

Feedback on the MRCGP Applied Knowledge Test (AKT) AKT 44, January 2022

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.

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 44 exam was held on 26th January 2022 and taken by 1569 candidates.

Statistics

Scores in AKT 44 ranged from 78 to 190 out of 199 questions, with a mean overall score of 148.58 marks (74.66%).

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' 74.61% (159 questions)
- 'Evidence-based practice' 74.38% (20 questions)
- 'Organisation and management' 75.32% (20 questions)

The pass mark for AKT 44 was set at **142**.

Pass rates are shown below:

Candidates (numbers)	Pass rate
All candidates (1569)	66.09%
UKG first-time takers (755)	83.58%

Other key statistics from this test:

Reliability (Cronbach α coefficient) = 0.92
Standard error of measurement = 5.64 (2.83%)

Performance in key clinical areas – AKT 44

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. Many topics appear in several places throughout the curriculum, and we have not listed all of these.

Improvements

In AKT 44, candidates performed better than previously in questions related to:

- Care of transgender people (Equality, Diversity and Inclusion)
- Understanding of risk, including Qrisk, sensitivity and specificity (Evidence Based Practice, Research and Sharing Knowledge)
- Consent and capacity issues (referred to throughout the curriculum but in this case the relevant section is Older Adults)
- Management of mental health problems (Mental 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 also 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. Candidates, and educators, will note that some themes recur often, including, once again, in the feedback provided below. We encourage use of the 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)

A few items require “free text” answers, where the candidate is asked to generate the correct answer without a list of options. This is explained in the MRCGP candidate presentation which can be found at <https://www.rcgp.org.uk/gp-training-and-exams/mrcgp-exam/mrcgp-applied-knowledge-test-akt.aspx>. Often these questions will be straightforward drug calculations, or sometimes the question may ask the candidate to answer with a value, which is relatively easily obtained from information provided. Occasionally the correct answer is a drug name.

In AKT 44, candidates had difficulty with questions in the format of the first two examples given above i.e. a drug dose and a value. The first advice to candidates is to read the question carefully, as it will be very clear what is required. Second, any calculation needed will be straightforward and will not involve any degree of complexity. Third, and perhaps most important, please reality-check the answer, just as we all must in the workplace. If the answer obtained is a drug volume which would never be given, or a value which would never be seen, then the answer is wrong. There is clearly a key safety issue involved in drug dose calculations, and the questions are based on common, real-life situations which candidates should not find difficult.

Children and young people (Life Stages Topic)

In AKT 44, candidates had some difficulty with questions concerning vaccinations. As we have explained in previous feedback reports, we will test on important indications or contraindications for vaccinations in children and adults, but we do not expect detailed knowledge of rare indications nor the fine details of complex childhood immunisations and schedules.

People at the end-of-life (Life Stages Topic)

We have noted above that there was improvement in knowledge around consent and capacity. However, there was a lack of understanding around key ethical concepts which may apply at the end-of-life. End-of-life care is a core part of the work of general practice and, although specialist input may sometimes be required to guide management and decision-making, GPs need to be able to have informed discussions with the patient or family about the possible effects of treatment options.

Cardiovascular health (Clinical Topic)

In AKT 44, candidates had difficulty with ECG interpretation. The recording of ECGs for a range of reasons is widespread in general practice and we expect candidates to be able to recognise common and important abnormalities which may be found in ECGs performed both routinely and urgently.

Genomic medicine (Clinical Topic)

Candidates had difficulty with knowledge around common genetic conditions, including their patterns of inheritance, and rare but important childhood genetic conditions which might be encountered in general practice. It is important to view this area in the context of the wide diversity of ancestry and ethnicity of people in the UK.

Kidney and urology (Clinical Topic)

In AKT 44, candidates lacked knowledge around side-effects of common treatments for cancer, and the drugs that might be prescribed to overcome side-effects. We remind candidates that some questions may concern drugs recommended from secondary care but where the responsible prescriber will usually be the GP, who must therefore be familiar with their use and relevant safety issues.

Past 12 months (AKTs 42-44)

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

Improving quality, safety and prescribing

The feedback concerned DMARD side effects and drug dose calculations.

Children and Young People

The feedback has included safeguarding, consent and capacity, and immunisations.

People at the end-of-life

Pain relief at the end-of-life and ethical concepts at the end-of-life have caused difficulty for candidates.

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 February 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 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. 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.
- 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, or whose training has not included data interpretation, 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.