

Subspecialty Training Reproductive Medicine

Definitive Document 2019

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Table of Contents

Contents

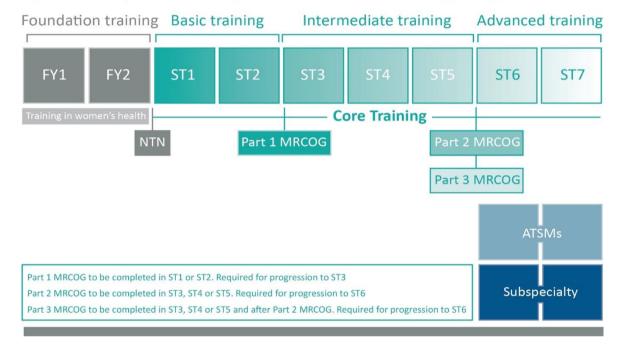
1		Introduction	3
2		Purpose of the Reproductive Medicine subspecialty training programme	3
	2.1	Background	3
	2.2	General description of the revised RM curriculum	4
	2.3	Interdependencies between the RM subspecialty curriculum and other training	
	prog	grammes, professions or areas of practice	6
	2.4	Flexibility and the transferability of learning	7
3		The organisation and content of the RM curriculum	8
	3.1	Curriculum framework features	9
	3.2	The Reproductive Medicine subspecialty curriculum	10
4		The research component of subspecialty training	38
	4.1	Research exemption	39
	4.2	Advanced Professional Module Clinical Research	40
	4.3	Non-completion of research component	40
5		Learning and Teaching	41
	5.1	The core training programme	41
	5.2	The general training environment	41
	5.3	The subspecialty training environment	42
6		Programme of Assessment	44
	6.1	Purpose of assessment	
	6.2	Programme of assessment	44
	6.3	Assessment of CiPs	45
	6.4	The global judgement process	45
	6.5	Assessment of progression	48
	6.6		
	6.7	Annual Review of Progression (ARCP)	52
7		Supervision and feedback	54
	7.1 9	Subspecialty training	55
	7.2	Generic supervision	55
	7.3	Appraisal	57
8		Quality Management	
9		Intended use of the RM subspecialty curricula by trainers and trainees	59
	9.1	Recording progress in the ePortfolio	59
10)	Equality and diversity	59

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 core curriculum requirements for CCT. The Core Curriculum covers ST1-7 as detailed in the Core Curriculum Definitive Document.

O&G is a run-through training programme lasting seven years. The fundamental training structure and waypoints remain the same in the new curriculum. In the final two years of training, trainee doctors have to complete two ATSMs OR one subspecialty programme to be eligible for CCT.

Specialty training and education programme



2 Purpose of the Reproductive Medicine subspecialty training programme

2.1 Background

Over recent years the RCOG has published three important strategic reports: <u>Becoming Tomorrow's Specialist</u>, <u>Tomorrow's Specialist</u> and <u>High Quality Women's Healthcare</u>.

Although there was an extensive review of the O&G core curriculum during 2012 and 2013, our research made it clear that the emphasis and design of the revised curriculum did not adequately address some of the key professional elements of being a consultant, nor was it flexible enough to be easily modified to fit future working practice. A new more adaptable curriculum was therefore required that will produce specialists who have the skills, knowledge and attributes needed in the 21st century.

The RCOG Curriculum Review Group was set up to take forward the RCOG's *Becoming Tomorrow's Specialist* recommendations relating to pre-CCT training. Its 2015 working party report identified the deficiencies in the current core curriculum with its emphasis on technical skills, and the lack of focus on non-technical and professional skills required by a modern consultant. Most importantly, the Review Group developed a definition of the required characteristics of an O&G consultant for the first time – and this has provided the basis for the work since carried out. The definition is as follows:

A highly skilled Obstetrician and Gynaecologist with the appropriate knowledge and attitudes to lead and deliver safe, high quality care taking account of individual needs and advocating for women's healthcare. This will involve a questioning approach to research and quality improvement. Working well in multiprofessional teams is essential for safe, effective patient care; Obstetricians and Gynaecologists must be good communicators, supportive of staff and happy to share their expertise and experience, as well as being open to the views of others. On completing training, the individual will be prepared for lifelong learning, which will allow them to be adaptable and flexible for a modern NHS.

At the same time, the publication of the GMC's Generic Professional Capabilities (GPCs) and the requirement to move to outcomes-based curricula combined with the development of a new ePortfolio necessitated a complete review of all the O&G advanced curricula to ensure that they too reflect the aspirations of the Review Group and the definition of the O&G consultant.

2.2 General description of the revised RM curriculum

The RCOG is committed to developing specialists with generic skills and our new curricula framework aims to do just that. Key to this is to define what a modern consultant in the NHS needs to be and to tailor the output of specialty training towards this. The RCOG has also supported the Shape of Training agenda, ensuring the O&G training programme produces generalists with skills to manage emergency care while working collaboratively with other specialties to deliver individualised patient care. All O&G curricula, whether core or advanced, acknowledge that the specialist will manage female, transgender and non-binary individuals of all age groups and ethnicities, including young people, and vulnerable individuals.

In the final 2 years of the training programme, trainees will be expected to develop professional interests which correspond with their skills and interests and future needs of the health service. They can either choose to do two Advanced Training Skills Modules (ATSMs) or one of four subspecialties. The subspecialties are Urogynaecology (RM), Gynaecological Oncology (RM), Maternal and Fetal Medicine (MFM) and Reproductive Medicine (RM).

The purpose of the RM subspecialty curriculum is to produce doctors with the generic professional and subspecialty-specific capabilities needed to advise and treat people presenting with a wide range of reproductive conditions in tertiary referral centres. RM subspecialists should have the skills to organise and supervise services at a local and regional level, contribute academic reproductive medicine, 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 frameworkfor 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 for the trainee to take responsibility for their own learning, as they would as a consultant. The RM curriculum and logbook were last revised in 2015. The rationale for the changes to the pre-2015 curriculum and logbook for subspecialty training in RM was two-fold: firstly, changes were needed to reflect developments in knowledge and practice in the subspecialty since the curriculum was introduced in 2007; and secondly inconsistencies between the curriculum and logbook needed to be corrected. The changes reflected developments in practice and terminology as well as a need to avoid overlap with the core curriculum. There was also a general updating of terminology.

RM subspecialty training consists of two years of clinical training plus 12 months of research training. Trainees may opt to be research exempt from the research training if they have already completed the Advanced Professional Module (APM) Clinical Research, or if they have a higher degree (MD(Res) or PhD) relevant to RM, or two or more first author RM subspecialty specific publications in citable, refereed MEDLINE journals. A trainee who is not research exempt would be expected to produce a minimum of two first author RM subspecialty specific publications in citable, refereed MEDLINE journals, or complete the APM Clinical Research to complete the research component of subspecialty training. The research element varies from a full year of dedicated research, to research sessions or blocks of research, depending on the organisation of the GMC/RCOG approved subspecialty programme. Subspecialty training can be commenced at ST6 at the earliest, and after successful competitive appointment to a subspecialty training post. Entry to subspecialty training is subject to the trainee having completed all clinical CiPs that lie outside the chosen subspecialty. Normally the trainee should have completed all core clinical O&G CiPs prior to starting but this may not be practically possible.

A trainee is eligible to register for subspecialty training on satisfactory completion of the Annual Review of Competence Progression (ARCP) (i.e. outcome 1) at the end of ST5 which includes attainment of the MRCOG and following successful competitive interview. To be awarded CCT all trainees must complete the generic and specialty specific CiPs. For the CCT to recognise RM subspecialty accreditation they must also complete all of the RM subspecialty specific CiPs.

No change is being proposed to accessing subspecialty training in RM.

The revised RM curriculum consists of Capabilities in Practice (CiPs) (high-level statements outlining the expectations of a doctor at the end of training). These all fall into the Clinical Expert Professional Identity (PI). The PIs, which are a fundamental concept of the core curriculum, are divided into generic (Developing the doctor) and specialty-specific (Developing the obstetrician & gynaecologist). The new CiPs require judgment 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.

Table 1 - Professional Identity and Capabilities in Practice for RM

DEVEL	OPING THE OBSTETRICIAN & GYNAECOLOGIST: SST-RM
PROFE	SSIONAL IDENTITY: CLINICAL EXPERT
CiP1	The doctor is competent in recognising, assessing and managing endocrinological disorders.
CiP2	The doctor is competent in providing specialist care for women with endometriosis.
CiP3	The doctor has the surgical skills appropriate for a subspecialist in reproductive surgery
CiP4	The doctor is competent in recognising, assessing and managing fertility problems and assisted conception.
CiP5	The doctor is competent in recognising, assessing and managing complex early pregnancy problems.

In parallel with the introduction of the core curriculum we have reviewed our 'assessment at work' methods. We have piloted and collated evidence for modified versions of our existing workplace-based assessment tools, the modification being the addition of a reflective element for each tool. The new tools reflect both the new GPCs mandated by the GMC as well as our own aspirations for developing a lifelong reflective practitioner. These new tools will be used by all trainees.

Our programme of assessment (PoA) 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 PoA will be based on robust and fair assessment principles and processes.

2.3 Interdependencies between the RM subspecialty curriculum and other training programmes, professions or areas of practice

The overall 7-year 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 core specialty and generic CiPs in the seven year programme will provide a more integrated approach to service and care, to fully meet the needs of the people using our clinical services.

During its development the core O&G curriculum underwent extensive consultation with stakeholders including trainees, trainers and Heads of Schools, as well as external

stakeholders including other related specialties (Royal College of General Practitioners, Faculty of Sexual and Reproductive Health and Royal College of Midwives), and patient groups to gain their insight into what they require from a high quality O&G consultant. Full details are given in the core O&G curriculum submission.

The British Fertility Society (BFS) has been consulted and contributed to the the revision of the RM subspecialty curriculum into the new outcomes-based format. The content of this curriculum is fundamentally unchanged from the current version in terms of knowledge criteria and clinical content. Where appropriate, generic professional skills have been removed as these are now covered in the core curriculum.

2.4 Flexibility and the transferability of learning

The creation of generic CiPs within the core curriculum design allows ease of transfer between specialties, as these have been mapped to the GMC's GPCs. In addition, all the clinical CiPs, whether in core, ATSMs or subspecialty curricula, have been mapped to the 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.

As subspecialty trainees are also still following the core O&G curriculum at the same time as their subspecialty training, they 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. Trainees attaining CCT will be skilled in managing the labour ward independently and managing the acute gynaecological on call service, as well as caring for people with gynaecological cancers. 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 CCT regardless of their ATSMs 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.

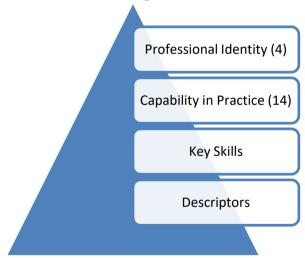
These core areas ensure that doctors in training and beyond CCT can provide safe care whilst working in a range of challenging and diverse work environments, balancing acute and non-emergency service provision. They also encourage trainees to experience a wide range of hospital and other healthcare environments. 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

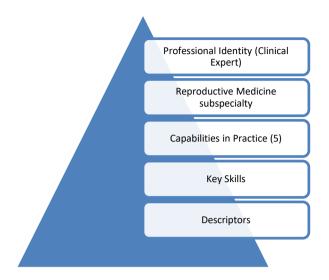
The practice of O&G requires the generic and specialty knowledge, skills and attitudes to advise and treat people presenting with a wide range of gynaecological and obstetric conditions and symptoms. It involves particular emphasis on woman-centred care, diagnostic reasoning, managing uncertainty, dealing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

Figure 1 – Core Curriculum design structure



All the CiPs in the RM curriculum are in the Clinical Expert Professional Identity. This is because the trainee is also completing the Core Curriculum which 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

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 which should be demonstrated by O&G doctors in the RM subspecialty. Descriptors may 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, their risks and benefits, with women and their families.

Each CiP gives guidance for the kinds 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. 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, 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 <u>Good Medical Practice</u> 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 6.7 outlines more detail on the mapping.

Assessment of the CiPs will be underpinned by the descriptors and judged against the requirements articulated in the RM Curriculum Guide. The Subpecialty 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.

In order 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 Core Curriculum.

3.2 The Reproductive Medicine subspecialty curriculum

What follows is the curriculum framework, which articulates the detail for each of the Reproductive Medicine CiPs, including the mapping to the GPCs.

SST - REPRODUCTIVE MEDICINE (RM)

SECTION 1: CAPABILITIES IN PRACTICE

CiP 1: The doctor is competent in recognising, assessing and managing endocrinological disorders.		
Key Skills Descriptors		
Is able to evaluate various endocrine systems affecting fertility	 Takes a focused history, recording menarche, cycle regularity, hirsutism, acne, alopecia, BMI, galactorrhoea, secondary sex characteristics, previous chemotherapy/pelvic radiotherapy. Performs an appropriate examination with reference to secondary sex characteristics. 	

	 Arranges and interprets appropriate investigations including a baseline hormone profile to include FSH, LH, oestradiol, PRL, TFTs, androgens (testosterone, SHBG, FAI). Organises and interprets appropriate investigations of impaired glucose tolerance and hypercholesterolaemia. Is able to interpret dynamic endocrinological testing. Communicates the results clearly to patients and discusses the possible cause and its impact on fertility. Formulates an appropriate individualised management plan taking into account patient preferences and the urgency required.
Is able to diagnose and manage polycystic ovary syndrome (PCOS) and disorders of androgen secretion	 Takes a focused history, recording menarche, cycle regularity, acne, hirsutism, alopecia, BMI, galactorrhoea, secondary sex characteristics. Performs an appropriate examination. Arranges and interprets appropriate investigations including a baseline hormone profile to include FSH, LH, oestradiol, PRL, TFTs, androgens (testosterone, SHBG, FAI, DHEAS, Androstenedione, 17 α hydroxyprogesterone). Organises and interprets appropriate investigations of impaired glucose tolerance and hypercholesterolaemia. Is able to interpret dynamic endocrinological testing. Uses ultrasound as diagnostic tool in the diagnosis of PCOS. Communicates the results clearly to patients and discusses the possible cause and its impact on fertility. 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 overcoming lifestyle issues such as obesity. Formulates an appropriate individualised management plan taking into account patient preferences. Is able to discuss and manage obesity including counselling on efficacy of pharmacological and non-pharmacological treatments. Liaises effectively with colleagues in other disciplines, clinical and non-clinical. Offers appropriate support and provides information on local
Is able to manage hyperandrogenism (hirsutism/acne/alopecia)	 and national support groups Formulates an appropriate individualised management plan taking into account patient preferences. Demonstrates understanding of the psychological impact of hirsutism. Is able to initiate medical management of hyperandrogenism Discusses and manages hyperandrogenism (hirsutism, acne and alopecia) including counselling on efficacy of pharmacological and non-pharmacological treatments.

Liaises effectively with colleagues in other disciplines, clinical and non-clinical (endocrinology, dermatology, plastics). Is able to diagnose and Takes a focused history, recording menarche, cycle regularity, manage hypothalamichirsutism, acne, alopecia, BMI, galactorrhoea, secondary sex pituitary disorders: characteristics, previous chemotherapy/pelvic radiotherapy. Hypogonadotrophic Performs an appropriate examination with reference to Hypogonadism secondary sex characteristics. anorexia Arranges and interprets appropriate investigations: baseline nervosa/exercise and hormone profile to include FSH, LH, oestradiol, PRL, TFTs, lifestyle-related androgens (testosterone, SHBG, FAI). disorders Formulates a differential diagnosis. Is able to organise and review the results of CT/MRI scans, pelvic/abdominal ultrasound. Is able to screen for associated conditions, e.g. autoimmune factors, genetic causes, diabetes mellitus, visual fields, late onset adrenal hyperplasia. Discusses diagnosis in a sensitive manner, including impact on future fertility, fertility options and treatment strategies. Escalates care to senior colleagues and other specialities when appropriate. Appreciates the association of other medical conditions with anovulation and liaises with appropriate specialists for further management. Is able to explain complications and adverse effects of treatment. Is able to diagnose and Takes a focused history, recording menarche, cycle regularity, manage primary and hirsutism, acne, alopecia, BMI, galactorrhoea, secondary sex secondary amenorrhoea characteristics, previous chemotherapy/pelvic radiotherapy. Performs an appropriate examination with reference to secondary sex characteristics. Arranges and interprets appropriate investigations including a baseline hormone profile to include FSH, LH, oestradiol, PRL, TFTs, androgens (testosterone, SHBG, FAI, DHEAS, Androstenedione, 17 α hydroxyprogesterone). Is able to differentiate between primary and secondary amenorrhoea. Interprets test results used to evaluate amenorrhoea. For paediatrics and adolescents, is able to ascertain patient's and parents'/carer's/guardian's understanding of the condition by listening and requesting them to articulate their understanding. Sensitively addresses adolescents concerns about sexuality and/or sexual functioning. Discusses treatment options. Counsels on the impact of the diagnosis on long-term fertility. Informs patients about support networks.

Is able to diagnose and Takes a focused history, recording menarche, cycle regularity, manage adrenal dysfunction: hirsutism, BMI, galactorrhoea, secondary sex characteristics, Cushing syndrome previous chemotherapy/pelvic radiotherapy. Addison's disease Performs an appropriate examination with reference to secondary sex characteristics. Congenital adrenal hyperplasia Arranges and interprets appropriate investigations including a baseline hormone profile, PRL, TFTs, androgens (testosterone, SHBG, FAI DHEAS, Androstenedione, 17 αHPA). Formulates a differential diagnosis. Is able to organise and review the results of CT/MRI scans, pelvic/abdominal ultrasound. Formulates management plan related to endocrinological findings. Is able to implement management plan and modify if necessary. Liaises effectively with colleagues in other disciplines, clinical and non-clinical. Discusses impact on future fertility and fertility options and counsels patients accordingly. Is able to explain openly about treatments, complications and adverse effects of treatment. Is able to diagnose and Takes a focused history, recording menarche, cycle regularity, manage thyroid disorders hirsutism, alopecia, BMI, secondary sex characteristics, previous chemotherapy/pelvic radiotherapy. Performs an appropriate examination with reference to secondary sex characteristics. Arranges and interprets appropriate investigations including a baseline hormone profile, PRL, TFTs, Thyroid antibodies, androgens (testosterone, SHBG, FAI). Formulates a differential diagnosis. Is able to organise and review the results of CT/MRI scans, pelvic/abdominal ultrasound Formulate management plan related to findings. Is able to implement management plan and modify if necessary. Liaises effectively with colleagues in other disciplines, clinical and non-clinical. Discusses impact on future fertility and fertility options and counsels patients accordingly. Is able to explain openly about treatments, complications and adverse effects of treatment. Is able to diagnose and Organises appropriate investigations to include baseline manage ambiguous genitalia / hormone profile, radiological investigations and genetic testing genital anomalies as appropriate, and interprets the results. Formulates a differential diagnosis. Is able to ascertain patient's and parents'/carer's/guardian's understanding of the condition by listening and requesting them to articulate their understanding.

Is able to diagnose and manage disorders of sexual development / Turner syndrome	 Liaises effectively with colleagues in other disciplines, paediatric endocrinology or adolescent gynaecology. Counsels patients and parents/carer/guardian sensitively about options available and invites patient and parents' opinion. Informs patients about support networks. Organises appropriate investigations to include baseline hormone profile, ultrasound scan and genetic testing as appropriate and interprets the results. Formulates a differential diagnosis. Is able to ascertain patient's and parents'/carer's/guardian's understanding of the condition by listening and requesting them to articulate their understanding. Formulates and implements a management plan addressing various aspects of the condition. Liaises effectively with colleagues in other disciplines, endocrinology, cardiology, obstetrics, audiology, renal physicians
	 Discusses impact on future fertility and fertility options. Counsels patients and parents/carer/guardian sensitively about options available and invites patient and parents' opinion. Informs patients about support networks.
Promotes non-discriminatory practice	 Understands the specific needs of transgender and non-binary individuals and is able to perform consultations and refer appropriately to specialist services.
Is able to diagnose and manage precocious puberty	 Organises appropriate investigations to include baseline hormone profile. Liaises effectively with colleagues in other disciplines to formulate and implement a management plan. Counsels patients and parents/ carer/guardian sensitively about options available and invites patient and parents' opinion. Offers appropriate support.
Is able to diagnose and manage delayed puberty	 Organises appropriate investigations to include baseline hormone profile, ultrasound assessment. Liaises effectively with colleagues in other disciplines to formulate and implement a management plan. Counsels patients and parents/carer/guardians sensitively about options available and invites patient and parents' opinion. Offers appropriate support
Is able to diagnose and manage premature ovarian insufficiency	 Organises and interpret tests including endocrine assessment, dual-energy X-ray absorptiometry bone scans, immunological investigations and genetic testing. Counsels on the treatment options for young women, including the advantages and disadvantages, risks and benefits of hormone replacement therapy.

	 including IV Liaises effect and non-climpsychosexu Liaises with other special Arranges appropriate of the control of the control	mpact on future fertility and fertility options F using donor eggs. ctively with colleagues in other disciplines, clinical nical, and refers for formal psychological or al counselling. reproductive endocrinologists, haematologists and alists for complex cases with medical co-morbidities. opropriate follow up. opriate support and provides information on local	
Is able to diagnose and manage menopause	 Discusses van (HRT), inclusive available proposed and proposed and non-clines. Liaises effect and non-clines. Liaises with other species. Arranges approposed and non-clines. 	arious forms of hormone replacement therapy ding the benefits, risks and adverse effects, the reparations and their routes of administration. Iternatives to HRT and supports non-hormonal cluding lifestyle and dietary advice. Cively with colleagues in other disciplines, clinical nical. reproductive endocrinologists, haematologists and alists for complex cases with medical co-morbidities. Oppropriate follow up. opriate counselling and provides information on ational support groups.	
Management of survivors of childhood cancer	 Understand term health Works with oncologist, term manage 	s the impact of the patient's diagnosis on their long- , including on their ability to reproduce. a multidisciplinary team and liaises with the paediatric oncologist and medical genetics for long-	
Promotes non-discriminatory practice	individuals a	s the specific needs of transgender and non-binary and is able to perform consultations and refer ly to specialist services.	
Evidence to inform decision			
 CbD Mini-CEX Reflective practice TO2 (including SO) Local and Deanery Teach RCOG eLearning Preceptor assessment of Personal study 		 Attendance at specialist clinics - menopause clinic including DEXA bone scanning; endocrinology, PAG, Combined Fertility and Oncology, Late effects. Appropriate postgraduate education courses: Paediatric and adolescent gynaecology Annual update and Training day, Subfertility and Reproductive Endocrinology Course 	

Knowledge criteria

 The standardised terms and definitions to describe sonographic features of normal pelvis and pelvic pathology

- Endocrinological measurement of hormones in biological fluids for evaluation of the various endocrine systems
 - Neuroendocrine anatomy and physiology
 - Hypothalamic-pituitary dysfunction:
 - Hypogonadotrophic hypogonadism
 - Kallman syndrome
 - o Pituitary adenoma
 - Hyperprolactinaemia
- Disorders of growth hormone
- Adrenal dysfunction:
 - Cushing syndrome
 - Addison's disease
 - o Adrenal hyperplasia
- Thyroid disorders
- Polycystic ovary syndrome and disorders of androgen secretion

Neuroendocrine function

- The anatomical and functional aspects of the hypothalamus, neurovascular relationships, hypothalamo-hypophyseal portal circulation and target cells of the pituitary
- Suprahypothalamic structures and neuronal systems relevant to regulation of reproductive processes
- The site of production, biological action and control of secretion of oxytocin, vasopressins and neurophysins
- The biochemical basis of neuroendocrine action of neuropharmacology of agonists and antagonists
- Pineal gland
- Blood-brain barrier
- Sex steroid-concentrating neurones
- The distribution and cellular characteristics of pituitary hormone-producing cells with special reference to gonadotrophe and lactotrophe
- 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, thyroid physiology
- Diagnostic value of thyroid-stimulating hormone, thyroid hormones total and free, thyroidstimulating immunoglobulins and related diagnostic tests

- Biosynthesis, control and metabolism of thyroid hormones
- Clinical and pathophysiological correlates of hypo- and hyperthyroidism, particularly as related 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, 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 hyperplasia, adenoma, carcinoma)
- Congenital adrenal hyperplasia
- Effects of aberrations of adrenocortical function on hypothalamopituitary-ovarian function
- Aldosterone and disorders of the renin–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
- Relate PCOS to 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 of hirsutism
- Pharmacology of anti-androgens

Endocrinology of pregnancy:

- Fetoplacental unit: physiology and pathophysiology of steroid hormones (e.g. oestrogen, progesterone, 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 pre-eclampsia and eclampsia
- Pathophysiology of altered maternal thyroid, adrenal and pancreatic status during pregnancy

The ovary and polycystic ovary syndrome:

- 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, central nervous system-hypothalamic-pituitary
- The various treatment strategies to address fertility issues for those with hypothalamicpituitary and hypothalamic disorders, including ovulation induction with gonadotrophins, in vitro fertilisation
- Diagnosis of polycystic ovary syndrome (PCOS):
 - Imaging of PCOS
 - Management of anovulation
 - Management of hyperandrogenism (hirsutism, acne, alopecia)
 - Management of obesity, including an understanding of long-term health risks, metabolic effects and cancer risks
- Management of ovulation induction in PCOS:
 - o 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; 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
- Clinical and pathophysiological correlates 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, polycystic ovary syndrome, 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 as related 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 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:
 - o Ambiguous genitalia
 - Disorders of sexual development
 - Complete androgen insensitivity syndrome
 - o 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
- Hormonal changes and gametogenesis relative to the reproductive cycle from intrauterine
 life to the development of normal reproductive cycles (e.g., gonadotrophin secretion in the
 fetus and the neonate, sensitivity of the feedback system during fetal and neonatal life and
 childhood; 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:
 - Vagina: vaginal reconstruction by dilatation or surgery
 - Uterus: knowledge of müllerian anomalies with obstruction of drainage
- Ambiguous genitalia, including involvement in the assignment of sex of rearing for an infant
 with ambiguous genitalia, techniques for surgical construction of unambiguous functioning
 female external genitalia and vagina (e.g. vaginoplasty, clitoridectomy and clitoral resection),
 indications and 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.

- Diagnosis and management of 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 ovarian insufficiency [POI]

- Management of the post-menopausal woman:
 - o The indictations for and choice of of hormone replacement therapy (HRT)
 - o Non-hormonal methods including lifestyle and dietary advice
 - Adverse effects and risks of HRT
- The sequelae of long-term low oestrogen levels for POI
- The indications and principles of performing DEXA scanning
- The potential causes of amenorrhea including premature ovarian insufficiency, congenital endocrine disorders (e.g. Turner syndrome, complete androgen insensitivity syndrome, ovarian agenesis, polyglandular endocrinopathy and fragile X syndrome) and acquired (e.g. post-surgery, chemo/radiotherapy)
- Interpretation of tests used to evaluate amenorrhoea
- A rational diagnostic and therapeutic approach to patients with amenorrhoea
- Premature ovarian insufficiency:
 - Causes of premature ovarian insufficiency, congenital endocrine disorders (e.g. Turner syndrome, , ovarian agenesis, polyglandular endocrinopathy and fragile X syndrome) and acquired (e.g. post-surgery, chemo/radiotherapy)
 - Treatment options for young women with ovarian failure, with particular regard to future fertility
 - o Advantages and disadvantages, risks and benefits of HRT

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	 Demonstrates understanding of symptoms related to endometriosis such as dysmenorrhoea, dyspareunia, dyschezia, dysuria, pelvic pain, lower backache. Ascertains fertility history and if the woman is trying for pregnancy. Uses appropriate quality of life questionnaires and analyses to assess severity and monitor response to treatment. Formulates a differential diagnosis such as urological or gastrointestinal disease. Demonstrates understanding that other associated gastrointestinal and urological symptoms should also be assessed. Performs focused physical examination for endometriosis: Examines findings relevant to benign gynaecological conditions including assessment of the posterior cul de sac 	

	Occidental Control of the Control of	
	 Carries out an appropriate general, pelvic and rectal examination Maps areas of pain or abnormal masses in relation to underlying anatomical structures 	
Organises appropriate investigations	 Organises appropriate radiological investigation (ultrasound/computed tomography/magnetic resonance imaging – abdomen and pelvis) to assess the extent of the disease. Interprets the results. 	
Provides accurate and non-judgmental information on the effects of endometriosis and its treatment on fertility and ART	 Discusses expectant management, non-pharmacological, medical and surgical treatment. Discusses impact of endometriosis on future fertility. Liaises effectively with colleagues in other disciplines, clinical and non-clinical, e.g. colorectal surgeons, urologists, chronic pain team and radiologists. 	
Is able to decide appropriate role of medical intervention for the management of endometriosis	 Formulates an appropriate individualised management plan taking into account patient preferences. Counsels appropriately. Follows safe prescribing. Arranges appropriate follow up. 	
Provides medical management of endometriosis	 Chooses appropriate treatment using either combined oral contraceptive pills, progestogens (oral, depot injections or intrauterine system) or GnRH analogues ± addback therapy Counsels appropriately. Discusses possible benefits and potential adverse effects. Follows safe prescribing. Arranges appropriate follow up. 	
Explains the role of endoscopic and open surgery for endometriosis associated symptoms or infertility	 Clearly explains treatments, complications and side effects of surgery. Decides when to operate and when to not operate. 	
Advises on the role of assisted conception in endometriosis associated infertility	 Formulates an appropriate individualised assisted conception management plan taking into account patient preferences. Counsels appropriately. Able to discuss issues such as poor ovarian response, effect on ovarian endometrioma on ovarian stimulation and for oocyte retrieval 	
Advises on multidisciplinary pain management	 Accurately documents patient's descriptions of pain. Prescribes effective and safe analgesia. Recognises when to refer to pain management teams. 	
Provides general advice including dietary, lifestyle and psychological advice	 Provides general dietary, lifestyle and psychological advice. Refers to dietician, pain specialist and psychologist to assist in management of patient where appropriate. 	
Evidence to inform decision		
o CbD o Mini-CEX	Personal studyRCOG eLearning	

- Reflective practice
- TO2 (including SO)
- Local and Deanery Teaching
- Preceptor assessment of knowledge
- Confirmed participation in endometriosis multidisciplinary team-based meeting
- Confirmed attendance at specialist endometriosis clinics, pain clinic
- Appropriate postgraduate education courses

Knowledge criteria

- The anatomy of the abdomen, female genital tract, bladder, ureters and lower bowel
- Pathogenesis and aetiology of endometriosis
- The mechanisms by which minimal and mild endometriosis may impair fertility, e.g. defective folliculogenesis, ovulatory dysfunction, hyperprolactinaemia, autoimmune disorders, disturbances in the peritoneal fluid environment.
- Diagnosis, staging/grading of disease and prognosis
- The role of physical examination in the diagnosis of endometriosis
- The indications for investigations, including:
 - o ultrasound / computed tomography/ magnetic resonance imaging
 - Pelvic MRI/CT
 - Serum CA125 measurement
- The limitations of serum CA125 measurement
- The limitations of hormonal treatment for suppression of ovarian function, surgery and IUI on fertility and assisted conception outcomes.
- The pharmacology of chemical substances that act upon benign gynaecological conditions
- The pharmacology and side-effects of analgesic drugs
- The role of hormonal agents, e.g. oral contraceptives, progestogens, , gestrinone, gonadotrophin-releasing hormone (GnRH) analogues, and their possible benefits and adverse effects
- The pharmacology of combined oral contraceptive pills
- The pharmacology of GnRH analogues and add-back therapy
- The effects of assisted conception on fertility
- The role of ART in the management of endometriosis, subfertility
- The role and limitations of surgical and medical management of endometriosis prior to assisted conception
- Knowledge of multidisciplinary pain management teams
- The contribution of complementary therapies for analgesia

CiP 3: The doctor has the surgical skills appropriate for a subspecialist in reproductive surgery.

Key Skills	Descriptors
Explains the role of endoscopic and open surgery in the treatment of fertility-related conditions,	 Clearly explains treatments, complications and side effects of surgery in the context of fertility e.g. fibroids, endometriosis, hydrosalpinges and tubal disease, sterilisation reversal. Decides when to operate and when to not operate.

Selects patients appropriately. Decides optimal method of entry. Demonstrates competence in setting up the equipment, theatre environment, patient positioning, optimisation and recording of images. Refers to colleagues with advanced skills when appropriate. Involves appropriate multidisciplinary team of specialists. Manages intra- and postoperative complications. Obtains focused and relevant history. Interprets the results of endocrinological assessment. Examines epidydimis and appreciates any abnormalities. Assesses testes using orchidometer. Selects patients appropriately for percutaneous epidydymal sperm aspiration (PESA) and testicular sperm aspiration (TESA), performs procedures under direct supervision and manages intra- and postoperative complications such as pain, bleeding, infection, testicular atropy. Organises appropriate use of surgically retrieved sperm. Refers to a urologist with a special interest in male factor infertility for: Open testicular biopsy Microscopic epidydimal sperm extraction Microscopic testicular sperm extraction		
	Assesses, manages and refers appropriately for	 Decides optimal method of entry. Demonstrates competence in setting up the equipment, theatre environment, patient positioning, optimisation and recording of images. Refers to colleagues with advanced skills when appropriate. Involves appropriate multidisciplinary team of specialists. Manages intra- and postoperative complications. Obtains focused and relevant history. Interprets the results of endocrinological assessment. Examines epidydimis and appreciates any abnormalities. Assesses testes using orchidometer. Selects patients appropriately for percutaneous epidydymal sperm aspiration (PESA) and testicular sperm aspiration (TESA), performs procedures under direct supervision and manages intra- and postoperative complications such as pain, bleeding, infection, testicular atropy. Organises appropriate use of surgically retrieved sperm. Refers to a urologist with a special interest in male factor infertility for: Open testicular biopsy Microscopic epidydimal sperm extraction

Evidence to inform decision

- o CbD
- Mini-CEX
- o NOTSS
- o TO2 (including SO)
- Local and Deanery Teaching
- RCOG eLearning
- o Confirmed attendance at specialist clinics
- o Attendance at specialist courses
- Reflective practice
- Surgical logbook

o OSATS:

- Hysteroscopic surgery
- Laparoscopic adhesiolysis
- Laparoscopic treatment of endometriosis
- Laparoscopic ovarian cystectomy
- Laparoscopic salpingectomy
- Laparoscopic salpingostomy
- Myomectomy
- o TAH+/-BSO
- o PESA
- o TESA
- Open testicular biopsy
- o Others:
 - Surgery for excision of vaginal septum
 - Surgery for imperforate hymen

Knowledge criteria

- Female pelvic and abdominal anatomy
- Possible anatomical changes in a woman with endometriosis

- Sterilisation reversal
- Uterine anatomy and histology:
 - normal anatomy
 - o different types of congenital abnormalities, such as uterine septum, their impact on fertility and their management
 - o impact and management of intrauterine adhesions
 - o impact and management of fibroids, including medical, surgical and embolisation
- Tubal anatomy and histology:
 - normal anatomy
 - different types of congenital abnormalities
 - o management of proximal, mid-tubal and distal tubal disease
 - o 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, endometriosis)
 - natural history and clinical course of acute and chronic salpingitis and relate these to subsequent fertility
- Vaginal and cervical anatomy and histology:
 - o gross and microscopic findings of endometriosis and adenosis
 - o possible consequences of antenatal hormone exposure
 - effects of various hormones on the vagina and cervix
- Endometrial histology:
 - o histological appearance of normal and abnormal endometrium
 - o current data relating estrogens with endometrial hyperplasia and adenocarcinoma
 - acute and chronic endometritis
 - developmental stages of the endometrium (dating)
 - o endometrial factors that affect implantation in early pregnancy
- Myometrial histology:
 - o gross and microscopic findings of adenomyosis, leiomyoma and other myometrial lesions related to reproduction
 - o relationships 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, polycystic ovary syndrome, 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
 - o specific staining techniques and cellular ultrastructure as related 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:
 - o normal anatomy and development of the testis
 - o various stages of normal and abnormal spermatogenesis;

- gross and microscopic findings in testicular disease (e.g. teratoma, seminoma, 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, sterilisation reversal
- The alternative therapies such as pharmacological, medical and non-medical treatments
- The environment, staffing and equipment required to safely and effectively perform surgery
- Principles of 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
- The associated reduced ovarian reserve following salpingectomy and has strategies to minimise this risk
- When to request an 3D ultrasound scan or MRI prior to myomectomy
- When and how to treat fibroids and refer appropriately
- The principles and practical steps involved in the performance of laparoscopic myomectomy
- The various techniques available, their safety and effectiveness in minimising the risks of excessive bleeding at myomectomy
- The principles, benefits and risks of ovarian diathermy for anovultory polycystic ovary syndrome
- 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 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 required 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

CiP 4: The doctor is competent in recognising, assessing and managing fertility problems and assisted conception.			
Key Skills	Descriptors		
Takes relevant history	 Takes a detailed history from individuals presenting with fertility issues, including exploring psyschosexual issues. Records age, previous pregnancies (if any), menarche, cycle regularity, hirsutism, BMI, galactorrhoea, secondary sex characteristics, previous chemotherapy/pelvic radiotherapy, frequency of sexual intercourse (if heterosexual relationship), previous medical and surgical history, medications, allergies, folic acid and vitamin D supplementation, life-style factors such as smoking, alcohol consumption and use of recreational drugs. Screens for previous infections such as chlamydia and gonorrhoea. 		
Performs a relevant physical examination Arranges appropriate, focused investigations and interpret the results	 Performs appropriate physical examination for individuals with particular emphasis to secondary sex characteristics, vagino and/orrectal assessment. Performs visual field examination. Uses an orchidometer to assess testicular volume. Examines epidydimis to appreciate any abnormalities Recognises varicocoele, testicular tumours, undescended testicles, hypospadias, absence of vasa deferens, inguinal hernia. Arranges appropriate investigations to identify ovulatory dysfunction and assess ovarian reserve. Interprets the results of semen analysis. Understands the reasons for and timing of a repeat semen analysis and arranges appropriately. Takes urethral swabs from men. Organises and interprets relevant and appropriate female and male endocrine profile. Takes vulvo-vaginal swabs Organises appropriate tubal patency test (HSG or HyCoSy or 		
Arranges further investigations to identify the cause of severe male factor infertility (azoospermia or severe oligospermia with a sperm density of < 5 million/ml)	Laparoscopy and dye test) Interprets chromosomal studies and karyotyping (as required). Is able to arrange relevant further investigations: repeat semen analyses urine for retrograde ejaculation endocrine evaluation microbiological genetic (karyotype, CF screening) scrotal and testicular ultrasound scan testicular biopsy Reviews investigations and is able to differentiate pre-testicular,		
	testicular and post-testicular causes of severe abnormality. Organises sperm banking if appropriate.		

Decides which diagnostic technique to use and communicates effectively with patients	 Discusses diagnostic techniques available for assessing tubal disease and uterine cavity abnormalities, any associated risks and complications. Arranges and carries out the following procedures: Trans-vaginal scan HyCoSy saline infusion sonography Hysterosalpingography (HSG) Knows when to request a CT/MRI. Records results appropriately, including the need for referral and/or
Communicates and formulates an appropriate plan for the management of infertility	 Explains the possible causes of infertility. Formulates management plan related to pathological findings, taking into account relevant moral and ethical considerations. Counsels the couple regarding the different treatment options available, taking into account their preferences and expectations. Discusses treatment related complications and adverse effects. Implements management plan and modifies treatment if necessary. Manages coital dysfunction related infertility. Arranges appropriate referrals to: urologist, endocrinologist, andrologist, clinical geneticist, psychosexual counsellor and IVF centre team.
Manages anovulation/oligo- ovulation	 Explains various treatment regimens of ovulation induction, 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 the link with ovarian cancer. Provides appropriate treatment monitoring to assess effectiveness and minimise the risk of multiple pregnancy. Provides appropriate advice for the management of the condition or its medication in pregnancy, such as the risk of developing gestational diabetes in patients with polycystic ovaries. 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 overcoming lifestyle issues such as obesity with an understanding of long-term health risks, metabolic effects and cancer risks. Prescribes ovulation induction agents, progestogens for withdrawal bleed appropriately. Provides appropriate treatment monitoring to assess effectiveness and minimise the risk of multiple pregnancy.
Co-ordinates medical therapy for male factor infertility	 Liaises with reproductive endocrinologists and andrologists and coordinates suitable medical therapy. Discusses available drugs, their effects, limitations and side-effects of these drugs. Discusses alternatives to medical therapy.

	 Arranges appropriate follow up to assess improvement in fertility. Refers men with low testosterone to reproductive endocrinologists for testosterone replacement therapy.
Discusses the role of intra- uterine insemination: natural cycle and stimulated	 Discusses intrauterine insemination as an option. 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. Provides appropriate treatment monitoring to assess effectiveness and minimise the risk of multiple pregnancy.
Counsels on in vitro fertilisation (IVF) and intracytoplasmic sperm injection (ICSI)	 Discusses IVF and ICSI. 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. Explains success rates (pregnancy rate and live birth rate) taking into consideration various factors. Discusses potential side effects of drugs and complications of procedures including the risk of poor ovarian response, failed fertilisation, multiple pregnancy, ovarian hyperstimulation syndrome (OHSS), ectopic pregnancy, the risks with oocyte retrieval procedure, the link with ovarian cancer and the risk of genetic disorders after IVF/ICSI. Provides appropriate monitoring to assess effectiveness and minimise the risk of multiple pregnancy. Completes appropriate HFEA consent forms. Offers appropriate counselling support
Counsels on various pituitary down-regulation protocols	 Clearly explains treatment regimes for pituitary down-regulation to suit particular clinical scenario. Discusses Long GnRH agonist protocol. Discusses short (flare or micro-flare) GnRH agonist protocols. Discusses GnRH antagonist protocol.
Manages drugs dosage and strategies for controlled ovarian stimulation (COS)	 Determines gonadotropin dosage taking various factors into consideration to provide safe and effective COS. Provides appropriate monitoring to assess safety and effectiveness of COS. Uses appropriate strategies to minimise the risk of and manage over or under response to COS. Discusses strategies such as cycle cancellation, coasting, freeze all, for hyper response. Discusses, as appropriate, conversion to IUI or cycle cancellation for poor ovarian response.
Is able to diagnose and manage ovarian	 Arranges appropriate follow up for women at risk of developing OHSS.

hyperstimulation	Arranges appropriate investigations to diagnose OHSS and its					
syndrome (OHSS)	severity.					
,	Formulates appropriate management plan (outpatient and					
	inpatient).					
	 Advises on management in pregnancy for women who have had 					
	severe OHSS.					
Manages frozen embryo	Clearly explains treatment regimes for FERC to suit particular					
replacement cycle (FERC)	clinical scenario.					
	Is able to initiate and manage stimulated cycle FERC.					
	Is able to discuss local and national success rates.					
	Offers appropriate support counselling.					
Counsels on use of donor	Counsels patients sensitively on the options of using donor gametes					
gametes (eggs and sperm)	or embryos relevant to particular situation.					
and embryo	Counsels on available alternative options.					
	Completes relevant HFEA consent forms for gamete and embryo					
	donation.					
	Offers appropriate counselling.					
Co-ordinates donor-	Clearly explains treatment regimes for patients (donor and					
recipient cycle	recipient).					
	Initiates and undertakes appropriate co-ordination of donor-					
	recipient cycle.					
	Discusses local and national success rates.					
	Offers appropriate support and implication counselling.					
Counsels on gametes	Offers appropriate counselling for individuals wishing gametes or					
(sperm or eggs) and embryo freezing	embryo storage					
embryo neezing	Discusses local and national success rates.					
	Offers appropriate counselling for posthumous use of gametes.					
	Completes relevant HFEA consent forms for gamete or embryo storage					
Discusses gametes (sperm	 storage. Arranges appropriate investigations and interprets the results. 					
or eggs) and embryo	 Arranges appropriate investigations and interprets the results. Arranges relevant further investigations: endocrinological and 					
storage prior to oncology	virology screening (HIV, Hepatitis B&C, VDRL).					
treatment	 Discusses local and national success rates. 					
	Counsels patients on alternative options available.					
	 Offers appropriate counselling for posthumous use of gametes. 					
	Completes relevant HFEA consent forms for gamete or embryo					
	storage.					
	Organises appropriate follow-up schedule to assess fertility					
	following oncology treatment.					
	 Offers appropriate counselling for posthumous use of gametes. 					
Manages fertility	Arranges appropriate investigations to assess the suitability and					
preservation for female	interprets the results.					
cancer patients or social	Formulates an appropriate individualised management plan, taking					
fertility preservation	into account patient preferences.					
	Counsels patients on available alternative options.					

Discusses sperm banking with men wishing to have vasectomy for contraception	 Liaises with other specialists (oncologists, haematologists, surgeons and radiologists) to optimise patient care. Offers appropriate counselling. Arranges semen analysis and interprets the results. Arranges relevant further investigations: pre-sperm banking screening (HIV, Hepatitis B&C, VDRL). Completes relevant HFEA consent forms for gamete storage. Counsel patients about available alternative options. Offers appropriate counselling for posthumous use of gametes. Organises appropriate follow-up schedule to assess fertility following oncology treatment. 					
Discusses and co-ordinates gamete or embryo donation for clinical use or research	 Arranges appropriate investigation and interprets the results. Assesses the suitability for gamete or embryo donation. Arranges relevant further screening investigations: HIV, HTLV, CMV, Toxoplasmosis, Hepatitis B & C, VDRL, chlamydia and gonorrhoea, blood group, karyotyping & cystic fibrosis screening. Completes relevant HFEA consent forms for gamete and embryo donation. Offers appropriate implications and support counselling. 					
Identifies psychosexual problems	Demonstrates unsubfertility.	Demonstrates understanding of the psychological impact of				
Counsels on infertility and fertility treatment	 Provides supportive counselling to couples before, during and after treatment. Liaises with counsellors. Provides therapeutic and psychosexual counselling alongside a counsellor. Counsels on the legal aspects of the use of donated gametes and 					
HFEA Code of Practice	-	gside a counsellor. understood HEFA Code of Practice				
Assesses and manages individuals/couples with genetic disease	Has read and understood HFEA Code of Practice Takes a detailed genetic history from both partners. Discusses and counsels couple regarding genetic inheritance and transmission of genetic disease. Discusses the role of pre-implantation genetic testing (PGT-M, PGT-SR). Liaises and arranges appropriate referral to centres for management of genetic disease.					
Evidence to inform decision						
 Oocyte retrie 		 RCOG eLearning Preceptor assessment of knowledge Attendance at RCOG/BFS course Local / Deanery / National Teaching or Training sessions Confirmed attendance at IVF and genetics 				
 Ultrasound as 	ssessments of	laboratory sessions				

- the normal pelvis
- ovarian lesions
- uterine fibroids
- endometrial abnormality
- early pregnancy complications
- Reflective practice
- o TO2 (including SO)
- NOTSS

- Regular participation in IVF theatres
- Exposure to relevant specialist clinics: endocrinology, clinical genetics, oncology, urology/andrology clinics,
- Participation in HFEA inspection
- Attendance at UKAS inspection
- Attendance at assisted reproduction ethics committee meeting

Knowledge criteria

General subfertility

- Female reproductive anatomy and physiology
- The normal physiology of ovulation, endometrial changes, tubal function
- The male reproductive anatomy and physiology
- The process of spermatogenesis and its control
- Awareness of possible feelings of guilt in patients with previous infection
- The environmental factors influencing male reproductive function
- The endocrine disorders affecting male fertility
- The effect of reproductive pathologies such as varicocoele, undescended testicles, sexually transmitted infections such as chlamydia and gonorrhoea, previous orchitis, chemoradiotherapy
- The impact of previous surgery such as vasectomy, reversal of vasectomy, inguinal herniorrhaphy, orchidopexy
- Coital dysfunction associated infertility
- Other putative causes of infertility: subtle ovulation defects, cervical mucus hostility, subclinical pregnancy loss, occult infection, sperm dysfunction, immunological causes and psychological factors
- The availability of various advanced sperm function tests and their role in the management of male factor infertility
- Normal ultrasound appearances of the uterus, ovaries and adnexa
- The standardised terms and definitions to describe sonographic features of normal pelvis and pelvic pathology
- Appearance of normal and abnormal uterus including fibroids
- Endometrial assessment, including normal cyclical changes, changes associated with hormone replacement, hyperplasia and malignancy
- Ovarian, para-ovarian and tubal masses
- The indications, pre-requisites and possible complications of HyCoSy, sonohysterography,
 HSG and laparoscopy
- The role of CT and MRI imaging
- The indications for medical therapy for azoospermia
- The sequelae of long-term low testosterone levels and the association with testicular cancer

IVF and assisted conception

- The various treatment strategies for anovulation:
 - o anti-estrogens
 - o anti-androgens

- o aromatase inhibitors
- o gonadotrophins
- laparoscopic ovarian diathermy
- dopamine agonists
- o steroids
- o insulin sensitisers
- o glitazones
- o in vitro fertilisation
- The impact of psychiatric and psychological issues on anovulation
- IVF and intracytoplastic sperm injection
- Management options:
 - o Long gonadotrophin-releasing hormone (GnRH) agonist protocol
 - o Short GnRH agonist protocol
 - o GnRH antagonist cycles
 - o Frozen embryo replacement (natural cycle, HRT cycle)
 - Donor-recipient cycle
 - Sperm freezing
 - o Embryo freezing
 - In vitro oocyte maturation
 - Oocyte freezing
 - Fertility preservation for cancer patients
- The indications for intrauterine insemination
- Clinical trial design
- Ultrasound/imaging:
 - o Follicular tracking: natural/simulated cycles
 - o Tracking IVF endometrial development
 - Uterine abnormalities
 - Ovarian pathology
 - o 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:
 - o anti-estrogens
 - anti-androgens
 - o aromatase inhibitors
 - o gonadotrophins (FSH, LH, hCG)
 - o GnRH-agonists
 - GnRH antagonists
 - o dopamine agonists
 - o oestrodiol
 - o progesterone
- The various down-regulation protocols
- Drugs and dosage for controlled ovarian stimulation

- The strategies to minimise the risk of OHSS
- Ultrasound guided paracentesis
- Clinicial presentation and classification of OHSS
- The potential complications of OHSS and the importance of multidisciplinary team 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, double stimulation (DuoStim)
- The role of counselling (supportive, implications, therapeutic, adoption, legal aspects and psychosexual

Genetics

- Genetic inheritance and transmission of genetic disease
- Cell cycle and biology
 - o Single gene disorders: recessive and dominant
 - Sex-linked disorders
 - Late-onset disorders and disease susceptibilities
 - Chromosome rearrangements: Robertsonian reciprocal translocations and their consequences
 - Aneuploidy, sporadic aneuploidy and important aneuploidy syndromes (e.g. Edwards, Turner, Patau)
- The role of pre-implantation genetic testing (PGT-M, PGT-SR) and diagnosis
- Chromosome analysis
- International System for Human Cytogenetic Nomenclature
- Normal variation
- Banding techniques
- Prenatal diagnosis
- Cell culture and processing

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
 - o polymerase chain reaction
 - o preimplantation genetic diagnosis
 - O DNA, RNA and protein amplification techniques

- o culture systems
- blastocyst culture
- o time-lapse imaging of embryo
- flow cytometry
- Human Fertilisation and Embryology Authority (HFEA) laboratory inspection
- Clinical Pathology Accreditation laboratory inspection
- International Standards Office and quality management systems

The role of HFEA:

- the HFEA Code of Practice
- the role of the "Person Responsible"
- HFEA regulations regarding the storage and use of gametes, including posthumous use
- What constitutes an adverse event and how to report it

Andrology

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

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	 Records pregnancy and medical history. Performs appropriate physical examination with particular emphasis to anatomical assessment of reproductive tract by abdomino-pelvic examination, calculation of body mass index and extent of hirsuitism. 				
Arranges appropriate investigations to establish the conditions associated with recurrent miscarriage	 Arranges appropriate investigations, including appropriate endocrine, immunological and anatomical assessment (antiphospholipid antibodies, cytogenetic analysis of products of conception, parental peripheral blood karyotyping, thrombophilias, HbA1C, thyroid function tests, trans-vaginal ultrasound scan (2D +/-3D), saline infusion sonography, Hysterosalpingogram, CT/MRI scan). Interprets results appropriately. 				

Discusses the results of these tests and their impact on recurrent miscarriage in detail with the patient.

• Demonstrates understanding of the psychological impact of recurrent miscarriage.

Communicates and formulates an appropriate management plan for couples with recurrent miscarriage

- Counsels patients on available treatment options and formulates an appropriate individualised management plan, taking into account investigation results and patient preferences.
- Implements management plan and modifies if necessary.
- Refers to clinical geneticist on findings of an abnormal karyotype.
- Liaises with obstetricians for assessment and management cervical factor to improve pregnancy outcome in women with a suspected history suggestive of cervical weakness.
- Is able to offer and/or perform appropriate surgical management.
- Advises and offers support to make life-style modifications to improve pregnancy outcome.
- Offers supportive care in a dedicated early pregnancy assessment unit setting for women with unexplained recurrent miscarriage.
- Liaises with colleagues in other disciplines, clinical and non-clinical, for advice and support.
- Refers to support groups as appropriate.

Evidence to inform decision

- o CbD
- o Mini-CEX
- Local and Deanery Teaching
- RCOG eLearning
- TO2 (including SO)
- o NOTSS

OSATS

- Ultrasound assessments of
 - the normal pelvis
 - congenital uterine anomaly
 - uterine fibroids
 - Early pregnancy
- Confirmed attendance at specialist recurrent miscarriage clinics and early pregnancy assessment unit
- Reflective practice

Knowledge criteria

- The various professional societies' definitions of recurrent miscarriage
- The risk factors, causes, investigations and management options for recurrent miscarriage
- 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 lack of evidence to support the use of corticosteroids nor intravenous immunoglobulin for women with APS and recurrent miscarriage
- The role of pre-implantation genetic testing for an euploidy (PGT-A)
- The available options on surgical correction of uterine abnormalities on pregnancy outcome

- The evidence (or lack of it) regarding routine use of hormonal therapy or immunotherapy for recurrent miscarriage
- The efficacy of thromboprophylaxis during pregnancy in women who have inherited thrombophilias with recurrent first-trimester miscarriage or second trimester miscarriage

SECTION 2: PROCEDURES

Procedures	Level by end	CIP 1	CIP 2	CIP 3	CIP 4	CIP 5
Languages is destruction of superficial	of training		V	V		
Laparoscopic destruction of superficial	5		X	Х		
endometriosis	2					
Laparoscopic excision of deep endometriosis	3		X	X		
Laparoscopic excision/ablation of ovarian	4		Х	Х		
endometriomas				V		
Laparoscopic surgery – treatment of ovarian dermoid	5			Х		
	5			Х		
Laparoscopic surgery – division of adhesions	5					
Laparoscopic surgery – salpingectomy for ectopic pregnancy / hydrosalpinx	5			Х		
Laparoscopic surgery – salpingostomy for ectopic	5			Х		
pregnancy						
Laparoscopic surgery – myomectomy	2			Χ		
Hysteroscopic surgery – resection of fibroid	5			Χ		
Hysteroscopic surgery – resection of polyp	5			Χ		
Hysteroscopic surgery – division of septum	2			Χ		
Hysteroscopic surgery – division of adhesions	5			X		
Hysteroscopic proximal tubal catheterisation	5			X		
Excision of vaginal septum	3			Х		
Imperforate hymen	3			X		
Male surgery – percutaneous epididymal sperm aspiration	2			Х		
Male surgery – testicular sperm aspiration	2			Х		
Male surgery – open testicular biopsy	2			Х		
Male surgery – Microscopic epididymal sperm aspiration	1			Х		
Male surgery – Micro - TESE	1			Х		
Hysterosalpingography (HSG)	2				Х	
Hysterosalpingo contrast sonography (HyCoSy)	5				Х	
Saline sonohysterography	5				Х	
Blue dye test at laparoscopy	5			Х	Х	
Intrauterine insemination	5				Х	
Embryo transfer	5				Х	
Transvaginal ultrasound egg collection	5	1			X	
Trans-abdominal ultrasound egg collection	2	1			X	
Embryo transfer procedure	5	1			X	
Excision of ovarian cystectomy	5	1		Х		

Procedures	Level by end	CIP 1	CIP 2	CIP 3	CIP 4	CIP 5
	of training					
Laparoscopic salpingostomy for distal tubal	2			Х		
blockages (cuff salpingostomy)						
Laparoscopic ovarian diathermy for anovulatory	5	X		Х		
polycystic ovary syndrome						
Proficiency in: Veress needle entry, Hasson &	5			Х		
Palmer's point entry techiques						
Safe tissue handling with laparascopic instruments,	5			Х		
sharp and blunt dissection	_					
Haemostatic techniques at laparoscopic and open	5			Х		
surgery	_					
Open myomectomy	5			X		
Excision of rudimentary horn of uterus (laparoscopic	1			Х		
resection)	_					
TAH+/-BSO	5			Х		
Trans-vaginal ultrasound scan for:					Х	
follicular tracking	5				Х	
Normal pelvis					Х	Х
Antral follicle count	5				Х	
 follicular tracking IVF 	5				Х	
 endometrial development 	5				Х	
uterine fibroids	5				Х	Х
 uterine cavity abnormalities 	5				Х	
congential uterine anomaly	5					Х
ovarian pathology	5				Х	
Adnexal pathology	5				Х	
oocyte retrieval	5				Х	
embryo replacement	5				Х	
early pregnancy assessment	5				Х	Х

SECTION 3: GMC GENERIC PROFESSIONAL CAPABILITIES

Mapping to GPCs

Domain 1: Professional values and behaviours

Domain 2: Professional skills

- o Practical skills
- o Communication and interpersonal skills
- Dealing with complexity and uncertainty

Domain 3: Professional knowledge

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

Domain 5: Capabilities in leadership and team working

Domain 6: Capabilities in patient safety and quality improvement

Domain 8: Capabilities in education and training

SECTION 4: MAPPING OF ASSESSMENTS TO CIPS

CIP	OSATS	Mini-CEX	CbD	NOTSS	T01/ T02	Reflective practice
1: The doctor is competent in recognising, assessing and managing endocrinological disorders.		Х	Х		Х	X
2: The doctor is competent in providing specialist care for women with endometriosis.		х	Х		Х	Х
3: The doctor has the surgical skills appropriate for a subspecialist in reproductive surgery.	Х	Х	Х	Х	Х	Х
4: The doctor is competent in recognising, assessing and managing fertility problems and assisted conception.	Х	Х	Х	Х	X	Х
5: The doctor is competent in recognising, assessing and managing complex early pregnancy problems.	X	X	X	X	X	X

4 The research component of subspecialty training

The aim of the research component of the subspecialty training programme is to ensure that subspecialty-accredited doctors are competent in the design and execution of a research study of sufficient quality to meet internationally recognised standards of research excellence, such as those published in the Medical Research Council's <u>Good research</u>

<u>practice</u>: <u>principles</u> and <u>guidelines</u>. Trainees will need to demonstrate expertise in clinical and/or laboratory research methodology including the ability to:

- critically to assess research papers
- design and run a research project
- understand statistical methods
- be aware of the ethical issues involved in research

Trainees also need to either:

- complete the research component of the subspecialty training programme or
- obtain research exemption through published output.

4.1 Research exemption

All applications for exemption are reviewed by the RCOG's <u>Subspecialty Committee</u>. Trainees will still be expected to undertake research during subspecialty training, even if they have fulfilled the research criteria before entering the programme. Approval of research exemption before starting subspecialty training requires:

- Completion of a research or academic programme that has led to the award of an MD (Res) or PhD thesis, OR
- Publication of two first-author papers of original research in citable, refereed <u>MEDLINE</u> journals relevant to the subspecialty, **OR**
- Satisfactory completion of the <u>Clinical Research Advanced Professional Module</u> (APM)

If research exemption is granted at commencement of training the trainee will undergo a two-year subspecialty training programme subject to achieving the clinical competences within two years. If the trainee has completed a period of research before starting subspecialty training but has not yet fulfilled the published output criteria they will be registered for a three-year programme. The trainee should apply for research exemption once the published output criteria have been fulfilled. The overall progress of clinical progression will be assessed at the next subspecialty assessment to establish the remaining training time.

Completion of the research criteria at the end of a three-year subspecialty training programme requires:

- Completion of a research of academic programme that has led to the award of an MD (Res) or PhD thesis, OR
- Publication of two first-author papers of original research in citable, refereed
 MEDLINE journals relevant to the subspecialty, preferably (but not necessarily) arising from a dedicated period of research lasting at least one year OR
- Satisfactory completion of the <u>Clinical Research Advanced Professional Module</u> (APM)

As the subspecialty training programme is a capability based programme it is therefore expected that if the trainee does not fulfil the research exemption requirement before commencing the programme, they will require three years to achieve both research and clinical capabilities stipulated in the subspecialty programme.

MD/PhD

- The MD (Res)/PhD must be relevant to the chosen subspecialty. An MD (Res)
 awarded from a university outside Great Britain or Ireland would not be considered
 equivalent to a UK MD (Res)
- An international PhD may be considered equivalent to a UK PhD if the trainee can
 provide supporting evidence that a period of supervised research led to the award of
 the PhD; the Subspecialty Committee requires supporting evidence before they can
 grant equivalence

Published papers

- First-author papers must be relevant to the chosen subspecialty
- Review articles (other than high-quality systematic reviews, preferably <u>Cochrane</u> <u>Reviews</u>) and case reports are excluded
- 'Exceptional' requests (i.e. a non-first author paper that the trainee wishes to be
 accepted as one paper towards research exemption) will be considered only if a
 minimum research period of two years has been undertaken, a fellowship whose
 primary purpose was to coordinate a trial has been completed, or there is supporting
 evidence of active involvement in all aspects of delivery of the study and authorship
 of an article published in a high-impact journals such as the New England Journal of Medicine, The Lancet, BMJ or Nature.

4.2 Advanced Professional Module Clinical Research

RM trainees can choose to take the APM Clinical Research as a way of completing the research component if they are not research-exempt. The APM is the first in a new suite of modules that are designed to enhance the acquisition of generic professional skills.

The aim is to define the skills that a consultant Obstetrician/Gynaecologist requires in order to support clinical research service as an active participant (Principal Investigator, coapplicant/collaborator, recruiter) in a primary, secondary or tertiary care setting. The APM can be completed as an optional module for O&G trainees who have an interest in academic training any time during their specialty training, generally from ST3. It is also intended to be available to NHS O&G consultants to develop their skills and knowledge.

4.3 Non-completion of research component

If the trainee reaches the end of subspecialty training without satisfying the research criteria, they will be offered a maximum 6-month extension to complete the research element, at the discretion of the Postgraduate Dean.

If the trainee reaches the end of the 6-month extension without completing the research component, the RCOG's <u>Subspecialty Committee</u> will not award subspecialty accreditation unless there are extenuating circumstances. Award of the <u>CCT</u> will be at the discretion of the Local Education Training Board / Deanery, although this might involve a further period of general training.

5 Learning and Teaching

5.1 The core training programme

The organisation and delivery of postgraduate training is the responsibility of the Health Education England (HEE) and Local Education Offices (LETBs), 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 also that 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

In order 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 specify 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, they expect employers to take action to ensure their training environments meet their 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 so can provide detailed feedback on specific areas of training and education that support curriculum delivery.

The RCOG has produced new 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. Sug gested activities include:

- Reading, including journals and web-based material such as e-Learning for Healthcare (e-LfH) and StratOG (the RCOG's eLearning 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. The generic criteria for accreditation are as follows:

- A centre should have sufficient caseload to support the trainee in completing the approved subspecialty curriculum within the required time frame.
- The numbers specified within the workload domain of the approval criteria would usually support one trainee, provided there is evidence of clinical supervision and timetabling for all elements of the curriculum within that centre.
- Recognition may be granted for 2 trainees per centre where there is supporting
 evidence from the deanery/LETB and where the centre can still deliver the breadth
 and depth of training.
- Mitigating factors in relation to the caseload required for recognition of a centre for subspecialty training include the track record of the training centre, working within a

training network, highly specialised or supra-regional areas of clinical practice provided within that centre, and workforce requirements within a geographical area. Recognition would be unlikely where an individual centre within a network could not deliver the majority of the elements of the curriculum, or where the approval criteria are fulfilled through a rotation involving more than 2 centres.

- Recognition could be achieved where centres work together across commissioning regions or geographies to fulfil the approval criteria and reflect the need for regionalisation of training in developing the future workforce within a large region or country.
- There should be a minimum of 2 full-time consultants working as subspecialists in any centre approved for subspecialist training. Each centre should name the clinical supervisor who will deputise when the Subspecialty Training Programme Supervisor (STPS) is on leave. The Subspecialty Committee would review ongoing recognition of a centre during long-term absence of an STPS.
- Each centre should inform their deanery/LETB of the theatre lists that have been identified to prioritise training of their subspecialty trainee, and lists where training will be shared with an ATSM or other trainee.
- A trainee should complete all aspects of the curriculum and be given the opportunity
 to visit other centres to gain level 1 experience of highly specialised techniques
 relevant to the curriculum, and experience of less common conditions occurring
 within a population.

The criteria for RM centre accreditation, which are approved by the BFS, are as follows:

Workload and scope

- Minimum number of new fertility referrals = 400 per annum
- Minimum 1 general fertility clinic per week
- Minimum number of IVF patients seen = 8 per week
- Minimum number of IVF treatment cycles = 500 per annum
- Number of procedures to be available to the trainee per annum:
 - >100 laparoscopies
 - >100 hysteroscopies
 - >100 HSGs/ HYCOSYs
 - >20 egg donation cycles
 - >50 IUI cycles
 - >50 OI cycles
 - o >50 DI cycles
 - >20 reproductive surgery
 - >20 surgical sperm retrievals
 - >50 reproductive endocrinology new referrals
 - >50 recurrent miscarriage new referrals

Service organisation

- The centre must be a HFEA-licensed centre with comprehensive portfolio of specialist services and have:
 - o a minimum of 2 fertility consultants

- weekly multidisciplinary team meeting
- o on-site facility to manage OHSS
- on-site laboratory for semenology and embryology
- Data collection: HFEA
- The centre must ensure that on-call arrangements do not interfere with elective Reproductive Medicine activities.

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 Core Curriculum 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 core curriculum, 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 judgment 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 to provide formative feedback. Those assessment tools which 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. Our assessment tools have been revised to include reflection and have been piloted during 2018.

6.3 Assessment of CiPs

The CiP is the fundamental basis of global judgement. 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 as 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

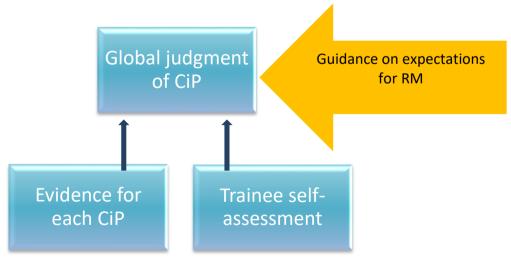
Towards the end of the training year, trainees will assess their own progression for each CiP (Figure 3a) and record this in the ePortfolio, signposting to the evidence that supports their

rating. The Subspecialty Training Programme Supervisor (STPS) will review the evidence in the ePortfolio including workplace-based assessments, the TO2 and the trainee's selfassessment 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.

Trainee Guidance on CiP expectations for RM self-assessment Key skills **Evidence Descriptors**

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 3 shows the five supervision levels that are based on an entrustability scale which is a behaviourally anchored ordinal scale based on progression to competence and reflects judgments that have clinical meaning for assessors¹.

Table 3 – Levels of supervision

Level Level 1	Descriptor 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

Global judgement to be used for each CiP

<u>Trainee self-assessment</u>

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:

¹ Entrustability Scales: Outlining Their Usefulness for Competency-Based Clinical Assessment

- 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 core curriculum. 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 Supervior 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.

The RM curriculum contains an outline grid of progress in procedures expected for each CiP.

Table 3 outlines the defined levels of achievement for the RM CiPs required for each year of training.

Table 3 – Outline grid of progress expected for RM CiPs Level descriptors for clinical CiPs

Level 1 - Entrusted to observe

Level 2 - Entrusted to act under direct supervision

Level 3 - Entrusted to act under indirect supervision

Level 4 - Entrusted to act independently with support

Level 5 - Entrusted to act independently

RM SST	Subspecialty
	Accreditation

Capabilities in practice	Progress expected by completion of 12 months WTE of clinical training	Progress expected by completion of 24 months WTE of clinical training	
1: The doctor is competent in recognising, assessing and managing	3		
endocrinological disorders.		5	_
2: The doctor is competent in providing specialist care for women with endometriosis.	3	5	CRITICAL PROGRESSION POINT
3: The doctor has the surgical skills appropriate for a subspecialist in reproductive surgery.	3	5	AL PROGRES
4: The doctor is competent in recognising, assessing and managing fertility problems and assisted conception.	4	5	CRITIC
5: The doctor is competent in recognising, assessing and managing complex early pregnancy problems.	4	5	

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. For those trainees on a three year programme, the proportion of time spent undertaking the research component and clinical training will vary over the three years although the total whole time equivalent clinical training will be two years, and one year for the research requirements. It is therefore not possible to write a matrix which 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.

Some subspecialty trainees will accrue skills and competencies steadily across all the capabilities in practice, throughout their subspecialty training, and the matrix gives guidance as to what is deemed adequate progress by the end of the first 12 months WTE of clinical training. However, other trainees follow a modular approach during subspecialty training, and the progression through the CiPs will be quite different for them and their progress may not be so readily compared to the matrix. For these trainees, assessors will be expecting completion of some CiPs ahead of time, whilst others may not have been commenced by the end of the first 12 WTE months of clinical training. It is not possible to create a didactic matrix which covers all training programmes, and common sense and professional

judgement will be required, in the same way as it was in the previous curriculum, with respect to competency accrual and sign off of CiPs.

The following methods of assessment will provide evidence of progress. The requirements for each training year/level are stipulated in the Matrix of Progression. 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).

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.

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 General Medical Council (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) which has been piloted along with the modified WBA tools. The TO1 forms are summarised in a TO2 form which informs the ARCP.

Non-Technical Skills for Surgeons (NOTSS) - new

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.

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 eg. 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 where the trainee's progress towards the required subspecialty CiPs will be formally assessed. The SST assessment follows the same principles as the ARCP but needs to be undertaken by subspecialists.

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. The RCOG has produced the RM Matrix of Progression for RM, which is shown in Table 4. It is essentially a subspecialty assessment decision aid which sets out the requirements for a satisfactory subspecialty assessment outcome at the end of each training year and critical progression point. 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. LETBs/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.

Table 5 – Matrix of Progression

*Each procedural skill requires 3 OSATS assessed as being competent prior to being

Matrix for Subspecialty Training in Reproductive Medicine					
	Progress expected by	Progress expected by completion of 24			
	completion of 12 months WTE	months WTE of clinical training			
	of clinical training				
Formative work	place-based assessments				
_	= -	Ps. The aim is for quality over quantity. Useful			
_	e, act as a stimulus and mechanism for refl velopmental feedback	lection, uncover learning needs and provide an			
Mini-CEX	Veropinental recadaek				
WIIII CLX	✓	✓			
CBD					
	✓	√			
NOTSS					
	√	√			
Reflective					
practice	√	√			
Formative	Optional but encouraged				
OSATS	·				
Summative wor	kplace-based assessments				
Competent					
Summative	✓	\checkmark			
OSATS*		·			
TO2	2	2			
Other evidence	required for SST assessment (to be	e specified in RM curriculum guidance)			
Research **	√	,			
Educational Supervisor's Report					
Supervisor's		1			
report	1	_			
Trainee feedback					
Trainee feedbac	LK				
Trainee feedbac	LK				
	√	✓			

able to perform the practical procedure independently with support

^{**}If not research exempt, evidence of research activity and have a plan for satisfying research component as per RCOG research criteria

Table 6 shows the possible formal methods of assessment for each CiP. It is not expected that every method will be used for each CiP and additional evidence will be suggested as indicated in the Matrix of Progression and in the individual CiP.

Table 6 - Assessments mapped to CIPs

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

7 Supervision and feedback

This section of the curriculum describes how trainees will be supervised, and how they will receive feedback on performance. For further information please refer to the AoMRC guidance on Improving feedback and reflection to improve learning².

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 <u>subspecialty curriculum</u> at trust level. This will also include workplace-based assessments and providing feedback to the trainee.

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

² Improving feedback and reflection to improve learning. A practical guide for trainees and trainers

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 training³.

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 roles⁴. 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 which are beyond their experiences and competences without supervision.

³ Promoting excellence: standards for medical education and training

⁴ Recognition and approval of trainers

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 in order 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-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 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 HEE LETBs/local teams and the devolved nations' deaneries. The HEE 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 HEE Offices/deaneries or by RCOG or both.

Development, implementation, monitoring and review of the RM subspecialty are the responsibility of the RCOG via the Speciality Education Advisory Committee (SEAC) and Subspecialty Committee. 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, TPD, STPSs and ATSM 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 LETBs/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 CCT or Certificate of Eligibility for Specialist Registration (CESR).

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 drive up the quality of training environments and ultimately improve patient safety and experience. These are monitored and reviewed by RCOG to improve the provision of training and ensure enhanced educational experiences. The principles of the quality criteria for O&G will be transferred to the new curriculum to ensure this continues.

9 Intended use of the RM subspecialty curricula by trainers and trainees

The RM subspecialty curriculum, Matrix of Progression and SST assessment decision aid will be available from the RCOG via the website 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 a new ePortfolio platform which will be 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, write end-of-attachment appraisals and supervisor's reports.

HEE 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.

HEE Local Offices/deaneries will quality assure each training programme so 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 prior to appointment or within 12 months of taking up post.
- HEE Offices/deaneries ensuring that Educational Supervisors have had equality and diversity training (for example, an e-learning module) every 3 years.
- HEE 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. HEE 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. HEE 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.