

MRCGP Applied Knowledge Test (AKT) Feedback Report AKT 52, July 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 52 exam was held on 9th July 2024 and was taken by 1382 candidates.

Statistics AKT 52

Range of scores 76 to 190 out of 200 questions
Mean overall score 143.86 marks (71.93%)

Mean scores by subject area:

- 'Clinical knowledge' 116.77(72.98%) (160 questions)
- 'Evidence-based practice' 13.10 (65.51%) (20 questions)
- 'Organisation and management' 13.98 (69.89%) (20 questions)

PASS MARK 138

PASS RATES

Candidates (numbers)	Pass rate
All candidates (1382)	65.92%
UKG first-time takers (327)	82.87%

Other key statistics:

Reliability (Cronbach α coefficient) = 0.90
Standard error of measurement = 5.89 (2.94%)

Performance in key clinical areas – AKT 52

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

- Recognition of cancer presentations (Urgent and unscheduled care)
- Management of acute illness (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 52, 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

We commonly ask candidates to select the appropriate answer to a question “according to current national guidance”. CKS is widely used but, on occasions, does not always concur with NICE guidance. In these situations, our questions will relate to NICE guidance so please be aware of this when answering questions.

Summary of areas causing difficulty in AKT 52

Medication side effects

Ethical issues e.g. capacity

Planetary health and medication

Safeguarding

Recognising normality and minor illness

Diabetes

Long-term conditions including musculoskeletal

Migraine

Substance misuse

Improving quality, safety and prescribing (Professional topic)

We frequently feed back on the important area of safe prescribing. In AKT 52, candidates had difficulty with knowledge concerning side effects of commonly prescribed medication. MHRA updates are an excellent resource for revision in this area, as well as the BNF, and day-to-day clinical practice.

Leadership and management (Professional topic)

Ethical issues around capacity caused difficulties in AKT 52. It may be helpful for candidates to consider the issue of capacity in a tutorial setting or a workplace-based assessment. It is important to understand how to assess capacity and be aware of situations in which capacity may be limited.

Population and planetary health (Professional topic)

Planetary health is an emerging and important area, which candidates found difficult. We will be testing regularly on this area as it applies to general practice, e.g. with regard to medication choices. The GMC has recently published a position statement on the importance of improving education on planetary health.

https://www.gmc-uk.org/-/media/documents/general-medical-council-planetary-health-position-statement--july-2024-_pdf-107773060.pdf

Care of children and young people (Life stage topic)

In general, questions around safeguarding caused some difficulty in AKT 52. This included scenarios concerning children, as well as issues affecting pregnant people and older adults. Day-to-day clinical practice, and trainer tutorials will help candidates to learn about these often complex situations.

Recognising normality in children caused some difficulty, as well as, more generally, being able to correctly distinguish minor illness from more serious illness, and having awareness of the relative prevalence of various conditions.

Metabolic problems and endocrinology (Clinical topic)

Candidates are reminded to be aware of the differences between type 1 and type 2 diabetes, with regard to diagnosis, investigation, management and emergency presentations. Sitting in on a nurse-led diabetes clinic in general practice may help strengthen knowledge in this area.

Musculoskeletal health (Clinical topic)

The diagnosis and management of common long-term conditions was a challenge for candidates in AKT 52. These conditions make up a large part of the workload in general practice and include musculoskeletal problems, where candidates seemed uncertain about appropriate management.

Neurology (clinical topic)

In AKT 52, candidates struggled with the management of migraine. This is a common condition in everyday general practice and knowledge of presentation, symptomatic management and prevention will be tested in the AKT. National guidance, as well as the BNF, are excellent resources for guidance on this.

Smoking, alcohol and substance misuse (Clinical topic)

Candidates had difficulty with this area. We are aware that not all candidates will have had exposure to the management of substance misuse, and we do not expect specialist knowledge. However, we do expect awareness of common general issues, and will test on areas such as those described in the super-condensed curriculum guide. <https://www.rcgp.org.uk/getmedia/1d931d95-f648-440f-ba75-6a4e1f9b9489/Smoking-Alcohol-and-Substance-Misuse.pdf>

It may be helpful for candidates to spend time in a local substance misuse clinic or with a GP with a special interest in this area.

Past 12 months (AKTs 50-52)

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

- Leadership and management

The feedback concerned doctor/patient relationship breakdown, death certificate legislation, capacity

- Children and young people

Faltering growth, neonatal illnesses, safeguarding, recognising normal, minor illness

- 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, safe prescribing of drugs used in long term conditions, controlled drugs, pathology results

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 July 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.