MB ChB

Guidance for Revision - Intermediate Professional Examination
1 Introduction
The purpose of this document is to provide general guidance for students in the 2015 intake (MED15) of Buckingham Medical School (UBMS) about revision for the Intermediate Professional Examination. The Medical School recognises that the MED15 cohort has no senior students to provide such guidance informally, so this document aims to help you prepare for the assessment.

It must be recognised, however, that the format of assessments is essentially the same across the whole medical course at Buckingham, so experience of summative assessments in Phase 1 is very relevant to those in Phase 2, and strategies that have proven successful earlier in the course will likely still be effective now.

2 The Intermediate Professional Examination
Full details of the format and rules of the Intermediate Professional Examination are provided in the ‘Code of Practice for Assessment’ that is available through Moodle. Please note that this is a revised version from that you will have consulted in Phase 1, with a different description of the assessments in Phase 2. In line with the provision in the first code you were given 12 months’ notice of the changes, so it is the new Code that applies.

The following description is a short summary to remind you, and cannot, therefore, encompass the full details of the examination. Do please consult the ‘Code of Practice for Assessment’, which is the definitive statement of how the assessments will be conducted.

The Intermediate Professional examination has three components:
- A written assessment made up of three two-hour papers.
- An Objective Structured Clinical Examination made up of two components. First, a 10 station OSCE of similar format to that you will be familiar with from Phase 2, and second, an OSCE made up of longer stations mostly involving consultations with real patients.
- A summative assessment of your portfolio

You must obtain at least a satisfactory grade in each of these components to progress automatically to the senior rotation. No borderline grades are awarded in Phase 2. If you obtain an unsatisfactory grade in either or both of the written papers combined or the OSCE components combined, then you will have to take a qualifying examination consisting of both written and OSCE components in the same format held in June. You may proceed to the senior rotation in the meantime, but if you do not gain a satisfactory grade in each of the written and OSCE components in the qualifying examination then your course will be recommended for termination.

If you have not made satisfactory progress with your portfolio, then you will have to put in place an action plan to do so by the time of the qualifying examination, and if that action plan is not successfully implemented, then, again, your course will be recommended for termination.

You may appeal against termination, and if that appeal is successful you may be permitted to take the whole junior rotation (and all associated assessments) again.

2.1 The written papers
There are three two-hour written papers scheduled for the 5th, 6th and 7th March 2018. The format of the papers is very similar to those in Phase 1. Each paper is made up of twelve question sets.

Each question set begins with a case vignette based on one of the 71 core clinical presentations that you should by now be familiar with. This is followed by a set of sub-questions adding up to a total of
10 marks. For some of the vignettes, the sub-questions will be in the ‘constructed response’ format that you are well familiar with from Phase 1, and will require you to write an answer in a box. In Phase 2 written examinations, however there will also be an increasing fraction of the question sets where the sub-questions are ‘selected response’ – that is you must choose the best answer from a list provided. This is help prepare you for postgraduate examinations, where selected response questions are most common.

For the Intermediate Professional Examination one of the three papers will have only selected response sub-questions. There may, as in Phase 1 be a mix of constructed and selected response sub questions in the other two papers.

Just as in phase 1, standard setting techniques will be used to set a ‘cut score’ for each question set, and you will need to exceed that cut score in 28 of the 36 question sets across the three papers to obtain a satisfactory grade. No borderline grades are awarded, so 27 or fewer question sets passed is an unsatisfactory performance.

### 2.2 The OSCE

The OSCE has two components taken on successive days, scheduled for the 8th and 9th March 2018. The first component is a 10 station OSCE similar to those you will have experienced in Phase 1. The stations will be slightly longer, and the tasks more complex, reflecting your increasing skills, but the general organisation and format will be like that you know already.

The second component will be made up of five longer stations (20 minutes), testing more integrated consultation skills, and usually involving real patients.

Just as in Phase 1 there will be a cut score set for each station, and to obtain a satisfactory grade you must meet or exceed that cut score in 75% of the stations.

### 2.3 The portfolio review

A panel of examiners will review your portfolio. You will have to demonstrate that:

- You have assembled an appropriate range of evidence in your portfolio as a whole to date, and have engaged assiduously with the portfolio process.
- You have been signed off as competent in all of the 32 ‘Practical Procedures for Graduates’ defined by the General Medical Council (GMC).
- You have assembled a good range of evidence that you are on course to meet the ‘Outcomes for Graduates’ defined the GMC under the category ‘Doctor as a Professional’.

Remember that the portfolio review is summative, and that if you are not awarded a satisfactory grade at first attempt or second review then your course will be recommended for termination irrespective of performance in other assessments.

### 3 Preparing for assessments

The most important part of preparing for assessments is to engage with the course. This means attending, participating in activities in the clinical workplace, and reflecting on your experiences. Assiduous engagement will take you 80% of the way to success, as you will learn in ways that tend to stick because that learning has been in context. ‘Revision’ as you have practised before makes a modest, but not insignificant, contribution, focussed on consolidating detail into a robust framework established by real life experience. You must do it, but if you have little experience to build on, it will not be effective.
3.1 Preparing for written examinations

The written papers are integrated, and any question set may include questions from any part of the course, including Phase 1. You are too far into the course to prepare by returning constantly to the course materials in the form they have been presented to you. There is just too much to deal with in that way.

You have reached the stage of practice where you should be well advanced in re-organising material into the way that you are going to use it with real patients, and you have seen enough of practice to facilitate that re-organisation.

The key to everything is patients and the problems they bring. You should aim to see a wide range of patients in each block, but then crucially use your experience of those patients to structure your learning. Every time you see a patient ask yourself:

- What did I need to know to understand what is happening to that patient, and what of that did I not know, or could not remember at the time?
- What did I need to know to understand how that patient is managed, and what of that did I not know or could not remember at the time?
- What am I going to do to ensure that next time I meet a similar patient I will know more and have forgotten less?

The trick is then to do that regularly day after day, week after week.

That is real, ongoing ‘revision’, and realising that you did not know or could not remember something at a time you needed to use it is the best possible stimulus to check it out and fix it in your mind. You just need to do that consistently.

Sitting with a book to fill in holes in understanding that you have identified through practice is infinitely better than sitting with a pile of workbooks or textbooks and trying to learn material in a disembodied way.

The course documentation does, however, give you guidance as to the range of patients you need to see and reflect upon. You need to see patients presenting with a full range of the ‘core presentations’ that the Medical School has defined, and each block has also identified ‘index conditions’ that correspond with each. See as many patients as you can with each of those, and every time ask yourself the questions above. Make a note of the answers at the time, and set some time during the week to address the deficits in your understanding that you have identified.

You can do this by:

- Reminding yourself of the relevant content of the lectures and seminars during the blocks and in Phase 1.
- Reviewing the relevant topics in textbooks or on-line resources
- Discussing cases with peers or tutors.

Over time your knowledge and understanding will grow in a sustainable way. So long as you see and reflect effectively on a good number and range of patients your knowledge will carry you easily through the summative assessments.

You will need some framework to structure that knowledge in your brain. By this stage most will have realised that some sort of ‘mind map’ or ‘concept map’ can be really effective. Exactly how you structure this is up to you, but we have tried to give you an option during Phase 1. You will recall from the ‘Clinical Problem Solving’ unit that we suggested an outline structure which can be very helpful.
If you can be certain that you can identify and remember all topics that are relevant to each of the domains in the diagram for all of the core presentations and each index condition associated with them, you will pass, and probably excel, in any feasible examination that we could set.

Do remember how we set the assessments. We use a blueprint that relates to GMC outcomes and the contexts of each of the core presentations with their associated index conditions, so we will test materially systematically in exactly the same way as we are suggesting that you learn it.

3.1.1 Question types

Two of the papers in the written assessments of the Intermediate Professional Examination will be largely made up of ‘constructed response’ items just like those you are familiar with from Phase 1. Remember the same advice applies:

- Monitor your timing, so that you can complete all question sets.
- Read the question – spend enough time to understand what is actually being asked.
- Write concise answers to the question posed, not a ‘brain dump’ of everything you consider might be vaguely relevant.
- The questions often give clues to the number of components required for a complete answer. Make sure you give them all.
- Always write something in the box. You cannot get any marks for a blank space, yet, however uncertain you are, you may get some credit for a partial answer.

One paper will be all ‘selected response’ questions. The questions will still be organised into sets following a vignette, but the format of the paper will appear different. In a selected response paper, you simply have to make a mark (a cross) in a box to indicate the answer(s) you have chosen from a list. These questions are marked by machine, so make sure that your marks are both clear and in the right box. You should use a pencil (HB) which will be provided, and you may erase answers and replace if you wish to change them.

There are different types of ‘selected response’ questions, and we may use any or all of them. Three types are most common.
3.1.1.1 ‘Single best answer’

Here the question is made up of a stem, followed by a series of statements. Your task is to identify the statement that is the best answer to the question posed in the stem. There may be some statements that are nearly correct but not quite, so it is the best answer that you are looking for. In writing these items, we aim to avoid options that are so obviously incorrect that they might as well not be there, so you do need to read them carefully and choose the one that is most correct, as most of the options will be superficially feasible.

There is a certain art in this, and you will be able to find further guidance on line. You do need to practise this form of assessment. Practice may be achieved by borrowing or buying ‘MCQ’ books aimed at medical students or early postgraduate exam takers. Make sure the resources contain SBAs and not true / false questions – the latter are not now used in most exams, and will not be used at UBMS. There are many websites that have databases of questions. Usually you need to subscribe to these databases. There are a few free sample questions on the internet. Not all resources are reliable, so do take care.

Example of a single best answer sub question:

A patient in hospital develops a tachycardia with a regular rate of 145 bpm and a blood pressure of 95/42 mm Hg. He denies chest pain, although he is acutely aware of his rapid heart rate. An ECG shows the duration of the QRS complex to be 0.10 s.

One sub question might be:
The single most appropriate immediate treatment is:
A. Adenosine 6mg
B. Amiodarone 300mg
C. DC Cardioversion
D. Digoxin 0.5mg
E. Esmolol 100 mg

Answer: A

In postgraduate examinations there will normally be a large number of items, and you should expect to have no more than one minute to answer each single SBA. We have replicated that timing in our examinations that use selected response items, and have a consistent rule of one minute per mark across all written papers.

3.1.1.2 ‘Matching’ questions

Here a single list covers a number of items (sub questions), and you have to select the correct answer for each sub question from the same list.

Example of a set of extended matching sub-questions:

Here, the starting vignette may be quite general – such as:

‘You are working in the Emergency Department, and a series of patients present with chest pain. In each of the following cases choose the single most likely diagnosis from the list.

List of options:
A. Myocardial infarction
B. Gastro-oesophageal reflux disease
C. Anxiety
D. Pleurisy
E. Pneumothorax
F. Pericarditis
G. Myocarditis
H. Dissecting aortic aneurysm
I. Pulmonary embolism
J. Shingles

Scenarios:

A 42-year-old overweight man presents with a two-day history of anterior chest pain that is worse on deep inspiration and lying down.
The best answer is: F: Pericarditis

A 67-year-old female with a history of chronic lymphocytic leukaemia presents with a 3-day history of burning pain in the right lower chest wall. Clinical examination is unremarkable.
The best answer is J: Shingles

A 25-year-old man with a history of Marfan’s disease presents with sudden onset shortness of breath and pleuritic chest pain.
The best answer is: E: Pneumothorax

And so on.

Just as with SBAs you may find practice questions online.

3.1.1.3 ‘Best three answers’ questions

There may be a few questions where you have to choose the best set of actions from a list. These questions will have a vignette and a stem just like other questions:

The correct response to the scenario involves doing several things, e.g. responding to patient, informing someone, and making a record.

Three appropriate actions together make a good response to the situation.

There will be 8 choices of answers for each stem. Three of these are right.

3.1.2 A word of warning

Do note that practising questions is no substitute for learning the material properly in the first place. You will not succeed by exam gaming alone. If you know the material then question practice will help to reduce anxiety and improve fluency in the exam room, so that the understanding you have will reveal itself more effectively. If you have not learned the material by engaging with clinical education, no amount of ‘exam practice’ will get you through.

3.2 Preparing for OSCEs

There is only one way to prepare for clinical examinations, and that is clinical practice. If you can do it on the wards and in the clinic, then you will be able to do it in the OSCE. There is no substitute.

Think about the patient journey and the patients you have seen. Steps in the patient journey will form nearly all of the OSCE stations. The OSCE is a clinical examination written by clinicians and assumes you have engaged fully with clinical learning. You must, therefore, engage in the clinical environment to give yourself the best chance of being successful. Take every opportunity to see patients – patients are the best revision for an OSCE.
OSCEs always test one or more of:

3.2.1 History taking
Take histories from patients presenting with the 71 key presentations listed by the Medical School (relevant to the junior rotation e.g. chest pain, sudden breathlessness, painful joint etc.) See as many patients as possible with different presentations - the history station will just become another patient to take a history from - the patient in the exam will be similar to patients you will have taken a history from during the blocks.
Check you can take a history fluently. There will be history stations in the IPE. The best preparation for this station is to see patients with a colleague who can give constructive feedback on your performance. You must be familiar with all the index cases.
You must be able to present the history fluently. Practice that over and over again.

3.2.2 Examination
Examine all the systems and parts of systems e.g. cardiovascular, respiratory, peripheral vascular, hip etc. etc. Examine as many patients as possible - there is a finite number of examinations - make a list - follow the same routine for each examination. The examination station will become second nature. The patient in the exam will be similar to patients you will have examined during the blocks.
Check you can examine patients systematically using a recognized routine. There will be examination stations in the IPE. You must be familiar with all the index cases.
Make sure that you can present your findings in a coherent and slick fashion. Again, practise over and over again.

3.2.3 Investigations
Order and interpret the investigations listed in the work books e.g. imaging, bloods etc. Ask yourself:
- What investigations have my patients had?
- Can I order them - what key information do I need to put on the form?
- What investigations are performed in the index cases?
- What abnormalities are found in the index cases?

Read the investigation section in each workbook. Revise the imaging sessions delivered in each block.
Check you can order and describe the common investigation modalities for each index case. Check you can describe common abnormalities for each index case - e.g. common CXR findings - effusion, pneumonia, cancer, pneumothorax etc. etc. There will be an ordering and interpreting investigation station in the IPE.

3.2.4 Clinical problem solving
From the history, examination and investigation can you formulate a sensible differential diagnosis?
Look at the list of index cases for each block.
What is the differential diagnosis of each condition?
Can you think of common conditions and conditions if missed will cause mortality or significant morbidity? For example, meningococcal sepsis is not an index case but every medical student must know about it. It could a differential in patients presenting with confusion, a rash, collapse, fever etc.
There will be parts of stations where you will need to provide a sensible differential diagnosis and a most likely diagnosis.
3.2.5 Formulating a management plan
Some stations will require you to discuss patient management. You must know how to manage the index cases in each block. Think about the patients you have seen on the ward, in the clinic and discussed at meetings.

A lot of learning in medicine is opportunistic and therefore you must attend all the clinical activities. Read the recommended textbooks every time you see a new condition. There will be stations that relate to patient management.

3.2.6 Writing a prescription
You must be able to write a prescription. You must be able to prescribe common / important drugs. Look at the list of drugs in the work books. Think of the drugs your patients take - can you prescribe them?

Can you write up fluids? Can you prescribe blood? Practise using the BNF.

Practise writing common prescriptions. Review the drug list and prescription charts of every patient you see. What are the indications, contraindications, side effects and monitoring needs etc? What drugs are used to manage the index cases?

You will have to write prescriptions in the IPE.

3.2.7 Explanations to patients
Some stations will include explaining investigations, procedures and management options to patients. This will include patients from a wide variety of backgrounds and levels of understanding.

To do this you must first understand what it is you have to explain, and then present it in a way that the patient can understand. Practise explanations over and over again. Remember about avoiding inappropriate jargon, and ‘chunking and checking’. Evolve ways of explaining things that are appropriate for patients but not patronising, and remember that if you do not establish rapport and use effective basic communication skills no amount of underlying knowledge will help you.

Remember some jobs of a doctor are challenging for example; breaking bad news or discussing difficult areas such as DNAR forms, Palliative care, Death, Organ donation etc. You may be asked to undertake these tasks in the IPE.

3.2.8 Handover and referral
Some stations may include handing over or referring patients to a colleague. Both written and verbal hand-over are important skills that requires time and practice to acquire.

Observe others referring and handing over patients. Practise summarising information. For example, pick out the key points from the history, examination, investigations and management and present to a colleague. Practise what you would write in an admission letter by reviewing letters that GPs have written to the acute admitting teams.

Practise summarising the medical notes and present to a colleague or write a discharge letter to the GP summarizing the key points.

3.2.9 Practical procedures
You must be competent in performing the 32 practical procedures prescribed by the General Medical Council. You must also be able to perform other procedures specifically listed in each of the blocks.

Procedures require practice and a colleague to watch and give feedback, so you may improve your technique. Use the checklists initially in the procedural document on Moodle. With practice and time doing the ‘right thing’ comes without thinking (like driving a car)
Practical procedures will feature in some stations. Remember some skills are observation in practice only, but you must be able to perform them in simulation (OSCEs are a simulation). You will be asked to perform procedures on plastic but you will need to explain the procedure to a real patient or the examiner. There are only a finite number of procedures - you know they will come up - practise them.

To repeat – the only way you can prepare for an OSCE is to _practise, practise, practise_. There are never too many times to do something. Be there, and just do it, over and over again.

### 3.3 Preparing for the portfolio review

Collating your portfolio is an ongoing task. You have been provided with considerable guidance already, which you should be following, so you should already have a great deal of material. If you have left matters then pick them up right now. You cannot compile a satisfactory portfolio in the last month before the review.

Make sure that:

- You have completed all necessary sign-offs of all of the 32 ‘Practical procedures for Graduates’
- Assembled a reasonable amount of evidence that you are making good progress towards achieving each of the ‘Outcomes for Graduates’ under the category ‘Doctor as a Professional’.

Remember that it essential to show that you are learning how to reflect upon your experiences and learn from those reflections.

Take some time to look at your portfolio before the end of October 2017, so you can identify any major gaps that need to be filled and put in place a sensible action plan to fill them. It is better to do that now than to put yourself at risk by not getting through the Intermediate Professional Examination at the first attempt. Note that even if you succeed in both written papers and the OSCE your record will still show that you failed the IPE at first attempt if your portfolio review is not satisfactory.

### 4 Finally

There is no reason to panic about the IPE so long as you have been engaging effectively with clinical learning and spending lots of time with patients. You will learn enough to ensure that, with sensible revision, you will do well in the assessments.

The better you can avoid panic the better you will do.