



*The Hong Kong College of
Obstetricians and Gynaecologists*

*Reproductive Medicine Subspecialty
Training and Development*

2016

A. TERMS OF REFERENCE OF REPRODUCTIVE MEDICINE SUBSPECIALTY BOARD

1. The Reproductive Medicine (RM) Board is

- a. to uphold and improve the standard of RM service in Hong Kong
- b. to improve knowledge, practice, teaching and research in the field of RM
- c. to promote the concentration of specialized expertise and facilities to improve access to care
- d. to establish a close understanding and working relationship with other disciplines
- e. to encourage coordinated management of relevant clinical services throughout the region
- f. to strive for local, regional and international recognition of RM as a subspecialty
- g. to formulate and to establish training guidelines
- h. to assess, to accredit and to monitor training centres, training programmes, trainers and trainees
- i. to coordinate continuous medical education in the field of RM
- j. to organize and to conduct subspecialty examinations with the authorization of the Council of the HKCOG
- k. to recommend to the Council and HKAM candidates for the award and re-certification of RM subspecialists

2. The RM Board is

- a. under the auspices of the Subspecialty Committee and the Council of the HKCOG
- b. to liaise with the Education Committee on issues regarding training and examination of the subspecialty in RM
- c. to liaise with the Manpower Committee/Working Group/Task Force on the training of RM subspecialists
- d. to be composed of 5 to 9 members with a majority being RM subspecialists. The subspecialist members should be elected amongst those subspecialists registered with the HKCOG. There should be at least one general specialist in the Board, who is to be appointed by the HKCOG Council. If possible, at least one member would come from each of the University / Hospital Authority / Private Sectors. The terms of office of Board members would be 3 years.
- e. to be chaired by a chairperson who is to be elected among the Board members every 3 years and endorsed by the Council. The chairperson should be a RM subspecialist and the term of office will be 3 years. The chairperson is eligible for election for a maximum of 3 consecutive terms.

B. REPRODUCTIVE MEDICINE TRAINING PROGRAMME AND ACCREDITATION

1. Objectives

RM subspecialists after completion of the training programmes should have acquired comprehensive knowledge and skill in the subject. They should have a broad knowledge of reproductive endocrine disorders and fertility problems in female and male patients. They must be clinically competent in the diagnosis and management of these disorders and should have a board knowledge and competent skill of modern methods of assisted conception, including in-vitro fertilization and assisted fertilization. They should be involved in the organization of the clinical service, in research, in postgraduate teaching and in providing a consultancy service to other obstetricians and gynaecologists in the area of RM.

2. Curriculum Knowledge and skills

The training of a RM subspecialist should include both knowledge and skill in the following 6 modules:

Module 1: Female Reproductive Endocrinology

- i) Female Endocrinology
- ii) Ovary and Polycystic Ovary Syndrome
- iii) Paediatric and Adolescent Gynaecology
- iv) Contraception and Termination
- v) Menopause and Premature Menopause

Module 2: Endometriosis

Module 3: Reproductive Surgery

Module 4: Subfertility and Assisted Reproduction

Module 5: Andrology

Module 6: Early Pregnancy Problems

2.1 Knowledge - a sufficient understanding of:-

- a. the basic and applied embryology related to female and male reproduction
- b. the embryonic development of the female and male reproductive systems
- c. the reproductive physiology and anatomy of both sexes
- d. the endocrine dynamics of menstrual cycles, ovulation and pregnancy
- e. the pathology of the hypothalamic-pituitary-ovarian axis and the relevant aspects of the thyroid and adrenal systems
- f. the pharmacology of substances that regulate the reproductive systems
- g. the immunology and genetics related to reproduction
- h. the psychosexual aspects of reproductive medicine
- i. the physiology of conception and reproductive tracts related to fertility and reproduction, and the techniques of in vitro fertilization including assisted fertilization and the assessment of sperm function
- j. the position of assisted conception techniques and embryo research in law and the associated ethical debate
- k. epidemiology, statistics, research and audit

2.2 Skills –

- a. expertise in diagnosis and management of a full range of reproductive endocrine disorders and infertility

- b. expertise in biological and chemical assessment of endocrine function related to reproduction, including experience in the performance and interpretation of appropriate endocrine and hormonal studies
- c. expertise in ultrasound of the uterus and ovary in order to perform follicle tracking and diagnosis of early pregnancy and its problems
- d. expertise in endoscopic techniques and surgery related to diagnosis and treatment of reproductive problems
- e. expertise in assisted conception, including ovarian stimulation and the management of hyperstimulation syndrome; ovum retrieval and embryo transfer techniques and the management of their complications
- f. the critical evaluation of clinical and laboratory audits

C. REPRODUCTIVE MEDICINE TRAINING CENTRE AND TRAINER

1. Standard Requirements for accreditation of a Reproductive Medicine training centre

A RM training centre must fulfill the following criteria:

1.1 Workload

An annual workload of:

- a. Minimum number of new fertility referrals = 400
- b. Minimum number of IVF treatment cycles= 500
- c. >100 cases of reproductive endocrinology
- d. >150 cases of early pregnancy complications including recurrent miscarriage
- e. Procedures to be available to trainee:
 - > 100 laparoscopies
 - > 100 hysteroscopies
 - > 50 HSG/ HYCOSY
 - > 50 IUI cycles
 - > 50 OI cycles
 - > 20 reproductive surgery
 - > 10 surgical sperm retrieval
 - Availability of oocytes donation program
 - Availability of sperm donation program

1.2 Trainers and Programme Director

- a. A trainer must be a Fellow of HKAM(O&G) and a HKCOG accredited RM subspecialist or equivalent, and should be working in the training centre.
- b. There must be at least 2 trainers per training centre.
- c. One of the trainers must be the training programme director who co-ordinates the training programme, accepts the main responsibility for its supervision and be actively involved in it. The director should have at least 3 years of post-subspecialty experience in RM (with the exception of First Fellow in RM) and is working as a full-time staff in the training centre.
- d. When a training centre comprises more than one physical unit, there should normally be at least one trainer in each unit.

1.3 Service Organization

- a. The centre should be a referral and resource centre for patients with reproductive endocrine disorders and infertility problems requiring special diagnostic and therapeutic facilities and expertise
- b. have appropriate clinical and laboratory facilities for investigating the relevant endocrine and infertility problems
- c. have access to appropriate endocrine and ultrasound investigations for monitoring of ovulation induction or diagnosis of early pregnancy and its problems
- d. have access to open and minimal access surgery for training of diagnostic and therapeutic reproductive surgery
- e. should hold a valid license granted by the Council on Human Reproductive Technology (CHRT), and with appropriate clinical and laboratory facilities to carry out assisted reproductive technology procedures
- f. have established close collaboration with urologists in the investigation and management of male infertility
- g. have established close collaboration with paediatric / medical endocrinologists in management of endocrine disorders in women during the reproductive years of life
- h. have established close collaboration with other obstetricians and gynaecologists in the clinical network, including major regional roles in continuing postgraduate education and training, research advice and co-ordination, and auditing activities

1.4 Facilities

Each centre should have:

- a. on site Human Embryology Laboratory with appropriate facilities for in-vitro fertilization, assisted fertilization including intracytoplasmic sperm injection and cryopreservation of gametes and embryos
- b. on site laboratory for semenology
- c. on site facility to manage ovarian hyperstimulation syndrome
- d. a good medical records system
- e. have adequate library, laboratory, internet access, statistic tools and other resources to support subspecialty work, training and research, over and above that required for the recognition of FHKAM(O&G) and higher training posts

1.5 Support from other medical disciplines

A training centre should have close collaboration with the following disciplines with adequate support at specialist level:

- a. Supporting diagnostic services from radiology, biochemistry, microbiology, pathology, andrology and genetic laboratories
- b. Supporting clinical and paramedical services including paediatric / medical endocrinology, urology, psychiatry, clinical psychology, medical social workers, and their supporting staff, all having definite commitment to the management of gynaecological endocrine, fertility (female and male) problems
- c. Medical genetic team able to provide special advice and counseling in genetic disorders

1.6 Activities

Each centre should have:

- a. A full range of diagnostic services including:-
 - semen analysis
 - hormonal assays
 - ultrasound facilities
 - laparoscopy and hysteroscopy
 - other radiological tests such as hysterosalpingography, MRI pituitary gland
- b. A full range of reproductive treatment procedures including:-
 - reproductive hormone therapy
 - reproductive surgical procedures
 - ovarian stimulation for IUI /IVF
 - intrauterine insemination
 - oocyte retrieval
 - transcervical embryo transfer
- c. Regular multi-disciplinary team meetings
- d. Regular quality assurance activities related to the subspecialty
- e. Regular review and update of clinical management protocols
- f. A coordinated educational program at subspecialty level
- g. Clinical trials and research related to the subspecialty

2. Composition of a training centre

Usually a training centre comprises a single physical unit. However, two or more units may collaborate to form a training centre that can provide a better training opportunity than when each of them stands alone.

3. Inspection of a training centre

The standards of the training centres and programmes will be reviewed:

- a. every 5 years, or
- b. when the programme director changes, and
- c. from time to time when considered necessary

D. REPRODUCTIVE MEDICINE TRAINING PROGRAMME

1. Normally the training programme lasts for three years with two components: clinical and research
2. The training programme can be
EITHER:
 - Two years of Clinical training in RM, plus One year of Research related to RM (which can be exempted, see 3a below).OR
 - Three years of Combined Clinical and Research training in RM
3. Research component
 - a. 1 year of research training may be exempted if a trainee has, before starting the subspecialty programme, already:
 - Completed a research or academic programme that has led to the award of an MD or PhD thesis,or
 - Published at least two first-author papers of original research in citable, refereed MEDLINE journals.
 - i. The papers do not need to be relevant to the chosen subspecialty of the trainee.
 - ii. If one paper has been accepted and the second paper is ready for submission, a grace period of 1 year can be given at the time of the application.
 - iii. If the second paper has not been accepted for publication at the end of one year of the subspecialty training, the trainee has to undertake research during the subspecialty training to fulfill the criteria as stated at the completion of a 3-year subspecialty program.
 - iv. Case reports and reviews would not normally be considered.
 - b. For trainees who go for a research training:
 - the research component should be planned at the beginning of the programme and appropriately timetabled and monitored.
 - At completion of the 3-year Subspecialty programme, the candidate should have published one first-author paper of an original research relevant to the chosen subspecialty of the trainee in citable, refereed MEDLINE journal, preferably (but not necessarily) arising from a dedicated period of research lasting at least 1 year, **OR** completion of a research or academic programme resulting in the award of an MD or PhD thesis. Case reports and reviews would not normally be considered.
4. The trainees should have full time involvement in the subspecialty during normal working hours throughout their training years.
5. Trainees will be granted a maximum of 70 days for sick leave, maternity or other special leave (excluding standard entitled vacation leave and study leave) during the whole period of training; if the period exceeds 70 days but is less than 90 days, an extension of 3 months of training is required; if the period exceeds 90 days, subsequent action will be determined by the Board.

E. REPRODUCTIVE MEDICINE TRAINEE

1. Opening of a training post

- a. The training centre will advertise for prospective trainees to apply for a training position in the RM Training Programme which leads to certification as a subspecialist in RM.
- b. The centre's trainee-to-trainer ratio should not exceed 2:1 within each centre.

2. Eligibility

Trainees for higher subspecialist training should hold the FHKAM(O&G) or have equivalent qualification.

3. Application

- a. Prospective trainees will apply to the training centre for the post.
- b. Applicants will be asked to forward their curriculum vitae and the names of two referees.
- c. The training centre will organize the selection exercise.
- d. Applicants will be assessed against the following selection criteria:
 - i. Previous experience in the field of RM
 - ii. Previous experience in advanced RM techniques
 - iii. Previous CME activities related to RM
 - iv. Experience in quality assurance activities
 - v. Research experience
 - vi. Teaching experience
 - vii. Referee reports
- e. The result of the selection exercise will be submitted to the RM Board for approval before commencement of training.

4. Registration

Following the confirmation of acceptance to the subspecialty training programme, the trainee must register with the HKCOG Subspecialty Board before commencement of training.

5. Prospective approval to continue training

- a. Every year, application to continue RM Training has to be approved by the RM Subspecialty Board before training can proceed.
- b. Approval for continuation of training should be based on satisfactory logging of experience and the trainers' recommendation.

6. Evidence of clinical competence and experience

6.1 Logbook

- a. The trainee has to keep a logbook as required by the Board. The trainee is required to log his or her experience in reproductive surgery, clinical

activities, teaching experience, quality assurance activities, research activities and attendance at conferences, workshops, symposia and lectures and items as stipulated in details in the logbook. The logbook would be checked on the fulfillment of training requirements.

- b. There is no mandatory minimal number of cases or procedures that the trainee is required to log, but the following can serve as a guide to the expected number of cases and procedures expected for each trainee on average per year over the period of training:
 - i. 150 new cases of reproductive endocrine disorders or infertility
 - ii. 80 cases of reproductive hormone therapy
 - iii. 20 cases of therapeutic reproductive surgery
 - iv. 50 IUI and/or OI cycles
 - v. 100 IVF cycles (with superovulation and monitoring, oocyte retrieval and embryo transfer)

6.2 Mini Clinical Evaluation Exercise (Mini CEX)

The trainee should go through at least 5 Mini Clinical Evaluation Exercise (Mini CEX) AND 5 Case-Based Discussions (CbDs) every 6 months with his or her supervisor for at least 2 years during his or her training.

6.3 OSATS

The trainee should complete the following summative OSATS during his or her training, including intrauterine insemination, oocyte retrieval, embryo transfer, hysteroscopic surgery, laparoscopic adhesiolysis, laparoscopic treatment of endometriosis, laparoscopic ovarian cystectomy, laparoscopic salpingectomy, laparoscopic salpingostomy and myomectomy. There is no set number on the completion of each formative OSATS.

7. **Assessment**

7.1 Prospective Assessment

- a. The trainee is assessed by his or her trainer(s) every 6 months by logbooks of competence and experience, objective structured assessment of technical skill on various surgical skills, mini-clinical evaluation exercise and case-based discussion. The logbook should be regularly signed by trainer(s) where appropriate and submitted to the Subspecialty Board for review annually.
- b. The trainee is assessed in the annual assessment review which is conducted by two RM Subspecialist assessors appointed by the Subspecialty Board within one month after the clinical training. The assessor will give feedback to the trainee regarding the adequacy of training as reflected in the logbooks of competence and experience, objective structured assessment of technical skill on various surgical skills, mini-clinical evaluation exercise and case-based discussion.

7.2 Exit Assessment

- a. At the end of the training, the trainee may apply to the Board to sit for the exit assessment. The trainee should submit the log books and the research report at the time of application for exit assessment. Evidence of research

that would lead to fulfillment of the requirement as stated in Session D 3b is mandatory.

- b. The exit assessment should be held within 3 months of completion of training.
- c. The exit assessment should include the following:
 - i. There would be 2 RM subspecialist assessors to be appointed by the Subspecialty Board to conduct the Exit Assessment. The 2 assessors should not be subspecialists from the trainee's training centre.
 - ii. The duration of the exit assessment would be at least 30 minutes.
 - iii. The log books and the research report would be checked on the fulfillment of training requirements.
 - iv. Candidates would be asked on questions regarding their log books and other questions related to the syllabus.
 - v. If the candidate failed to pass the Exit Assessment, the Exit Assessment Panel would make recommendations on the subsequent action for consideration by the RM Subspecialty Board and the Subspecialty Committee.

8. Admission of Reproductive Medicine subspecialist

A trainee who has completed the training requirements and assessment of the Board satisfactorily may apply to be a RM subspecialist.

F. PROFESSIONAL DEVELOPMENT IN REPRODUCTIVE MEDICINE

1. The Continuing Medical Education (CME)/ Continuing Professional Development (CPD) cycle is 3 years.
2. CME/ CPD activities related to RM:
 - a. Research
 - b. Teaching
 - c. Attending conferences related to RM
3. A minimum of 90 CME/ CPD points (at least 60 points on RM) is required in a 3-year audit cycle. The method of calculating CME/ CPD points is similar to the current CME/ CPD system for general O&G.
4. The College reserves the right to accept or reject the subspecialty CME/ CPD points claimed

G. RE-CERTIFICATION OF REPRODUCTIVE MEDICINE SUBSPECIALISTS

1. A RM subspecialist needs to be re-certified every 3 years.
2. A RM subspecialist who satisfies the continuous professional development requirement in RM may apply to the Board for re-certification.