Feedback on the MRCGP Applied Knowledge Test (AKT)
April 2021, AKT 42

After each sitting of the exam, the AKT core group provides feedback on overall candidate performance via the RCGP website and direct to educators via Deaneries/LETBs. 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 AiTs themselves, and we welcome comments on the feedback to the email address at the end of this report.

For important general information about how to prepare for the AKT exam, including specifically how trainers can better help AiTs, descriptions of the exam format and content, as well as ‘frequently asked questions’, please see the weblinks throughout the AKT page of the MRCGP site.

We realise that there are areas throughout the curriculum with which some candidates are less familiar or experienced than others. This may be due to differences in undergraduate or postgraduate training and the many varieties of clinical experience. We encourage candidates who are in this position, for example, around women’s health issues, evidence-based practice, general practice organisation and management, or any other topic, to identify these as learning needs where specific training or updating may be required.

The AKT 42 exam was held on 28th April 2021 and taken by 2050 candidates, a record number.

Statistics

After reviewing question performance, one of the 200 questions was suppressed from the final scoring total.

Scores in AKT 42 ranged from 78 to 190 out of 199 questions, with a mean overall score of 148.7 marks (74.7%).

The mean scores by subject area were:

- ‘Clinical knowledge’ 75.04% (159 questions)
- ‘Evidence-based practice’ 73.99% (20 questions)
- ‘Organisation and management’ 72.69% (20 questions)

The pass mark for AKT 42 was set at 141

Pass rates are shown below:

<table>
<thead>
<tr>
<th>Candidates (numbers)</th>
<th>Pass rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>All candidates (2050)</td>
<td>69.50%</td>
</tr>
<tr>
<td>UK first-time takers (916)</td>
<td>83.62%</td>
</tr>
</tbody>
</table>
Other key statistics from this test:

Reliability (Cronbach α coefficient) = 0.91
Standard error of measurement = 5.53 (2.78%)

**Performance in key clinical areas – AKT 42**

Providing feedback which is educationally useful but which does not undermine the security of test questions is never easy. We have highlighted below general areas of good performance, as well as areas where there is room for improvement. Comments are referenced to the 2019 RCGP curriculum. Please note that the previous AKT Content Guide has now been subsumed into the Topic Guides of the new curriculum. Many topics appear in several places throughout the curriculum and we have not listed all of these.

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

Some questions may relate to clinical situations such as management of mildly abnormal blood test results. As described above, it may be that significant additional testing is not required and this may be the correct answer option.

We will ask about abnormal examination findings, including significant retinal examination findings. This question format will generally be photographs. We may also ask about normal findings, and some of these will be illustrated by photographs without any abnormality.

We may ask about investigations commonly undertaken in secondary care after patients are referred, for example, for investigation of suspected cancer. We do not expect candidates to have detailed knowledge of these investigations, but we would expect that candidates have sufficient awareness to be able to respond to patient queries about possible further tests, when a referral is discussed and agreed.

We also remind candidates that drug choices should be those that reflect evidence-based, widespread and accepted practice in primary care, and not those that a secondary care doctor with specialist skills and experience might sometimes make. There may be questions involving drug dose and volume calculations, where the maths will not be complicated. Again we ask, please, reality-check your answer, especially with regard to the volume to be administered. We receive answers to these calculations which are quite clearly wrong and by dangerously large amounts.

With regard to non-clinical areas of the exam, most candidates do well in questions on data interpretation and general practice administration. We use a range of resources to test data interpretation, including the types of graphs and tables regularly sent to practices from local primary care organisations and health boards. We would encourage all candidates, and in particular those who may feel they have gaps in their knowledge in this area, or whose training has not included data interpretation, to use the following 2019 resource produced by the AKT group.

The GP curriculum gives further guidance with regard to professional and administration topics, and GP trainers can provide useful help to candidates by sharing the content of their administrative workload with trainees, many of whom may be unfamiliar with the range of administrative tasks with which GPs engage.

We will continue to test on new and emerging knowledge relevant to primary care, and that includes areas such as COVID-19.

The vast majority of candidates answer every question in the AKT exam. We hope that candidates have a good level of knowledge and are able to apply this knowledge confidently when selecting answers. However, there is no negative marking in the AKT exam and marks are not deducted if the chosen answer option is wrong.

Improvements

In AKT 42, candidates performed better than previously in questions related to:

- Recognition of normal findings in young children (Life Stages Topic, Children and Young People).
- Recognition of symptoms which might indicate an underlying cancer (Life Stages Topic, People with Long-term Conditions including Cancer).
- Differential diagnosis of common symptoms such as palpitations and chest pain (Clinical Topic Guide, Cardiovascular Health).
- Management of depression and anxiety, including prescribing issues (Clinical Topic Guide, Mental Health). This was a continued improvement from AKT 41.

Areas causing difficulty for candidates

Equality, Diversity and Inclusion (Professional Topic Guides)

In AKT 42, candidates had difficulty as regards the responsibility for clinical management decisions with transgender people. We recommend that candidates keep up-to-date with GMC guidance, which provides detailed, practical, advice on decision making across a wide range of potentially complex areas.

Children and Young People (Life Stages Topic)
As with AKT 41, candidates found difficulty with consent and capacity issues in relation to children, and safeguarding. We repeat our comments from AKT 41, namely that these are areas which GPs are required to consider on a daily basis in their clinical practice and with which candidates should be very familiar. The GMC provides extensive guidance on their website.

**People at the End-of-Life (Life Stages Topic)**

Providing holistic care at the end-of-life requires a breadth of knowledge and skills. In AKT 42, candidates had difficulty with regard to appropriate prescribing for different types of pain at the end of life. In general, questions concerning pain management were not well answered. We recommend that candidates keep up to date with current national guidance in the important area of pain management.

**Dermatology (Clinical Topic)**

We regularly feed back on difficulties that candidates have around diagnosis and management of common skin conditions. This was again the case in AKT 42. Photographs will often be used when testing in this area, and candidates might find online photographic resources showing common conditions useful in their revision, as well as their own day-to-day clinical practice.

**Haematology (Clinical Topic)**

Candidates had difficulty in this area with regard to interpretation of full blood count results, and making a decision on which further blood tests might be required to investigate anaemia. This is a daily task for all GPs and something that candidates may want to review in their routine clinical practice.

**Metabolic problems and endocrinology (Clinical Topic)**

In the past, we have fed back on difficulties candidates experience around management of diabetes. In AKT 42, as in AKT 39, candidates did not perform well with regard to insulin regimes. While we do not expect specialist knowledge in this area we do expect candidates to have a general understanding of the safe and appropriate adjustment of insulin.

More generally, we noted instances of candidates not identifying a common endocrine presentation from a clear description given, and therefore, for example, not selecting the most appropriate test to diagnose the condition, from the list of options. Throughout the exam, candidates should not overlook common conditions when considering their answers.

**Sexual Health (Clinical Topic)**

In AKT 40 and 41, we noted some improvement in knowledge concerning contraception. However, in AKT 42, candidates were again finding this area difficult, for example in relation to oral contraception prescribing. Although practice nurses often lead in the provision of contraceptive advice, GPs should be familiar with this common and important area of practice.
Past 12 months (AKTs 40-42)

We have highlighted a need for improvement in each of the last three sittings of the AKT exam regarding:

**Children and Young People**

The feedback has centred on the very important topic of safeguarding, including consent and capacity.

In two of the last three sittings there has been room for improvement in the following areas:

**Leadership and Management**

Issues on which we have fed back include staff vaccinations and data protection.

**Gynaecology and breast**

HRT and management of irregular periods were the areas of difficulty.

**Sexual health**

The area of difficulty here is contraception.

We hope that candidates will not overlook these and other important areas in their exam preparation, guided by the GP Curriculum, particularly the Knowledge and Skills sections within each Topic Guide.

We now publish on the AKT website a summary of feedback over the last five years. This allows candidates to have an “at a glance” overview of areas where there is room for improvement, without the need to go back over 15 separate, archived AKT reports.

**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 the AKT and RCA 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 2021**
Comments or questions to exams@rcgp.org.uk