Feedback on the April 2017 MRCGP Applied Knowledge Test (AKT 30)

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 30 exam was held on 26th April 2017 and taken by 1485 candidates.

Statistics

After reviewing question performance, one question from the 200 in the exam was suppressed from the final scoring total.

Scores in AKT 30 ranged from 84 to 192 out of 199 questions with a mean overall score of 74.1%.

The mean scores by subject area were:
- ‘Clinical medicine’ 73.2% (160 questions)
- ‘Evidence interpretation’ 81.7% (20 questions)
- ‘Organisational’ 72.9% (19 questions)

The pass mark for AKT 30 was set at 137 with pass rates as below:

<table>
<thead>
<tr>
<th>Candidates (numbers)</th>
<th>Pass rate</th>
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<tbody>
<tr>
<td>All candidates (1485)</td>
<td>72.1%</td>
</tr>
<tr>
<td>ST2 first-time takers (1037)</td>
<td>77.3%</td>
</tr>
<tr>
<td>ST3 first-time takers (112)</td>
<td>73.2%</td>
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Other key statistics from this test:

- Reliability (Cronbach α coefficient) = 0.91
- Standard error of measurement = 5.68

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 30
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 30 candidates performed better than previously in –

- awareness of childhood development and normal variation in children (Curriculum statement 3.04 Care of children and young people, p 45 Content guide)
- management of common problems related to men’s health (Curriculum statement 3.07 Men’s health, p.39 Content guide)
- improvement was also noted overall in items related to research, statistics and epidemiology, particularly understanding of risk reduction (Curriculum statements 2.03 The GP in the wider professional environment and 2.04 Enhancing professional knowledge, section 2 Content guide)

Areas causing difficulty for candidates
In general, candidates should ensure that they are familiar with guidance relating to management of common long-term conditions, and examples are included below.

3.01 Healthy people, promoting health and preventing disease (p.45 Content guide
Care of children and young people)
Childhood immunisation schedules are constantly changing, with new vaccines introduced on a regular basis. Candidates should be familiar with national schedules relating to both child and adult vaccinations.

3.06 Women’s health (p.40 Content guide)
Candidates had difficulties with a range of women’s health topics.
Knowledge about contraception appears to fluctuate between exam sittings. In AKT 27 and 28 we noted some improvement. In AKT 29 some questions caused difficulty, for example around “quick starting” a contraceptive method and emergency contraception.

Again in AKT 30, there was lack of knowledge, specifically in relation to serious side effects of combined oral contraception.

We fed back on difficulties with HRT prescribing following AKT 29. In AKT 30 candidates appeared uncertain about appropriate management of common side effects of HRT.

Candidates should be familiar with investigation of common problems such as infertility and amenorrhoea.

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 in AKT 29. In AKT 30, there were problems answering questions relating both to diagnosis and to management of diabetes. Diabetes care is a core part of general practice with which candidates should be familiar.

3.19 Respiratory health (p.36 Content guide)
Knowledge of asthma seems patchy, and as with other areas, varies from sitting to sitting. Candidates will be aware that new guidance was issued by BTS/SIGN in 2016 and should ensure that they are clear about which recommendations have changed and which remain the same.

COPD guidance is well established but still seems to cause some difficulties.

3.21 Care of people with skin problems (p.43 Content guide)
Many GPs are involved in undertaking minor surgery procedures to remove skin lesions. Candidates should be aware of common problems and sequelae which can be associated with removal of skin lesions.

Overall feedback for past 12 months (AKT 28-30)
We have noted room for improvement in the past three sittings of the AKT exam in:

3.21 Care of people with skin problems
This includes both diagnosis and management

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, prescribing for children and vaccinations.

3.06 Women’s health.
This is another large area, with difficulties for candidates arising in topics 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,

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

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 May 2017
Comments or questions can be sent to: exams@rcgp.org.uk