

Feedback on the MRCGP Applied Knowledge Test (AKT) AKT 47, January 2023

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 47 exam was held on 25th January 2023 and was taken by 1864 candidates.

Statistics AKT 47

Range of scores 35 to 189 out of 200 questions
Mean overall score 144.64 marks (72.32%)

Mean scores by subject area:

- 'Clinical knowledge' 115.2 (72%) (160 questions)
- 'Evidence-based practice' 14.99 (74.95%) (20 questions)
- 'Organisation and management' 14.45 (72.26%) (20 questions)

PASS MARK 139

PASS RATES

Candidates (numbers)	Pass rate
All candidates (1864)	64.86%
UKG first-time takers (746)	84.58%

Other key statistics:

Reliability (Cronbach α coefficient) = 0.92
Standard error of measurement = 5.85 (2.92%)

Performance in key clinical areas – AKT 47

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

- Prescribing for skin diseases (Dermatology)
- Management of significant MSK symptoms (Musculoskeletal health)
- Simple calculations (Improving quality, safety and prescribing; Evidence-based practice, research and sharing knowledge). This is a continued improvement since AKT 46
- Confidentiality principles and issues (Leadership and management)

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 updated after every AKT exam, and 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. 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/gp-training-and-exams/mrcgp-exam/mrcgp-applied-knowledge-test-akt.aspx>.

Summary of areas causing difficulty in AKT47

Side-effects of drugs used for long-term conditions

Antimicrobial stewardship

Prescribing for long-term conditions in children

Child development

Diagnosis of cancer

Diagnosis and management of eyelid conditions

Management of asthma

Contraception with teratogenic drugs

Improving Quality, Safety and Prescribing (Professional Topic)

There are two areas of feedback under this heading, following AKT 47.

Many drugs are prescribed frequently by GPs for treatment of common, long-term conditions. In AKT 47, questions concerning important side-effects of some of these drugs were not answered well. There are many resources available for candidates to familiarise themselves with this area of knowledge, including the introductory sections of BNF chapters and long-term condition guidelines.

Antimicrobial stewardship is a UK-wide priority to ensure appropriate use of antimicrobial agents and preserve their future effectiveness. Candidates had difficulty with questions around use of antibiotics for treatment of common clinical problems, despite guidelines giving clear advice about which agents should be used.

Children and Young People (Life Stages Topic)

There are two areas of feedback under this heading also.

In AKT 47, candidates did not perform well with questions which concerned prescribing for some long-term conditions in children. This included uncertainty about whether drugs used in adults are suitable for prescribing to children with the same condition. It might be helpful for candidates to review their own day-to-day prescribing of common drugs and clarify which are appropriate for routine prescribing to children and which are not. The BNFC is clearly a useful source of reference for this.

GPs work closely with other colleagues in the primary care team, including health visitors, and commonly advise parents to consult with a health visitor if there are concerns about the development of their child. However, it is important that GPs have an awareness of normal development to be able to explain to parents what to expect from further assessment, and the likely outcomes. In AKT 47, candidates had difficulty identifying abnormal child development.

People with Long-term Conditions including Cancer (Life Stages Topic)

In AKT 47, candidates had some difficulty with scenarios/photographs where the correct diagnosis was a type of cancer. It is important to be aware of less common presentations of cancer, for example with endocrine or other systemic abnormalities. Unusual skin lesions or rashes in the genital area may also be cancerous, particularly if they have not responded to treatments used for more common conditions.

Eyes and Vision

Candidates had difficulty with diagnosis and management of common eyelid problems, including any self-management advice which might be appropriate.

Respiratory Health

Management of long-term conditions has already been mentioned in this feedback. For common conditions, such as asthma, candidates should be very familiar with prescribing for stable disease management, routine stepping up of treatment, and management of exacerbations. In AKT 47, candidates had difficulty with appropriate prescribing decisions in this situation.

Sexual Health

After previous AKT sittings including AKT 46, we highlighted the very important area of contraceptive advice for women taking teratogenic drugs. In AKT 47, candidates again struggled with this topic. Guidance provided by the FSRH and the MHRA should be regularly and carefully reviewed for updates. We will continue to test on any MHRA guidance which is relevant to general practice, not only around sexual health but also other areas of clinical practice.

Past 12 months (AKTs 45-47)

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 monitoring, side effects of drugs used in long-term conditions, and antimicrobial stewardship.

Leadership and management

This related to access to medical records, and privacy issues.

Gastroenterology

This related to long-term condition management, and diagnosis of gastrointestinal symptoms.

Respiratory health

This related to asthma management, and simple calculation using respiratory parameters/values.

Sexual health

This concerned choice of contraception with teratogenic drugs, diagnosis of pregnancy, and erectile dysfunction diagnosis.

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. We do not expect to hear reports of rudeness to test centre staff and will act if it is reported to us.

The MRCGP examination regulations and the code of conduct for both 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 2023
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.
- 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 single most appropriate **diagnostic** test, not other tests which might be easily requested, but which are much less likely to be diagnostic of the clear, underlying condition.
- 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.

- Our approach to testing around immunisations has moved away from expecting detailed knowledge of childhood immunisation schedules, as these have become more complex over recent years, and also because in some parts of the UK immunisation provision is no longer primary care led. However, we do expect candidates to be aware of important indications, contraindications and side-effects of childhood and other common immunisations. We also expect some knowledge of occupational vaccine requirements as they apply to GP settings.
- 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-Nov-2019-\(1\).pdf](https://www.rcgp.org.uk/getmedia/e2ba263c-385f-4e3c-9fc4-7bd13beeca40/Evidence-and-data-interpretation-in-the-AKT-Nov-2019-(1).pdf)).
- 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/mrcgp-exams/wpba/cpr-aed-safeguarding>).
- 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.