



RACGP

Royal Australian College of General Practitioners

RACGP Education

Exam report 2017.2 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 Problem (KFP) exam is determined by the internationally recognised Modified Angoff method, and outcomes may vary between each exam cycle. The Objective Structured Clinical Exam (OSCE) pass mark is determined by the borderline group method (refer to The Royal Australian College of General Practitioners [RACGP] Education [Examination guide](#) for further details).

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

The 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. 2017.2 psychometrics

Mean score (%)	65.87
Standard deviation (%)	10.60
Reliability	0.89*
Pass mark (cut score %)	60.67
Pass rate (%)	69.73
Number sat	1186

*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.

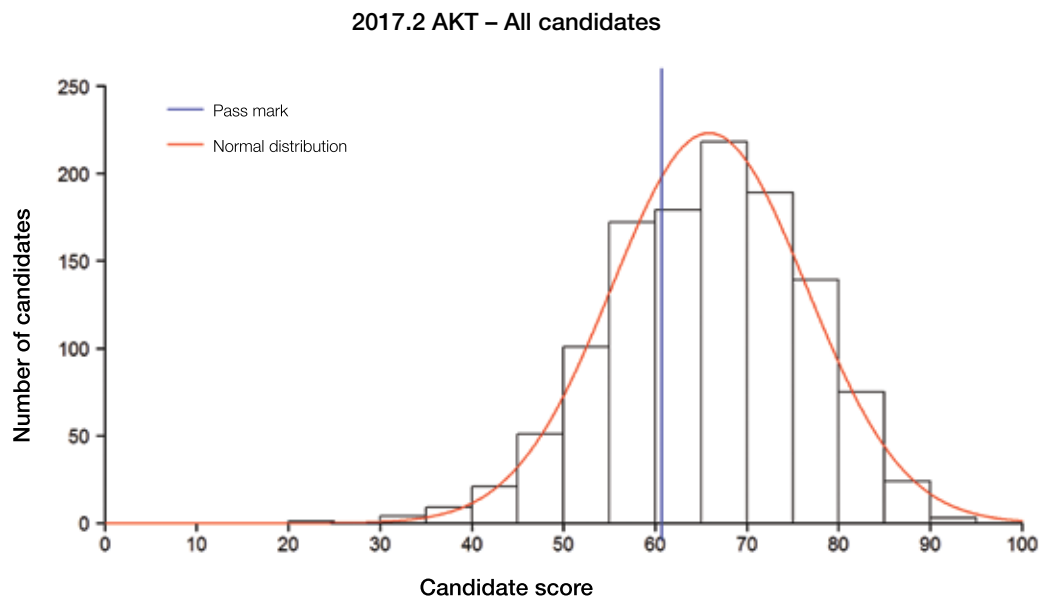


Figure 1. 2017.2 AKT score distribution

3. Candidate outcomes by exam attempt

Table 2 provides pass rates (%) displayed by number of attempts. As shown 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	79.0
Second attempt	54.1
Third attempt	43.2
Fourth or greater attempt	30.6

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 (Table 3). Attempting the practice exam is therefore highly recommended.

Table 3. 2017.2 AKT online practice exam				
Attempted practice exam	Total number of candidates	Proportion of candidates	Number passing the real exam	Pass rate
Yes	1,076	90.7%	788	73.2%
No	110	9.3%	39	35.5%
Grand total	1,186	100.0%	827	

5. Feedback report on 2017.2 AKT

An exam feedback report, such as the one you are now reading, will be published following each AKT in conjunction with candidate results. All of the questions in the AKT are written by experienced general practitioners (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 clinical scenarios from the 2017.2 AKT that some candidates found challenging. It describes alternative options selected by candidates and provides feedback regarding the correct answer to the question.

Example 1

The clinical scenario described a middle-aged female executive who has had episodes of palpitations. She presents during one of these episodes feeling slightly anxious but with no chest pain and is haemodynamically stable. An electrocardiogram (ECG) is given within the question for candidates to interpret; the ECG demonstrated supraventricular tachycardia.

The question asked: 'What is the most appropriate initial management?' The correct response was vagal stimulation.

Approximately three-quarters of the candidates answered the question correctly; the alternative responses chosen by the remaining candidates included rebreathing into a paper bag, and an adenosine IV bolus.

This question highlights the initial management of a presentation that is not infrequently encountered in Australian general practice. While adenosine may be considered, it is not the most appropriate initial management within primary care in the otherwise stable patient.

Example 2

The clinical scenario described a middle-aged male patient who presents after experiencing repeated trauma to the front of his knee while renovating his house. He has noticed increasing swelling and worsening pain over several days. He has a tender swelling localised to the anterior part of his knee, and the rest of his knee examination is normal.

The question asked: 'What is the most likely diagnosis?' The correct response was prepatellar bursitis.

Knee pain is a common presentation to Australian general practice. This typical presentation of trauma to the front of the knee, associated with an isolated swelling within that location, led three-quarters of the candidates to select the correct response.

Alternative answers selected by the remainder of candidates included patella tendonitis (which is less likely to present with swelling and less specific to this presentation), and pes anserine bursitis (which did not fit with the clinical description of the location of the swelling, is generally smaller, and less likely to present in this way).

Example 3

The clinical scenario described an elderly woman who presents to the clinic with a two-year history of worsening cough and increasing sputum production. Over the prior few months, her sputum had become thicker and more copious. She has no history of smoking and her exercise tolerance has been appropriate for her age. A chest X-ray report is provided that is described as normal.

The question asked: 'What is the most appropriate investigation to confirm your provisional diagnosis?' The correct response was a high-resolution CT scan of the chest.

Cough is a common presentation to Australian general practice and it is important that candidates are aware of the presentation of bronchiectasis. A high-resolution CT of the chest is the most appropriate investigation to confirm this diagnosis. Approximately two-thirds of candidates answered this correctly.

Alternative options selected by the remainder of candidates included endoscopic examination of sinuses (for presumed chronic sinusitis or nasal polyposis – neither of which have symptoms consistent with those described), and sputum microscopy and culture (which is not a good confirmatory test for the provisional diagnosis, and may only reveal colonisation of the lungs).

Example 4

The clinical scenario described a fictional new drug treatment that claims to reduce the chance of myocardial infarctions in high-risk patients. The question described, numerically, a larger reduction in cardiovascular events in the intervention group compared with the control group. The question continues with a pharmaceutical sales representative informing you that there is a reduction in the occurrence of myocardial infarction in those who use the drug by X percentage.

The question asks: 'What type of evidence-based measure is being described by the pharmaceutical sales representative?' The correct answer was 'relative-risk reduction'.

This question was correctly answered by half of the candidates. Alternative answers selected by the majority of incorrect candidates included absolute-risk reduction, and incidence.

It is important that Australian GPs have a strong understanding of how statistical data are presented to them and their appropriate interpretation.

Example 5

The clinical scenario described a seven-day-old neonate presenting to their GP with mild jaundice. The question describes the birth history, which includes a vacuum-assisted delivery and a subsequent cephalohaematoma. No other risk factors or concerns are in the history, the baby is formula fed, and the examination of the neonate is otherwise normal.

The question asked: 'What is the most likely cause of her jaundice?' The correct answer was resolution of ecchymosis.

Often candidates do not appropriately read the question. For example, the clinical scenario described that the baby was formula fed; however, some candidates still chose 'breast milk jaundice' as the most likely cause.

While many alternative answers selected by candidates included more complex causes such as hypothyroidism, there were no other features of hypothyroidism provided. It is important that candidates use their clinical reasoning skills to consider all features of the information provided in the scenario before selecting their answer.

6. *Further information*

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



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