Introduction

Background

MRCOG review

A Working Party was set up in April 2012 to consider all aspects of the examination leading to Membership of the Royal College of Obstetricians and Gynaecologists (MRCOG), in order to ensure that the examination is equipped to fulfil its purpose of assessing the knowledge and certain defined skills required of specialists in women's health care. Discussions and recommendations were organized around the MRCOG's role in specialty training, the achievement of best practice regarding its format and psychometric standards, and the organizational structures required for its delivery in the present and development for the future.

The review recommended two key changes to the format of the Part 2 MRCOG, to ensure that the examination continues to strive towards the highest standards of validity and reliability:

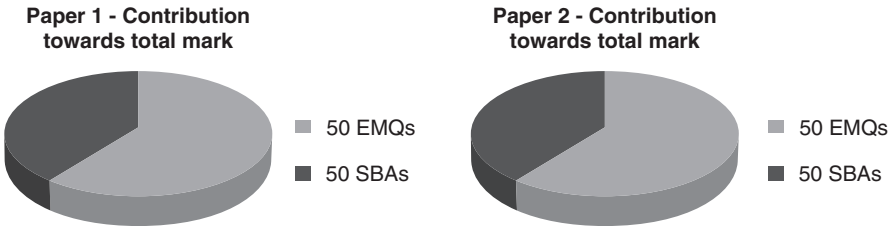
- The introduction of a single best answer (SBA) element to replace the examination's true/false multiple choice question (MCQ) element.
- The removal of the short answer question (SAQ) element, with the existing extending matching question (EMQ) element expanded.

The new Part 2 MRCOG written examination

These changes, which take effect in March 2015, have simplified the structure of the Part 2 MRCOG written examination, with two question formats, each covered over two papers:

Previous format	New format
Paper 1: SAQs (1¾ hours)	Paper 1: 50 SBAs and 50 EMQs (3 hours)
Paper 2: 120 MCQs and 45 EMQs (2¼ hours)	Paper 2: 50 SBAs and 50 EMQs (3 hours)
Paper 3: 120 MCQs and 45 EMQs (2¼ hours)	

In each of the two new papers, the SBA element contributes 40% of the total marks and the EMQ element contributes 60% of the total marks. The higher tariff for EMQs reflects the increased amount of time required to answer each EMQ when compared with each SBA.



The introduction of SBAs in the Part 2 MRCOG follows the successful introduction of SBAs in the Part 1 MRCOG in 2012, in part at the expense of the contribution of that examination's MCQ element, with the latter format increasingly viewed as insufficiently robust for high-stakes examinations. Indeed, because of its promotion of factual regurgitation over higher-order thinking, lack of professional authenticity, and the encouragement of cue-seeking behaviours such as question spotting and exhaustive practice, the MCQ format is perceived as less fair and less rigorous than other question formats.

The replacement of MCQs with an expanded SBA element addresses these shortcomings without undermining either the breadth of knowledge covered in the examination or the reliability with which this is assessed. Indeed, the greater discrimination between good and bad candidates that individual SBA questions offer compared with MCQs ensures that the reliability of the Part 2 MRCOG should improve. These two aims – a greater breadth of knowledge tested more effectively and a greater reliability – are further achieved by the removal of the SAQ element from the Part 2 MRCOG, which is the logical conclusion of a process that has seen its contribution to the overall score diminish over the past 10 years as more effective assessment techniques have been developed. Assessment is often the driving force behind learning, and the change in format allows the questions to be more relevant to clinical practice and thus a more valid assessment.

Blueprinting

'Blueprinting' refers to the process of mapping the examination to the syllabus to ensure sufficient coverage of all domains and modules. A Part 2 MRCOG written examination composed only of best answer question formats (SBA and EMQ) reflects progress in assessment methodology. However, it does pose a question regarding the division of labour between two question formats that, in essence, share a number of similarities. In fact, the way in which EMQs within the Part 2 MRCOG have evolved to include detailed clinical information, requiring an effective synthesis of this as well as subsequent application of knowledge, ensures that they have become equipped to perform a different function from that designed for SBAs within the Part 2 MRCOG.

For this reason, SBAs and EMQs can coexist comfortably within the Part 2 MRCOG, and careful consideration has been given to how each question format will contribute to assessing the material of the examination's syllabus, with questions generated to identify areas of best fit. The blueprinting approach will accommodate the fact that domains such as aetiology, basic sciences, epidemiology, natural history and statistics/audit lend themselves to assessment by SBAs. Meanwhile, investigations, diagnosis and management are tested more effectively using EMQs. Such a

distribution of topics is, however, designed to be a guide rather than unnecessarily prescriptive.

The MRCOG syllabus underpins the blueprint grid and the grid ensures that the breadth of the syllabus is covered in each exam.

Standard setting

A significant benefit of the introduction, in SBAs, of a question format similar in nature to existing EMQs is that the new Part 2 MRCOG format can accommodate an extension of a successful approach to standard setting in this element of the examination. The Angoff method[1] has proven to be an effective method of identifying the minimum standard for the Part 2 MRCOG's optically marked elements and will continue to be used for the SBA paper.

Summary

The move from true/false MCQs, which rely on rote learning, and SAQs, which are difficult to mark consistently, will increase the validity and reliability of the MRCOG exam. All questions are reviewed by teams of consultants prior to inclusion in the bank of questions for the exam and are edited to ensure they are not ambiguous and are relevant to the standard of an ST5 trainee. The questions are reviewed on a regular basis to ensure that they are up to date and reflect current clinical practice in the UK. The pass mark varies for each exam depending on the difficulty of the questions. This is set prior to each exam using the Angoff method – assessing the proportion of borderline candidates who would be expected to get the right answer to the question. All questions used in the examination are reviewed to assess their ability to discriminate between good and poor candidates. Any question with poor or negative discrimination may be rewritten or discarded.

Modern examinations need to assess clinical knowledge and ability. By moving to SBA and EMQ styles of questions, the MRCOG exam goes beyond basic knowledge and allows assessment of clinical reasoning and data interpretation. This reflects the doctor's clinical practice more accurately. With 200 questions in the two papers, reliability is ensured.

The SBA Regional Question Writing Model

Adapted from an article first published in O&G, the RCOG membership magazine

Members of the RCOG regularly ask how they can become more fully involved with the work of the College. In March 2013, Council accepted the recommendation of the MRCOG Review Working Party that the Part 2 MRCOG examination should replace its multiple choice questions (MCQs) and short answer questions (SAQs) with single best answer questions (SBAs). By December 2013, 93 consultants from all over the British Isles had volunteered to undertake the crucial work of building the College's bank of new SBAs, working in 16 regional question-writing groups. For many of these consultants, this has been their first substantive involvement with the work of the College post-CCT.

In February 2013, Mr Kevin Hayes MRCOG, the Chair of the College's Assessment Sub-Committee, ran a workshop on the writing of SBAs for the existing and new members of the MCQ Sub-Committee, which was now reconstituted as the

[1] The Angoff method is a widely used criterion-referenced approach whereby examiners are required to consider the notion of a 'borderline' candidate (i.e. a hypothetical minimally competent candidate) and rate questions by considering how difficult they would be for this borderline candidate. The results of this exercise are then used to inform the pass mark.

SBA Sub-Committee. This event was followed in March by a workshop for all 93 of the new regional question writers.

After the workshop, all members were asked to write four questions each for review in the May Sub-Committee meeting, and this resulted in the submission of a very respectable total of 240. By the end of summer 2014, over 500 questions had been produced and reviewed by the SBA Sub-Committee, some of which have been used in this publication.

The concept of regional question writing groups fits very well with the College's policy of the regionalization of College activity to make it less London-centric. It has proved to be an efficient and enjoyable means of building up an entirely new bank of questions to ensure that the MRCOG retains its primacy as a world-class examination.

Single best answer (SBA) questions

What is an SBA?

Single best answer questions – also referred to as 'best of five' questions – usually consist of a stem describing a scenario, a lead-in question, and five plausible options labelled a–e, one of which is clearly the most appropriate. They are designed to assess application of knowledge and clinical reasoning.

Although the five options are plausible – some may even be partially correct – there is always one answer that is clearly the best.

A typical SBA is shown below:

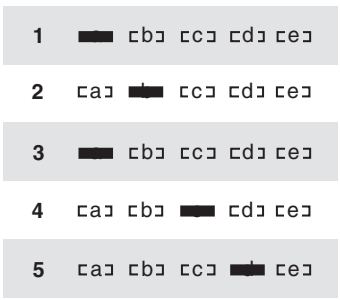
> A 24-year-old presents at 27 weeks into her second pregnancy feeling unwell, with backache, fever and rigors. She has a temperature of 39.5 °C. Urinalysis shows leucocytes and protein +++. Her blood pressure is 80/50.
>
> Which is the most appropriate action to take?
>
> a) Admit to ICU/HDU for intravenous antibiotics and supportive care
> b) Arrange ultrasound of renal tract
> c) Commence 7-day course of oral antibiotics
> d) Give intramuscular steroids to promote fetal lung maturity
> e) Make referral for physicians to review

Answering the questions

For each Part 2 MRCOG examination paper, the SBA answer sheet is numbered 1–50. Against each number there are five lozenges labelled a–e:

1	⊏a⊐	⊏b⊐	⊏c⊐	⊏d⊐	⊏e⊐
2	⊏a⊐	⊏b⊐	⊏c⊐	⊏d⊐	⊏e⊐
3	⊏a⊐	⊏b⊐	⊏c⊐	⊏d⊐	⊏e⊐
4	⊏a⊐	⊏b⊐	⊏c⊐	⊏d⊐	⊏e⊐
5	⊏a⊐	⊏b⊐	⊏c⊐	⊏d⊐	⊏e⊐

Answer each question by boldly blacking out the letter that corresponds to the single best answer in the options list:



Candidates may mark their responses in the question book and then transfer them to the answer sheet, but be aware that this will take longer and all answers must be transferred fully within the time allowed for the examination.

The 200 SBA questions included in this book have all been produced by the Part 2 SBA Regional Question Writing Group and reviewed by the Part 2 MRCOG SBA Sub-Committee, following the same process and meeting the same standards as the questions that will be used in the actual examination. The questions used in this book will not appear in the examination.

Questions

Questions

1

A 32-year-old woman attends her general practitioner surgery concerned that she has forgotten to take her oral contraceptive pills for the previous two days, having taken the first five tablets in the packet. She had unprotected sexual intercourse last night.

What is the most appropriate contraceptive advice?

a) Advise her to miss her forgotten pills and take her next pill at the usual time
b) Advise her that you recommend emergency contraception
c) Advise her to take her forgotten pills now and the next one at the usual time
d) Advise her to take her forgotten pills now and the next one at the usual time and start the next packet omitting the pill-free 7 days
e) Advise her to take her forgotten pills now and the next one at the usual time and use additional contraceptive for the next 7 days

2

A community midwife booking a woman at 10 weeks of gestation is concerned that she might have had female genital mutilation (FGM). She speaks to the registrar, who enquires about the patient's country of origin.

Which country has the highest reported prevalence of FGM?

a) Nigeria
b) Somalia
c) Togo
d) Tanzania
e) Yemen

3

A 33-year-old woman has primary infertility due to bilateral hydrosalpinges. She has been referred for assisted reproduction. She is otherwise fit and well with no significant past medical history of note.

What initial treatment would optimize her chances of pregnancy with in-vitro fertilization (IVF)?

a) Aspiration of hydrosalpinx fluid
b) Hysteroscopic proximal tubal occlusion

c) Laparoscopic proximal tubal occlusion
d) Salpingectomy
e) Salpingostomy

4

A 30-year-old woman had a vaginal delivery and also required manual removal of the placenta under spinal anaesthesia. She is known to be rhesus negative and her baby is confirmed to be rhesus positive. The Kleihauer test shows fetomaternal haemorrhage (FMH) of 5 mL.

How much anti-D should this woman receive?

a) 500 IU
b) 625 IU
c) 750 IU
d) 875 IU
e) 1000 IU

5

You are a working as a fifth-year specialist trainee. A first-year specialist trainee asks you to observe her taking a history and performing an abdominal examination.

Which assessment tool is most appropriate to provide feedback on her history-taking skills?

a) CbD (case-based discussion)
b) Mini-CEX (mini clinical evaluation exercise)
c) OSATS (objective structured assessment of technical skill)
d) PQ (patient questionnaire)
e) TO1 (team observation)

6

You have performed a hysterectomy on a 40-year-old woman for heavy menstrual bleeding. She has no significant medical history. Histology shows completely excised cervical intraepithelial neoplasia (CIN) grade 3. She is on routine recall for her smears and they have all been normal previously.

According to the NHS Cervical Screening Programme (NHSCSP) guidelines, when should she have vaginal vault cytology?

a) 3 and 6 months
b) 6 and 12 months
c) 6 and 18 months
d) 6, 12 and 18 months
e) 6, 12 and 24 months

7

A couple, both aged 28, have been trying to conceive for over two years. They are both fit and well, with a normal body mass index (BMI), and are non-smokers. Following thorough investigation, they have been given a diagnosis of unexplained subfertility.

What treatment would NICE (the National Institute for Health and Care Excellence) recommend is offered to this couple?

a) Clomifene citrate
b) Intracytoplasmic sperm injection (ICSI)