

Feedback on the MRCGP Applied Knowledge Test (AKT) AKT 45, April 2022

The AKT core group provides feedback on overall candidate performance after each exam sitting, via the RCGP website and direct to Deanery/LETB Educators. We also highlight areas of general interest related to the exam. This feedback is intended to be helpful to all those involved in education and training, particularly AiTs themselves. 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.

The feedback consists of a report on the current sitting of the exam, followed by a section of general advice and feedback to candidates.

The AKT 45 exam was held on 27th April 2022 and taken by 2230 candidates.

Statistics

Scores in AKT 45 ranged from 66 to 194 out of 199 questions, with a mean overall score of 146.1 marks (73.42%).

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' 73.24% (159 questions)
- 'Evidence-based practice' 72.40% (20 questions)
- 'Organisation and management' 75.85% (20 questions)

The pass mark for AKT 45 was set at **142**.

Pass rates are shown below:

Candidates (numbers)	Pass rate
All candidates (2230)	60.31%
UKG first-time takers (860)	80.37%

Other key statistics from this test:

Reliability (Cronbach α coefficient) = 0.93
Standard error of measurement = 5.71 (2.87%)

Performance in key clinical areas – AKT 45

Providing feedback, which is educationally useful, but which does not undermine the security of test questions is not 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 current RCGP curriculum. Many topics appear in several places throughout the curriculum, and we have not listed all of these.

Improvements

In AKT 45, candidates performed better than previously in questions related to:

- Palliative care, including prescribing for end-of-life symptoms (People at the end of life)
- Diagnosis of cancer (referred to in many of the clinical topics sections)
- Diagnosis of important/common oral conditions (Ear, nose and throat, speech and hearing)
- Emergency contraception (Sexual health)

Areas causing difficulty for candidates

In early 2021, we produced for the first time a summary of feedback provided over the last five years, which is updated after every AKT exam, and published on the AKT website. This allows candidates 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. Please note that some themes often recur, including, once again, in the feedback provided below. We encourage use of this summary resource which can be found in the reports section at <https://www.rcgp.org.uk/gp-training-and-exams/mrcgp-exam/mrcgp-applied-knowledge-test-akt.aspx>.

Improving quality, safety and prescribing (Professional Topic)

We frequently feed back on issues concerning safe prescribing. This includes areas such as correct calculation of drug doses, awareness of side-effects and drug interactions, and monitoring of drugs.

In AKT 45 candidates had difficulty in two areas. There was a lack of knowledge around appropriate monitoring of drugs commonly prescribed for some mental health conditions. There was also a lack of knowledge around less common but potentially serious side-effects of drugs used to treat several long-term conditions. We recommend the BNF as a resource for exam preparation, in particular the general sections, where they relate to commonly prescribed groups of drugs.

Leadership and management (Professional Topic)

It is common in day-to-day practice to be asked for information from medical records. These requests come from a large range of sources, including the patient themselves, family members, and outside agencies or individuals. Maintaining confidentiality appropriately, and in accordance with law and good practice is a core professional responsibility of all doctors. However, in AKT 45, candidates were unclear about

some aspects of access to patient records with which it is important to be familiar. GMC and BMA guidance are helpful resources in this regard.

Cardiovascular health (Clinical Topic)

Advising patients about raised blood pressure, and prescribing medication to reduce cardiovascular risk where appropriate is an almost daily task for most GPs. In AKT 45, candidates were unfamiliar with the relevant blood pressure and risk thresholds which guide prescribing. National guidelines on management of common conditions are a useful exam revision resource.

Candidates also had difficulty with interpretation of common, abnormal ECG findings. As noted in feedback from past exams, including after AKT 44, ECGs are widely recorded, both routinely and urgently in primary care and although many are automatically interpreted, these interpretations cannot always be relied upon. Having identified the abnormality, candidates then need to know what management is required. ECGs are an area that we will continue to test on in the AKT.

Gastroenterology (Clinical Topic)

Some patients with long-term conditions may be jointly cared for by primary and secondary care, and this includes some gastroenterological conditions. As stated in the "General advice" summary on the next page of this feedback, we do not expect candidates to have detailed knowledge of secondary care drug choices and uses. However, we do expect candidates to be familiar with drugs used in the management of relatively common primary care presentations of jointly managed long-term conditions, where the GP may be initiating some treatments, or adjusting existing treatments, or taking the prescribing responsibility for drugs recommended in secondary care. In AKT 45, candidates had difficulty with knowledge concerning the management of some of these conditions.

Past 12 months (AKTs 43-45)

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

Improving quality, safety and prescribing

The feedback concerned DMARD side-effects, drug dose calculations and drug monitoring.

In two of the last three sittings of the exam there was a need for improvement regarding:

Cardiovascular health

The feedback concerned ECGs on each occasion, and also raised blood pressure management.

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. Please be mindful to respectfully and carefully follow the instructions outlined by Pearson VUE test centre staff.

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. See [Regulations for Doctors Training for a CCT in General Practice](#) for more details.

AKT Core Group May 2022
Comments or questions to exams@rcgp.org.uk

General advice and feedback points

- 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 both within and outside of the UK, and the many varieties of clinical experience. We encourage candidates who are in this position, for example, around women's health issues, data interpretation, the application of basic medical statistics, evidence-based practice, general practice organisation and management, or any other topic, to identify these early in their training as learning needs where specific training or updating may be required.
- 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. The knowledge which informs this discussion can have a significant impact on the patient's decision to move forward with investigation for what might be a serious underlying problem.
- 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. Ensure that any decimal points are in the correct place - this advice applies whether or not you choose to use the available calculator. Please reality-check your answer, especially about the volume to be administered. We receive answers to these calculations which are quite clearly wrong and by dangerously large amounts.
- Our approach to testing around immunisations has moved away from expecting detailed knowledge of childhood immunisation schedules, as these have become more complex over recent years, and also because in some parts of the UK immunisation provision is no longer primary care led.

However, we do expect candidates to be aware of important indications, contraindications and side-effects of childhood and other common immunisations. We also expect some knowledge of occupational vaccine requirements as they apply to GP settings.

- Regarding non-clinical areas of the exam, overall, 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, especially those whose training has not included data interpretation in a UK setting, to use the following 2019 resource produced by the AKT group <https://www.rcgp.org.uk/training-exams/mrcgp-exam-overview/-/media/B4406D5D2E9A492B86AD74BC3FEFD08B>.
- The GP curriculum gives further guidance about 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.
- Safeguarding issues will be tested in the AKT exam and candidates are reminded to regularly engage in participatory and non-participatory learning activities. 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>).
- We will continue to test on new and emerging knowledge relevant to primary care, and that includes areas such as COVID-19.
- Almost all candidates answer every question in the AKT exam. We hope that candidates have a good level of knowledge and can 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.