

MRCGP Applied Knowledge Test (AKT) Feedback Report AKT 53, October 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 resources for candidates and trainers, 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 53 exam was held on 30th October 2024 and was taken by 1529 candidates.

Statistics AKT 53

Range of scores 76 to 196 out of 200 questions
Mean overall score 149.42 marks (74.71%)

Mean scores by subject area:

- 'Clinical knowledge' 120.04 (75.03%) (160 questions)
- 'Evidence-based practice' 14.14 (70.68%) (20 questions)
- 'Organisation and management' 15.24 (76.21%) (20 questions)

PASS MARK 145

PASS RATES

Candidates (numbers)	Pass rate
All candidates (1529)	62.52%
UKG first-time takers (405)	84.20%

Other key statistics:

Reliability (Cronbach α coefficient) = 0.91
Standard error of measurement = 5.71 (2.86%)

Performance in key clinical areas – AKT 53

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

- Adverse effects of medications (Improving quality, safety and prescribing)
- Knowledge of ethical scenarios (Leadership and management)
- Recognition of safeguarding issues (Care of children and young people)
- Management of common dermatological conditions (Dermatology)

Performance in safeguarding questions has varied between sittings of the exam (after AKT 52 there was “room for improvement”). The RCGP has recently published a document concerning safeguarding standards in practice which candidates should find helpful:

<https://www.rcgp.org.uk/learning-resources/safeguarding-standards>

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 53, we would like to remind candidates and others to review the “General advice” section of this report (p.6-8). In particular, the first paragraph about different experiences that doctors have had in their training remains very relevant.

A prospective candidate’s understanding of, for example, data interpretation may require specific, individualised GP Educator review. See the links on this page <https://www.rcgp.org.uk/mrcgp-exams/applied-knowledge-test/akt-preparing#Resources-for-trainees-and-trainers> , and in our “General advice” section, for very useful resources in this regard.

Summary of areas causing difficulty in AKT 53

Prescribing in older adults

Interpretation of results

Colorectal and perianal conditions

Hormone replacement therapy

Common musculoskeletal conditions

Common neurological conditions

Paediatric and adult asthma management

Improving quality, safety and prescribing (Professional topic)

Candidates found some difficulty around the topic of prescribing for older people. It is important to consider how prescribing may change for older adults, including which medications should have their dose reduced, or should be stopped altogether. The BNF is an excellent revision resource for this. We will continue to regularly ask about safe prescribing of commonly used medications.

In addition, under the same curriculum heading-

Result interpretation is a core part of general practice and is tested in various scenarios in the AKT. Candidates struggled with this area in AKT 53. A good way to revise this is for candidates to be seeing lots of pathology results in practice, checking the guidelines and deciding on an action. This may include borderline results.

Gastroenterology (Clinical topic)

The diagnosis and management of common colorectal and perianal conditions caused problems in AKT 53. Candidates should make sure they are revising this area and checking guidelines for patients seen in practice.

Gynaecology and breast (Clinical topic)

Knowledge of combined hormone replacement therapy with safe options for endometrial protection is an increasingly important part of general practice. This was an area which caused some difficulty in AKT 53. Candidates should think about how they can increase their exposure to patients requiring hormone replacement therapy and make sure they are up to date with guidance around this.

Musculoskeletal health (Clinical topic)

We frequently provide feedback on this topic, which posed a challenge again in AKT 53. Candidates should make sure they are revising the diagnosis, investigation, and long-term management of a range of musculoskeletal conditions presenting in general practice and checking up to date guidance in this area. This includes long-term conditions.

Neurology (Clinical topic)

Neurology has been listed as a feedback topic for the past four AKT sittings. In AKT 53, candidates struggled with symptom recognition for common neurological conditions. Candidates are reminded to look at a range of neurological conditions during their revision.

Respiratory health (Clinical topic)

Asthma management in both children and adults was challenging for candidates in AKT 53. Candidates are reminded to look at national asthma guidance as part of AKT revision and consider sitting in with other healthcare professionals in the practice to increase knowledge in this area.

Past 12 months (AKTs 51-53)

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

- Neurology

Interpretation of symptoms and signs including acute presentations, migraine

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

- Improving quality, safety and prescribing

Drug side effects, prescribing in older adults, interpretation of results

- Leadership and management

The feedback concerned death certificate legislation, capacity

- Children and young people

Neonatal illnesses, safeguarding, recognising normal, minor illness

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 November 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.
- We commonly ask candidates to select the appropriate answer to a question "according to current national guidance". CKS covers a wider range of primary care situations than NICE. If any differences occur between the two, where we stipulate current national guidance, we are referring to NICE/SIGN.
- 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** option from a list of investigations, 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 may also ask for the **next** management step/investigation from a list. This requires candidates to select what is important **next** and choose this over other alternatives which may be indicated at some point in the future, but which are **not** the **next** key priority.
- We will ask about abnormal examination findings, which may include 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). Nearly one third of questions can have a significant therapeutic component.
- 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.

'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.

- We would encourage all candidates to use the following 2024 resources produced by the AKT group. These might be of particular relevance for those who feel they have knowledge gaps in this area, especially whose training has not included data interpretation in a UK setting, or has not included undergraduate and postgraduate teaching on this subject:

1. [Interpreting diagnostic test statistics](#) - Professor Michael Harris discusses concepts such as sensitivity/specificity/predictive values.
 2. [Interpreting risk](#) – Professor Michael Harris discussing how to interpret risk and present the effectiveness of a treatment.
 3. [How to interpret the results of a randomised control trial](#) - tutorial with Professor Michael Harris discussing data interpretation.
 4. [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](#) give further guidance about professional, evidence-based 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. The RCGP has recently published safeguarding standards for general practice. <https://www.rcgp.org.uk/learning-resources/safeguarding-standards>
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.