



RACGP

Royal Australian College of General Practitioners

# *RACGP Education*

Exam report 2018.1 AKT



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*We acknowledge the Traditional Custodians of the lands and seas on which we work and live, and pay our respects to Elders, past, present and future.*

# 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 [Examinations 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. Psychometrics	
Mean score (%)	69.42
Standard deviation (%)	9.88
Reliability*	0.88
Pass mark (cut score %)	62.42
Pass rate (%)	77.75
Number sat	1263

\*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 (Figure 1) shows the range and frequency of final scores for this exam. The vertical blue line represents the pass mark.

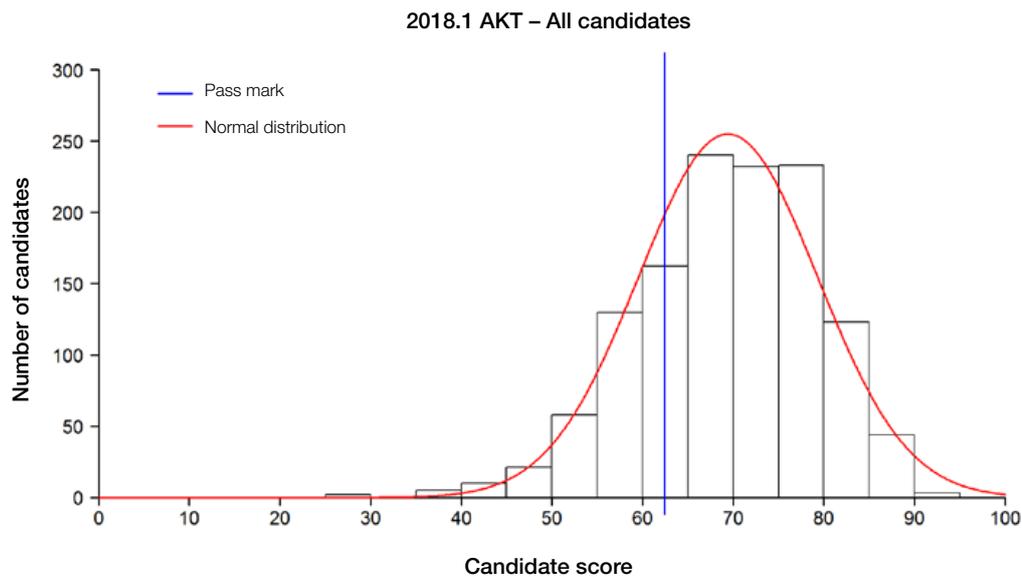


Figure 1. 2018.1 AKT score distribution

## 3. Candidate outcomes by exam attempt

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

**Table 2. Pass rates by number of attempts**

Attempts	Pass rate (%)
First attempt	86.3
Second attempt	62.0
Third attempt	52.7
Fourth or greater attempt	42.1

## 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 or grade, or to 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. AKT online practice exam				
Attempted practice exam	Total number of candidates	Proportion of candidates	Number passing the real exam	Pass rate
Yes	1,157	91.6%	929	80.3%
No	106	8.4%	53	50.0%
Total	1,263	100.0%	928	

## 5. Feedback report on 2018.1 AKT

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 appropriate option for the clinical scenario provided should be selected.

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.

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It is useful for candidates to identify any areas of weakness in their clinical practice through self-reflection and feedback. A supervisor, mentor or peer may assist them in developing an appropriate learning plan to assist with future exams and ongoing professional development.

All questions in the AKT undergo extensive quality assurance processes. Questions are rigorously reviewed during the creation, pre-exam and post 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 2018.1 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 who was admitted to a rural hospital with symptoms of renal colic. She was managed overnight with simple analgesia, and appropriate investigations were normal except for mild haematuria on urine dipstick. An ultrasound report was provided that described a 4 mm renal stone with no complicating features. The patient was asymptomatic in the morning with the ongoing use of non-steroidal anti-inflammatory drugs (NSAIDs).

The question asked, 'What is the MOST appropriate next step?' Of the options provided, the most correct option was to discharge the patient home with NSAIDs and arrange appropriate follow-up. Alternative options included immediate surgical intervention, prophylactic antibiotics, and advising reduction in calcium intake.

This question required candidates to have familiarity with the clinical course of a kidney stone, understand its initial management, and have a good understanding of safe discharge planning. They needed to also consider this within the context of a rural setting.

## Example 2

The clinical scenario described a middle-aged female who presents for a repeat of her 'rash' cream. The rash was described as an intermittent painless rash between her fingers. She had a history of recurrent urinary tract infections requiring repeated courses of a specific antibiotic, and the rash appeared during these times. Examination details described the location of the rash, and an image of the rash was also provided.

The question asked, 'What is the MOST likely diagnosis?' Of the options provided, the most correct answer was a fixed drug eruption. Alternative options included eczema, irritant dermatitis, and discoid lupus erythematosus.

The question required candidates to think about the rash in the context of the patient's presentation. They needed to consider the possible time–course link between recurrent courses of an antibiotic and the patient's rash. It required candidates to also be familiar with alternative listed diagnoses and identify that these are less likely within this clinical presentation.

## Example 3

The clinical scenario described an elderly male who wanted to undertake an airplane flight but takes some medication for a respiratory condition and was uncertain if he could safely fly. His clinical presentation described his risk factors and an exercise tolerance consistent with a history of mild chronic obstructive pulmonary disease (COPD). He was on appropriate medication and his symptoms were well controlled. His examination features were consistent with his diagnosis and its severity. A spirometry result was provided to allow objective grading of the severity of the patient's COPD.

The question asked, 'What is the MOST appropriate management?' Of the options provided, the most correct answer was to give approval for the patient to fly without alteration to his current management. Alternative options included provision of nasal oxygen, prophylactic antibiotics, and referral to a respiratory specialist for approval.

This question required candidates to make the appropriate diagnosis of COPD, then to grade its severity. It required interpretation of the spirometry to identify that this gentleman has mild disease with minimal ongoing symptoms. The question did not require in-depth knowledge of the rules for medical clearance for airplane flight in a patient with COPD, because candidates with familiarity with COPD management would identify that this patient has only mild, stable disease.

## Example 4

The clinical scenario describes a middle-aged male who presents concerned about an increase in the size of his breast tissue. The scenario explains that he has a history of benign prostatic hypertrophy (BPH) and has recently commenced new medication that has improved his symptoms. Unfortunately, he cannot remember the medication's name. His clinical examination was consistent with his presentation.

The question asked, 'What medication is the MOST likely cause of his presenting symptoms?' Of the options provided, the most correct answer was dutasteride. Alternative options were other medication options used for treating BPH.

The question requires candidates be familiar with the appropriate medications for BPH. It then requires them to demonstrate their knowledge of possible side effects of the medication options.

## Example 5

The clinical scenario describes a phone call from a retirement home about an elderly male with a history of Parkinson's disease who has had a cough and increasing breathlessness over the last week. The caller explains that the patient had experienced vomiting and diarrhoea recently, as had many other residents due to an unfortunate outbreak of viral gastroenteritis. A description of the clinical examination performed by the nursing home nurse described mild tachycardia, borderline temperature, mild tachypnea, and that the patient sounded 'wheezy' while seated.

The question asked, 'What is the MOST appropriate provisional diagnosis?' Of the options provided, the most correct answer was aspiration pneumonia. Alternative options included acute heart failure, *Bordetella pertussis* infection, and *Salmonella* septicaemia.

The question required candidates to understand the possible comorbidities associated with Parkinson's disease, including possible swallowing limitations. Associated with the recent vomiting illness and the current presentation of respiratory difficulty, the most appropriate provisional diagnosis was aspiration pneumonia.

# 6. Further information

Refer to RACGP Education's *Examinations guide* for exam-related information.



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