

## Feedback on the April 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 21 exam was held on 30<sup>th</sup> April 2014 and taken by 1430 candidates.

### Statistics

Scores in AKT 21 ranged from 86 to 190 out of 200 questions with a mean overall score of 72.2%.

The mean scores by subject area were:

- 'Clinical medicine' 72.5% (160 questions)
- 'Evidence interpretation' 73.8% (20 questions)
- 'Organisational' 67.9% (20 questions)

The pass mark for AKT 21 was set at 134 with pass rates as below:

Candidates (numbers)	Pass rate
All candidates (1430)	72.5%
ST2 first-time takers (1013)	79.5%
ST3 first-time takers (73)	79.5%

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

Reliability (Cronbach  $\alpha$  coefficient) = 0.90  
Standard error of measurement = 5.74

### 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. This is updated each year for the start of the training year.

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.

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 on the AKT section of the website 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 21**

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

Knowledge of immunisation schedules appeared to have improved in AKT 21 (Curriculum statement 3.04 Care of children and young people, content guide p.44). This is an area which has repeatedly caused difficulty for candidates in the past. Fitness to work questions were answered better (2.03 The GP in the wider professional environment, content guide p.49) and candidates did well in questions related to fibromyalgia (3.20 Care of people with musculoskeletal problems, content guide p.29). In previous sittings, questions related to hypertension were not well answered and candidates appeared to be unaware of NICE guidance. However, there was improvement in this area in AKT 21 (3.12 Cardiovascular health, p.12 content guide). Falling under the same curriculum heading, candidates performed well in questions related to acute circulatory problems.

Drug calculation questions are included in every AKT and we have noted only a marginal improvement in candidates answering these correctly. Some free-text questions also require drug names which candidates often spell incorrectly. Although prescribing is usually computerised and done from a drop-down list, correct spelling is essential to avoid potentially dangerous confusion, especially in hand-written prescriptions.

## Areas causing difficulty for candidates

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

Two areas caused some difficulty.

a) **Death and Cremation certification.** Candidates may not have much experience of completion of death and cremation certificates, but this is an important area where legal requirements must be adhered to. The following links will provide useful guidance for doctors working in England and Wales, Scotland and Northern Ireland. Questions take into consideration the variation between the Home countries and are applicable to the whole of the UK.

[http://www.gro.gov.uk/images/medcert\\_July\\_2010.pdf](http://www.gro.gov.uk/images/medcert_July_2010.pdf)

[http://www.sehd.scot.nhs.uk/cmo/CMO\(2009\)10.pdf](http://www.sehd.scot.nhs.uk/cmo/CMO(2009)10.pdf)

<http://www.dhsspsni.gov.uk/guidance-death-stillbirth-and-cremation-certification-pt-b.pdf>

b) All doctors need to be aware of their responsibilities when tasks are delegated, especially if the delegation concerns administration of medicines by other health professionals. Candidates appeared unfamiliar with some of the legal guidance and good practice recommendations in this area.

Curriculum statement 3.03 Care of acutely ill people (p.23 Content guide, infectious diseases)

In each AKT there will always be questions relating to infections. A number of these questions were not well answered in AKT 21. We would recommend that candidates review the summary tables in BNF section 5.1, concerning antibacterial therapy and prophylaxis.

Curriculum statement 3.06 Women`s health (p.37 Content guide, sexual health)

Questions concerning contraception continue to cause difficulty for candidates. Patients often consult nurses for advice in this area but GPs should be familiar with the common indications and contraindications for different contraceptive methods, in order to counsel women effectively. With regard to LARC, it is important to be aware of drugs which interact with or may reduce the efficacy of this option.

Curriculum statement 3.10 Care of people with mental health problems (p.25 Content guide, mental health problems)

Candidates usually perform quite well on mental health questions but in AKT 21 there were difficulties concerning anxiety diagnosis and management. National guidance exists relating to generalised anxiety disorder, and a range of other mental health problems, and candidates should be familiar with this guidance.

Curriculum statement 3.13 Digestive health (p.14 Content guide digestive problems, including nutrition)

Candidates had some difficulty with questions relating to common GI problems such as irritable bowel syndrome and coeliac disease. There is NICE guidance available which may prove helpful.

Curriculum statement 3.14 Care of people who misuse drugs and alcohol (p.26 Content Guide, Alcohol and substance misuse problems)

Drug and alcohol problems are very common in patients consulting in general practice, and management is largely community-based. Candidates appeared unfamiliar with treatment of symptoms related to substance withdrawal. This is another area where management may be delegated to other healthcare professionals but the overlap with other conditions means that the GP has to be aware of current management regimes.

Curriculum statement 3.17 Care of people with metabolic problems, (p.28 Content Guide, Metabolic and endocrine problems)

Candidates should be familiar with certain key symptoms which may point to the possibility of potentially life-threatening but avoidable poisoning, including by ingestion of agents or inhalation of fumes. Accidental poisoning in childhood is a common reason for parents seeking emergency advice.

Curriculum statement 3.21 Care of people with skin problems (p.41 Content guide, skin problems)

Skin disease is another very common area of clinical presentation in general practice, and candidates should be confident in applying their knowledge. Questions on this topic are frequently not well answered, and may reflect limited training time in dermatology. In AKT 21, candidates again appeared unfamiliar with diagnosis and management of psoriasis.

**Overall feedback for the training year 2013-2014: (AKT 19-21)**

We have noted room for improvement after each sitting of the AKT over the past year with regard to *3.17 Care of people with metabolic problems*. This mostly relates to questions concerning diabetes, particularly in the interpretation of test results and routine management.

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

*2.02 Patient safety and quality of care*

This relates to prescribing issues.

*3.21 Care of people with skin problems*

Diagnosis and management of skin conditions such as psoriasis has proved difficult for candidates.

*3.06 Women`s health*

This includes contraception and more general issues such as continence.

*2.03 The GP in the wider professional environment*

This covers a range of topics including certification.

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.

[http://www.rcgp-curriculum.org.uk/nmrcgp/regulations\\_and\\_documents.aspx](http://www.rcgp-curriculum.org.uk/nmrcgp/regulations_and_documents.aspx)

**AKT Core group May 2014**

**Comments or questions can be sent to: [exams@rcgp.org.uk](mailto:exams@rcgp.org.uk)**