

MRCGP Applied Knowledge Test (AKT) Feedback Report AKT 51, April 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 51 exam was held on 24th April 2024 and was taken by 1693 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 51

Range of scores 85 to 191 out of 199 questions

Mean overall score 147.42 marks (74.08%)

Mean scores by subject area:

- 'Clinical knowledge' 116.92 (73.53%) (159 questions)
- 'Evidence-based practice' 15.65 (78.26%) (20 questions)
- 'Organisation and management' 14.85 (74.26%) (20 questions)

PASS MARK 139

PASS RATES

Candidates (numbers)	Pass rate
All candidates (1693)	69.64%
UKG first-time takers (607)	87.48%

Other key statistics:

Reliability (Cronbach α coefficient) = 0.91

Standard error of measurement = 5.66 (2.85%)

Performance in key clinical areas – AKT 51

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 51, candidates performed better than previously in questions relating to:

- Practice organisation, including addressing issues relating to aggressive patients (Leadership and management)
- Drug monitoring for childhood conditions (Children and young people)
- Common dermatological conditions – overall improvement but see also “Areas causing difficulty”, below (Dermatology)
- Recognition of acute cancer 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 51, 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.

A prospective candidate’s understanding of data interpretation may require specific, individualised GP Educator review. For example, some candidates struggle to answer questions about ‘risk’. This may in part relate to differing previous exposure, to undergraduate and postgraduate teaching on this subject.

‘Risk’ understanding is important in many daily clinical interactions, such as: talking about medications, cancer and long-term conditions. The AKT will continue to test the concept of clinical risk, including how to interpret patient decision aids and share risk information with patients.

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 51

Death certificate legislation

Neonatal illnesses

Blood pressure management

Treatment in palliative care

Skin symptom management

Recognition of neurological symptoms

Leadership and management (Professional topic)

This is an area which frequently causes difficulties and which we often provide feedback on. In AKT 51, candidates struggled with knowledge around death certificate legislation. It is important that candidates are aware of the legal requirements around death certificate completion, and what would constitute a coroner/procurator fiscal referral. We ensure that questions conform with legislation applicable across all four nations and update them when any new processes are introduced.

Care of children and young people (Life stage topic)

Candidates struggled with questions around problems presenting in the neonatal period (babies aged less than 28 days old). Some of these can indicate serious underlying illness requiring urgent action, and candidates should be able to recognise these presentations, as well as being familiar with common problems and “normal” in this age group.

People with long term conditions including cancer (Life stage topic)

In AKT 51, candidates had difficulty with issues around management of raised blood pressure. Candidates should be very familiar with national guidelines on diagnosis and treatment of this common problem. A theme which causes difficulty more generally for candidates, is knowing when “no treatment” is the appropriate response.

People at the end of life (Life stage topic)

Candidates had some difficulties with knowledge around symptom control in palliative care for problems such as pain, nausea, breathlessness, agitation and constipation. Providing high quality end of life care, often as part of a team, is an important part of being a GP. Home visits and nursing home visits are good opportunities to gain experience of this area.

Dermatology (Clinical topic)

Although performance in some dermatological areas had improved, candidates found difficulty in the treatment of common dermatological symptoms. Candidates are reminded of the importance of appropriately managing skin symptoms, which can be very debilitating, as well as managing the overall dermatological condition.

Neurology (Clinical topic)

We frequently feed back on this area which is an important part of general practice. In AKT 51, candidates struggled to recognise the underlying cause of neurological symptoms. We test on a broad range of neurological conditions, including acute conditions, chronic neurological disease and medically unexplained symptoms. We expect candidates to recognise these common presentations.

Past 12 months (AKTs 49-51)

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

- Children and young people

Eating disorders, faltering growth, neonatal illnesses

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 drug side effects, safe prescribing of drugs used in long term conditions, controlled drugs, quality improvement methodologies, pathology results

- Leadership and management

Doctor/patient relationship breakdown, death certificate legislation

- Neurology

Interpretation of symptoms and signs including acute presentations

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 May 2024
Comments or questions to:
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.

- More generally, with items that contain numerical data, make sure you consider the real world. Does your answer fit with what you routinely discuss with patients about, say, the risks related to a particular medication?
- 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 2024 resources produced by the AKT group:

[Interpreting risk](#) – Professor Michael Harris discussing how to interpret risk and present the effectiveness of a treatment.

[How to interpret the results of a randomised control trial](#) - tutorial with Professor Michael Harris discussing data interpretation.

[Data interpretation in the AKT \(PDF file, 1.1 MB\)](#) - for candidates and GP educators to use in tutorials and peer group learning. Aims to kick-start conversations about the importance of interpreting data we encounter in primary care.

- 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 continue to 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.