Feedback on the January 2015 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 23 exam was held on 28th January 2015, and taken by 1196 candidates.

Statistics

Scores in AKT 23 ranged from 90 to 195 out of 200 questions with a mean overall score of 76.9%.

The mean scores by subject area were:
- ‘Clinical medicine’ 77.1% (160 questions)
- ‘Evidence interpretation’ 77.2% (20 questions)
- ‘Organisational’ 74.8% (20 questions)

The pass mark for AKT 23 was set at 143 with pass rates as below:

Candidates (numbers) Pass rate

- All candidates (1196) 75.8%
- ST2 first-time takers (835) 83.2%
- ST3 first-time takers (107) 67.3%

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 = 5.38

Impact of extra time and the calculator

As with AKT 22, candidates taking AKT23 had 190 minutes instead of the previous 180, and also the use of an on-screen calculator. The availability of the calculator appears to have helped some candidates but some incorrect answers suggest that errors in using the calculator have arisen. In real-life this could lead to serious errors and a “reality check” on the answer should always be done.
Learning resources

1. Content Guide
As referred to in previous exam reports, the AKT content guide is available on the College website, and is updated each year for the start of the training year (current version August 2014). We would recommend that candidates and trainers use this document in the ways we described in the report following AKT 17.

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 work through 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. However, it is still important to view the tutorial on the day to ensure that candidates are familiar with the exam functionality.

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. AKT sample questions
Sample questions are available in the AKT area of the website in the section entitled ‘How to prepare for the AKT’ and have recently been updated. Two versions are available, with and without answers, to allow candidates to test their knowledge. The format of questions is the same as that of the AKT, but the proportion of questions on individual topics is not representative of the test as there are only 50 questions.

4. 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.

5. National guidance
National guidance such as NICE, SIGN and others are the established reference sources for many AKT questions. 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 23

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

In AKT 23, candidates performed better than previously in some areas of statistical interpretation, including charts and risk estimations. (Curriculum statement 2.04 Enhancing professional knowledge, p.47 Content Guide, Research, statistics and epidemiology). Awareness of legislation relating to data release and protection has improved. Fitness to work certificates have been in place since 2010 and there appears to be increasing familiarity with these, although some of the less commonly used options are still challenging. (Curriculum statement 2.03 The GP in the wider professional environment, p.51 Content guide, Administration, ethical and regulatory frameworks). Drug misuse management items were also well answered. (Curriculum statement 3.14 Care of people who misuse drugs and alcohol, p. 25 Content Guide, Alcohol and substance misuse problems).

Areas causing difficulty for candidates

Curriculum statement 3.01 Healthy people: promoting health and preventing disease (Content guide, Clinical medicine and p.49 Research, statistics and epidemiology)

After AKT 22, we fed back on lack of knowledge around some national screening programmes. Although GPs are not always involved in making referrals when abnormalities are found, candidates should be aware of the relevant pathways and procedures following abnormal screening results.

Items on immunisation were not well answered. There have been a number of recent changes to immunisation programmes and we recommend that candidates update themselves with the “Green Book”.

Curriculum statement 3.03 Care of acutely ill people (Content guide, most sections of Clinical Medicine, including p.33 Pharmaco-therapeutics)

We have noted a recurrent theme of candidates failing to recognise acute, serious but rare illnesses in adults.

There is also some evidence that a small proportion of candidates are using out-dated guidance for CPR and anaphylaxis management.

It is important that candidates are able to identify and correctly manage serious illness and emergencies, even if these are uncommon.

In addition, candidates seemed unaware of prescribing guidance around the use of some antibiotics, and were unclear about situations where medicines may have different indications between adults and children.
Curriculum statement 3.04 Care of children and young people (p.45 Content guide, Children and young people)

We commonly feed back on difficulties with items concerning paediatrics. As with scenarios related to adults, candidates had difficulty with items concerning serious but rare illness in children, where heightened awareness is particularly important. With regard to some common problems, we have highlighted previously that “no action” may sometimes be the most appropriate management strategy. Candidates should also familiarise themselves more thoroughly with the management of asthma in children.

Curriculum statement 3.06 Women’s health (p.37 Content guide, Sexual health)

Candidates had difficulty with some contraceptive questions, including issues around “quick starting” of contraceptives, which is now well-established practice.

Curriculum statement 3.18 Care of people with neurological problems (p.30 Content guide, Neurological problems)

Candidates should familiarise themselves with national guidance on diagnosis and management of different types of headache, which is a common presenting problem.

**Overall feedback for 2014/15 (AKT 21-23)**

We have noted room for improvement after each sitting of the AKT over the past year with regard to the following:

3.06 Women’s health
This includes contraception, antenatal care and more general issues such as continence.

Other areas where we have noted room for improvement in two out of the past three AKT sittings are:

2.03 The GP in the wider professional environment
This covers a range of topics including certification and reports.
3.01 Healthy people: promoting health and preventing disease
This includes a range of issues such as screening and immunisations.
3.04 Care of children and young people
Questions which candidates have found difficult include child development and acute and serious illness.
3.13 Digestive health
This relates mostly to irritable bowel syndrome.
3.17 Care of people with metabolic problems
This mostly relates to questions concerning diabetes, particularly the interpretation of test results, and management.
We hope that candidates will not overlook these and other common and important areas in their exam preparation, guided by the curriculum and the content guide.

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.

AKT Core group February 2015
Comments or questions can be sent to: exams@rcgp.org.uk