



RACGP

Royal Australian College of General Practitioners

RACGP Education

Exam report 2017.1 AKT



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We recognise the traditional custodians of the land and sea on which we work and live.

1. Exam psychometrics

Table 1 shows the mean and standard deviation of the entire cohort who sat the exam. These values can vary between exams. The reliability is a measurement of the consistency of the exam.

A candidate must achieve a score equal to or higher than the pass mark in order to pass the exam. The pass mark for the Applied Knowledge Test (AKT) and Key Feature Problems (KFP) exam is determined by the internationally recognised Modified Angoff method, and outcomes may vary between each exam cycle. The Objective Structured Clinical Examination (OSCE) pass mark is determined by the borderline group method (refer to the RACGP Education [Examination guide](#) for further details).

The 'pass rate' is the percentage of candidates who achieved the pass mark.

The Royal Australian College of General Practitioners (RACGP) has no quotas on pass rates; there is not a set number of candidates who may pass the exam. Pass rates may vary depending on a wide variety of different variables.

Table 1. 2017.1 psychometrics	
Mean score (%)	66.62
Standard deviation (%)	10.83
Reliability	0.89*
Pass mark (cut score %)	61.49
Pass rate (%)	67.82
Number sat	1125

*The exam reliability is now expressed as a value between 0 and 1, in line with international best practice in assessment reporting.

2. Candidate score distribution

The below histogram shows the range and frequency of final scores for this exam. The vertical blue line represents the pass mark.

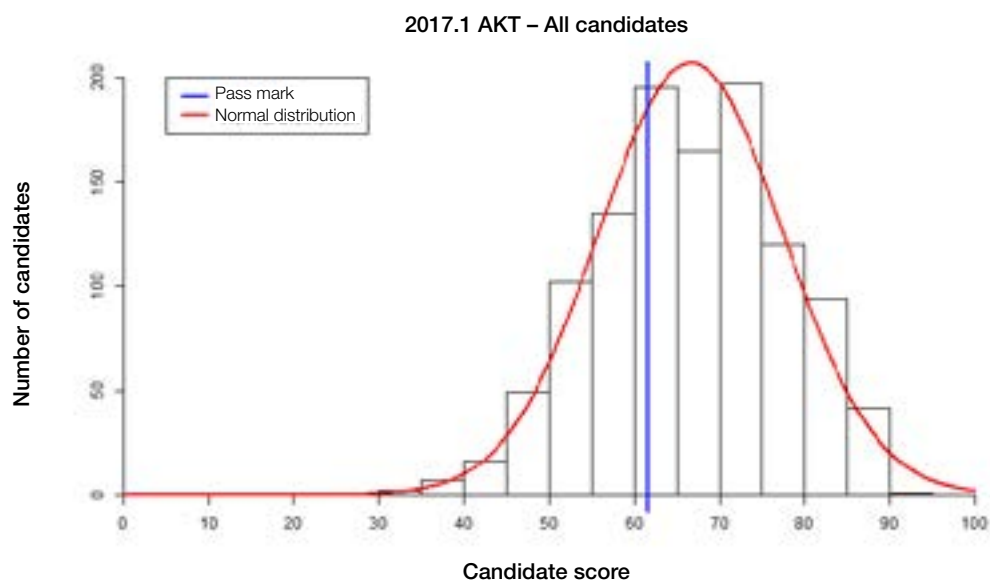


Figure 1. Final 2017.1 AKT score distribution

3. Candidate outcomes by exam attempt

Table 2 provides pass rates (%) displayed by number of attempts. As displayed below, the rate of passing decreases with increased attempts at the exam. Preparation and readiness to sit are therefore important for candidate success.

Table 2. Pass rates by number of attempts

Attempts	Pass rate (%)
First attempt	77.2%
Second attempt	52.3%
Third attempt	51.5%
Fourth or greater attempt	30.0%

4. Preparation – practice exams

An online practice exam is made available to enrolled candidates prior to each AKT and KFP exam. The purpose of this exam is to provide a simulated experience for candidates preparing for the real exam. Candidates are provided with automated feedback to complete their experience.

The practice exam is not designed to provide a mark/grade, or give an indication of whether or not a candidate will pass.

However, candidates who attempt the online practice exams perform better in the real exam than those who do not. Attempting the practice exam is therefore highly recommended.

Table 3. 2017.1 AKT online practice exam				
Attempted practice exam	Total number of candidates	Proportion of candidates (%)	Number passing the real exam	Pass rate (%)
Yes	1022	90.8%	723	70.7%
No	103	9.2%	40	38.8%
Total	1125	100.0%	763	

5. Feedback report on 2017.1 AKT

This feedback document will be published following each AKT in conjunction with candidate results. All of the questions in the AKT are written by experienced GPs who currently work in clinical practice and are based on clinical presentations typically seen in an Australian general practice setting. The questions should be answered based on the context of Australian general practice.

It is important to carefully read the clinical scenario and question. Although more than one option may be plausible, only the most likely or most appropriate option for the clinical scenario provided should be selected.

It is important not to base exam preparation on partially reconstructed AKT papers, since these often poorly remembered papers may not accurately reflect the content of the AKT. It is also not advisable to memorise questions and answers from these reconstructed AKT papers, as minor modifications to the clinical scenario or the question being asked may alter the correct response.

All candidates are under strict confidentiality obligations and must not disclose, distribute or reproduce any part of the exam without the RACGP's prior written consent.

It is useful to identify any areas of weakness in your clinical practice through self-reflection and feedback. A supervisor, mentor or peer may use this information to assist you in developing an appropriate learning plan to assist with future exams.

All questions in the AKT undergo extensive quality assurance processes. Questions are reviewed during creation of the AKT and its rigorous pre-exam review processes, and also during the standard-setting process following the AKT. Reviews are performed by GPs who are currently in clinical practice across Australia.

This report provides a sample of this exam cycle's clinical scenarios that some candidates found challenging. It describes alternative options selected by candidates and provides feedback regarding how the question would be correctly addressed.

Example 1

This question included a description of a middle-aged man who was at home when he felt light-headed and experienced palpitations. An electrocardiogram (ECG) was provided along with the clinical presentation scenario.

The question asked candidates to determine the most likely cause of the man's symptoms. The correct answer was complete heart block.

Alternative answers chosen by candidates included first-degree heart block and second-degree heart block. The difference in the interpretation requires understanding of the relationship between the P wave and the QRS complex.

It is important that candidates have appropriate skills in interpreting ECGs. For example, the management of a complete heart block may vary significantly from other types of blocks.

Example 2

This question included a description of a new medication designed to reduce cardiac events, with candidates given statistical information regarding a recent clinical trial.

The question asked candidates to determine what type of evidence-based measure was described. The correct answer was relative risk.

Alternative answers chosen by candidates included absolute risk and positive predictive value. It is important for candidates to be aware of the key differences between absolute risk and relative risk. Relative risk differences may be reported as very large amounts; however, the absolute difference may be very small – indicating possibly minimal clinical benefit.

Being able to identify the features of statistical information described in clinical trials is important for critical appraisal of literature and helps to guide appropriate clinical management decisions.

Example 3

This question included a description of a young woman experiencing sub-optimally controlled asthma while on her current moderate dose of inhaled corticosteroid.

The question asked candidates to determine the most appropriate next step in the woman's management. The correct answer was the addition of long-acting beta agonist to her inhaled corticosteroid.

Alternative answers chosen by candidates included increasing her inhaled corticosteroid to the maximal dose or initiating montelukast.

The correct interpretation required knowledge of the *Australian Asthma Handbook* and the step-wise approach for up-titration of medication, and application of this knowledge to the epidemiology and disease pattern of the patient in the scenario

Example 4

This question included a description of a young man who fell onto his hyperextended wrist. He has pain in the anatomically described 'snuff box'.

The question asked candidates to determine the most appropriate initial form of imaging. The correct answer was a plain X-ray.

Alternative answers chosen by candidates included a computed tomography (CT) scan and ultrasound.

It is appropriate to initially perform a plain X-ray when assessing and investigating a possible scaphoid fracture, as this may identify the pathology in up to 70% of cases. Further imaging decisions, such as CT or magnetic resonance imaging (MRI), depend on clinical requirement or continued uncertainty of diagnosis after the initial plain X-ray. It is important for candidates to be aware of the rational and appropriate initial imaging modality for different types of suspected orthopaedic pathology.

Example 5

This question included a description of an older man with increasing lower urinary tract symptoms over six months. A normal urinalysis is provided along with a prostate-specific antigen (PSA) result, which is slightly above normal. As in all questions where a result is given, the normal range is provided.

The question asked candidates to determine the most likely cause of the man's symptoms. The correct answer is benign prostatic hypertrophy.

Alternative answers chosen by candidates included prostate cancer and chronic prostatitis.

It is important for candidates to be aware that elevated PSA levels can be caused by many factors. In the setting of slightly worsening lower urinary tract symptoms, as described within this question, the most likely cause is the common condition of benign prostatic hypertrophy. Lower urinary tract symptoms in prostate cancer are a late sign and less likely than benign prostatic hypertrophy. Chronic prostatitis may present with some findings on urinalysis and is less likely than benign prostatic hypertrophy given its epidemiology and the patient's slow worsening of symptoms over a prolonged period of time.

Example 6

This question included a description of an older man who recently had a transient ischaemic attack (TIA) in hospital and discharged against medical advice. Appropriate investigations and results described were all normal. His medication includes an angiotensin-converting-enzyme (ACE) and a statin. He told his GP that the doctors in the hospital suggested he take another medication, but that he could not remember what it was.

The question asked candidates to determine the most important medication to initiate. The correct answer was aspirin.

Alternative answers selected by candidates included warfarin and apixaban.

It is important for candidates to be aware of medications required for ongoing pharmacological management of their patients following an acute event. The question did not describe any symptoms or findings consistent with atrial fibrillation where warfarin or a new oral anticoagulant (NOAC) may be indicated. Aspirin, however, is recommended routinely after any TIA unless contraindicated or another medication is used in its stead.

6. Further information

Refer to the RACGP Education [Examination guide](#) for exam-related information.



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