

# MRCGP Applied Knowledge Test (AKT) Feedback Report AKT 50, January 2024

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 50 exam was held on 24<sup>th</sup> January 2024 and was taken by 1703 candidates.

After reviewing question performance, one of the 200 questions was suppressed from the final scoring total, and this is shown in the statistics below.

## Statistics AKT 50

Range of scores 76 to 189 out of 199 questions  
Mean overall score 148.21 marks (74.48%)

Mean scores by subject area:

- 'Clinical knowledge' 119.66 (75.26%) (159 questions)
- 'Evidence-based practice' 14.56 (72.79%) (20 questions)
- 'Organisation and management' 13.99 (69.93%) (20 questions)

**PASS MARK 141**

**PASS RATES**

<b>Candidates (numbers)</b>	<b>Pass rate</b>
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All candidates (1703)	68.35%
UKG first-time takers (619)	87.72%

Other key statistics:

Reliability (Cronbach  $\alpha$  coefficient) = 0.92  
Standard error of measurement = 5.57 (2.80%)

## **Performance in key clinical areas – AKT 50**

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

- Knowledge around immunisations (Population and planetary health)
- Recognising symptoms of possible cancer/cancer risk (People with long-term conditions including cancer)
- Acute cardiovascular presentations (Urgent and unscheduled care)

### **Areas causing difficulty for candidates**

As well as providing feedback after each AKT exam, we produce a summary of areas which have caused more difficulty for candidates over the last five years. This is updated after every AKT exam and published on the AKT website. The summary 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/mrcgp-exams/applied-knowledge-test/further-help-support#AKT-feedback-reports>

Before commenting on specific difficulties noted in AKT 50, we would like to remind candidates and others to review the “General advice” section of this report. In particular, the first paragraph about different experiences that doctors have had in their training remains very relevant. Candidate understanding of data interpretation may require review; for example, the concept of risk. This is an area which is very important in many daily clinical interactions, including talking with patients about medications, cancer and long-term conditions. Some candidates struggle with this.

In addition, we remind candidates:

- Nearly one third of questions can have a significant therapeutic component such as drug monitoring, adverse effects or interactions. Be aware of important side effects and interactions, for example those highlighted as “red” in the BNF
- Please fact check drug dose and other calculations - is the result compatible with real life?

- Some questions require identification of “normal”, or an awareness that no investigation is required for the situation described

### **Summary of areas causing difficulty in AKT 50**

Common side effects of chronic disease management medications

Interpretation of blood test and other results

Controlled drug prescribing

Doctor-patient relationship breakdown

Faltering growth in children

Investigations in primary care

ECG interpretation and rhythm abnormalities

Acute neurological disease

### Improving quality, safety and prescribing (Professional topic)

This is broad area where we often provide feedback.

In AKT 50, candidates struggled to identify common side effects of long-term medications used in chronic disease management. The BNF is a very useful resource for revision around this area.

Safe interpretation of pathology results is a core part of general practice. We noted that candidates were not always taking into account all the results provided in some questions. Candidates are encouraged to consider “borderline” results as well as those that are clearly abnormal. An educational session with a supervisor talking through pathology results that have been received can be a good way to revise these more difficult areas.

Prescribing of controlled drugs is an area where we commonly provide feedback. It is important for candidates to safely prescribe controlled drugs, and candidates are reminded to check the guidelines around this.

### Leadership and management (Professional topic)

This is another broad area which frequently causes difficulties and where we often provide feedback. In AKT 50, candidates struggled with practice administration

issues relevant to doctor-patient relationship breakdown. Candidates could consider spending time with a partner or practice manager to discuss important areas of practice administration to which they do not have much exposure during GP training.

#### Children and young people (Life stage topic)

Faltering growth in infants is an important presentation which candidates struggled with in AKT 50. There is clear national guidance around this topic which candidates are encouraged to read through and discuss with their supervisor.

#### Maternity and reproductive health (Life stage topic)

Candidates in AKT 50 found some difficulty around investigations for common gynaecological presentations. Candidates are reminded to consider which investigations are appropriate to organise in primary care prior to any referral/secondary care investigations. This applies more broadly and not just with regard to reproductive health.

#### Cardiovascular health (Clinical topic)

Interpretation of ECGs is an important part of general practice. This caused some difficulties in AKT 50. Candidates are expected to recognise common and important ECG changes, both acute and chronic, as well as recognising a normal ECG. This could form a good topic for a study group with peers, or a tutorial with the candidate's supervisor.

#### Neurology (Clinical topic)

Acute neurological presentations in general practice are not uncommon and may indicate serious underlying illness. Candidates should consider a range of differential diagnoses and should be able to identify the most likely cause from the presentation described.

### **Past 12 months (AKTs 48-50)**

After each 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 drug monitoring, side effects, safe prescribing of drugs used in long term conditions, antimicrobial prescribing/stewardship, controlled drugs, quality improvement methodologies, pathology results

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

- Leadership and management

Social media use, doctor/patient relationship breakdown

- Children and young people

Eating disorders, faltering growth

- Neurology

Interpretation of symptoms and signs including acute presentations and MUS

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 and the [super-condensed GP Curriculum Guides](#).

## **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 test centre instructions being ignored or rudeness to test centre staff. We will act if it is reported to us.

The MRCGP examination regulations and the code of conduct for both the AKT and SCA 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 [MRCGP Examination Misconduct Policy and Procedure for AKT and SCA](#) for more details.

**AKT Core Group February 2024**  
**Comments or questions to:**  
**[exams@rcgp.org.uk](mailto:exams@rcgp.org.uk)**

***Please see the following pages for more general advice  
and feedback points about the AKT***

## 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.
- In clinical practice, multiple 'screening' blood tests are sometimes requested in a non-discriminatory way without considering specific, likely possibilities. In the AKT, some questions will ask candidates to choose only **one** test from a list of answer options including other tests, to confirm the most likely diagnosis from the scenario given. The question stem will make clear that what is being asked for is the **most** appropriate investigation to confirm the diagnosis, rather than asking for all the possible (but lower yield) screening tests.
- 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.

- Be aware of important drug side effects and severe interactions (such as those marked as red in the BNF).
- Our approach to testing around immunisations has moved away from expecting detailed knowledge of infant immunisation schedules, as these have become more complex over recent years, and because in some parts of the UK immunisation provision is no longer primary care led. However, candidates are expected to be familiar with any recent general developments in immunisation programmes. We will test knowledge of important indications, contraindications and side-effects of vaccines for all age groups. Knowledge of occupational vaccine requirements, as they apply to GP settings, is also expected, as well as of issues related more broadly to immunisation such as consent and patient group directions.
- 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 health service 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.pdf>
- The GP curriculum and super-condensed topic guides gives further guidance about professional and administration topics. GP trainers can help trainees prioritise areas across the GP curriculum and 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 learning activities. Training requirements for child and adult safeguarding are detailed elsewhere:  
<https://www.rcgp.org.uk/mrcgp-exams/wpba/cpr-aed-safeguarding#childadultsafeguarding>
- We will continue to test on new and emerging knowledge relevant to primary care.



- 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.