

RACGP Education

Exam report 2016.2 KFP



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#### RACGP Education: Exam report 2016.2 KFP

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The Royal Australian College of General Practitioners 100 Wellington Parade East Melbourne, Victoria 3002 Australia

Tel 03 8699 0510 Fax 03 9696 7511 www.racgp.org.au

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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 and semesters. The reliability is a measurement of the consistency of the exam, with values between 0% and 100%.

A candidate must achieve a score higher than the pass mark (or 'cut score') to pass the exam. The pass mark for the Applied Knowledge Test (AKT) and Key Feature Problem (KFP) is determined by the Modified Angoff standard setting method. This is a criterion referenced methodology that is used internationally in high stakes assessments.

The Objective Structured Clinical Examination (OSCE) pass mark is determined by the well accepted borderline group method (see candidate handbook for further detail).

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; that is, there is no set number or percentage of candidates who pass the exam. Fluctuations in pass rates can be attributed to various factors. The number of candidates who sat the exam is the number of people present on the day. Enrolment figures may be higher due to withdrawals.

Table 1. 2016.2 Psychometrics			
KFP	2016.2		
Mean score (%)	57.86		
Standard deviation (%)	6.36		
Reliability (%)	72.87		
Pass mark (%)	57.47		
Pass rate (%)	53.54		
Numbers sat	1384		

# 2. Candidate score distribution histogram

The histogram below shows the range and frequency of final scores for this exam. The vertical blue line is the cut score.

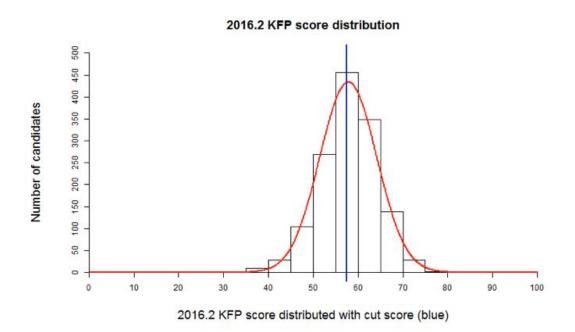


Figure 1. Final 2016.2 KFP score distribution

# 3. Candidate outcomes by exam attempt

Table 2 provides pass rates (%) displayed by number of attempts. There is a general trend that suggests overall candidate success rates diminish for each subsequent attempt. Preparation and readiness to sit are paramount for candidate success.

Table 2. 2016.2 Pass rates by number of attempts				
Attempts	Pass rate (%)			
First	60.8%			
Second	43.9%			
Third	43.8%			
Fourth or greater	40.0%			

# 4. Preparation – practice exams

Prior to each AKT and KFP exam, an online practice exam is made available to enrolled candidates. The purpose of this exam is to provide a simulated exam experience in preparation 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 as an indication of whether or not a candidate will pass. However, it is evident to the RACGP that candidates who attempt the online practice exams perform better in the subsequent real exam. Attempting the practice exam is highly recommended.

Table 3. 2016.2 KFP practice exam				
Attempted practice exam	Percentage attempted	Correlated pass rate in actual exam		
Yes	89.1%	57.1%		
No	10.9%	24.5%		

The RACGP is developing new online learning modules as part of the exam support online (ESO), which will be available for all members. These modules have previously been part of the support material accessed once a candidate has enrolled for the exams. The new ESO modules will be available on-demand for all members, so that prospective candidates and those supporting them can optimise preparation for the Fellowship of the RACGP (FRACGP) assessments.

The first module introduces the KFP and explains the assessment format with examples of cases from recent exams.

The second module takes the learner through a series of past cases with explanations and advice on how to approach the exam.

The KFP ESO modules will be available for the 2017.1 exam cycle and accessible via gplearning.

# 5. Candidate performance – AKT and KFP

The following table shows the performance of the 998 candidates sitting both the AKT and KFP in the 2016.2 exam cycle.

Table 4. 2016.2 AKT and KFP performance					
Same semester		2016.2			
AKT	KFP	#	%		
Pass	Pass	489	49.0%		
Pass	Fail	238	23.8%		
Fail	Pass	32	3.2%		
Fail	Fail	239	23.9%		
То	tal	998	100%		

# 6. Feedback report on 2016.2 KFP exam

A feedback report will be published following each KFP exam in conjunction with candidate results. All of the questions in the KFP are written by experienced general practitioners (GPs) who currently work in clinical practice and are based on clinical presentations typically seen in the general practice setting in Australia. The questions should therefore be answered within the context of Australian general practice.

The KFP exam is designed to assess the clinical reasoning of the candidate – a core competency for clinicians. It is important to remember that the KFP paper is not simply a short answer paper but requires the analysis of the clinical scenario, taking into account the initial information and any evolving information as the cases progress. The candidate is then required to answer focused questions relating to the context of the given clinical scenario.

Feedback is given at a case level. The information comes from the examiners' feedback as well as the multiple quality assurance processes in place. It is hoped that prospective candidates, and those supporting them, will find these reports useful to assist them in their preparation as they approach the KFP paper and will be of general interest to all interested in the RACGP assessments.

#### Case 1

The first case focuses on a male patient presenting with a 'funny turn'. The case scenario provides additional information about the event, along with pertinent past medical and social history. The questions explore the diagnosis and initial investigation.

This question was answered well, with the majority of candidates identifying the correct diagnosis.

The options for investigations were presented as a list for candidate selection. In general, diagnoses, history, examination and management questions in the KFP paper are usually 'write-in' questions, while questions about investigations are usually presented as a selection list. This reflects how GPs work in practice; when consulting with a patient, we collect and synthesise information to generate hypotheses around potential differential diagnoses and then set about the clinical reasoning process to establish a working diagnosis and generate management plans. Most clinicians would use computer systems and select investigations from a list rather than having to generate their own investigation list. There are variations to this, however, especially where candidates may be asked for single or a limited number of investigations.

In this case, candidates were asked for the immediate investigations required. It is important to answer the question asked. The list of investigations included those appropriate to later investigations as well as immediately necessary ones. It is important to reflect on our actual practice, as well as appropriate guidelines, and how we rationally approach investigating such a case and select those investigations that answer the question set.

The common error in this question was to select investigations that may be appropriate but are not required at the initial presentation.

#### Case 2

The second case focuses on the diagnosis and management of a range of ophthalmology presentations. There were classic descriptions as well as clinical photographs to guide candidates to the correct diagnoses. The presentations were those commonly seen in practice, as well as presentations such as the 'red eye' that are essential to identify the possible diagnoses, as failure to identify them could cause significant harm to the patient. The common errors in this case centred on not taking into account all the information and providing differential diagnoses that did not match the presentations.

Eye conditions are common in primary care and as such are regularly seen in the FRACGP assessments. It is important that candidates can safely manage the common presentations as well as identify serious conditions and 'red flags' in a patient's history.

### Case 3

This case describes classical features of a patient presenting with persistent shortness of breath over a defined period of time and an evolving story of chronic obstructive pulmonary disease (COPD). Candidates are taken through possible differential diagnoses, initial investigations and initiation of treatment.

The case follows the clinical reasoning process with investigations, candidates were then presented with a chest X-ray that was classic for COPD. The chest X-ray required interpretation, in light of the information already provided, and then initiating appropriate management. Candidates are regularly required to interpret X-rays with a clinical picture provided. In this case, despite the history and findings, many candidates focused on cardiac disease and management or identified pulmonary neoplasms that were not evident in the chest X-ray. It is important to read the case and answer in the context of the information given. This is a 'key feature' paper and not a simple short answer paper where all causes of shortness of breath are given. Remember to answer in the context of the question.

Candidates used many abbreviations in the management question and unfortunately they gave abbreviations such as LABA (long-acting beta agonist), but then provided examples that were incorrect and so effectively gave two or more answers. It was concerning that the wrong examples were provided for the different classes of medications for COPD – this raised the question whether some candidates actually knew what the abbreviations meant. There were also uses of abbreviations that the examiners could not understand and were therefore marked incorrect. Candidates are advised in the pre-exam materials not to use abbreviations.

In the KFP paper, we recommend that candidates do not provide examples unless they are specifically requested to, as this will lead to extra responses and associated penalties.

#### Case 4

This case features a patient presenting with a chronic haematological condition that, while previously stable, has developed new symptoms. Candidates were required to identify key features in the patient's history to identify possible diagnoses and to select appropriate investigations to use to resolve the presentation.

In approaching this case, it is important to remember that candidates will not score if they simply repeat information in the case scenario, but only score marks if they correctly identify additional information that is required. The FRACGP assessments are specialist exams and providing answers that are vague or non-specific will not score. For example, answers such as 'medications', 'trauma' or 'family history' are not specific and therefore too vague to be considered correct. Answers need to be focused, specific and relevant to the case.

The main issues in this case were not being aware of the potential of chronic haematological conditions to rapidly progress and identifying those elements of the history that would indicate that this is occurring.

### Case 5

In this case, candidates are presented with investigations and an accompanying clinical scenario that requires analysis and then ongoing management. This is a common case presentation. For all investigations, abnormal results are not highlighted, but normal ranges are provided for all results.

The patient had moderate renal disease from previously undiagnosed hypertension. Both of these conditions are common and candidates should know how to rationally investigate them.

Candidates were asked to select investigations, the common failing being that many candidates chose investigations that would not assist in the diagnosis. It is important to remember to select those tests that will be high yield in formulating a diagnosis or common underlying pathology, rather than selecting a blanket list of investigations.

In this case, the patient returns with other comorbidities and candidates are required to manage these in light of the whole presentation. For example, candidates would need to take into account the patient's ongoing medications and renal disease when prescribing medications. Failing to identify these issues, and therefore failing to prescribe and/or manage the patient correctly, led to candidates not scoring well.

### Case 6

This case provides candidates with a patient presenting with both dermatological and rheumatological issues. Candidates were given a description and clinical photographs to identify the lesions and asked to provide information on management. Dermatology forms a large part of our workload in general practice and in most KFP papers there are dermatology questions. It is important to look at the range of common conditions and how they are managed, as well as identifying more serious lesions.

In this case, some candidates chose to describe the lesion, despite a picture having been provided, rather than answer the question regarding management. As we have said before in previous cases, candidates should ensure they answer the question given and do not give examination findings or descriptors of lesions when asked about management.

The final question in the case describes the incidental finding at examination of gouty tophi in the fingers and asks about ongoing management. The picture was classic gouty tophi, but overall the question was a challenge, with the most common diagnoses offered being osteoarthritis or Heberden's nodes.

#### Case 7

Case 7 centres on the investigation and management of an elderly patient presenting with acute onset of lower thoracic midline pain, with anterior wedging of vertebrae shown on an X-ray. Candidates were required to select appropriate investigations at this point and consider non-pharmacological management.

The most common error in response to this question was to provide pharmacological treatment, despite the question explicitly asking for non-pharmacological treatment. Many candidates lost marks by not reading the question carefully, or by inferring details that were not included in the clinical scenario, and suggested management such as reducing weight, reducing caffeine or using mobility aids; none of which were referred to in the scenario. While these might be appropriate, there is no evidence they are an issue in this scenario, so they should not be addressed when answering the question.

#### Case 8

Candidates are presented with an 18-month-old Aboriginal child coming for immunisation and need to provide the appropriate immunisations as well as address parental concerns about the vaccines. Many candidates listed diseases rather than vaccines. Candidates had to identify the additional vaccines required in this situation as well as the regular scheduled vaccines. Many candidates omitted the diphtheria, tetanus and pertussis vaccine (Infanrix), which is now scheduled for all children at 18 months.

In responding to parental concerns, rather than addressing those concerns, some candidates provided rote answers regarding Aboriginal and Torres Strait Islander health issues rather than addressing the specific queries from the parent.

In the question relating to the parental concerns, simply writing 'provide handout' or 'refer to nurse' is very nonspecific and does not show confidence in managing a very straightforward enquiry and one that is a regular issue in both consultations and the media.

### Case 9

In this case, candidates had to consider the differential diagnoses and the immediate and longer term management of a female patient in her late twenties. The case describes new onset of symmetrical significant joint pains with initial investigations showing raised inflammatory markers.

While providing succinct differential diagnoses, some candidates did not focus on the information provided in the question and looked at more unusual diagnoses, rather than focusing on the more common diagnoses, or gave answers out of the context of the patient in this scenario, providing an 'all cause' list of joint pains.

In the management section, many candidates nominated medication or therapeutic options not appropriate for initial management, as well as using lots of abbreviations in their answers. Good answers identified the issues as presented, recommended the correct treatment, and included appropriately timed referral as the patient's health issues deteriorate.

#### Case 10

Case 10 considers an extensive description of a female patient with several emergency department attendances with symptoms ultimately suggestive of underlying mental health issues. Candidates are required to analyse the information and develop a working list of differential diagnoses, assess and identify the most important risks within the presentation and develop an appropriate management plan.

Within this case, common errors included: focusing on organic causes of the presentation rather than looking at the detailed scenario; not identifying the risks to the patient and her infant; and using general terms when considering treatment or management, including recommending 'antidepressants', 'counselling', or 'therapy'.

Despite the scenario stating to the contrary, there were answers referring to domestic abuse and acting on this. It is important to remember to read the scenario carefully and to respond in the context of that scenario.

## Case 11

In this case, candidates are presented with a patient having potential side effects from her chosen contraception method – Mirena IUD. The case unfolds and considers initial advice and later ongoing management options.

Depending on candidates' experience and practice demographics they may not have had exposure to all aspects of primary care. When preparing for the assessments, it is important to identify areas where there may be a lack of experience and to ensure that the candidate is familiar with contemporary treatment and management.

In this case, one of the recurring issues in the examiners feedback was the lack of specific information and candidates using general terms rather than specific management, or simply referring to a specialist without actually managing the patient's problems. The inference being that they were not familiar with this form of contraception, or its wider use within women's health.

# Case 12

This case presents a classic picture and clinical history of guttate psoriasis in a teenager. Candidates were asked to identify the diagnosis and then the appropriate management.

The condition was appropriately identified; however, in managing the condition, many candidates used emollients and symptomatic treatments, rather than managing the actual psoriasis. Some candidates utilised medications or approaches that were in the realm of specialist treatments, rather than those available to GPs. It is important to note that if using topical steroids, the potency needs to be given. A generic answer of 'topical steroids' will not score well and this is a common issue in dermatology cases.

# Case 13

Candidates are provided with a history and clinical picture of a pigmented lesion. The story describes a lesion that is changing in size and asks what additional clinical features are required to assess the lesion and how it should be managed.

Many candidates reproduced information from the scenario and therefore did not gain marks. The question was assessing whether candidates have a possible framework for assessing pigmented lesions and identifying which of the elements in the assessment framework is not provided (such as the ABCDE or Glasgow framework).

Many clinical presentations have well defined checklists or rubrics to assist the clinician as well as accepted guidelines. In the KFP exam, questions will always reference these resources in the development of the marking grids, hence it is important that candidates review appropriate Australian guidelines for common presentations in primary care.

When considering management, if candidates simply said 'excise' without reference to biopsy or histopathology then they scored zero. It is essential that histology is undertaken of any excised lesion as failure to do so and the consequences of such failure are a regular medico-legal issue.

#### Case 14

In this case, a coincidental finding is made at a routine medical of microscopic haematuria. Candidates are asked to outline the subsequent history and investigation. The scenario offers information that assists in the potential diagnosis for this patient.

In considering the patient's history, if a case states there is no previous medical history of note or the weight is stable, then asking about radiation treatment or weight loss will not score marks. When a case provides a range of information, it is important to read the scenario a few times to ensure you have taken in all the information and that you are not providing answers contrary to the information that is already included.

When considering the investigations, it is important to look at the age and gender of the patient and provide answers appropriately. A prostate-specific antigen (PSA) test would not be appropriate in a young man as an initial investigation, nor would a cystoscopy.

Whenever a case of haematuria presents in exams some candidates will reference beetroot. While beetroot consumption may produce a colour change in urine, it will not be detected as haematuria on urinalysis or microscopy. This is again about considering all of the information, rather than providing an 'all cause' list for haematuria.

### Case 15

Case 15 presents the acute onset of a tender swelling in the neck of a young female patient and describes a tender goitre. Candidates were asked for differential diagnoses, appropriate investigation and therapeutic strategies.

In investigating the patient, choosing the tests that will help differentiate the causes of an acutely tender goitre in this patient will score, but generic tests that will yield little information will not.

The question asked candidates how to manage a patient while awaiting results of the investigations, so long-term treatments or treatments for symptoms not being experienced in the clinical scenario will not score. The question was assessing candidates' ability to identify the immediate issues – the pain and tenderness – and manage these appropriately.

### Case 16

This case presents a pet shop worker with symptoms of atypical pneumonia. Candidates were asked to identify the most likely diagnosis, further issues in the history, as well as most important investigations.

The most common error in responses was giving elements of the history but then giving multiple answers on each line, expanding on the answers and frequently having unrelated aspects of history together on the same line, such as, 'night sweats, weight loss, anorexia'. Each answer is scored, so every additional answer above the number requested will attract a penalty. This is a key feature paper and requires focused and specific answers. When candidates provide multiple answers, create lists or provide multiple examples, penalties will apply.

### Case 17

In this case, candidates are required to identify from the clinical history and findings an acutely unwell child presenting to a remote country hospital run by local GPs. The case directs candidates to a diagnosis of acute epiglottitis and seeks to identify additional history to support the diagnosis and immediate management.

The issue in this question was that some candidates could not identify the correct life-threatening diagnosis. Also the remote location was not taken into account in the management options provided by many candidates.

It is important to consider if a scenario gives a location for the presentation, as this may be pertinent to answering aspects of the case.

#### Case 18

This case focuses on a resident of an elderly care facility who presents with changes in her behaviour over the preceding few days. As well as pertinent information her medication list is provided.

Candidates are asked to give possible causes for the behaviour change and provide specific examples. This is a question that is explicit about needing examples. The question included an example of how candidates were expected to answer. Despite this, many candidates only gave general causes with no specific examples.

Candidates were provided with examination findings and bedside tests, and asked to select appropriate initial investigations. Many candidates wanted to organise radiological investigations including chest X-ray (CXR) and computed tomography (CT) scans. While in an emergency department this may be appropriate, in a residential facility this is not part of the initial investigations in the context of the clinical information provided.

In managing the patient, general answers such as 'medication review', 'optimise medication', 'sedation' or simply referring her to emergency did not score. Given the medication list was provided, there were specific therapeutic options available and candidates who scored well looked at a holistic approach to her presentation and possible management strategies.

### Case 19

In this case, we are presented with a history and clinical picture of a penetrating injury to the distal phalanx in the index finger of a patient. Candidates are required to identify immediate management steps and possible complications.

Many candidates were keen to refer to a hand surgeon, but the presentation occurs in a rural location and such an answer does not address the immediate management. Analgesia was a common response, but many candidates did not specify which type, so did not score well (as this could range from simple analgesia such as paracetamol through to opiates).

In considering complications, some candidates only listed three different forms of infection rather than considering the impact of the injury on the different structures as well as infection. It is important to consider how you would group answers and have a framework to respond to such questions to consider specific complications relating to potential injury to nerves, bone and tendons.

### Case 20

Case 20 describes a new patient who presents with investigations from a previous GP that were organised before moving to your area. The results show a macrocytic anaemia and low B12. Candidates are asked to look for relevant elements of her history and to consider ongoing management.

While many candidates correctly identified the possible underlying causes for the presentation in the history, they were then unable to progress the investigations to assess for pernicious anaemia. Schilling test was a common response, but this has not been available in Australia for several years so did not score. A gastric/small bowel biopsy is not an investigation that a GP would order, and is not appropriate in the initial investigations to determine if this is pernicious anaemia.

### Case 21

This case presents an acutely unwell patient presenting with features classic of a leaking aortic aneurysm. The most common error was identifying this as a ruptured aortic aneurysm, a very different presentation, which generally does not present in the way the case describes. When considering the diagnosis, it is important to carefully read the scenario given. When asked for elements in his history, candidates should be aware that it is important to focus on history, not examination findings.

When considering the management in this case, urgent transfer by ambulance is imperative. A simple refer to emergency is not sufficient. When considering referral of patients as part of management, it is important that you consider where, who to and the degree of urgency, given examiners are looking for specific management and the ability to identify the urgency of a clinical scenario.

## Case 22

In this case, we see a six-week-old baby brought by her mother with an inguinal swelling. There is an extensive description and clinical history provided. Candidates are required to identify the swelling, consider the differential diagnoses and the ongoing management.

In this scenario, while candidates could identify possible differential diagnoses, the urgency of the situation was not realised. Candidates often referred to 'rules' for hernias but these were for older children rather than a six-week-old. As in Case 21, identification of the need for an appropriate and timely referral scored the most marks.

## Case 23

This case outlines the presentation of a resident of a group home presenting with increased aggressive behaviour and asks candidates to identify the possible underlying causes and appropriate management.

In answering the question, candidates should consider a logical approach rather than simply listing several infections or possible medications (especially when no medication list is provided). In the scoring grid, infection only scored once so listing several infections meant that marks were lost for other possible causes. This was another example of where candidates extrapolated the scenario beyond the information given.

In considering how to manage the situation, it was important that candidates take a holistic approach and consider the patient, the group home staff, and other residents given the information provided in the scenario.

### Case 24

Case 24 considers a patient who presents with increasing abdominal pain and weight loss and asks candidates to consider the appropriate investigation. It also considers the issues faced when a patient fails to return to discuss abnormal results.

Candidates were able to identify the most important differential diagnoses and management, but some candidates struggled with how to manage abnormal results and the duty of care on them to follow up a patient's results.

Medico-legal/ethical dilemmas will often appear in the KFP and duty of care is one important facet of this. It is important that candidates consider different scenarios and ensure they have an appropriate approach to such scenarios.

# Case 25

In this case, candidates are presented with a female patient with right sided lower abdominal pain and asked to identify important differentials and ongoing management.

Given the focus on ensuring ectopic pregnancy is considered in any such scenario, candidates who did not list this possibility lost significant marks. Likewise, not looking at excluding pregnancy in the investigations meant marks were similarly lost.

It was important to give other differentials in line with the candidate's age and presentation in the scenario. Candidates need to remember to address the scenario, not simply provide an all cause lists of lower abdominal pain.

#### Case 26

The final case centres on an older patient with bipolar depression and required candidates to identify key indicators in the history that would raise the suspicion of this diagnosis, then look to manage the patient in the primary care setting following referral to a psychiatrist. This focused on a holistic approach as well as essential monitoring of medications and regular bloods tests related to the medication. Candidates scoring well considered a holistic approach to managing the patient. In this case, a holistic approach meant not just focusing on the medication or clinical monitoring, but also considering ongoing targeted education (again just listing education is not specific enough to score marks), appropriate support for the partner/family, involvement of appropriate allied health and considering the development of crisis plans.

Answers such as education, regular review or ongoing preventive health strategies will not score, as they are either not specific or do not address the question.

# 7. Further information

For further information, please refer to the RACGP examination guide and consider the Exam Support Online (ESO) modules that will become available for the AKT and KFP exams in the upcoming months through gplearning.



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