

*Federation of the Royal Colleges of
Physicians of the UK
in partnership with
Specialist Societies*

Specialty Certificate Examinations

John Mucklow

Specialty Certificate Examinations

- Purpose
- Delivery
- Funding
- Specialties involved
- Question writing
- Standard setting

Specialty Certificate Examinations

Purpose

- To ensure that certified specialists have sufficient knowledge to practise competently and safely as consultants
- To complement workplace-based assessments
- To provide a rigorous national assessment to establish public confidence
- To offer a challenge similar to subspecialty certification exams in North America

Specialty Certificate Examinations

Delivery

- 1 diet annually
- Computer-based testing
- 2 papers in each diet
- 100 best-of-five questions in each paper
- Assess core knowledge and application of this knowledge in a clinical setting
- Strict distribution of questions in accordance with blueprint derived from specialty curriculum

Specialty Certificate Examinations

Funding

- Pilot exams in 2006 funded by RCP London
- Development organised by MRCP(UK) Central Office
- Investment by Federation of RCPs in partnership with Specialist Societies
- Some specialist societies have a financial stake
- Fees were set at minimum necessary to cover costs
- Given sufficient numbers of overseas candidates, we may break even after 3-4 years
- There is no 'crock of gold'!

Specialties

First diet

2008

- Gastroenterology

2009

- Diabetes/Endocrinology
- Geriatric medicine
- Nephrology
- Neurology
- Respiratory medicine
- Dermatology
- Infectious diseases

First diet

2010

- Acute medicine
- Medical oncology
- Rheumatology

Question writing

Requirement for each specialty

- 1 diet per year (200 questions/diet)
- 200 questions per year
- Ideally, each question should not be re-used more often than once every 3 years
- Thus, each specialty question bank should contain at least 600 re-usable questions
- To cover curriculum blueprint and allow for near-duplicate questions, initial target is 1000

Question writing

Design of questions

- All questions are multiple choice one-from-five
- Design is identical to that used for MRCP(UK)
- Some questions have a short stem and seek core knowledge
- Others have a longer clinical scenario and require data interpretation and/or clinical judgement
- Very few questions are as long as those found in an MRCP Part 2 Written paper

Question writing

Each question has:

- a clinical stem, which may include some investigation results and/or an image
- a lead-in (the question posed)
- 5 options, 1 of which is correct (or more correct than the other 4)

One mark is awarded for every correct answer – there is no negative marking

Examples can be found on the SCE web site

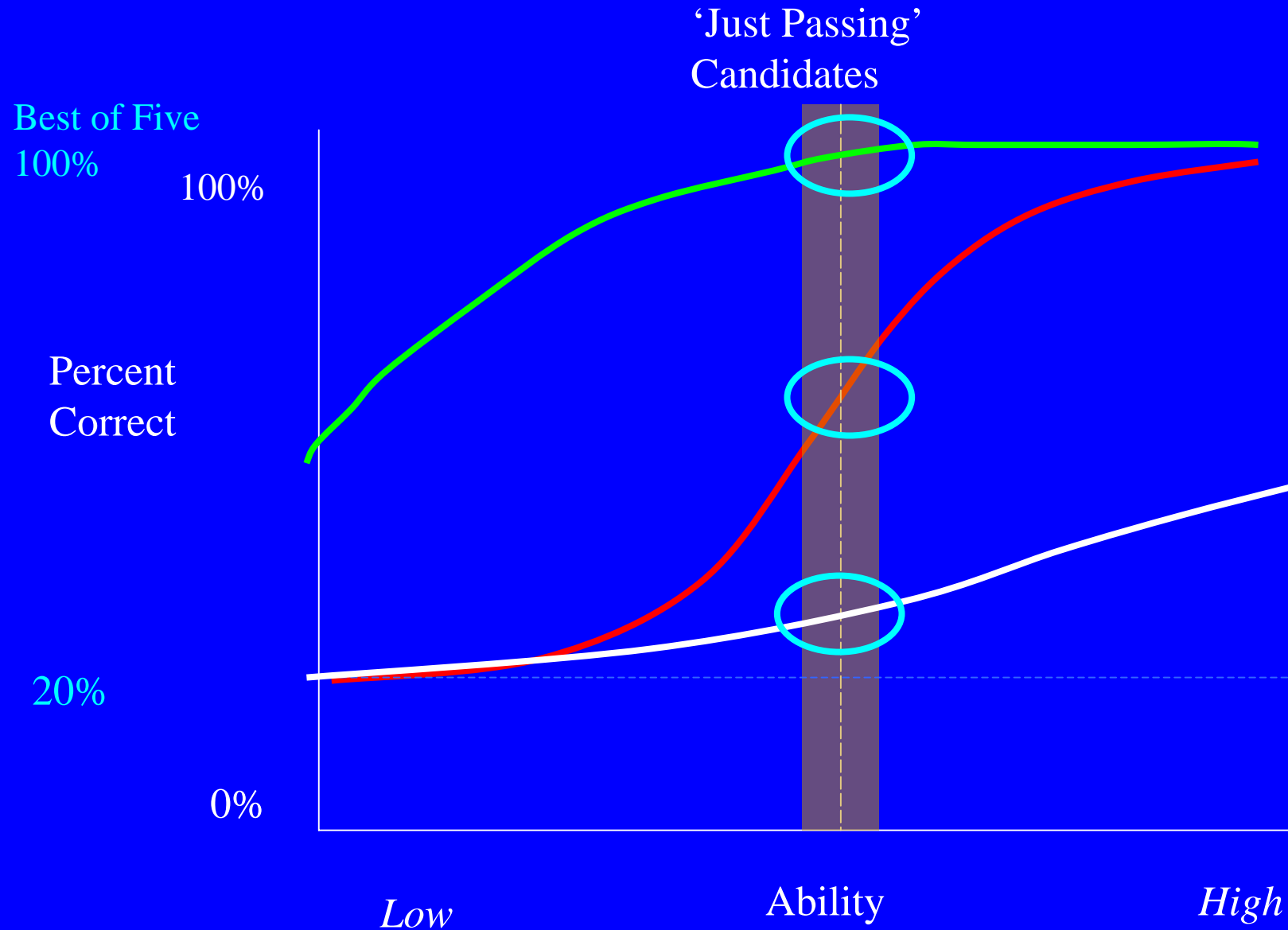
Question writing

The aim of the question writer is to construct a question that:

- will test the knowledge required of a newly registered specialist – neither too easy nor too difficult
- will discriminate between trainees who know enough to pass the exam and those who do not, even among those on the borderline
- will be representative of the overall exam in the challenge it presents

After each diet, the performance of every question is analysed against a standard set of criteria and the results are fed back to the Examining Board

Item Characteristic Curve



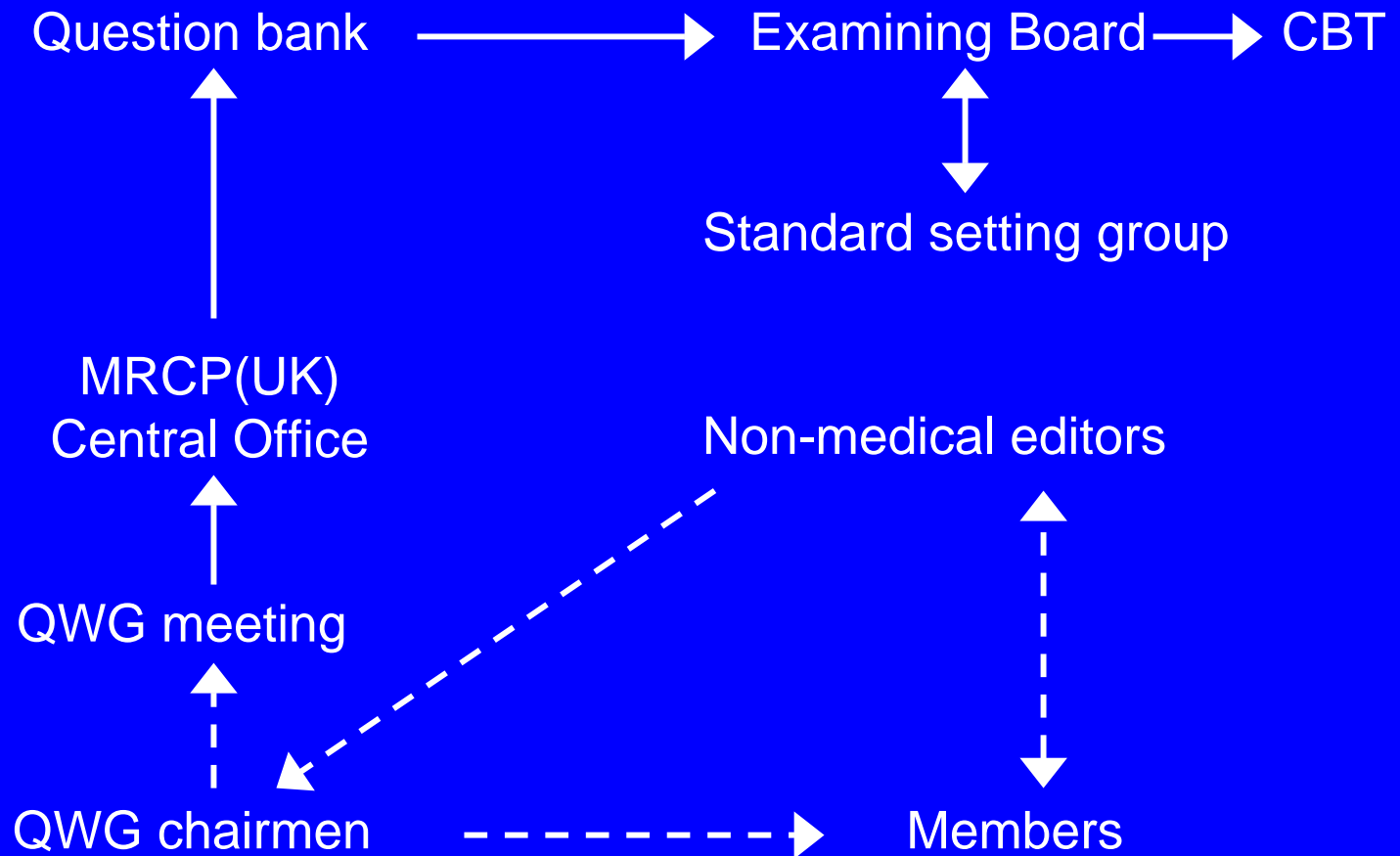
Question Writing Groups (QWGs)

- 11 groups, each comprising:
 - up to 25 specialist members, including a chairman
- Membership by open application; preference given to those with previous experience of writing questions for pilot knowledge-based assessments or MRCP(UK)
- QWG chairmen guide members on choice of question topics, based on blueprint
- Questions discussed at two-day meetings

Obligations of QWG membership

- Attend a workshop as prelude to membership
- Declare any conflict of interest and agree to safeguard confidentiality of test material
- Draft at least 15 questions before each meeting
- Attend QWG meetings
- Remain a member for 5 years, subject to satisfactory performance
- Be prepared to stand down after failing to draft questions for two consecutive meetings without satisfactory explanation

Questions for SCEs



Standard setting

- The aim of the standard setting process is to set a pass mark indicative of 'minimal competence'
- The process involves 8 experienced specialists who are also trainers/supervisors of specialty trainees
- Each independently scrutinizes over 200 questions selected by the Examining Board for the next diet
- Each must decide what proportion of borderline (just-passing) candidates should know the answer to each question

Standard setting

- Questions may seek:
 - core knowledge essential for a newly appointed consultant to practise independently as a specialist
 - knowledge of basic science that is required by the curriculum but is not essential to everyday clinical practice
 - clinical judgement required of a trained specialist
- Having reached a decision about every question, standard setters meet to compare and discuss their views
- Each 'votes' again on every question to reduce the variance
- The mean of all results for all questions is the criterion-referenced pass mark

Specialty Certificate Examinations

- Development of exams
- Designing questions
- The aims of question writers
- The question writing process
- Setting the pass mark