

Feedback on the January 2014 MRCGP Applied Knowledge Test (AKT)

After each sitting of the exam, the AKT core group provides feedback on overall candidate performance via the College website and direct to educationalists via Deaneries. We also highlight areas of general interest related to the exam. We hope that this feedback is helpful to all those involved in education and training, particularly GP trainees themselves, and we welcome comments on the feedback, to the email address at the end of this report.

The AKT 20 exam was held on 29th January 2014 and taken by 1284 candidates.

Statistics

Scores in AKT 20 ranged from 79 to 190 out of 200 questions with a mean overall score of 75.8%.

The mean scores by subject area were:

- 'Clinical medicine' 76.3% (160 questions)
- 'Evidence interpretation' 74.3% (20 questions)
- 'Organisational' 73.3% (20 questions)

The pass mark for AKT 20 was set at 141 with pass rates as below:

Candidates (numbers)	Pass rate
All candidates (1284)	74.7%
ST2 first-time takers (912)	81.3%
ST3 first-time takers (85)	70.6%

For the sake of transparency we also report the other key statistics from this test:

Reliability (Cronbach α coefficient) = 0.90
Standard error of measurement = 5.41

Learning resources

1. Content Guide

As referred to in previous exam reports, the [AKT content guide](#) was made available on the College website last year.

We would recommend that candidates and trainers use this document in the ways we described in the report following AKT 17 which we have reprinted below.

The document is quite long and may appear a little daunting at first glance. We recommend that candidates and trainers use the lists of symptoms and topics to assess educational needs and obtain an overview of those areas which may need more attention. We also recommend that trainees and trainers pay particular attention to the introduction to the Content Guide which provides information on topic importance and the level of detail required.

The lists in Sections 2 (Research, statistics and epidemiology) & 3 (Administration, ethical and regulatory frameworks) are more detailed to help candidates know what topics may be tested. However, candidates should remember that there are only 20 questions on each of these sections in the AKT.

We welcome feedback on the AKT in general and we would be especially pleased to receive comments on the Content Guide and how it could be improved, as this is a new resource.

2. Exam tutorial

The tutorial which begins each AKT in the exam centre, is now available on the [AKT website](#). We strongly recommend that candidates view this tutorial on the website to maximise their familiarity on the day with the exam format, question types, and how to complete answers on the screen. It also shows how to mark questions for review and practising this will save time on the day.

Candidates will note from the online tutorial and also from the sample questions that the question stem frequently includes the phrase “Which is the SINGLE MOST likely ..?”, referring to a list of options. When the question is about a single most likely diagnosis, candidates should bear in mind that the prevalence of a condition should be taken into account in identifying the correct answer, and that the correct answer may not necessarily be the most serious condition listed, if this is less common than an alternative.

3. Essential Knowledge resources

Candidates should consider looking at the Essential Knowledge Updates and Essential Knowledge Challenge sections of the RCGP website as part of their preparation for the AKT. This will familiarise them with updated guidance and emerging knowledge.

4. National guidance

National guidance such as NICE, SIGN and others are the established reference sources for many AKT questions. (With regard to AKT 20, it was clear that not all candidates were aware of the most recent NICE hypertension guidelines, which are now nearly three years old).

We would also highlight the use of the BNF for guidance on prescribing, including the more general information in the opening chapters. The GMC publication “Good Medical Practice” has recently been updated (2013) and with its supporting guidance is also an important reference for the AKT exam.

Performance in key clinical areas- AKT 20

Providing feedback which is educationally useful but which does not undermine the security of test items is never easy. However we have highlighted general areas of good performance, as well as areas where there is room for improvement. Both Curriculum and Content Guide references are given.

Improvements

We noted improvement in performance in some questions related to regulations, such as Freedom of Information (Curriculum statement 2.03 The GP in the wider professional environment, p.48 Content Guide Administration, ethical and regulatory frameworks). Overall, performance in the more “general” medicine topics appears to have improved but this does not hold true for all medicine “specialties” (see below).

There was better performance on some questions related to Care of Children but again this did not apply to all childhood topics (see below).

Areas causing difficulty for candidates

Curriculum statement 2.02 Patient safety and quality of care, (p.33 Content Guide, Pharmaco-therapeutics)

Our feedback in this area again concerns safe use of medication. Candidates appeared unaware of hazards related to the use of over-the-counter supplements or certain foodstuffs in combination with commonly prescribed medication. GPs as well as pharmacists have an important role to play in informing patients about potential risks in this respect. We would encourage candidates to take a broad approach to the issue of drug interactions and contraindications.

Curriculum statement 3.04 Care of children and young people, (p.43 Content Guide, Children and young people)

This is an area where we regularly provide feedback, often with regard to identification of “normal” clinical findings. On this occasion, once more, candidates struggled to recognise when child development was deviating from normal. Gaining relevant knowledge in this important area may be difficult for candidates unless they are able to attend child health clinics and clinical supervisors may be able to facilitate this.

Curriculum statement 3.17 Care of people with metabolic problems, (p.27 Content Guide, Metabolic and endocrine problems)

In the past we have fed back on difficulties candidates have in answering questions concerning diabetes. On this occasion, the problems again related to management of type 2 diabetes, and in particular use of insulin. There also continued to be problems around diagnosis of diabetes. Nurses deliver much routine diabetic care but GPs must have knowledge and understanding of appropriate use of common diabetic medication.

Curriculum statement 3.16 Care of people with eye problems, (p.18 Content Guide, Eye problems)

Questions relating to this area caused candidates some difficulty. Eye problems are common in general practice and we expect candidates to be familiar with the diagnosis and management of those which present most frequently. This will include conditions related to trauma where urgent action may be required.

Curriculum statement 3.20 Care of people with musculoskeletal problems, (p.29 Content Guide, Musculo-skeletal problems including trauma)

Questions on osteoporosis, in particular relating to DEXA scans, were not well answered. This is an increasingly important clinical area and GPs should be able to interpret DEXA scans and act appropriately on the results

Curriculum statement 2.03 The GP in the wider professional environment, (p.48 Content Guide Administration, ethical and regulatory frameworks).

Candidates often struggle with questions related to certification, such as fitness to work certificates. The best way to consolidate knowledge about these is through day-to-day clinical practice!

Overall feedback, AKT 18-20

There are two curriculum areas where we have noted room for improvement, after each of AKT 18-20.

These are:

3.17 Care of people with metabolic problems (diabetes diagnosis and management);

2.02 Patient safety and quality of care (prescribing issues including drug side effects and interactions)

Misconduct

Although misconduct in professional examinations is rare, we would warn candidates that it is taken very seriously and a full investigation of any allegation will be undertaken, including reviewing CCTV footage taken in the test centres. The MRCGP examination regulations and the code of conduct for AKT and CSA assessments give detailed information about misconduct, including the possible penalties for misconduct, in the expectation that candidates will exercise an approach consistent with standards expected by the General Medical Council.

http://www.rcgp-curriculum.org.uk/nmrcgp/regulations_and_documents.aspx

AKT Core group February 2014

Comments or questions can be sent to: exams@rcgp.org.uk