Feedback on the January 2017 MRCGP Applied Knowledge Test (AKT 29)

After each sitting of the exam, the AKT core group provides feedback on overall candidate performance via the College website and direct to educators 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.

UK and devolved Home nations

As a general point, we would like to reassure candidates that questions are carefully constructed and checked at each time of use, to ensure that they are applicable across the UK and encompass clinical and organisational guidance for all four home nations.

The AKT 29 exam was held on 25th January 2017 and taken by 1110 candidates.

Statistics

Scores in AKT 29 ranged from 94 to 190 out of 200 questions with a mean overall score of 74.1%.

The mean scores by subject area were:

- ‘Clinical medicine’ 73.2% (160 questions)
- ‘Evidence interpretation’ 81.2% (20 questions)
- ‘Organisational’ 74.0% (20 questions)

The pass mark for AKT 29 was set at 138 with pass rates as below:

<table>
<thead>
<tr>
<th>Candidates (numbers)</th>
<th>Pass rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>All candidates (1110)</td>
<td>72.5%</td>
</tr>
<tr>
<td>ST2 first-time takers (769)</td>
<td>79.6%</td>
</tr>
<tr>
<td>ST3 first-time takers (108)</td>
<td>71.3%</td>
</tr>
</tbody>
</table>

Other key statistics from this test:

- Reliability (Cronbach α coefficient) = 0.90
- Standard error of measurement = 5.60

Learning resources

1. MRCGP AKT website
   A. Content Guide

As referred to in previous exam reports, the AKT content guide is available on the College website (current version August 2014). We would recommend that candidates and trainers use this document in the ways we described in the January 2013 AKT Feedback Report. Candidates who have not had much exposure to research or statistics in their medical education are encouraged not to overlook topics in section 2 of the guide. ST2s who have spent less
time in GP may need to review administrative topics which also feature as a separate section in the Guide.

B. Exam tutorial
There is a generic tutorial on the Pearson VUE website to help candidates familiarise themselves with navigating the computer-based test format. On the day of the test, there is a specific AKT tutorial preceding the exam which shows the exam format, question types, and how to complete answers on the screen. It also shows how to mark questions for review.

SINGLE MOST likely
Candidates will note 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 consider the prevalence of a condition when identifying the correct answer. The most serious condition listed may not necessarily be the correct answer if this is less common as it will not be the MOST likely.

Option lists
All the AKT question formats, apart from the free text, require the candidate to identify the best answer(s) from a list of plausible alternatives, using all of the information in the question. There may be other answers which are not included in the option list, but the candidate should focus on the best available answer for the specific question asked; in other words, focus on the options given, and not what is absent.

C. AKT sample questions
Sample questions are available on the AKT section of the website. 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.

D. Innovait AKT Podcast
This podcast features interviews with GP trainees who have recently taken the AKT, an examiner and the Deputy Lead for the AKT and provides useful tips on revision and preparation.

E. Preparing to take the AKT
This is a concise guide for trainees preparing to take the AKT and contains a clear overview of what is required.

2. Essential Knowledge resources
Candidates should consider looking at the Essential Knowledge Updates and Essential Knowledge Challenge sections of the RCGP website (RCGP Learning – Online learning) as part of their preparation for the AKT. This will familiarise them with updated guidance and emerging knowledge.

3. National guidance
National guidance such as NICE, SIGN are the established reference sources for many AKT questions. As stated earlier, all the questions are checked to ensure that they apply across the UK and would not disadvantage candidates from any of the four Home nations; the MRCGP is the licensing qualification to work anywhere in the UK.

We would also highlight the use of the BNF for guidance on prescribing, including the more general information in the opening chapters. This may be more accessible and obvious in the printed version. The GMC publication “Good Medical Practice” with its supporting guidance is also an important reference for the AKT exam.

**Performance in key clinical areas- AKT 29**

Providing feedback which is educationally useful but which does not undermine the security of test items is never easy. We have highlighted below 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 29, candidates performed better than previously in –

- awareness of “watchful waiting” as a management strategy for self-limiting conditions in childhood (Curriculum statement 3.04 Care of children and young people, p 45 Content guide). In other words, the correct response to some questions may be that no action is required.

- management of asthma. With the recent introduction of new BTS/SIGN guidelines, candidates should make sure they are working with the current version for future exams.

**Areas causing difficulty for candidates**

2.03 The GP in the wider professional environment (p.51 Content guide, Administration, ethical and regulatory frameworks)

After AKT 28, we reminded candidates to be aware of areas which will regularly be tested, for example end of life care and death certification. In AKT 29, candidates had difficulty with the requirements for reporting certain deaths to the Coroner or Procurator Fiscal. Further information can be found in the links below.

Guidance for doctors completing Medical Certificates of Cause of Death in England and Wales

Guidance for doctors completing Medical Certificates of Cause of Death in Scotland

Working with the Coroners Service for Northern Ireland

3.04 Care of children and young people (p.45 Content guide)

After AKT 28, we reported on difficulties candidates had with the diagnosis and investigations of suspected cancer in children. This is a rare but important topic and again in AKT 29 there were similar problems. The NICE 2015 “Suspected Cancer” guidance includes recommendations for children and young people.
3.06 Women’s health (p.40 Content guide)
In general, as stated earlier, the frequency of a condition should be taken into account, when responding to questions on differential diagnosis, and this applies to women’s health as well as other areas.

Knowledge about contraception appears to fluctuate and in AKT 27 and 28 we noted some improvement. However, in AKT 29 some questions caused difficulty, for example around “quick starting” a contraceptive method and emergency contraception. This is important knowledge in terms of avoiding unwanted pregnancies.

Candidates were not familiar with indications for different types of HRT, and also found difficulty with management of incontinence, both of which are common issues in women’s health.

3.10 Care of people with mental health problems (p.24 Content guide)
Anxiety and depression are common problems, which may not respond to first line treatments. Candidates should be familiar with second and third line treatments, which some GPs may initiate and others may take over prescribing after specialist advice. In both cases, the GP becomes responsible for long-term monitoring and safety, including awareness of potential drug interactions.

3.16 Care of people with eye problems (p.16 Content guide)
As in AKT 26 and 27, candidates continued to have difficulty interpreting symptoms which indicate a potentially serious eye problem, where urgent referral may be required. Eye emergencies are not common but can result in serious consequences with visual loss if missed.

3.17 Care of people with metabolic problems (p.26 Content guide)
Candidates gave generally good responses to questions concerning management of type 2 diabetes. However, type 1 diabetes caused difficulty and candidates are reminded in particular to review the management of type 1 diabetes during intercurrent illness, and sick day rules.

3.21 Care of people with skin problems (p.22 Infectious diseases)
Candidates had difficulty with management of fungal skin infections. Clearly these are frequently seen in general practice and candidates should be aware of the range of treatments and indications for each.

Overall feedback for past 12 months (AKT 27-29)
We have noted room for improvement in two out of the past three sittings of the AKT in:

2.03 The GP in the wider professional environment
This is a large area including topics such as consent, confidentiality, death certification and others.

3.04 Care of children and young people
This covers areas such as child development, starting with normality, as well as diagnosis of acute and serious illness, and prescribing for children.
3.06 Women’s health.
This is another large area, with difficulties for candidates arising in areas such as contraception, hormone replacement therapy and pregnancy care.

3.10 Care of people with mental health problems
This relates in particular to medicines management issues, such as appropriate drug prescribing and monitoring,

3.16 Care of people with eye problems
Eye emergencies are not well recognised by candidates.

3.17 Care of people with metabolic problems
Diabetes care encompasses a wide range of topics and certain areas can cause difficulties.

3.21 Care of people with skin problems
This includes both diagnosis 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.

Regulations for Doctors Training for a CCT in General Practice

AKT Core group February 2017
Comments or questions can be sent to: exams@rcgp.org.uk