

Feedback on the MRCGP Applied Knowledge Test (AKT) October 2020, AKT 40

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 or any other topic, to identify these as learning needs where specific training or updating may be required.

The AKT 40 exam was held on 28th October 2020 and taken by 1594 candidates.

Statistics

Scores in AKT 40 ranged from 72 to 195 out of 199 questions, with a mean overall score of 148.7 marks (74.72%).

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

The mean scores by subject area were:

- 'Clinical knowledge' 74.82% (159 questions)
- 'Evidence-based practice' 72.84% (20 questions)
- 'Organisation and management' 75.80% (20 questions)

The pass mark for AKT 40 was set at **139**.

Pass rates are shown below:

Candidates (numbers)	Pass rate
All candidates (1594)	70.14%
UK first-time takers (816)	88.60%

Other key statistics from this test:

Reliability (Cronbach α coefficient) = 0.92
Standard error of measurement = 5.6 (2.82%)

Performance in key clinical areas – AKT 40

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 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, recently produced by the AKT group:

<https://www.rcgp.org.uk/training-exams/mrcgp-exam-overview/-/media/B4406D5D2E9A492B86AD74BC3FEFD08B>.

Training requirements for child and adult safeguarding are detailed elsewhere (<https://www.rcgp.org.uk/training-exams/training/mrcgp-workplace-based-assessment-wpba/cpr-aed-and-child-safeguarding/child-and-adult-safeguarding.aspx>). Safeguarding issues will be tested in the AKT exam and candidates are reminded to regularly engage in participatory and non-participatory learning activities.

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 40, candidates performed better than previously in questions related to:

- Interpretation of some graphs and charts (Professional Topic Guide, Evidence Based Practice, Research and Sharing Knowledge)
- Anticoagulation (Clinical Topic Guide, Cardiovascular Health). This included items on warfarin and DOACs.
- Contraception (Clinical Topic Guide, Sexual Health). There were some areas of contraception which were answered better, but this did not apply throughout (see below) .

Areas causing difficulty for candidates

Evidence Based Practice, Research and Sharing Knowledge (Professional Topic)

Items concerning communication of risk were not well answered in AKT 40. Candidates should be able to understand and share with patients issues around risk, including the use of risk assessment tools, and understand concepts such as absolute and relative risk well enough in order to be able to explain these to their patients.

Improving quality, safety and prescribing (Professional Topic)

Safe prescribing is a key part of general practice. We expect candidates to be very familiar with serious side effects and interactions related to commonly used drugs. In AKT 40, candidates were not aware of some significant interactions between antidepressant drugs and other commonly used medicines. There was also a lack of knowledge around drugs which may be nephrotoxic.

Leadership and Management (Professional Topic)

Health and safety matters concerning practice staff fall within the management responsibilities of GPs. In AKT 40, candidates had difficulty with pre-employment vaccination requirements.

Urgent and Unscheduled Care (Professional Topic)

After AKT 39, we fed back that there was an improvement in questions concerning emergency medicine. However, this was not maintained into AKT 40, where candidates had difficulty answering questions concerning the primary care management of acute illness such as sudden collapse.

Children and Young People (Life Stages Topic)

GPs have a very important role in child and adult safeguarding, and we have provided a link in this report (above) to resources and requirements for the MRCGP. In AKT 40, candidates had difficulty identifying situations which might indicate non-accidental injury.

Older Adults (Life Stages Topic)

Providing support to patients around decision-making, including paying careful attention to consent and capacity issues, is a core part of general practice. In AKT 40, candidates were uncertain about legal documentation which may be in place concerning decision-making in older adults, and which also has applicability across other age groups. The AKT tests an understanding of the knowledge that applies across all four home nations.

Cardiovascular Health (Clinical Topic)

ECGs are routine investigations in primary care and although many are automatically interpreted, these interpretations cannot always be relied on. In AKT 40, candidates had difficulty with questions concerning common ECG abnormalities. This is an area that we will continue to test on in the AKT.

Gynaecology and Breast (Clinical Topic)

There was some difficulty with items concerned with HRT. We encourage candidates who have had less clinical experience around women's health issues, to identify these as learning needs where specific training or updating may be required.

Sexual health (Clinical Topic)

Candidates were unsure about contraceptive recommendations for women taking certain potentially teratogenic drugs, and there was also uncertainty around the relative efficacy of different LARC methods. MHRA alerts regularly remind clinicians about the importance of giving appropriate contraception advice when teratogenic drugs are being taken.

Smoking, Alcohol and Substance Misuse (Clinical Topic)

Substance misuse problems are common in general practice. In AKT 40, candidates had difficulty with correctly identifying possible reasons for acute mental health problems which might be related to drug misuse.

Past 12 months (AKTs 38-40)

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

Improving quality, safety and prescribing

There is often room for improvement with regard to candidates' knowledge of safe prescribing and medicines management. A recent review has highlighted that approximately 25% of questions within the AKT clearly require therapeutics knowledge. The BNF remains an essential revision aid for all candidates.

Leadership and Management

This is a broad area. Issues on which we have fed back include health and safety, such as the health of staff, ethical issues, and death certification requirements.

Children and Young People

We have fed back on a range of areas such as screening, consent/confidentiality, safeguarding, and infections.

Dermatology

This includes diagnosis of common conditions, including genital skin problems, often from photographs.

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

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 November 2020
Comments or questions to exams@rcgp.org.uk