

Key skills	Descriptors
Takes a thorough history from the individual, or couple, to identify the causes of infertility and diagnoses endometriosis	<ul style="list-style-type: none"><li>• Demonstrates understanding of symptoms related to endometriosis such as: dysmenorrhoea, dyspareunia, dyschezia, dysuria, pelvic pain and lower backache.</li><li>• Ascertains fertility history and if the woman is trying for pregnancy.</li><li>• Uses appropriate quality of life questionnaires and analyses to assess severity and monitor response to treatment.</li><li>• Formulates a differential diagnosis, such as urological or gastrointestinal disease.</li><li>• Demonstrates understanding that other associated gastrointestinal and urological symptoms should also be assessed.</li><li>• Performs a physical examination focusing on endometriosis, including:<ul style="list-style-type: none"><li>○ examines findings relevant to benign gynaecological conditions, including assessment of the posterior cul de sac.</li><li>○ carries out an appropriate general, pelvic and rectal examination.</li><li>○ maps areas of pain or abnormal masses in relation to underlying anatomical structures.</li></ul></li></ul>
Organises appropriate investigations	<ul style="list-style-type: none"><li>• Organises appropriate radiological investigation (ultrasound/computed tomography (CT)/magnetic resonance imaging (MRI)) of the abdomen and pelvis to assess the extent of the disease.</li><li>• Interprets the results of the radiological investigation.</li></ul>
Provides accurate and non-judgemental information on the effects of endometriosis and its treatment on fertility and ART	<ul style="list-style-type: none"><li>• Discusses expectant management, non-pharmacological, medical and surgical treatment.</li><li>• Discusses impact of endometriosis on future fertility.</li><li>• Works effectively with colleagues in other disciplines, both clinical and non-clinical, e.g. colorectal surgeons, urologists, Chronic Pain team and radiologists.</li></ul>
Is able to decide on appropriate medical	<ul style="list-style-type: none"><li>• Puts together an appropriate individualised management plan, taking into account patient preferences.</li><li>• Can counsel patients appropriately.</li><li>• Follows safe prescribing.</li></ul>



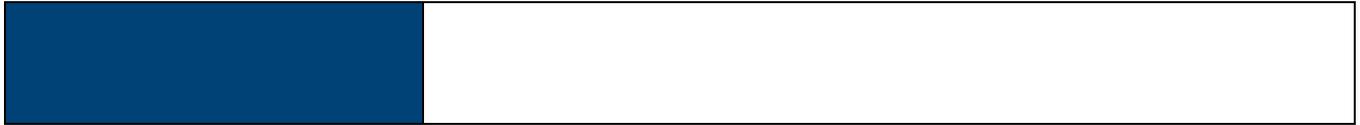
intervention to manage endometriosis	<ul style="list-style-type: none"> <li>• Arranges appropriate follow up with patients.</li> </ul>
Provides medical management of endometriosis using either combined oral contraceptive pills, progestogens (oral, depot injections or intra-uterine system) or gonadotropin-releasing hormone (GnRH) analogues with or without (±) add-back therapy	<ul style="list-style-type: none"> <li>• Chooses appropriate treatment, including carrying out a pre-prescription assessment for someone's suitability for combined oral contraceptive pills.</li> <li>• Can counsel patients appropriately.</li> <li>• Discusses possible benefits and potential adverse effects of different treatments.</li> <li>• Follows safe prescribing.</li> <li>• Arranges appropriate follow up with the patient.</li> </ul>
Explains the role of endoscopic and open surgery for endometriosis associated symptoms or infertility	<ul style="list-style-type: none"> <li>• Clearly explains treatments, complications and side effects of endoscopic and open surgery.</li> <li>• Decides when to operate and when to not operate.</li> </ul>
Advises on the role of assisted conception in endometriosis associated infertility	<ul style="list-style-type: none"> <li>• Formulates an appropriate individualised assisted conception management plan, taking into account patient preferences.</li> <li>• Can counsel patient appropriately.</li> <li>• Able to discuss issues such as poor ovarian response, and effect of ovarian endometrioma on ovarian stimulation and for oocyte retrieval.</li> </ul>
Advises on multidisciplinary pain management	<ul style="list-style-type: none"> <li>• Accurately documents patient's descriptions of pain.</li> <li>• Prescribes effective and safe analgesia.</li> <li>• Recognises when to refer to Pain Management teams.</li> </ul>
Provides general advice, including dietary, lifestyle and psychological	<ul style="list-style-type: none"> <li>• Provides general dietary, lifestyle and psychological advice.</li> <li>• Refers to dietician, pain specialist and psychologist to assist in management of patient, where appropriate.</li> </ul>
<b>Evidence to inform decision – examples of evidence (not mandatory requirements)</b>	
<ul style="list-style-type: none"> <li>• CbD</li> <li>• Mini-CEX</li> <li>• Reflective practice</li> <li>• TO2 (including SO)</li> <li>• Local and deanery teaching</li> </ul>	<ul style="list-style-type: none"> <li>• Personal study</li> <li>• RCOG Learning</li> <li>• Confirmed participation in endometriosis MDT-based meeting</li> </ul>



<ul style="list-style-type: none"><li>• Preceptor assessment of knowledge</li></ul>	<ul style="list-style-type: none"><li>• Confirmed attendance at specialist endometriosis clinics and pain clinic</li><li>• Appropriate postgraduate education courses</li></ul>
<b>Mandatory requirements</b>	
<ul style="list-style-type: none"><li>• OSATS<ul style="list-style-type: none"><li>○ laparoscopic destruction of superficial endometriosis</li></ul></li></ul>	
<b>Knowledge criteria</b>	
<ul style="list-style-type: none"><li>• The anatomy of the abdomen, female genital tract, bladder, ureters and lower bowel</li><li>• Pathogenesis and aetiology of endometriosis</li><li>• The mechanisms by which minimal and mild endometriosis may impair fertility, e.g. defective folliculogenesis, ovulatory dysfunction, hyperprolactinaemia, autoimmune disorders, and disturbances in the peritoneal fluid environment</li><li>• Diagnosis, staging and grading of disease and prognosis</li><li>• The role of physical examination in the diagnosis of endometriosis</li><li>• The indications for investigations, including:<ul style="list-style-type: none"><li>○ ultrasound/CT/MRI</li><li>○ pelvic MRI/CT</li><li>○ serum CA125 measurement</li></ul></li><li>• The limitations of serum CA125 measurement</li><li>• The limitations of hormonal treatment for suppression of ovarian function, surgery and intrauterine insemination (IUI) on fertility and assisted conception outcomes.</li><li>• The pharmacology of chemical substances that act upon benign gynaecological conditions</li><li>• The pharmacology and side-effects of analgesic drugs</li><li>• The role of hormonal agents, e.g. oral contraceptives, progestogens, danazol, gestrinone and gonadotropin-releasing hormone (GnRH) analogues, and their possible benefits and adverse effects</li><li>• The pharmacology of combined oral contraceptive pills</li><li>• The pharmacology of GnRH analogues and add-back therapy</li><li>• The pharmacology of Danazol, its role in the management of endometriosis and the potential androgenic adverse effects</li><li>• Appreciates that Danazol is not recommended as a first-line drug for managing endometriosis</li><li>• The effects of assisted conception on fertility</li><li>• The role of ART in the management of endometriosis and subfertility</li><li>• The role and limitations of surgical and medical management of endometriosis prior to assisted conception</li><li>• Knowledge of multidisciplinary pain management teams</li><li>• The contribution of complementary therapies for analgesia</li></ul>	



SST RM CiP 3: The doctor has the surgical skills appropriate for a subspecialist in reproductive medicine.	
Key skills	Descriptors
Explains the role of endoscopic and open surgery in the treatment of fertility-related conditions, e.g. fibroids, endometriosis, hydrosalpinges and tubal disease and sterilisation reversal	<ul style="list-style-type: none"><li>Clearly explains treatments for, complications and side effects of surgery.</li><li>Decides when to operate and when not to.</li><li>Is aware of different surgical approaches, including their advantages and disadvantages: open, straight stick laparoscopy or robotic.</li></ul>
Performs appropriate surgery safely and efficiently	<ul style="list-style-type: none"><li>Selects patients for reproductive surgery appropriately.</li><li>Decides optimal method of entry.</li><li>Demonstrates competence in setting up the equipment and theatre environment, patient positioning, optimisation and recording of images.</li><li>Refers to colleagues with advanced skills, when appropriate.</li><li>Involves appropriate MDT specialists.</li><li>Manages intra- and postoperative complications.</li><li>Is capable of carrying out intermediate endometriosis surgery.</li><li>Works towards advanced (deep infiltrating) endometriosis surgery.</li><li>Is able to remove uterine fibroids by different routes and techniques.</li></ul>
Assesses, manages and refers appropriately for infertility in males	<ul style="list-style-type: none"><li>Obtains focused and relevant history.</li><li>Interprets the results of endocrinological assessment.</li><li>Examines epididymis and appreciates any abnormalities.</li><li>Assesses testes using orchidometer.</li><li>Selects patients appropriately for Percutaneous Epididymal Sperm Aspiration (PESA), Testicular Sperm Aspiration (TESA) or Extraction (TESE). Performs procedures under direct supervision and manages intra- and postoperative complications such as pain, bleeding, infection and testicular atrophy.</li><li>Organises appropriate use of surgically retrieved sperm.</li><li>Refers to a urologist with a special interest in infertility in males for:<ul style="list-style-type: none"><li>microscopic epididymal sperm extraction</li><li>microscopic testicular sperm extraction.</li></ul></li></ul>





### Evidence to inform decision – examples of evidence (not mandatory requirements)

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|--|--|
| <ul style="list-style-type: none"><li>• CbD</li><li>• Mini-CEX</li><li>• NOTSS</li><li>• TO2 (including SO)</li><li>• Local and deanery teaching</li><li>• RCOG Learning</li></ul> | <ul style="list-style-type: none"><li>○ Confirmed attendance at specialist clinics</li><li>○ Attendance at specialist courses</li><li>○ Reflective practice</li><li>○ Surgical logbook</li></ul> |
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### Mandatory requirements

- OSATS:
  - 
  - laparoscopic destruction of superficial endometriosis
  - laparoscopic surgery – division of adhesions
  - laparoscopic surgery – salpingectomy for hydrosalpinx
  - hysteroscopic surgery – resection of fibroid
  - hysteroscopic surgery – resection of polyp
  - myomectomy (open or laparoscopic)

### Knowledge criteria

- Female pelvic and abdominal anatomy
- Possible anatomical changes in someone with endometriosis
- Sterilisation reversal
- Uterine anatomy and histology:
  - normal anatomy
  - different types of congenital anomalies, such as uterine septum, their impact on fertility and how to manage them
  - impact and management of intrauterine adhesions
  - impact and management of fibroids, including medical, surgical and embolisation
- Tubal anatomy and histology:
  - normal anatomy
  - different types of congenital abnormalities
  - management of proximal, mid-tubal and distal tubal disease
  - sterilisation and reversal of sterilisation
  - gross and microscopic findings of diseases of the oviduct related to reproductive endocrinology (e.g. acute and chronic salpingitis, granulomatous salpingitis and endometriosis)
  - natural history and clinical course of acute and chronic salpingitis and relate these to subsequent fertility
- Vaginal and cervical anatomy and histology:
  - gross and microscopic findings of endometriosis and adenosis
  - possible consequences of antenatal hormone exposure
  - effects of various hormones on the vagina and cervix
- Endometrial histology:
  - histological appearance of normal and abnormal endometrium



- current data relating estrogens with endometrial hyperplasia and adenocarcinoma
- acute and chronic endometritis
- developmental stages of the endometrium (dating)
- endometrial factors that affect implantation in early pregnancy
- Myometrial histology:
  - gross and microscopic findings of adenomyosis, leiomyoma and other myometrial lesions related to reproduction
  - relationship of leiomyoma to infertility, including each of the different types (e.g. subserosal, intramural and submucosal)
- Ovarian anatomy and histology:
  - gross and microscopic findings and natural history of ovarian tumours related to reproductive function (e.g. follicular cysts, luteoma, corpus luteum, PCOS, endometrioma, granulosa-theca cell tumour, Sertoli-Leydig cell tumour, gynandroblastoma, cystic teratoma, dysgerminoma, gonadoblastoma, and mixed germ cell or gonadal tumours)
  - different compartments of the Graafian follicle (e.g. granulosa cells, theca and adjacent stroma) and the primordial, preantral, antral and Graafian follicles, including the dynamic changes which occur in the ovary from embryo to menopause
  - specific staining techniques and cellular ultrastructure relating to function
  - gross and microscopic findings and the development of gonadal structures found in various forms of gonadal dysgenesis and intersex conditions
- Testicular anatomy and histology:
  - normal anatomy and development of the testes
  - various stages of normal and abnormal spermatogenesis
  - gross and microscopic findings in testicular disease (e.g. teratoma, seminoma, and Leydig and Sertoli cell tumours)
- The role of endoscopic and open surgery in the treatment of fertility-related conditions, e.g. fibroids, endometriosis, hydrosalpinges and tubal disease, and sterilisation reversal
- The alternative therapies, such as pharmacological, medical and non-medical treatments
- The environment, staffing and equipment needed to safely and effectively perform surgery
- Principles of the safe use of energy sources
- The techniques to minimise the risk of chemical peritonitis
- The available anti-adhesion agents and their limitations for adhesiolysis
- The importance of excision or occlusion of hydrosalpinges prior to IVF
- Reduced ovarian reserve associated with salpingectomy, and strategies to minimise this risk
- When to request a 3D ultrasound scan or MRI, prior to myomectomy
- When and how to treat fibroids and when appropriate to refer to other specialists
- The principles and practical steps involved in the performance of laparoscopic myomectomy
- The various techniques available to minimise the risks of excessive bleeding during myomectomy, and their safety and effectiveness
- The principles, benefits and risks of ovarian diathermy for anovulatory PCOS
- Good understanding of available hysteroscopic tissue removal systems for resection of submucous fibroids and endometrial polyps



- How to use distension media and the importance of maintaining fluid balance
- The principles of, and the surgical steps involved in, septal resection
- The various techniques available for myomectomy, their safety and effectiveness in minimising the risks of excessive bleeding
- The indications and prerequisites for PESA and TESA
- The environmental, staffing and supplies needed to safely perform PESA and TESA
- The indications and principles of performing an open testicular biopsy
- The indications and principles of performing MESA and micro-TESE

**SST RM CiP 4: The doctor is competent in recognising, assessing and managing complex fertility problems and assisted conception.**

Key skills	Descriptors
Arranges further investigations to identify the cause of severe infertility in men infertility (azoospermia or severe oligospermia with a sperm density of < 5 million/ml)	<ul style="list-style-type: none"> <li>• Is able to arrange relevant further investigations:               <ul style="list-style-type: none"> <li>○ repeat semen analyses</li> <li>○ urine for retrograde ejaculation</li> <li>○ endocrine evaluation</li> <li>○ microbiological</li> <li>○ genetic (karyotype and cystic fibrosis screening)</li> <li>○ scrotal and testicular ultrasound scan</li> <li>○ testicular biopsy</li> </ul> </li> <li>• Reviews investigations and is able to differentiate pre-testicular, testicular and post-testicular causes of severe abnormality.</li> <li>• Organises sperm freeze, if appropriate.</li> </ul>
Co-ordinates medical therapy for infertility in men	<ul style="list-style-type: none"> <li>• Liaises with reproductive endocrinologists and andrologists and co-ordinates suitable medical therapy.</li> <li>• Discusses available drugs for severe infertility in men, their effects, limitations and side-effects.</li> <li>• Discusses alternatives to medical therapy for severe infertility in men.</li> <li>• Arranges appropriate follow up to assess how to improve fertility.</li> <li>• Refers men with low testosterone to reproductive endocrinologists for testosterone replacement therapy.</li> </ul>



<p>Discusses the role of IUI: natural cycle and stimulated</p>	<ul style="list-style-type: none"><li>• Discusses IUI with couples experiencing infertility, including: natural and simulated cycles.</li><li>• Clearly explains treatment regimes for ovarian stimulation, success rates (pregnancy rate and live birth rate), potential side effects of drugs and complications of procedures, including the risk of multiple pregnancy and ovarian hyperstimulation syndrome (OHSS) and link with ovarian cancer.</li><li>• Provides appropriate monitoring during treatment to assess effectiveness and minimise the risk of multiple pregnancy.</li></ul>
<p>Can counsel patients on in vitro fertilisation (IVF) and intracytoplasmic sperm injection (ICSI)</p>	<ul style="list-style-type: none"><li>• Discusses IVF and ICSI as a treatment option in those with subfertility.</li><li>• Clearly explains treatment regimes for pituitary downregulation, controlled ovarian stimulation, final follicular maturation trigger, luteal phase support and is able to perform oocyte retrieval and embryo transfer.</li><li>• Explains success rates (pregnancy rate and live birth rate) taking into consideration various factors.</li><li>• Discusses potential side effects of drugs and complications of procedures, including the risk of poor ovarian response, failed fertilisation, multiple pregnancy, OHSS, ectopic pregnancy, the risks with oocyte retrieval procedure, the link with ovarian cancer and the risk of genetic disorders after IVF/ICSI.</li><li>• Provides appropriate monitoring to assess the effectiveness of treatment and minimise the risk of multiple pregnancy.</li><li>• Completes appropriate HFEA consent forms.</li><li>• Offers appropriate counselling support for those embarking on treatment.</li></ul>
<p>Can counsel patients on various pituitary down-regulation protocols</p>	<ul style="list-style-type: none"><li>• Clearly explains treatment regimens for pituitary down-regulation to suit particular clinical context.</li><li>• Discusses long GnRH agonist protocol.</li><li>• Discusses short (flare or micro-flare) GnRH agonist protocols.</li><li>• Discusses GnRH antagonist protocol.</li></ul>



Manages drugs dosage and strategies for controlled ovarian stimulation (COS)	<ul style="list-style-type: none"><li>• Determines a gonadotropin dosage, taking various factors into consideration to provide safe and effective COS.</li><li>• Provides appropriate monitoring to assess the safety and effectiveness of COS.</li><li>• Uses appropriate strategies to minimise the risk of, and manage over or under response to, COS.</li><li>• Discusses strategies such as cycle cancellation, coasting, freeze all for hyper response COS.</li><li>• Discusses, as appropriate, conversion to IUI or cycle cancellation for poor ovarian response.</li></ul>
Is able to diagnose and manage ovarian hyperstimulation syndrome (OHSS)	<ul style="list-style-type: none"><li>• Is familiar with drainage of peritoneal fluid (ascites) technique.</li></ul>
Manages frozen embryo replacement cycle (FERC)	<ul style="list-style-type: none"><li>• Clearly explains treatment regimes for FERC to suit particular clinical context.</li><li>• Is able to initiate and manage a stimulated cycle.</li><li>• Is able to discuss local and national success rates for FERC.</li><li>• Offers appropriate support and counselling for people going through the treatment.</li></ul>
Can counsel patients on using donor gametes (eggs and sperm) and embryo	<ul style="list-style-type: none"><li>• Can counsel patients sensitively on the options of using donor gametes or embryos, relevant to their particular situation.</li><li>• Can counsel patients on available alternative options.</li><li>• Completes relevant HFEA consent forms for use of donor gametes and embryos.</li><li>• Offers appropriate counselling for people using donor gametes and embryos.</li></ul>
Co-ordinates a donor-recipient cycle	<ul style="list-style-type: none"><li>• Clearly explains treatment regimes for patients (donor and recipient).</li><li>• Initiates and undertakes appropriate co-ordination of a donor-recipient cycle.</li><li>• Discusses local and national success rates of using treatment with donor gametes and embryos.</li></ul>



	<ul style="list-style-type: none"><li>• Offers appropriate support and implications counselling for someone using donor gametes and embryos.</li></ul>
Advises on gamete (sperm or eggs) and embryo freezing	<ul style="list-style-type: none"><li>• Offers appropriate advice for people wanting to store gametes or embryos.</li><li>• Discusses local and national success rates for gamete and embryo freezing.</li><li>• Offers appropriate advice for posthumous use of gametes.</li><li>• Completes relevant HFEA consent forms for gamete or embryo storage.</li></ul>
Discusses gametes (sperm or eggs) and embryo storage prior to oncology treatment	<ul style="list-style-type: none"><li>• Arranges appropriate investigations and interprets the results.</li><li>• Arranges relevant further investigations: endocrinological and virology screening (HIV, Hepatitis B and C and syphilis).</li><li>• Discusses local and national success rates.</li><li>• Can counsel patients on alternative options that are available.</li><li>• Offers appropriate counselling for posthumous use of gametes.</li><li>• Completes relevant HFEA consent forms for gamete or embryo storage.</li><li>• Organises an appropriate follow-up schedule to assess someone's fertility following oncology treatment.</li></ul>
Manages fertility preservation for female cancer patients or social egg or embryo freezing	<ul style="list-style-type: none"><li>• Arranges appropriate investigations to assess the suitability and interprets the results.</li><li>• Formulates an appropriate individualised management plan, taking into account the patient's preferences.</li><li>• Can counsel patients on available alternative options.</li><li>• Liaises with other specialists (oncologists, haematologists, surgeons and radiologists) to provide the best care to the patient.</li><li>• Offers appropriate counselling to those wishing to preserve fertility.</li></ul>



Discusses sperm banking with men who want to have a vasectomy for contraception	<ul style="list-style-type: none"><li>• Arranges semen analysis and interprets the results.</li><li>• Arranges relevant further investigations: pre-sperm banking screening (HIV, Hepatitis B and C, syphilis).</li><li>• Completes relevant HFEA consent forms for gamete storage.</li><li>• Can counsel patients on available alternative options.</li><li>• Offers appropriate counselling for posthumous use of gametes.</li></ul>
Discusses and coordinates gamete or embryo donation for clinical use or research	<ul style="list-style-type: none"><li>• Arranges appropriate investigation of the potential donor and interprets the results.</li><li>• Assesses the suitability for gamete or embryo donation.</li><li>• Arranges relevant further screening investigations: HIV, Human T Cell Lymphotropic Virus (HTLV), Cytomegalovirus (CMV), toxoplasmosis, Hepatitis B and C, syphilis, chlamydia and gonorrhoea, blood group, karyotyping and cystic fibrosis screening.</li><li>• Completes relevant HFEA consent forms for gamete and embryo donation.</li><li>• Offers appropriate implications and support counselling for those donating gametes or embryos for clinical use or research.</li></ul>
Discusses the role of surrogacy	<ul style="list-style-type: none"><li>• Explores the indications for and different types of surrogacy treatment.</li><li>• Be familiar with the surrogacy process: tests, consents, counselling and legal aspects.</li></ul>
Discusses managing viral discordant couples	<ul style="list-style-type: none"><li>• Be aware of viral screening requirements for all patients having ART.</li><li>• Is able to interpret viral results and act on them.</li><li>• Coordinate with infectious diseases colleagues, when required.</li><li>• Is familiar with European Society of Human Reproduction and Embryology (ESHRE) guidelines on treating couples with transmissible viral diseases.</li><li>• Knows about laboratory requirements for treating viral positive patients.</li></ul>



<p>Can counsel on infertility and fertility treatment</p>	<ul style="list-style-type: none"> <li>• Offers supportive counselling to patients before, during and after treatment.</li> <li>• Liaises with counsellors.</li> <li>• Offers therapeutic and psychosexual counselling, alongside a counsellor.</li> <li>• Can counsel on the legal aspects of using donated gametes and adoption, alongside a fertility counsellor.</li> </ul>
<p>HFEA Code of Practice</p>	<ul style="list-style-type: none"> <li>• Has read and understood the HFEA Code of Practice.</li> <li>• Considers enrolling on the HFEA Person Responsible (PR) entry programme.</li> </ul>
<p>Can apply knowledge of clinical and molecular genetics to manage people at risk of, or affected by, a genetic problem</p>	<ul style="list-style-type: none"> <li>• Takes an appropriate history, can construct a family tree and arranges appropriate investigations.</li> <li>• Communicates effectively with patients about genetic inheritance and transmission of genetic disease.</li> <li>• Manages the care of a people with a personal or family history of a chromosomal anomaly, single gene disorder or syndromic anomaly, including assessment of risk, prenatal diagnostic options, and further management options after testing.</li> <li>• Discusses the role of pre-implantation genetic testing (PGT-M and PGT-SR).</li> <li>• Provides information to a patient at risk of, or affected by, a genetic problem.</li> <li>• Recognises when advice from, and referral to, clinical genetics services is needed.</li> </ul>
<p><b>Evidence to inform decision – examples of evidence (not mandatory requirements)</b></p>	
<ul style="list-style-type: none"> <li>• CbD</li> <li>• Mini-CEX</li> <li>• Reflective practice</li> <li>• TO2 (including SO)</li> <li>• NOTSS</li> <li>• RCOG Learning</li> <li>• Preceptor assessment of knowledge</li> <li>• Attendance at RCOG/British Fertility Society course</li> <li>• Local, deanery or national teaching or training sessions</li> </ul>	<ul style="list-style-type: none"> <li>• Regular participation in IVF theatres</li> <li>• Exposure to relevant specialist clinics: endocrinology, clinical genetics, oncology and urology/andrology clinics</li> <li>• Participation in HFEA inspection</li> <li>• Attendance at United Kingdom Accreditation Service (UKAS) inspection</li> </ul>



<ul style="list-style-type: none"><li>• Confirmed attendance at IVF and genetics laboratory sessions</li></ul>	<ul style="list-style-type: none"><li>• Attendance at assisted reproduction ethics committee meeting</li></ul>
<b>Mandatory requirements</b>	
<ul style="list-style-type: none"><li>• OSATS<ul style="list-style-type: none"><li>○ transvaginal ultrasound egg collection</li><li>○ trans-abdominal ultrasound egg collection</li><li>○ ultrasound examination in gynaecology (non-pregnant patient) including variety of different pathologies and ovarian follicular assessment</li></ul></li></ul>	
<b>Knowledge criteria</b>	
<p><i>General subfertility:</i></p> <ul style="list-style-type: none"><li>• Female reproductive anatomy and physiology</li><li>• The normal physiology of ovulation, endometrial changes and tubal function</li><li>• The male reproductive anatomy and physiology</li><li>• The process of spermatogenesis and its control</li><li>• Awareness of possible feelings of guilt in patients with previous infection</li><li>• The environmental factors influencing male reproductive function</li><li>• The endocrine disorders affecting male fertility</li><li>• The effect of reproductive pathologies, such as varicocele, undescended testicles, sexually transmitted infections including, chlamydia and gonorrhoea, previous orchitis and chemo-radiotherapy</li><li>• The impact of previous surgery, such as vasectomy, reversal of vasectomy, inguinal herniorrhaphy and orchidopexy</li><li>• Coital dysfunction associated infertility</li><li>• Other putative causes of infertility: subtle ovulation defects, cervical mucus hostility, subclinical pregnancy loss, occult infection, sperm dysfunction, immunological causes and psychological factors</li><li>• The availability of various advanced sperm function tests and their role in managing infertility in males</li><li>• Normal ultrasound appearances of the uterus, ovaries and adnexa</li><li>• The standardised terms and definitions to describe sonographic features of a normal pelvis and pelvic pathology</li><li>• Appearance of a normal and abnormal uterus, including fibroids</li><li>• Endometrial assessment, including normal cyclical changes, changes associated with hormone replacement, hyperplasia and malignancy</li><li>• Ovarian, para-ovarian and tubal masses</li><li>• The indications, pre-requisites and possible complications of HyCoSy, sonohysterography, HSG and laparoscopy</li><li>• The role of CT and MRI</li></ul>	



- The indications for medical therapy for azoospermia
- The sequelae of long-term low testosterone levels and the association with testicular cancer

*IVF and assisted contraception:*

- The various treatment strategies for anovulation:
  - anti-estrogens
  - anti-androgens
  - aromatase inhibitors
  - gonadotrophins
  - laparoscopic ovarian diathermy
  - dopamine agonists
    - steroids
    - insulin sensitisers
    - glitazones
- The impact of psychiatric and psychological issues on anovulation
- IVF and intracytoplasmic sperm injection
- Management options:
  - long GnRH agonist protocol
  - short GnRH agonist protocol
  - GnRH antagonist cycles
  - frozen embryo replacement (natural cycle and HRT cycle)
  - donor–recipient cycle
  - sperm freezing
  - embryo freezing
  - in vitro oocyte maturation
  - oocyte freezing
- Fertility preservation for cancer patients
- The indications for IUI
- Clinical trial design
- Ultrasound/imaging:
  - Follicular tracking: natural/simulated cycles
  - Tracking IVF endometrial development
  - Uterine abnormalities
  - Ovarian pathology
  - Early pregnancy assessment
- Oocyte retrieval
- Embryo replacement
- Microsurgical epididymal sperm aspiration
- Percutaneous epididymal sperm aspiration
- Open testicular biopsy



- The pharmacokinetics of drugs used in reproductive medicine:
  - anti-estrogens
  - anti-androgens
  - aromatase inhibitors
  - gonadotrophins (FSH, LH, hCG)
  - GnRH-agonists
  - GnRH antagonists
  - dopamine agonists
  - estradiol
  - progesterone
- The various down-regulation protocols
- Drugs and dosage for controlled ovarian stimulation
- The strategies to minimise the risk of OHSS
- Ultrasound guided paracentesis
- Clinical presentation and classification of OHSS
- The potential complications of OHSS and the importance of MDT management
- The process and limitations of natural cycle FERC
- The embryo survival rate, following freeze-thaw
- The law relating to gamete and embryo donation and storage
- The various methods of gamete and embryo freezing
- The role and limitations of medical therapy, such as GnRH agonists/aromatase inhibitors for breast cancer
- The various treatment protocols for preserving fertility for female cancer patients, including random start and double stimulation (DuoStim)
- The role of counselling (supportive, implications, therapeutic, adoption, legal aspects and psychosexual)

*Genetics:*

- Normal chromosome structure and function
- Gene structure and function, including gene control, mechanisms, and effects of mutation and genetic heterogeneity
- Cell division (meiosis and mitosis), and abnormalities arising from these processes
- Patterns of genetic inheritance and susceptibility, expression and penetrance, multifactorial and mitochondrial inheritance
- Types of aneuploidy, including structural rearrangements, deletions and common microdeletions, trisomies, sex chromosome anomalies (including Monosomy X (Turner syndrome), Klinefelter syndrome and Triple X syndrome), extra markers, mosaicism (fetal and placental), uniparental disomy and triploidy



- The underlying genetic aetiology of single gene disorders, including myotonic dystrophy, Huntington's disease, haemoglobinopathies, haemophilia, other common bleeding disorders and inborn errors of metabolism
- The role of pre-implantation genetic testing (PGT-M, PGT-SR) and diagnosis
- Chromosome analysis
- International System for Human Cytogenetic Nomenclature
- Normal variation within genetics
- Banding techniques for assessment of chromosomes
- Prenatal diagnosis
- Cell culture and processing
- The statistical terms relevant to screening, including sensitivity, specificity, false positive rates, positive predictive rates, and how these are inter-dependent
- The meaning of likelihood ratios in risk calculations
- How recurrence risks for chromosomal and single gene disorders are derived
- Laboratory techniques for analysing parental and fetal samples, including quantitative polymerase chain reaction (qPCR), fluorescent in situ hybridization (FISH), karyotyping, microarray, mutational analysis, sequencing, enzymatic analysis, analyte genetic inheritance and transmission of genetic disease

*Laboratory techniques:*

- Has observed the following techniques in an IVF laboratory:
  - sperm preparation
  - oocyte culture
  - oocyte insemination
  - oocyte sperm injection
  - embryo culture
  - embryo freezing and thawing
  - assisted hatching
  - polymerase chain reaction
  - preimplantation genetic diagnosis
  - DNA, RNA and protein amplification techniques
  - culture systems
  - blastocyst culture
  - time-lapse imaging of embryo
  - flow cytometry
- HFEA laboratory inspection
- Clinical Pathology Accreditation (CPA / UKAS) laboratory inspection
- International Organisation for Standardisation and quality management systems



*The role of HFEA:*

- The HFEA Code of Practice
- The role of the Person Responsible
- HFEA regulations about storing and using gametes, including posthumous use
- What constitutes an adverse event and how to report it

*Andrology:*

- Appropriate history and investigations:
  - Semen analysis
  - Endocrine profile: male
  - Anatomy and physiology of the testes
  - Investigation of azoospermia
  - Hypothalamo-pituitary-thyroid axis function and assessment
- Assessment and management of impotence Treatment:
  - Endocrine therapy
  - Gonadotrophin therapy

**SST RM CiP 5: The doctor is competent in recognising, assessing and managing complex early pregnancy problems.**

Key skills	Descriptors
Assesses women with recurrent miscarriage and performs a physical examination	<ul style="list-style-type: none"> <li>• Records pregnancy and medical history.</li> <li>• Performs appropriate physical examination with particular emphasis on anatomical assessment of reproductive tract by abdomino-pelvic examination, calculation of body mass index and extent of hirsutism.</li> </ul>
Arranges appropriate investigations to establish the conditions associated with recurrent miscarriage	<ul style="list-style-type: none"> <li>• Arranges appropriate investigations, including endocrine, immunological and anatomical assessment (antiphospholipid antibodies, cytogenetic analysis of products of conception, parental peripheral blood karyotyping, thrombophilias, glycated haemoglobin test (HbA1C), thyroid function tests, trans-vaginal ultrasound scan (2D +/-3D), saline infusion sonography, hysterosalpingogram and CT/MRI scan).</li> <li>• Interprets results of recurrent miscarriage investigations appropriately.</li> <li>• Discusses the results of these tests and their impact on recurrent miscarriage in detail with the patient.</li> </ul>



	<ul style="list-style-type: none"> <li>• Demonstrates an understanding of the psychological impact of recurrent miscarriage.</li> </ul>
<p>Communicates and formulates an appropriate management plan for people with recurrent miscarriage</p>	<ul style="list-style-type: none"> <li>• Can counsel patients on available treatment options and formulate an appropriate individualised management plan, taking into account results of investigations and patient preferences.</li> <li>• Implements management plan and modifies it, if necessary.</li> <li>• Refers to clinical geneticist on findings of an abnormal karyotype.</li> <li>• Liaises with obstetricians to assess and manage cervical factor to improve pregnancy outcome in women with a history suggestive of cervical weakness.</li> <li>• Is able to offer and/or perform appropriate surgical management for people with recurrent miscarriage (e.g. fibroid / polyp surgery, metroplasty, division of inrauterine adhesions).</li> <li>• Advises on, and offers support to make, lifestyle changes to improve someone’s pregnancy outcome.</li> <li>• Offers supportive care in a dedicated early pregnancy assessment unit for women with unexplained recurrent miscarriage.</li> <li>• Liaises with colleagues in other disciplines, both clinical and non-clinical, for advice and support.</li> <li>• Refers people with recurrent miscarriage to support groups, as appropriate.</li> </ul>
<p><b>Evidence to inform decision – examples of evidence (not mandatory requirements)</b></p>	
<ul style="list-style-type: none"> <li>• CbD</li> <li>• Mini-CEX</li> <li>• Local and deanery teaching</li> <li>• RCOG Learning</li> <li>• TO2 (including SO)</li> <li>• NOTSS</li> </ul>	<ul style="list-style-type: none"> <li>○ Confirmed attendance at specialist recurrent miscarriage clinics and early pregnancy assessment unit</li> <li>○ Reflective practice</li> </ul>
<p><b>Mandatory requirements</b></p>	
<ul style="list-style-type: none"> <li>• OSATS:             <ul style="list-style-type: none"> <li>○ ultrasound examination in gynaecology (non-pregnant patient) including variety of different pathologies</li> <li>○ ultrasound examination of early pregnancy complications</li> </ul> </li> </ul>	
<p><b>Knowledge criteria</b></p>	
<ul style="list-style-type: none"> <li>• The various professional societies’ definitions of recurrent miscarriage</li> <li>• The causes of, and risk factors, investigations and management options for recurrent miscarriage</li> </ul>	



- Normal ultrasound appearances of the uterus, ovaries and adnexa
- The standardised terms and definitions to describe sonographic features of normal pelvis and pelvic pathology
- The role of antiphospholipid syndrome (APS) in recurrent miscarriage
- The benefits of treatment with low-dose aspirin, plus heparin, in women with APS
- The potential risks of low-dose aspirin, plus heparin, in pregnancy
- The evidence base for treatments such as corticosteroids or intravenous immunoglobulin for women with recurrent miscarriage
- The role of pre-implantation genetic testing for aneuploidy (PGT-A) in relation to miscarriage
- The available options on surgical correction of uterine abnormalities and impact on pregnancy outcome
- The evidence for routine use of hormonal therapy or immunotherapy for recurrent miscarriage
- The efficacy of thromboprophylaxis during pregnancy in women who have thrombophilias (inherited or acquired) with recurrent first-trimester miscarriage or second trimester miscarriage assessment
- The role of cervical cerclage (transvaginal and transabdominal) to prevent second trimester miscarriage.
- The role of infection, and microbiome, in pregnancy loss and subfertility

## SECTION 2: PROCEDURES

<i>Procedures</i>	<i>Level by end of training</i>	<i>CiP 1</i>	<i>CiP 2</i>	<i>CiP 3</i>	<i>CiP 4</i>	<i>CiP 5</i>
Laparoscopic destruction of superficial endometriosis*	5		X	X		
Laparoscopic excision of deep endometriosis	3		X	X		
Laparoscopic excision/ablation of ovarian endometriomas	4		X	X		
Laparoscopic surgery – treatment of ovarian cysts (e.g.dermoid)	5			X		
Laparoscopic surgery – division of adhesions*	5			X		
Laparoscopic surgery – salpingectomy for hydrosalpinx*	5			X		
Laparoscopic surgery – salpingostomy	5			X		
Hysteroscopic surgery – resection of fibroid*	5			X		
Hysteroscopic surgery – resection of polyp*	5			X		
Hysteroscopic surgery – division of septum	2			X		
Hysteroscopic surgery – division of adhesions	5			X		
Hysteroscopic proximal tubal catheterisation	3			X		
Excision of vaginal septum	3			X		
Imperforate hymen	3			X		



<i>Procedures</i>	<i>Level by end of training</i>	<i>CiP 1</i>	<i>CiP 2</i>	<i>CiP 3</i>	<i>CiP 4</i>	<i>CiP 5</i>
Male surgery – PESA	2			X		
Male surgery – testicular sperm aspiration	2			X		
Male surgery – open testicular biopsy	2			X		
Male surgery – MESA	1			X		
Male surgery – Micro-TESE	1			X		
Hysterosalpingography (HSG)	2				X	
HyCoSy or saline sonohysterography	5				X	
Blue dye test at laparoscopy	5			X	X	
Intrauterine insemination	5				X	
Embryo transfer	5				X	
Transvaginal ultrasound egg collection*	5				X	
Trans-abdominal ultrasound egg collection*	3				X	
Embryo transfer procedure	5				X	
Ovarian cystectomy	5			X		
Laparoscopic salpingostomy for distal tubal blockages (cuff salpingostomy)	3			X		
Laparoscopic ovarian diathermy for anovulatory PCOS	5	X		X		
Proficiency in: Veress needle entry, Hassan and Palmer's point entry techniques	5			X		
Safe tissue handling with laparoscopic instruments, sharp and blunt dissection	5			X		
Haemostatic techniques for laparoscopic and open surgery	5			X		
Myomectomy (open or laparoscopic)*	4			X		
Excision of rudimentary horn of uterus (laparoscopic resection)	1			X		
TAH+/-BSO	3			X		
Ultrasound examination in gynaecology (non-pregnant patient) including variety of different pathologies and ovarian follicular assessment*	5				X	
Ultrasound examination in gynaecology (non-pregnant patient) including variety of different pathologies*	5					X
Ultrasound examination of early pregnancy complications*	5					X



## SECTION 3: GMC GENERIC PROFESSIONAL CAPABILITIES (GPCs)

### *Mapping to 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**

## SECTION 4: MAPPING OF ASSESSMENTS TO RM CiPs

SST RM CIP	OSATS	Mini-CEX	CbD	NOTSS	TO1/ TO2	Reflective practice
1: The doctor is competent in recognising, assessing and managing endocrinological disorders.		X	X		X	X
2: The doctor is competent in		X	X		X	X



SST RM CIP	OSATS	Mini-CEX	CbD	NOTSS	TO1/ TO2	Reflective practice
providing specialist care for women with endometriosis.						
3: The doctor has the surgical skills appropriate for a subspecialist in reproductive medicine.	X	X	X	X	X	X
4: The doctor is competent in recognising, assessing and managing complex fertility problems and assisted conception	X	X	X	X	X	X
5: The doctor is competent in recognising, assessing and managing complex early pregnancy problems.	X	X	X	X	X	X



# Research – Subspecialty Training

## SECTION 1: CAPABILITIES IN PRACTICE (CiP)

**SSTR CiP: The doctor is able to engage with research and promote innovation within their subspecialty.**

Key skills	Descriptors
Demonstrates research skills	<ul style="list-style-type: none"> <li>• Is able to demonstrate practice in healthcare research and the different methodologies within their subspecialty.</li> <li>• Shows continued engagement in Good Clinical Practice (GCP) and Research and Development (R&amp;D) processes.</li> <li>• Engages in ethics and governance processes within research, demonstrating they are able to follow guidelines on ethical conduct and consent for research.</li> <li>• Demonstrates involvement in informatics, statistical analysis and emerging research areas within their subspecialty.</li> <li>• Shows engagement with national trials within their subspecialty, including patient recruitment, trial monitoring and adverse event reporting.</li> <li>• Shows understanding of the role of public and patient involvement within clinical trials.</li> <li>• Is able to discuss clinical trials with, and facilitate recruitment of, patients within their subspecialty.</li> <li>• Has the ability to translate research into clinical practice within their subspecialty.</li> </ul>
Demonstrates critical thinking	<ul style="list-style-type: none"> <li>• Is able to develop and critically appraise a research protocol.</li> <li>• Is able to critically evaluate clinical trial data to establish the clinically significant outcomes and relevance for clinical practice within their subspecialty.</li> <li>• Is able to interpret research findings, reflect on the potential impact on their clinical practice and share this with colleagues and patients.</li> <li>• Can develop and critically appraise a patient information leaflet.</li> <li>• Is able to interpret research findings within their subspecialty and discuss these when taking informed consent for treatment.</li> </ul>



**Innovates**

- Demonstrates how their clinical practice has developed from innovative research within their subspecialty.
- Is able to demonstrate engagement with the introduction of any innovations within their subspecialty, including governance and costs.

**Evidence to inform decision – examples of evidence (not mandatory requirements)**

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• National teaching and courses</li> <li>• Critical appraisal of protocols/papers</li> <li>• Subspecialty journal club presentations</li> <li>• GCP re-certification</li> <li>• Participation, including recruitment for national multicentre trials</li> <li>• Preparation of research protocol/grant applications</li> <li>• Oral, and/or poster presentations at national/international subspecialty meetings</li> </ul> | <ul style="list-style-type: none"> <li>• SIPM in Clinical Research</li> <li>• Peer reviewed original research publications relevant to their subspecialty</li> <li>• A higher degree such as a PhD or research MD</li> </ul> |
|--|--|

## SECTION 2: PROCEDURES

There are no procedures in this SST Research CiP.

## SECTION 3: GMC GENERIC PROFESSIONAL CAPABILITIES (GPCs)

*Mapping to 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**

## 4 The research component of subspecialty training

The subspecialty research CiP (SSTR CiP) builds on the Curriculum 2024 research requirements. It trains the sub-specialist to interpret and contribute to clinical research within their subspecialty, and to discuss and introduce new evidence to improve clinical outcomes for patients within their subspecialty.

Trainees who have completed the SIPM in Clinical Research or have had OOP research experience can use this evidence towards this CiP meaning those key skills and descriptors will not be repeated. Leading to the shortening of training time.

## 5 Learning and teaching

### 5.1 Stages 1-3 training programme

The organisation and delivery of postgraduate training is the responsibility of the National Health Service England (NHSEE), NHS Education for Scotland (NES), Health Education and Improvement Wales (HEIW) and the Northern Ireland Medical and Dental Training Agency (NIMDTA). A Training Programme Director will be responsible for coordinating the O&G training programme in each deanery. The local organisation and delivery of training is overseen by a school of O&G.

Progression through the programme will be determined by the annual review of curriculum progression (ARCP) process and the training requirements for each indicative year of training are summarised in the O&G ARCP decision aid. The successful completion of each stage of training will be dependent on achieving the expected level in all CiPs and procedural skills. The programme of assessment will be used to monitor and determine progress through the programme. Training will normally take place in a range of settings, e.g. community, District General Hospitals and Teaching Hospitals.

The sequence of training should ensure appropriate progression in experience and responsibility. The training to be provided at each training site is defined to ensure that, during the programme, the entire syllabus is covered and unnecessary duplication and educationally unrewarding experiences are avoided. The sequence of training should ideally



be flexible enough to allow the trainee to develop a special interest which can be taken forward during the advanced training period.

## 5.2 The general training environment

To fulfil the RM curriculum requirements, trainees need to train and work in high quality training environments. The GMC has clear standards in its [Promoting excellence document](#) which specifies that employers must provide trainers with the support and resources they need to meet their education and training responsibilities. Employers should also protect time for training and produce rotas that help deliver that goal. Where the GMC survey shows this is not happening, employers are expected to take action to ensure their training environments meet GMC standards.

The RCOG annual trainee evaluation form (TEF) and subsequent analyses also provides longitudinal data for schools and units to use to drive improvements in the education they provide. The TEF data is specialty-specific, and so can provide detailed feedback on specific areas of training and education that support curriculum delivery.

The RCOG has produced a quality criteria, based on GMC and RCOG standards and good practice noted through the TEF exercise, which will enable individual training placements to benchmark the education and training they provide and further develop high quality placements. These will detail how we can enable trainees to:

- Provide safe and effective care.
- Have a supportive working environment.
- Enjoy a better educational experience.

The quality criteria provide guidance regarding the range and access to informal, formal and experience-based learning that will be required to fulfil the curriculum requirements. The curriculum will provide a balance of different learning methods for trainees to progress through, from formal teaching programmes to learning 'on the job'. The proportion of time allocated to each method may vary depending on the nature of the attachment within a rotation. Rotations should be constructed to enable the trainee to experience the full range of educational and training opportunities.

### Informal learning methods will include:

- **Learning with peers** - There are many opportunities for trainees to learn with their peers. Local postgraduate teaching opportunities allow trainees of varied levels of experience to come together for small group sessions. Examination preparation encourages the formation of self-help groups and learning sets.



- **Work-based experiential learning** - The content of work-based experiential learning is decided by the local faculty for education within a unit.

### Formal postgraduate teaching sessions

The content of other formal postgraduate teaching sessions and access to other more formal learning opportunities are determined by the local faculty of O&G education. RM trainees will attend those that are of interest or relevance to them. There are many opportunities throughout the year for formal teaching locally and at regional, national and international meetings. Many of these are organised by the RCOG.

### Independent self-directed learning

Trainees will use this time in a variety of ways depending upon their stage of learning. Suggested activities include:

- Reading, including journals and web-based material such as e-Learning for Healthcare (e-LfH) and the RCOG's Learning platform.
- Maintenance of personal portfolio (self-assessment, reflective learning, personal development plan).
- Audit, quality improvement and research projects.
- Achieving personal learning goals beyond the curriculum.

## 5.3 The subspecialty training environment

Subspecialty training can only be followed in a centre that has been accredited by the RCOG Subspecialty Committee.

A centre should have sufficient caseload to support the trainee in completing the approved subspecialty curriculum within the required timeframe.

Recognition may be granted for more than 1 trainee per centre, where there is supporting evidence that there is sufficient workload within the centre for given number of trainees.

# 6 Programme of assessment

## 6.1 Purpose of assessment

The purpose of the programme of assessment is to:

- Assess trainees' actual performance in the workplace.



- Encourage the development of the trainee as an adult responsible for their own learning.
- Enhance learning by providing formative assessment, enabling trainees to receive immediate feedback, understand their own performance and identify areas for development.
- Drive learning and enhance the training process by making it clear what is required of trainees and motivating them to ensure they receive suitable training and experience.
- Demonstrate trainees have acquired the GPCs and meet the requirements of good medical practice.
- Ensure that trainees possess the essential underlying knowledge required for their specialty.
- Provide robust, summative evidence that trainees are meeting the curriculum standards during the training programme.
- Inform the ARCP, identifying any requirements for targeted or additional training where necessary and facilitating decisions regarding progression through the training programme.
- Identify trainees who should be advised to consider changes of career direction.

## 6.2 Programme of assessment

Our overall programme of assessment as outlined in the Curriculum 2024 Definitive Document refers to the integrated framework of exams, assessments in the workplace and judgements made about a learner during their approved programme of training. The purpose of the programme of assessment is to clearly communicate the expected levels of performance and ensure these are met on an annual basis and at other critical progression points, and to demonstrate satisfactory completion of training as required by the curriculum.

The programme of assessment for the RM subspecialty curriculum comprises the use of a number of individual assessment tools which are the same as those for the Curriculum 2024, apart from the MRCOG which must have already been achieved. These include summative and formative workplace-based assessments. A range of assessments is needed to generate the necessary evidence required for global judgements to be made about satisfactory performance, progression in, and completion of, training. All assessments are linked to the relevant learning outcomes stated in the curriculum.

The programme of assessment emphasises the importance of professional judgement in making sure learners have met the learning outcomes and expected levels of performance set out in the approved curriculum. It also focuses on the learner as a reflective practitioner. Assessors will make accountable, professional judgements on whether progress has been made according to a learner's self-assessment. The programme of assessment explains how



professional judgements are used and collated to support decisions on progression and satisfactory completion of training.

Assessments will be supported by structured feedback for trainees. Assessment tools, which are well established in O&G training, will be both formative and summative and have been selected on the basis of their fitness for purpose and their familiarity to trainees and trainers.

Trainees will be assessed throughout the training programme, allowing them to continually gather evidence of learning and provide formative feedback. Those assessment tools that are not identified individually as summative will contribute to global judgements about a trainee's progress as part of the programme of assessment. The number and range of these will ensure a reliable assessment of the training relevant to their stage of training and achieve coverage of the curriculum.

Reflection and feedback should be an integral component to all workplace-based assessments. Every clinical encounter can provide a unique opportunity for reflection and feedback and this process should occur frequently – and as soon as possible after any event to maximise benefit for the trainee. Feedback should be of high quality and should include an action plan for future development for the trainee. Both trainees and trainers should recognise and respect cultural differences when giving and receiving feedback.

### 6.3 Assessment of CiPs

A global judgement by the educational supervisor is the fundamental basis of assessment of progression through the learning aims and requirements of a Capability in Practice. Assessment of CiPs involves looking across a range of key skills and evidence to make a judgement about a trainee's suitability to take on particular responsibilities or tasks appropriate to their stage of training. It also involves the trainee providing self-assessment of their performance for that stage of training.

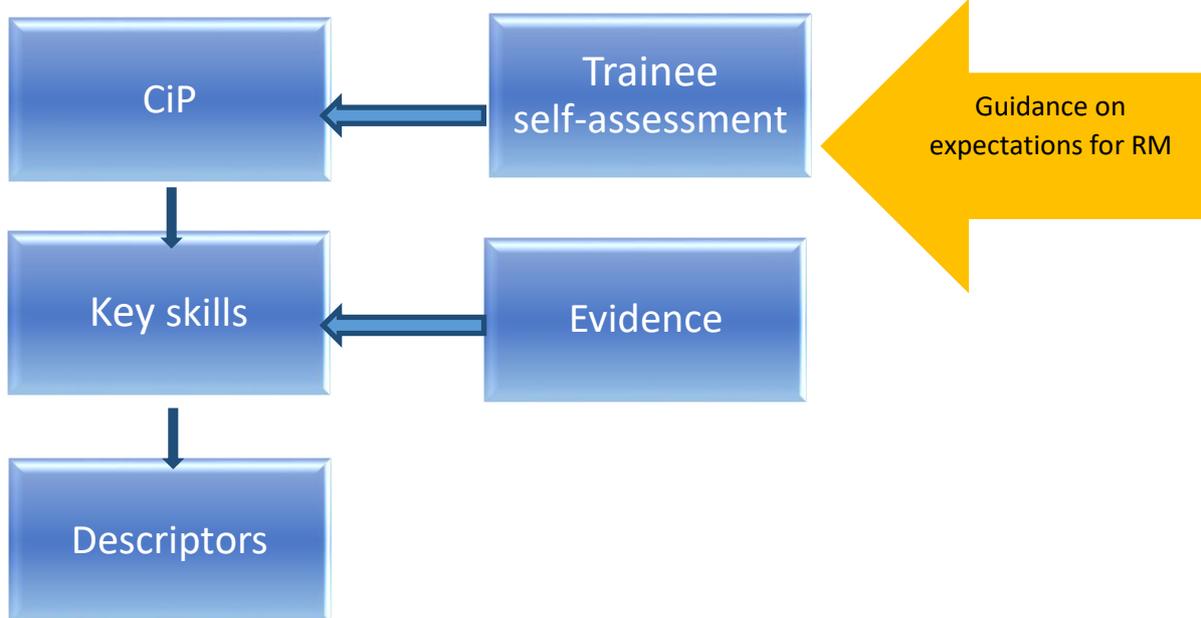
Clinical Supervisors and others contributing to assessment will provide formative feedback to the trainee on their performance throughout the training year. Evidence to support the global rating for the CiP will be derived from workplace-based assessments and other evidence, e.g. TO2.

### 6.4 The global judgement process

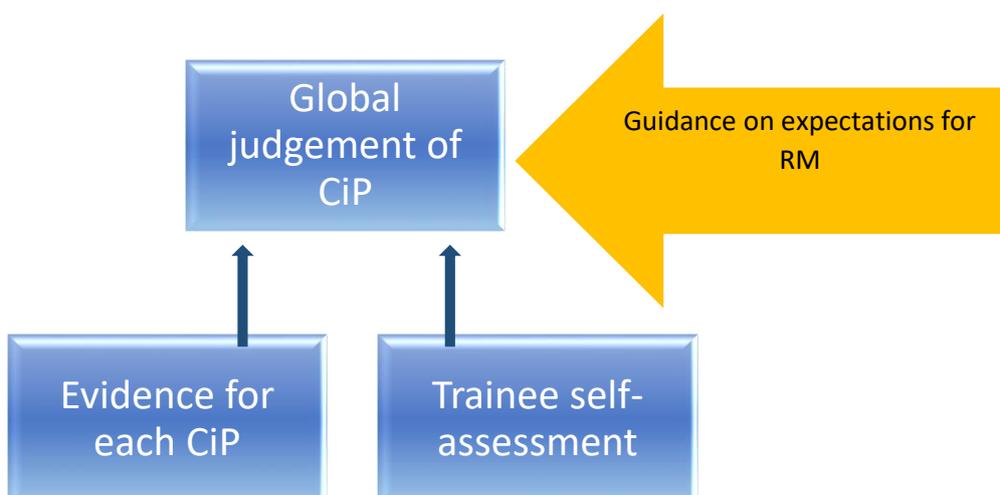
Toward the end of the training year, trainees will assess their own progression for each CiP (Figure 3a) and record this in the ePortfolio, signposting to the evidence that supports their rating. The Subspecialty Training Programme Supervisor (STPS) will review the evidence in the ePortfolio including workplace-based assessments, the TO2 and the trainee's self-assessment and record their global judgement of the trainee's performance in the SST

Educational Supervisor Report (SST ESR), with commentary. Figure 3b shows how the trainee's self-assessment and the evidence feed into the global judgement by the STPS.

**Figure 3a – Trainee self-assessment of a CiP**



**Figure 3b – STPS assessment of all CiPs**





The trainee will make a self-assessment to consider whether they meet expectations for the RM subspecialty as a whole, using the five supervision levels listed in Table 3 and highlighting the evidence in the ePortfolio. The STPS will indicate whether the trainee is meeting expectations or not by assigning one of the five supervision levels, as in the template below.

Table 2 shows the five supervision levels that are based on an entrustability scale that are behaviourally anchored ordinal scale based on progression to competence and reflects judgements that have clinical meaning for assessors<sup>1</sup>.

**Table 2 – Levels of supervision**

Level	Descriptor
Level 1	Entrusted to observe
Level 2	Entrusted to act under direct supervision: (within sight of the supervisor).
Level 3	Entrusted to act under indirect supervision: (supervisor immediately available on site if needed to provide direct supervision)
Level 4	Entrusted to act independently with support (supervisor not required to be immediately available on site, but there is provision for advice or to attend if required)
Level 5	Entrusted to act independently

<sup>1</sup> [Entrustability Scales: Outlining their usefulness for competency-based clinical assessment](#)



### **Global judgement to be used for each CiP**

#### Trainee self-assessment

FOR EACH CiP

Statement of what level of supervision is required.

Link to evidence on the ePortfolio.

#### STPS Educational Supervisors assessment

I agree with the trainee's self-assessment and have added my comments to each CiP.

I do not agree with the trainee's self-assessment for the following reasons:

#### STPS Educational Supervisors global judgement of the CiPs

I consider that the trainee's performance overall meets the clinical entrustability scale of 1-5 (specify) and that the trainee is:

- Not meeting expectations for the subspecialty training in RM; may not meet the requirements for critical progression point
- Meeting expectations for the subspecialty training in RM; expected to progress to next stage of training

The generic skills for subspecialty training, i.e. communication, team working, leadership, good medical practice and maintaining trust, teaching, research, governance and risk management, administrative skills and service management, information use and management will be evidenced and assessed through the generic CiPs in the Curriculum 2024. The evidence will need to be at an appropriate level for a subspecialist. The expectations for the RM curriculum as a whole for generic CiPs will be specified in the RM curriculum guidance. Those subspecialty trainees who are undertaking subspecialty training post-CCT will be signposted to the relevant generic CiPs and advised in the guidance that they will need to include evidence within their ePortfolio for these.



## 6.5 Assessment of progression

Subspecialty trainees will be formally assessed on an annual basis prior to their ARCP by a subspecialty assessment panel as to whether the trainee is making sufficient progress to complete the RM curriculum and acquired the procedural competence required. The recommended outcome of the SST assessment will feed into the Educational Supervisor Report (ESR). The ESR will make a recommendation to the ARCP panel on progress to complete the RM curriculum. The ARCP panel will make the final decision on whether the trainee can be signed-off and progress to the next year.

## 6.6 Evidence of progress

Many trainees work less than full time, and other trainees spend only a proportion of their working week in clinical subspecialty training if this is combined with an academic lecturer post. Subspecialty training programmes are constructed in different ways, with some adopting a modular approach and others exposing the trainee to all disciplines throughout the programme. It is therefore not possible to write a matrix that takes accounts of all these variations in the pattern of subspecialty training. At each subspecialty assessment, the panel will judge the evidence provided against the period of whole time equivalent CLINICAL training time and not the number of calendar months since training began or since the last assessment. It is expected that the subspecialty educational supervisors, through their reports, will make it clear to the assessment panel how much WTE clinical training is being assessed.

Common sense and professional judgement will be required when assessing overall progress across the subspecialty curriculum at each yearly assessment, however there will be general guidance for panels to follow.

The following methods of assessment will provide evidence of progress. Evidence is a crucial concept in the new curriculum, and as well as the methods listed below, can include other sources, such as the Personal Development Plan or quality improvement project or procedure log. The trainee will collect evidence to support their self-assessment, and the STPS will use it to reach a global judgement. These methods are described briefly below. More information and guidance for trainees and assessors are available in the ePortfolio and on the RCOG website ([www.rcog.org.uk](http://www.rcog.org.uk)).

### Summative assessment

- Objective Structured Assessment of Technical Skills (OSATS) - summative



### **Formative assessment**

- Case-Based Discussions (CbD)
- Mini-Clinical Evaluation Exercise (mini-CEX)
- OSATS - formative
- Team Observation (TO1), TO2 and Self-observation (SO)
- Non-Technical Skills for Surgeons (NOTSS)

### **Supervisor report**

- Educational Supervisor Report (ESR)
- Subspecialty Educational Supervisor Report (SST ESR)

### **Objective Structured Assessment of Technical Skills (OSATS)**

There are a number of fundamental procedures in each ATSM that require an objective assessment tool to aid the review process. OSATS are validated assessment tools that assess technical competency in a particular technique. OSATS will be completed throughout training until the trainee is competent to practise independently. OSATS can be undertaken as many times as the trainee and their supervisor feel is necessary (formative). A trainee can be regarded as competent to perform a procedure independently after they have completed 3 summative OSATs by more than one appropriate assessor.

### **Case-based Discussion (CbD)**

The CbD assesses the performance of a trainee in their management of a patient to provide an indication of competence in areas such as clinical reasoning, decision-making and application of medical knowledge in relation to patient care. It also serves as a method to document conversations about, and presentations of, cases by trainees. The CbD should focus on a written record (such as written case notes, out-patient letter, discharge summary). A typical encounter might be when presenting newly referred patients in the outpatient department.

### **Mini-Clinical Evaluation Exercise (mini-CEX)**

This tool evaluates a clinical encounter with a patient to provide an indication of competence in skills essential for good clinical care such as history taking, examination and clinical reasoning. The trainee receives immediate feedback to aid learning. The mini-CEX



can be used at any time and in any setting when there is a trainee and patient interaction and an assessor is available.

### **Multi-source feedback**

The TO1 form is a multi-source feedback tool based on the principles of [good medical practice](#), as defined by the GMC. TO1 forms are used to obtain feedback from a range of healthcare professionals and forms part of a trainee's assessment. The TO1 is a snapshot feedback tool to be used by individuals at a fixed point in time. Individual team members completing a TO1 form should do so based on their experience of working with the trainee. The trainee will also be able to self-assess using a modified TO1 form (SO) that has been piloted along with the modified WBA tools. The TO1 forms are summarised in a TO2 form that informs the ARCP.

### **Non-Technical Skills for Surgeons (NOTSS)**

The NOTSS system provides a framework and common terminology for rating and giving feedback on non-technical skills. Used in conjunction with medical knowledge and clinical skills, NOTSS is a tool to observe and rate behaviour in theatre in a structured manner. This enables clear and transparent assessment of training needs. NOTSS describes the main observable non-technical skills associated with good surgical practice, under the following headings:

- Situation awareness
- Decision-making
- Communication and teamwork
- Leadership.

The RCOG has piloted the NOTSS system for use on the labour ward and in the gynaecological operating room. We have removed the rating system to focus on providing constructive and timely feedback. The system includes only those behaviours that are directly observable or that can be inferred through communication. NOTSS covers a wide range of non-technical skills in as few categories as possible. For subspecialty training the same principles apply as in the Curriculum 2024 but we expect the trainee to do these for sub-speciality related learning events.

### **Training evaluation form (TEF)**

Trainees are required to complete a TEF on annual basis. The data from the TEF enables a proactive approach to the monitoring of quality of training by triangulating with other available data e.g. GMC National Training Survey. This data is shared with deaneries and



published on the RCOG website. In recognition of the importance that the RCOG places on trainee feedback, completion of the TEF is a requirement in the training matrix of progression.

### **SST Educational Supervisor report (ESR)**

The STPS will annually record a longitudinal, global report of a trainee's progress over the full range of RM CiPs based on a range of assessments and observations in practice or reflection on behaviour by those who have appropriate expertise and experience. The SST ESR can incorporate commentary or reports from observations, such as from supervisors, or formative assessments demonstrating progress over time. The STPS will offer a global judgement as to whether the trainee should progress to the next year of training.

### **Annual subspecialty assessment**

Subspecialty trainees in RM are reviewed annually and the trainee's progress towards the required subspecialty CiPs will be formally assessed. The SST assessment follows the same principles as the ARCP, and needs to be undertaken by all subspecialists in training.

The subspecialty assessment is undertaken prior to the trainee's ARCP as the outcome needs to feed into the ARCP process. The completed SST ESR is considered by a panel of subspecialty assessors, and an outcome recommended as to whether the trainee is meeting their subspecialty requirements. This decision is recorded in an outcome form and in the ESR. Decisions on progression fundamentally rely on the professional judgement of the STPS based on the global judgement produced for each CiP and the outcome of the subspecialty assessment. As a precursor to the subspecialty assessment, the RCOG strongly recommends that trainees have an informal ePortfolio review with their STPS/SST Educational Supervisor. This provides opportunities for early detection of trainees who are failing to gather the required evidence for the subspecialty assessment.

## **6.7 Annual Review of Progression (ARCP)**

The decisions made at critical progression points and upon completion of training should be clear and defensible. They must be fair and robust and make use of evidence from a range of assessments, potentially including exams and observations in practice or reflection on behaviour by those who have appropriate expertise or experience. They can also incorporate commentary or reports from longitudinal observations, such as from supervisors, or formative assessments demonstrating progress over time.



Decisions on progression fundamentally rely on the professional judgement of the STPS based on the global judgement produced for each CiP and the outcome of the annual subspecialty assessment.

Periodic (at least annual) reviews should be used to collate and systematically examine evidence about a doctor's performance and progress in a holistic way, and make decisions about their progression in training. The ARCP process supports the collation and integration of evidence to make decisions about the achievement of expected outcomes. The ARCP process is described in the Gold Guide. Deaneries are responsible for organising and conducting ARCPs. The evidence to be reviewed by ARCP panels should be collected in the trainee's ePortfolio. As a precursor to ARCPs, the RCOG strongly recommends that trainees have an informal ePortfolio review either with their Educational Supervisor (STPS/SST ES) or arranged by the local school of O&G. These provide opportunities for early detection of trainees who are failing to gather the required evidence for ARCP.

## 7 Supervision and feedback

This section of the curriculum describes how trainees will be supervised, and receive feedback on performance. For further information please refer to the AoMRC guidance on Improving feedback and reflection to improve learning<sup>2</sup>.

Access to high-quality, supportive and constructive feedback is essential for the professional development of the trainee. Trainee reflection is an important part of the feedback process and exploration of that reflection with the trainer should ideally be a two-way dialogue. Effective feedback is known to enhance learning and combining self-reflection with feedback promotes deeper learning.

Trainers should be supported to deliver valuable and high quality feedback, including through face-to-face training. Trainees would also benefit from such training as they frequently act as assessors to junior doctors. All involved could also be shown how best to carry out and record reflection.

### 7.1 Subspecialty training

The Subspecialty Training Programme Supervisor (STPS) is responsible for the day-to-day, hands-on training of the subspecialty trainee and in the organisation and delivery of all aspects of the subspecialty curriculum at trust level. This will also include workplace-based assessments and providing feedback to the trainee.

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<sup>2</sup> [Improving feedback and reflection to improve learning. A practical guide for trainees and trainers](#)



Any newly appointed STPS must be subspecialty accredited. The STPS should obtain feedback from other subspecialty-trained colleagues for the annual assessment of a trainee's progress. Unless there are exceptional local circumstances, each subspecialty training centre (irrespective of the number of programmes offered) should have only one STPS per subspecialty, which should not be a job share. The STPS responsibilities include:

- Take responsibility for maximising the educational opportunities provided in the accredited subspecialty training centre to meet the training needs of the subspecialty trainee.
- Ensure all components of the curriculum are included in the subspecialty training programme.
- Ensure that the trainee's mandatory logbook is accurate and up to date. The STPS should check that the trainee has sufficient evidence to allow the assessment panel to judge the trainee's progress at the annual assessment.
- Take responsibility for the completion and submission of the application for recognition as a subspecialty training centre.
- Take responsibility for ensuring that the subspecialty training programme is advertised nationally and appointed in open competition.
- Take responsibility for completion and submission of trainee registration documentation (within 6 months of the trainee starting subspecialty training).

## 7.2 Generic supervision

All elements of work in training posts must be supervised, with the level of supervision dependent on the experience of the trainee, their clinical exposure and case mix undertaken. Outpatient and referral supervision must routinely include the opportunity to personally discuss all cases if required. As training progresses, the trainee should have the opportunity for increased autonomy, consistent with safe and effective care for the patient.

Organisations must make sure that each doctor in training has access to a named Clinical Supervisor and the STPS. Depending on local arrangements, these roles may be combined into a single role of Educational Supervisor/STPS. However, it is preferred that a trainee has a single named Educational Supervisor for (at least) a full training year, in which case the Clinical Supervisor is likely to be a different consultant during some placements.

The role and responsibilities of supervisors have been defined by the GMC in their standards for medical education and training<sup>3</sup>.

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<sup>3</sup> [Promoting excellence: standards for medical education and training](#)



## Clinical Supervisor

The Clinical Supervisor oversees the doctor's clinical work throughout a placement. They lead on reviewing the doctor's clinical or medical practice throughout a placement and contribute to the STPS report on whether the doctor should progress to the next stage of their training.

The STPS, when meeting with the trainee, should discuss issues of clinical governance, risk management and any report of any untoward clinical incidents involving the trainee. The STPS should be part of the clinical specialty team. If the clinical directorate (clinical director) has any concerns about the performance of the trainee, or there have been issues of doctor or patient safety, these would be discussed with the STPS. These processes, which are integral to trainee development, must not detract from the statutory duty of the trust to deliver effective clinical governance through their management systems.

Educational and clinical supervisors need to be formally recognised by the GMC to carry out their roles<sup>4</sup>. All Educational Supervisors are recognised by RCOG as Tier 2 educators in the Faculty Development Framework. It is essential that training in assessment is provided for trainers and trainees in order to ensure that there is complete understanding of the assessment system, assessment methods, their purposes and use. Training will ensure a shared understanding and a consistency in the use of the workplace-based assessments and the application of standards.

Opportunities for feedback to trainees about their performance will arise through the use of the workplace-based assessments, regular appraisal meetings with supervisors, other meetings and discussions with supervisors and colleagues, and feedback from the subspecialty assessment and ARCP.

## Trainees

Trainees should make the safety of patients their first priority. Furthermore, trainees should not be practising in clinical scenarios that are beyond their experiences and competences without supervision.

Trainees should actively devise individual learning goals in discussion with their trainers and should subsequently identify the appropriate opportunities to achieve said learning goals. Trainees would need to plan their workplace-based assessments accordingly so that they collectively provide a picture of their development during a training period. Trainees should actively seek guidance from their trainers to identify the appropriate learning opportunities and plan the appropriate frequencies and types of assessment according to their individual learning needs. It is the responsibility of trainees to seek feedback. Trainees should self-

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<sup>4</sup> [Recognition and approval of trainers](#)



reflect and self-evaluate regularly with the aid of feedback. Furthermore, trainees should formulate action plans with further learning goals in discussion with their trainers.

## 7.3 Appraisal

A formal process of appraisals and reviews underpins training. This process ensures adequate supervision during training provides continuity between posts and different supervisors and is one of the main ways of providing feedback to trainees. All appraisals should be recorded in the ePortfolio.

### Induction appraisal

The trainee and STPS/SST Educational Supervisor should have an appraisal meeting at the beginning of the SST post to review the trainee's progress so far, agree learning objectives for the SST post ahead and identify the learning opportunities presented by the SST post. Reviewing progress through the curriculum will help trainees to compile an effective Personal Development Plan (PDP) of objectives for the SST post. This PDP should be agreed during the Induction Appraisal. The trainee and supervisor should also both sign the educational agreement in the ePortfolio at this time, recording their commitment to the training process.

### Monthly meetings

Monthly meetings between the trainee and STPS/Educational Supervisor are not mandatory but are encouraged. These are particularly important if either the trainee or educational or clinical supervisor has training concerns, or the trainee has been set specific targeted training objectives at their ARCP. At these meeting trainees should review their PDP with their supervisor using evidence from the ePortfolio. Workplace-based assessments and progress through the curriculum can be reviewed to ensure trainees are progressing satisfactorily, and attendance at educational events should also be reviewed.

### End of attachment appraisal

Trainees should review the PDP and curriculum progress with their STPS/Educational Supervisor using evidence from the ePortfolio. Specific concerns may be highlighted from this appraisal. The end of attachment appraisal form should record the areas where further work is required to overcome any shortcomings. Further evidence of competence in certain areas may be needed, such as planned workplace-based assessments, and this should be



recorded. If there are significant concerns following the end of attachment appraisal, then the Training Programme Director should be informed.

## 8 Quality management

The organisation of training programmes for O&G is the responsibility of NHSE local teams and the devolved nations' deaneries. The NHSE offices/deaneries will oversee programmes for postgraduate medical training in their regions. A Training Programme Director will be responsible for coordinating the O&G training programme in each trust. The Schools of O&G in England, Wales and Northern Ireland and NHS Education Scotland will undertake the following roles:

- Oversee recruitment and induction of trainees from Foundation to ST1 O&G.
- Allocate trainees into particular rotations for ST1 O&G appropriate to their training needs.
- Oversee the quality of training posts provided locally.
- Interface with other specialty training faculties (General Practice, Anaesthesia etc.) and other healthcare professionals (midwives, specialist nurses).
- Ensure adequate provision of appropriate educational events.
- Ensure curricula implementation across training programmes.
- Oversee the workplace-based assessment process within programmes.
- Coordinate the ARCP process for trainees.
- Provide adequate and appropriate career advice.
- Provide systems to identify and assist doctors with training difficulties.
- Provide flexible training.
- Recognise the potential of specific trainees to progress into an academic career.

Educational programmes to train Educational Supervisors and assessors in workplace-based assessment may be delivered by NHSE offices/deaneries or by RCOG or both.

### 8.1 Monitoring RM subspecialty

The development, implementation, monitoring and review of the RM subspecialty are the responsibility of the RCOG via the SEAC and the Subspecialty Committee. The SEAC is formally constituted with representatives from each health region in England, from the devolved nations and with trainee and lay representation. It is the responsibility of the RCOG to ensure that curriculum developments are communicated to Heads of Schools, regional specialty training committees, Training Programme Directors, STPSs and SITM Directors.

The RCOG serves its role in quality management by monitoring and driving improvement in the standard of all O&G training. SEAC includes all Heads of UK O&G schools as members



and is actively involved in assisting and supporting deaneries to manage and improve the quality of education within each of their approved training locations. It is tasked with activities central to assuring the quality of medical education such as writing the curriculum and assessment systems, reviewing applications for new posts and programmes, provision of external advisors to deaneries and recommending trainees eligible for the CCT or Portfolio Pathway.

The RCOG uses data from five quality datasets across the O&G specialty and four subspecialties to provide meaningful quality management. The datasets include the GMC National Training Survey (NTS) data, Training Evaluation Form (TEF) data, ARCP outcomes, MRCOG exam outcomes and External Advisor reports. These datasets form the basis of the annual report to the GMC on the quality of O&G training nationally.

Quality criteria have been developed to improve the quality of training environments and ultimately the patient safety and experience. These are monitored and reviewed by RCOG to improve the provision of training and ensure enhanced educational experiences.

## 9 Intended use of the RM subspecialty curriculum by trainers and trainees

The RM subspecialty curriculum and SST assessment decision aid will be available from the RCOG via the website [www.rcog.org.uk](http://www.rcog.org.uk) and ePortfolio.

Clinical supervisors and STPS should use the curriculum and decision aid as the basis of their discussion with trainees, particularly as part of preparing for the annual subspecialty assessment and the ARCP process. Both trainers and trainees are expected to have a good knowledge of the curriculum and should use it as a guide for their training programme. Each trainee will engage with the curriculum by maintaining an ePortfolio. The trainee will use the curriculum to develop learning objectives and reflect on learning experiences.

### 9.1 Recording progress in the ePortfolio

The ePortfolio allows evidence to be built up to inform decisions on a trainee's progress and provides tools to support their education and development. The RCOG is investing in developments and changes on the existing ePortfolio platform which will enable the Curriculum 2024 being delivered. The ePortfolio platform is designed to support the process of learning and recording of evidence with improved functionality. It will also include a procedures log.



The trainee's main responsibilities are to ensure the ePortfolio is kept up-to-date, arrange assessments and ensure they are recorded, prepare drafts of appraisal forms, maintain their PDP, record their reflections on learning and record their progress through the curriculum.

The supervisor's main responsibilities are to use ePortfolio evidence such as outcomes of assessments, reflections and PDPs to inform appraisal meetings. They are also expected to update the trainee's record of progress through the curriculum, and write end-of-attachment appraisals and supervisor's reports.

NHSE offices, Training Programme Directors, College Tutors and ARCP panels will use the ePortfolio to monitor the progress of trainees for whom they are responsible.

The RCOG will use summarised, anonymous ePortfolio data to support its work in quality assurance.

## 10 Equality and diversity

The RCOG will comply, and ensure compliance, with the requirements of equality and diversity legislation set out in the Equality Act 2010.

The RCOG believes that equality of opportunity is fundamental to the many and varied ways in which individuals become involved with the Colleges, either as members of staff and Officers; as advisers from the medical profession; as members of the Colleges' professional bodies or as doctors in training and examination candidates.

RCOG has a number of initiatives and working groups to keep exploring and addressing the areas of equality, diversity and inclusion. In partnership with the GMC, RCOG analyses and monitors a range of datasets and has plans to report on this new initiative.

NHSE local offices/deaneries will quality assure each training programme to ensure that it complies with the equality and diversity standards in postgraduate medical training as set by GMC. They should provide access to a professional support unit or equivalent for trainees requiring additional support.

Compliance with anti-discriminatory practice will be assured through:

- Monitoring of recruitment processes.
- Ensuring all College representatives and Programme Directors have attended appropriate training sessions before appointment or within 12 months of taking up post.
- NHSE local offices/deaneries ensuring that Educational Supervisors have had equality and diversity training (e.g. an e-learning module) every 3 years.



- NHSE local offices/deaneries ensuring that any specialist participating in trainee interview/appointments committees or processes has had equality and diversity training (at least as an e-module) every 3 years.
- Ensuring trainees have an appropriate, confidential and supportive route to report examples of inappropriate behaviour of a discriminatory nature. NHSE local offices/deaneries and Programme Directors must ensure that on appointment trainees are made aware of the route in which inappropriate or discriminatory behaviour can be reported and supplied with contact names and numbers. NHSE local offices/deaneries must also ensure contingency mechanisms are in place if trainees feel unhappy with the response or uncomfortable with the contact individual.
- Providing resources to trainees needing support (for example, through the provision of a professional support unit or equivalent).
- Monitoring of College Examinations.
- Ensuring all assessments discriminate on objective and appropriate criteria and do not unfairly advantage or disadvantage a trainee with any of the Equality Act 2010 protected characteristics. All efforts shall be made to ensure the participation of people with a disability in training through reasonable adjustments and recognising that not all disabilities are visible.

## 10.1 RCOG's current work on race equality in the specialty

We have committed to an action plan with the GMC demonstrating how we are targeting the attainment gap and working towards achieving fair training cultures. This work is overseen by both the RCOG SEAC and the Exams and Assessment Committee as well as the College's honorary Differential Attainment Advisor and Educational Supervision Champion. These issues have been explored in past RCOG World Congresses and other quality improvement and development conferences.

Race Equality Taskforce members have published on differential attainment in [Obstetrics, Gynaecology and Reproductive Medicine](#) and [The Obstetrician and Gynaecologist](#), and contributed to the development of BMA guidance on induction for [International Medical Graduates recruited to the NHS](#).

We have also worked hard to listen to lived experiences of these issues, surveying our membership and holding focus groups for over 400 trainees, SAS and LE doctors, consultants, and medical directors working in O&G in deaneries across the UK. [Our annual Training Evaluation Form \(TEF\)](#) now includes questions on racism and cultural bias. The information gained from these will inform future work.

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



Royal College of  
Obstetricians &  
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