

Feedback on the MRCGP Applied Knowledge Test (AKT) AKT 46, October 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 46 exam was held on 26th October 2022 and was taken by 2139 candidates.

Statistics

Scores in AKT 46 ranged from 71 to 193 out of 200 questions, with a mean overall score of 147.7 marks (73.84%).

The mean scores by subject area were:

- 'Clinical knowledge' 73.76% (160 questions)
- 'Evidence-based practice' 77.11% (20 questions)
- 'Organisation and management' 71.24% (20 questions)

The pass mark for AKT 46 was set at **141**.

Pass rates are shown below:

Candidates (numbers)	Pass rate
All candidates (2139)	68.02%
UKG first-time takers (759)	86.30%

Other key statistics from this test:

Reliability (Cronbach α coefficient) = 0.92
Standard error of measurement = 5.68 (2.84%)

Performance in key clinical areas – AKT 46

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

- Drug dose calculations (Improving quality, safety and prescribing)
- Acute ill health in children (Children and young people)
- Acute cardiovascular problems (Cardiovascular health)
- Recognition of ENT conditions (Ear, nose and throat, speech and hearing)

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>.

Leadership and management (Professional Topic)

After AKT 45, we fed back on difficulties candidates had with the application of concepts related to maintaining confidentiality. In AKT 46, candidates were unclear about privacy, which may overlap with confidentiality in some circumstances, but might also include issues around wide uses of social media and digital technologies. AKT questions are centred on real-life scenarios and while we do not expect detailed knowledge of regulations, the scenarios concerning professional topics will require thoughtful application of important principles.

Gastroenterology (Clinical Topic)

Candidates will be aware that some AKT questions present a scenario where a diagnosis must be made. Information provided in the scenario may include symptoms, examination findings and test results which candidates will need to synthesise in order to come up with the correct answer. Having a high level of awareness of the possibility of cancer is clearly important, but carefully read a scenario and consider if, based on the given information, an alternative diagnosis is more likely.

Gynaecology and breast

In AKT 46, candidates failed to consider the possibility of pregnancy as the explanation for common symptoms. As outlined above, careful reading of the scenario is required, in this case to identify key features which might suggest that pregnancy testing is required. Clearly, failing to diagnose pregnancy in a timely way can have serious consequences.

Kidney and urology

The NICE guidance on suspected cancer was first published in 2015 and candidates will be familiar with its layout- including recommendations which are organised according to site of cancer, symptoms and results of primary care investigations. In AKT 46, candidates were not aware of appropriate further tests recommended to help rule-in or rule-out cancer, following initial abnormal investigations. Over-investigation or over-referral is not helpful for patients and is wasteful of resources. We will continue to test widely on the diagnosis and investigation of suspected cancer.

Respiratory health

As noted above, candidates performed better with regard to drug calculations. However, candidates had difficulty with simple calculation focussing on respiratory parameters/values. Again, we encourage candidates to please reality check numerical answers.

Sexual health

Three items under this heading warrant feedback.

After previous AKT sittings, we have highlighted the very important area of contraceptive advice for women taking teratogenic drugs. In AKT 46 candidates again had difficulty with this area. Guidance provided by the FSRH and the MHRA should be regularly and carefully reviewed for updates.

Awareness by candidates that symptoms described in a scenario might indicate pregnancy and that pregnancy testing is required appeared to be lacking, both where sexual health was the focus as well as for gynaecological problems.

Candidates had difficulty with knowledge around underlying causes of erectile dysfunction.

Past 12 months (AKTs 44-46)

After two of the last three sittings of the AKT exam, we have highlighted a need for improvement regarding:

Improving quality, safety and prescribing

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

Leadership and management

This related to access to medical records and privacy issues.

Cardiovascular health

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

Gastroenterology

This related to long-term condition management and diagnosis of gastrointestinal symptoms.

Kidney and urology

This included prostate cancer treatment and diagnosis of cancer.

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. We do not expect to hear reports of rudeness to test centre staff and will act if it is reported to us.

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 October 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. Photographs of skin problems will be from a range of different ethnic backgrounds.
- 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 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/getmedia/e2ba263c-385f-4e3c-9fc4-7bd13beeca40/Evidence-and-data-interpretation-in-the-AKT-Nov-2019-\(1\).pdf](https://www.rcgp.org.uk/getmedia/e2ba263c-385f-4e3c-9fc4-7bd13beeca40/Evidence-and-data-interpretation-in-the-AKT-Nov-2019-(1).pdf).
- 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/mrcgp-exams/wpba/cpr-aed-safeguarding>).
- 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.