Feedback on the October 2017 MRCGP Applied Knowledge Test (AKT 31)

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 31 exam was held on 25th October 2017 and taken by 1278 candidates. Unfortunately, there was a server failure at Pearson Vue’s Southgate centre in London meaning that 27 candidates were unable to take the AKT that day. A contingency plan was implemented so that those candidates could take the AKT on a back-up date of 15th November. This was obviously a very regrettable event but it is the first time in 10 years that the contingency plan has been needed.

For security reasons, the set of questions was not identical to those used on 25th October, and the pass mark has been set by statistical methods to maintain the current standard for both sets of candidates. The pass mark for any one set of AKT questions will vary slightly reflecting the variable level of difficulty of the questions.

Statistics

Scores in AKT 31 ranged from 89 to 188 out of 200 questions with a mean overall score of 145.9 (72.9%).

The mean score % by subject area were:

- ‘Clinical medicine’ 72.4% (160 questions)
- ‘Evidence interpretation’ 78.2% (20 questions)
- ‘Organisational’ 71.7% (20 questions)

The pass mark for AKT 31 was set at 135 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 (1278)</td>
<td>75.7%</td>
</tr>
<tr>
<td>ST2 first-time takers (519)</td>
<td>80.4%</td>
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<tr>
<td>ST3 first-time takers (349)</td>
<td>82.8%</td>
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Other key statistics from this test:

- Reliability (Cronbach α coefficient) = 0.89
- Standard error of measurement = 5.70
Learning resources

1. MRCGP AKT website
   • 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.

   • 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.

   • 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.

   • 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.

   • 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.

We would also like to bring to your attention a new resource for Trainers entitled ‘What can I do to help my AiT prepare for the AKT exam?’, which is also now freely available on the MRCGP AKT exam website. This concise booklet outlines how Trainers can better help their Trainee effectively prepare for their AKT, highlighting how much a normal day in general practice is the best exam preparation.
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 31

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.

Candidates are reminded that the AKT tests for appropriate and cost-effective management, so sometimes the correct answer is not to investigate or not to prescribe or refer. Candidates find this option a difficult one to choose, as is sometimes the case in clinical practice.

- **Improvements**
  In AKT 31 candidates performed better than previously in –
  - areas concerned with genetics, such as awareness of genograms, modes of inheritance and practical applications of genetics (Curriculum statement 3.02 Genetics in primary care, Content guide p.18). Genetics is a rapidly expanding and developing topic so keeping up to date is important.
  - questions concerned with Parkinson’s disease (Curriculum statement 3.05 Older Adults, Content guide p.30 Neurological problems). We have previously fed back about therapy, which is likely to be initiated in secondary care but ongoing prescribing is usually the responsibility of primary care.
  - awareness of different types of HRT and contraindications to use. HRT is becoming more commonly prescribed. However, recognition and diagnosis of the menopause is still causing difficulties. (Curriculum statement 3.06 Women's health, p.40 Content guide).

- **Areas causing difficulty for candidates**
  - 2.02 Patient safety and quality of care (p.33 Content guide, Pharmaco-therapeutics)
    - We have previously commented that there will always be a question concerning drug dose calculation in each sitting of the AKT. These will be basic calculations and a calculator is available. However, candidates should perform a reality check on the answer they derive!
o A further important safety issue concerns monitoring of DMARDs. These drugs are usually initiated in primary care but monitoring is often the responsibility of the GP who should be aware of the specific requirements of each drug and when specialist advice or action is needed.

o Appropriate use of antibiotics caused some difficulty for candidates, who are reminded about issues concerning resistance.

o 3.01 Healthy people, promoting health and preventing disease (p.45 Content guide Care of children and young people)
We fed back on this item after AKT 30. 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, including for specific at risk groups.

o 3.03 Care of acutely ill people (Content guide- various sections)
Candidates had some difficulty with management of acute medical emergencies in the community, including sepsis and related conditions. Sepsis has recently been highlighted nationally as a serious condition which is sometimes missed.

o 3.12 Cardiovascular health (p.9 Content guide)
National guidance exists on a number of conditions including hypertension and heart failure. This guidance is the point of reference for AKT questions, and not local guidance, or what happens in individual practices.

o 3.14 Care of people who misuse drugs and alcohol (p.25 Content guide)
Candidates had some difficulty with questions concerning assessment and management of alcohol abuse. This is a common problem with which candidates should be familiar.

o 3.16 Care of people with eye problems (p.16 Content guide)
Although eye problems may increasingly be dealt with by opticians, GPs need to know when to refer urgently.

o 3.19 Respiratory health (p.36 Content guide)
We fed back on this area after AKT 30. Knowledge of asthma management remains patchy. 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.

- Overall feedback for past 12 months (AKT 29-31)
We have noted room for improvement in the past three sittings of the AKT exam in:

o 3.01 Healthy people, promoting health and preventing disease
There have been many significant changes to the immunisation schedules over recent years and this is an area that is delegated to other practice staff. However, the decision about vaccination is often posed to the GP and requires knowledge of current guidance.
3.06 Women’s health
This is a large area, with difficulties for candidates arising in topics such as contraception and pregnancy care.

3.16 Care of people with eye problems
Both acute and routine presentations cause difficulty. This is an area that is increasingly being delegated to primary care opticians but GPs need to be aware of eye presentations that require urgent intervention to prevent sight loss if the opportunity is missed.

3.17 Care of people with metabolic problems
Diabetes care encompasses a wide range of topics across many different subspecialties, and polypharmacy is common.

3.19 Respiratory health
The main topic concerned here is asthma where new guidance was introduced in 2016.

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

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