

SHABANA BORA, THERESA HEAH & SHIVANGI THAKORE

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# OSCEs for MEDICAL AND SURGICAL FINALS



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OSCEs for

**MEDICAL AND  
SURGICAL FINALS**

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## PREFACE

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The objective structured clinical examination (OSCE) is increasingly replacing the traditional long-case, short-case and viva-based clinical finals. Although OSCE style finals are fairer than the traditional style of clinical finals, they are not a perfect assessment of competence. Diligent students, who have acquired the necessary knowledge and skills to qualify as doctors, do occasionally fail OSCE based finals. As for all examinations, exam technique has a great deal to do with success, and OSCEs have a large element of performance to them – a fact that, unfortunately, we learned through personal experience. As well as working hard, it is, therefore, also necessary to work *smart* for the final OSCE, and put on the performance the examiners are looking for.

Many clinical teachers have sat more traditional finals and may have little experience of OSCEs. There is still also an absence on the bookshelves of a user-friendly final OSCE revision guide of the form that exists for other types of clinical exams. This book is therefore a compact revision aid for final OSCEs, providing students with tips about *how to play the OSCE game and win*. It represents our combined knowledge in a format that we would have benefited from whilst preparing for our own finals. We hope it proves to be a useful revision aid, and that it allows more deserving medical students to celebrate qualifying as doctors on results day.

*Remember, don't just work hard – work smart!*

S. Bora  
T. Heah  
S. Thakore

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# INTRODUCTORY SECTION

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## HOW TO USE THIS BOOK

*OSCEs for Medical and Surgical Finals* is aimed at the level of clinical finals and the clinical Professional and Linguistics Assessment Board (PLAB) exam. It therefore focuses on medicine and surgery, broadly excluding the other specialties, except where they may be a significant part of a medical or surgical condition, and omitting very basic clinical skills, neither of which is usually examined at this stage. It is a revision aid to be used during preparation for the final objective structured clinical examination (OSCE), and is not intended to be a complete textbook of clinical skills. We have pitched the content at a level which assumes that students using the book will already be familiar with clinical skills, and will be using it to practise in an exam-focused way for the final OSCE, gaining insight into what OSCEs are all about, what is required in each station, what the examiner will be looking for, and vital tips about how to score well. By the final year, most students do have a good repertoire of clinical skills that just need some brushing up, although it doesn't always feel like that!

The final year of medical school can leave you confused about how to structure your work. Aside from preparing for the OSCE, there is also the not so small task of revising for written finals, and at times these two demands seem conflicting. It must be stressed, however, that success in an OSCE is difficult without a fairly sound knowledge of medicine and surgery. Being able to piece together clinical signs and interpret histories obviously relies on knowing common presentations and pathologies. Although everyone is different, it is probably best to start revising for your written finals early on in the final academic year, aiming to have completed much of it before the start of the last term. At the same time you should start practising (or learning!) the clinical skills that might be tested in your OSCE; you will then be left with ample time to do the exam-focused OSCE preparation that this book facilitates. Essentially, your examiners are looking for a fluent performance – they want to see that the competencies being assessed are second nature to you. This might seem like an act that is impossible to convey, but it is not. If you go through the stations in this book over and over again until you can perform each one near perfectly, you will walk into the OSCE feeling like you can breeze through it and, if you believe that, breeze through it you will!

Revising for clinical finals is best done in pairs or threes, taking it in turns to be candidate, examiner and, if necessary, role-player. This set-up replicates the scene of the final OSCE as much as possible. It also enables someone to assess how you carry out each task and give you feedback on what you have done well and how you could improve. A valuable lesson we gained whilst revising for our OSCE was that each of us had different strengths and weaknesses in our clinical knowledge and skills, and that there was a huge amount we learnt just by observing each other perform various stations. In this regard, revising with several different people is a good idea. This group work can take place in a variety of settings: on the ward using real patients, in the clinical skills centre and at home. *OSCEs for Medical and Surgical Finals* is written to be an aid in this group revision situation, providing the 'examiner' with checklists against which to mark the 'candidate'.



The rest of this introductory section contains crucial information about the OSCE in finals – knowledge that will help you understand what a finals OSCE consists of, what form it might take, how it is marked, what sorts of cases you can be given, what competencies are being assessed, and how not to fail. Following on from this introductory section are sections on practical skills, examination, emergency situations-focused history and management, discharge planning, chronic disease management, conducting an interview with patients with mental health and cognitive problems, communication, and personal and professional development. Each section contains a section-specific introduction, giving generic advice applicable to all the stations in that section. Individual stations start with a scenario that provides candidates with the sort of instructions they would be given in an OSCE. In stations for which a role-player is required, this scenario will help inform him or her of the role to be played, as will details in the 'key tips' section for that station. Each individual station also consists of a checklist, which can be used whilst you are thinking about how to perform each task and by your 'examiner' as a mark-sheet when you are preparing in groups. At the end of each checklist are some key tips for success in that station, which will help improve your performance the next time you practise.

We were very keen for it to be a compact book, allowing you to carry it around hospital and use it opportunistically. If, for example, you should stumble across a patient with a good murmur or have a few moments to spare in your clinical skills centre, why not whip it out and pretend you're in your OSCE? Of course, you cannot always be in a group, so when you are alone you can use this book to work out in your own mind how to perform each type of skill and what individual stations require.

Most of the stations in the book are written to be approximately 7 minutes long, so if OSCE stations in your finals are longer or shorter than this, you will need to think about what will be additionally required or what should be omitted. It is most useful to practise to the time frame set out in your own medical school OSCE. Some medical schools include a global score to be given by the examiner and, if applicable, the role-player/patient at the end of each station. In some assessments this can amount to a significant proportion of the total marks, so it is worth paying attention to it. In each chapter introduction, we describe how to score these global marks. Finally, the entirety of this book cannot be wholly applicable to every medical school, and we would encourage you to adapt these checklists where you feel appropriate and, indeed, to use them as a guide to writing others. The process of writing checklists will give you an insight into what examiners are looking for, an insight which will help you play the OSCE game and win.

## FINALS AND THE OBJECTIVE STRUCTURED CLINICAL EXAMINATION

### The OSCE in finals – why?

Summative assessment is a time-consuming, difficult and expensive process to do well. It is a high-stakes occupation for all participants. The increased scrutiny of the medical profession over recent years has meant that medical schools have to be absolutely sure that graduates have real and measurable competency in the skills they will need as junior doctors. As a result, assessments have become increasingly focused on testing competencies; they now go beyond simply examining theoretical knowledge about skills – candidates must actually demonstrate the skills being assessed. It is difficult to test a medical student's performance '*in vivo*' or in real settings, as they are not yet practising clinicians. The alternative is to focus on '*in vitro*' tests such as OSCEs.

Old-style finals, although long established, had a number of weaknesses. There was an element of 'pot luck' with regard to who was your assessor and which cases you saw. The OSCE consists of a number of stations and allows students to be assessed across a wide range of knowledge, skills and attitudes by a range of examiners. This, and the fact that the marks are allocated objectively rather than subjectively, is thought to make the OSCE a more accurate, fair, rigorous and defensible assessment than long or short clinical cases. A well-constructed, well-planned OSCE is therefore thought to offer high validity and moderately good reliability in assessing competence in clinical skills (Newble and Cannon, 1994).

This type of assessment is also used in postgraduate assessments such as the Membership of the Royal College of Physicians (MRCP) Practical Assessment of Clinical Examination Skills (PACES) assessment and PLAB Part II. OSCEs are, and will remain for some time, a part of our professional lives – there is no escaping them!

### The OSCE in finals – what?

Most students have had some experience of OSCEs and almost every medical school will use this method of assessment somewhere in their undergraduate course. Many of the OSCEs that students will have been exposed to in earlier years of the curriculum assess simple competencies. Often these are basic practical procedures and tests of examination skills and history-taking skills with more emphasis on technique than findings. At the level of finals, more is expected of students. This is an assessment that aims to judge whether candidates are prepared to take on the role of a health professional. Practising health professionals blend knowledge, skills and attitudes together to diagnose and care for patients, and this is done using problem-solving and clinical reasoning skills (Hartley et al., 2003). This means that the OSCE at finals goes a stage further; these assessments check that candidates have the required knowledge, skills and attitudes and also that they are capable of using these in a targeted and relevant way.

### Understanding the OSCE

OSCEs are relatively formulaic and transparent assessments; they are not trying to deceive or pull tricks. The key to doing well in this sort of assessment (apart from just

being able in some of the competencies!) is knowing what the assessment is setting out to test, what is likely to be in it, how it is constructed and how it will be marked.

OSCEs are designed to be as **reliable, objective, valid and feasible** as possible.

To be **reliable**, a summative OSCE covering a wide curriculum needs more than 20 stations. This means there will be a large number of items in the test. You cannot therefore leave whole chunks of the curriculum out of your revision plans. If you do, you will almost certainly be faced with stations that you haven't the faintest idea how to approach. However, if you spend some time thinking about your *general approach* to certain types of stations, for example communicating in difficult situations or performing joint examinations, and devise some basic principles, no station is likely to faze you completely. The large number of stations means that you can't do perfectly on every station; learn to accept this and you will be able to give every station your best shot. Your medical school may offer sample questions from past papers and you should look at *all* the available examples. This will give you an insight into how the OSCE is marked in your institution, what sort of stations are included, what sort of instructions are given, and how long you have for each type of task. Although there may be a few stations that are brand new each year, many are re-workings of old stations, and being sure you can do well on all past stations you have seen is probably the most important step you can take (other than buying this book of course!).

To aid reliability in an OSCE further, the mark-sheets used must be relatively structured and contain details of how to score or grade students fairly and objectively. There is a variety of mark-sheets used in OSCEs at finals. These fall into two broad groups: mark-sheets with a large series of items which limit markers by only allowing them to indicate if a student has or has not performed a certain activity, and those with broader marking areas and score ranges that allow examiners to use their own judgement with the help of anchor statements. An example of each type of mark-sheet is included at the end of this section. Although these mark-sheets look rather different, well-trained assessors seem to be able to use both relatively objectively. Even in the less itemized type of mark-sheet, anchor statements are often detailed and so assessors are limited to scoring on what they *actually* observed and heard. Although it is difficult to get consensus on what constitutes an excellent or good performance, most practising clinicians are clear about what constitutes a poor performance. So if your assessment uses anchor statements, look carefully at the descriptions of what constitutes a sub-standard performance on each station and use this as a guide to work out what is the very least expected of you for an assessor to pass you.

Finally, if you are aiming for excellent marks, it is worth remembering that ensuring reliability also means that OSCEs often take more than 2 hours per circuit. This means any one examiner may have seen countless students before you. This is a repetitive task, and so it might be a good idea to think about how your performance might stand out from the crowd – just be sure your performance stands out in a good way!

To be **objective**, the cases used in an OSCE need to be reproducible. This is because most institutions will be running the assessment over a considerable number of hours, even days, and often on a number of sites. This need for reproducibility means that any real patients used will have to have relatively common stable conditions and be well enough to sit through hours of examinations. Where role-players (actors or members of the public who have special training to simulate clinical scenarios) are used, the

potential for conditions they may be asked to simulate is wider, but even an Oscar winner would have some difficulty simulating a distended tense abdomen! For preparation purposes, it might therefore be sensible to concentrate on common stable conditions for the examination stations and to expect common credible scenarios for the talking stations.

To be **valid**, an assessment has to reflect the breadth of the school's course. This is usually done by 'blueprinting' the assessment. This process ensures that the stations sample across every area of the curriculum to provide an assessment that tests a wide variety of different skills and abilities. Also, a valid assessment will not test outside the defined course objectives, therefore taking time to look at these is worthwhile.

At finals, assessment often goes beyond simply checking whether a student has mastered a clinical skill. Often the station will attempt to assess clinical reasoning by requiring the students to attempt a differential diagnosis. This means that now is a good time to start brushing up on your clinical reasoning skills. The best way to do this is to list common presentations such as chest pain, numbness in the legs etc. Next write down the most common causes for each condition (you may need to check with one of your teachers or in a textbook that you have got these diagnoses correct). Then list the questions and responses that would lead you to choose one diagnosis over another. For example, if the symptom is chest pain and the three most likely diagnoses you have written down are (i) ischaemic, (ii) oesophageal and (iii) muscular pain, positive responses to questions about relation to eating or lying down make it more likely to be oesophageal, whereas positive responses to questions about exertional pain and radiation to the arm make it more likely to be ischaemic. When you are practising histories and examination with each other, stop and reflect regularly: What have I discovered so far? What does it mean with regard to what is going on? What questions or further examination will prove or disprove this theory? With enough practice, these reflective thoughts and hypothesis testing will become a natural part of your clinical acumen.

To be **feasible**, an assessment has to be relatively easy to run. OSCEs are expensive and time consuming, requiring big halls, lots of equipment and plenty of markers. Patients need stable common problems to allow assessment organizers to get enough cases for every candidate to have a similar experience. Very sick patients and examination halls do not go together; there are not the resuscitation facilities available and patient well-being is paramount. This means that rare conditions are unlikely to be tested and the serious conditions represented will be those that are relatively straightforward to simulate (refer back to the paragraph on objectivity in this introductory section). Most OSCEs will use models to assess practical skills for reasons of feasibility. Make sure you are familiar with the skills models held in your clinical skills centre and practise on them – these are likely to be the same models that will be used in the OSCE.

## Testing personal and professional development in OSCEs

The General Medical Council (GMC) document *Tomorrow's Doctors* (GMC, 1993, 2003) has had a significant effect on how and what medical schools teach and assess. All schools are required to meet the recommendations in this document. The response of most schools is to have a more integrated curriculum with closer links between the basic and clinical sciences and a greater focus on acquiring professional skills and attitudes. These curriculum changes are matched by changes in what is assessed at finals. For example, some aspects of basic medical science relevant to professional practice,

such as using statistical and epidemiological skills to evaluate evidence, are now being tested in finals. Professional skills such as using ethical and legal principles in decision making or making the most of health promotion opportunities are also being tested. Do not leave these areas out of your exam preparation. Also remember that professional attitudes may be tested by observing your behaviour in more complex or demanding stations. Being polite, respectful and non-judgemental with all patients and role-players is essential, as are displaying respect for other members of a team and insight into your own limitations.

## How to fail an OSCE

It is possible to be a competent final-year student and fail an OSCE by not knowing what is required of you in the exam, by working hard and not smart. You must, as outlined above, find out exactly what your OSCE entails and prepare for it in an exam-focused way.

You need to convey to your examiners that you are ready to be a doctor, and the way to do this is to act like one! There are therefore some behaviours and tactics that can predictably put you into a 'fail' category. These include lying, being rough with patients or oblivious to their feelings, failing to get consent, being dangerous with equipment, especially sharps, and being cocky or argumentative with the examiner. Conversely, to give yourself the best chance of passing, you should dress professionally and appropriately, appear confident yet not over-confident, be safe, and interact with patients in a caring and pleasant manner. In stressful situations it is sometimes all too easy to pay less attention to these areas in an attempt to get the station completed. To avoid this when you are practising with your colleagues, don't just say 'I would gain the patients consent and ensure comfort' or 'I would dispose of the sharps carefully' – actually do the thing. If you practise a behaviour often enough, it will become like second nature. Also remember that the examiner is trying to help you; showing disrespect is guaranteed to lose you valuable marks.

Due to the scale of a finals OSCE, you may be examined at a centre with which you are unfamiliar. Make sure you arrive unflustered by leaving home with lots of extra time and clear instructions of where to report. It is difficult to cope with students who are absent, late arrivals, or those who turn up at the wrong place. Don't start out with the disadvantage of being flustered and looking unprofessional. If you are a borderline candidate, this may be the deciding factor that means you are a fail and not a pass.

OSCEs are daunting and often stations do go disastrously. The last thing you need is for one poor performance to adversely affect the rest of your exam. Difficult though it is, you have to try to collect your thoughts together and be calm for the next station, not allowing yourself to dwell on the disaster of the last.

Finally, those who are experienced in assessment would agree that failing is usually a multi-factorial situation – rarely is the candidate simply not knowledgeable or skilled enough. If you are unwell, emotionally overwrought about the thought of finals, or if something significant is going on in your life that is distracting you from your preparations, speak to your personal tutor or academic advisor as soon as possible and definitely before the assessment. Sharing this information with the right people can only help you in the long run.

## Long-case OSCEs

More and more schools are replacing traditional long cases with long-case OSCEs. These are similar in format to other OSCEs but the stations are longer and usually require more complex professional skills. These OSCEs may also include structured orals or vivas, or a variation on the OSCE known as the OSLER (Objective Structured Long Case Examination Record). If your school uses an OSCE format for long cases, it is essential that you get some practice in these sorts of stations with clinicians who are familiar with the format. Be clear with anyone who is helping you to prepare in those final months about exactly *how* you are being assessed. Many clinicians may not be up to date with more recent assessment changes, so if you can give your teacher an example mark-sheet, it will help to focus his/her feedback to you about your performance.

The usefulness of vivas at finals causes fierce debate among medical educators. Structured vivas maintain the strengths of vivas, being useful in assessing all-round knowledge and attitudes, whilst attempting to be more objective and fair. They can still be terrifying assessments, especially as there is likely to be more than one examiner at the station. Get some practice to steady your nerves, and remember that they are designed to test across an area, so don't panic if you cannot answer every question perfectly. Remember, one of their strengths is testing attitudes, so being honest and saying 'I don't know' is important. Also, saying 'I would ask the patient what they wanted' or 'I would consult a senior colleague or the member of the team with the appropriate knowledge or experience' is not a bad answer if you really haven't got a clue.

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## EXAMPLE MARK-SHEET

### VITAL SIGNS

Examiner: Please confirm the vital signs in this patient before the first candidate.  
The BP measurement should be within 6 mmHg of your measurement.

Please mark one response for each item like this [ \_\_\_\_ ]

### Instructions for candidate

In this station you will be asked to assess and record this patient's vital signs. Please measure the blood pressure, radial pulse rate and rhythm, and respiratory rate of this patient and state your findings to the examiner.

You have 7 minutes

Items	Y	N
1. General approach to patient (courteous, good rapport, ensures comfort etc.)	[ ]	[ ]
<b>Blood Pressure</b>		
2. Chooses correct cuff	[ ]	[ ]
3. Puts cuff on correctly	[ ]	[ ]
4. Feels a pulse and places stethoscope correctly	[ ]	[ ]
5. Inflates cuff, within reason, above pulse pressure	[ ]	[ ]
6. Lowers mercury at appropriate speed	[ ]	[ ]
7. Reports correct blood pressure	[ ]	[ ]
<b>Pulse</b>		
8. Measures rate and rhythm at radial pulse	[ ]	[ ]
9. Reports correct rate	[ ]	[ ]
10. Reports correct rhythm	[ ]	[ ]
<b>Respiratory Rate</b>		
11. Measures rate by observing chest for at least 30 seconds	[ ]	[ ]
12. Reports correct rate	[ ]	[ ]
<b>Global score</b>	Clear pass	[ ]
	Borderline pass	[ ]
	Borderline fail	[ ]
	Clear fail	[ ]

## EXAMPLE MARK-SHEET

### EXAMINATION SKILLS – RHEUMATOID HANDS

Instructions for candidate: Mrs Smith is a 50-year-old lady with rheumatoid arthritis (RA). She complains of painful hands. Please examine her hands. Towards the end of the station I will ask you to present your findings.

Item	Good pass	Pass	Borderline	Fail
1. Appropriate start to the examination	[ ]	[ ]	[ ]	[ ]
	States full name and role, checks preferred form of address, explains nature of examination, gains consent for examination	Introduction of self, gives overview of purpose of examination	Some attempt at introduction, vague description of purpose of examination, makes statement assuming consent	No attempt at introductions, no explanation of purpose of examination, does not gain consent
2. Conducts appropriate examination	[ ]	[ ]	[ ]	[ ]
	Systematic and thorough examination of hands including elbows, watches patients face	Generally appropriate examination	Unsystematic examination, cursory examination of some areas	Unsystematic, misses areas of examination, does not watch patient's face
3. Presents findings of examination	[ ]	[ ]	[ ]	[ ]
	Systematic and accurate summary of findings	Generally accurate summary of findings	Unsystematic description of findings. Some omissions or incorrect findings	Chaotic description, significant omissions or inaccuracies
4. Suggests correct diagnosis (RA)	[ ]	[ ]	[ ]	[ ]
	Correct diagnosis with appropriate weighting of findings in examination to support this	Correct diagnosis	Diagnosis of inflammatory arthritis but not specifically RA	Diagnosis incorrect or no attempt at diagnosis
Global Score	[ ]	[ ]	[ ]	[ ]



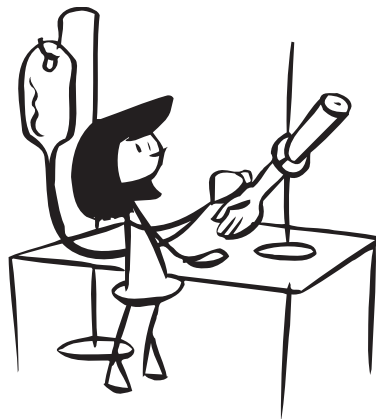
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## SECTION 1: PRACTICAL SKILLS

Blood cultures	4
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## SECTION 1: PRACTICAL SKILLS

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Practical skills stations are extremely predictable and once mastered are easy to score well on. All you have to do is execute your rehearsed routine, often without facing the added challenge of picking up clinical signs, forming differential diagnoses or interpreting a history. The key to scoring well is to appear slick and fluent, and practice is the only way to achieve this. Some of the practical skills stations will require you to demonstrate the procedures on real patients, and others on mannequins or models.

Initially practical skills are best learnt in the safety of the clinical skills centre, where your mistakes are more easily rectified. These skills should be quickly transferred onto the ward and clinic setting, with doctors and other health professionals supervising and teaching you. Learning them in a real setting gives you an insight into the clinical indications for various procedures and will teach you how the procedures are carried out in practice, which is often different from the 'correct' method you will be taught in a clinical skills teaching session. Practising in a ward setting will also give you the variability and challenges that real patients pose (plastic catheterization models tend not to have enlarged prostate glands!), and therefore help to make you proficient at carrying out practical procedures in preparation for your house jobs. This said, in the run up to your final objective structured clinical examination (OSCE), the clinical skills centre is the most useful place for you to return to practise and rehearse. We would recommend that in the last few weeks before your finals you set aside several sessions to attend the clinical skills centre with two friends to become slick and fluent at the practical skills. Practising with two other people allows one of you, where required, to be the patient and the other to play the role of the examiner, assessing the candidate against the checklists provided in this chapter. Attending a clinical skills centre will allow you to practise the procedures on models, which is often very different from carrying them out on real patients, and also to be in an environment where you can replicate the OSCE setting and rehearse to time. The clinical skills centre at your medical school will provide you with equipment that is actually used in the OSCE so you can familiarize yourself with it in advance of the exam.

Some of the practical skills stations are difficult to complete in the short time given in an OSCE; however, it is surprising just how much you speed up with practice. Once you have mastered each practical skill, your next challenge, which is perhaps just as difficult, is to ensure that you can carry it out in the time allocated in your OSCE. Time is often wasted thinking about what equipment you need, and a useful tip is to memorize lists of equipment for each of the practical skills you may be required to demonstrate. We suggest talking through the procedure as you perform it, drawing the examiner's attention to the fact that you have carried out a particular step and allowing him or her to tick it off on the mark-sheet. You can either talk directly to the examiner or describe what you are doing by way of explanation to the 'patient', if that is required – check with the examiner at the station what he or she would like you to do. If there is a step that you would carry out in reality but are unable to do in the OSCE setting, for example introducing yourself to a mannequin, you should state your intention to do it, allowing the examiner to give you the mark.



In all practical skill stations you should always confirm the 'patient's' identity, checking the wristband on a model and asking a role-player his/her name and date of birth. Ensure that you establish rapport with your 'patient', explain the indication and procedure and seek his/her permission, giving him/her an opportunity to express any concerns. Global marks in practical skills stations are for performing the task correctly and fluently, and for your interaction with the 'patient'. Your examiner may also ask you some questions at the end of the procedure, for example, when assessing nasogastric tube insertion, he/she might ask what you would do if the patient coughed. These questions are to ascertain whether you have in fact performed the task in reality on the wards, to test your wider clinical knowledge, and to give you an opportunity to increase your global score. But, as you can see from the mark-sheets, it is by no means the end of the world if you cannot answer them.

We have included a broad selection of practical skills in this chapter, some of which you will frequently perform as newly qualified doctors, and others which, although more commonly performed by nurses, you ought to know about. You may find that your medical school assesses skills that we have not included, and if this is the case, we suggest devising your own mark-sheets for practice along similar lines to the ones included in this chapter.

## BLOOD CULTURES

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You are a medical pre-registration house officer (PRHO) on-call and you have been asked to review Mr Whitehurst, who is pyrexial with a temperature of 39 °C following the insertion of a central line. Part of your assessment involves taking blood cultures. Please demonstrate this on the model arm provided.

States intention to introduce self and confirm patient's name and date of birth

States intention to explain the need for obtaining blood cultures and the procedure, and to seek the patient's permission

Selects appropriate equipment for the test (green needle/s, 10/20 mL syringe, blood culture bottle/s, alcohol wipes, tourniquet, gloves and cotton swabs)

Washes hands and puts on gloves

Applies tourniquet to model arm and selects a vein

Cleans the skin using alcohol swabs

Retracts vein to stabilize it and inserts needle into the vein using aseptic technique

Ensures that adequate blood sample has been withdrawn (5–10 mL is required per bottle)

Releases tourniquet and withdraws needle, whilst achieving haemostasis with a cotton swab

Removes caps from blood culture bottles and cleans tops with alcohol wipes

Fills each blood culture bottle with the correct volume of blood, filling the anaerobic bottle first

Discards needle and syringe safely

Labels each bottle appropriately

Completes the correct request form with necessary clinical information

Documents taking of blood cultures in the notes



### Global marks

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Examiner global rating

**KEY TIPS** 

Depending on which hospital/medical school you are at, you will be required to fill either one or two (aerobic and anaerobic) blood culture bottles.

There are two schools of thought when it comes to changing to a sterile needle after blood has been drawn, and prior to filling the blood culture bottles. The reason is that although changing the needle reduces the risk of contaminating the sample with skin flora, it also increases the chance of needlestick injury. It is worth checking with your medical school whether or not they prefer the needle to be replaced with a sterile one.

Remember that although not a sterile procedure, you do need to be as aseptic as possible in order to reduce contamination of the culture medium. So, clean the selected venepuncture site with plenty of alcohol wipes from the centre outwards, allow the skin to dry before puncture, and once the site is cleaned do not palpate the vein again!

## BASIC LIFE SUPPORT (BLS)

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You are called to the ward to assess a collapsed patient. Please demonstrate basic life support on the mannequin provided.

Demonstrates a safe approach (i.e. does not pose hazard to self or 'patient')

Approaches the 'patient' and checks for responsiveness using verbal and physical stimulation

If no response, shouts for help

Checks in the mouth for foreign objects and removes any visible obstruction

Opens the 'patient's' airway using either a jaw thrust technique or head tilt – chin lift as appropriate

Checks for signs of breathing for 10 seconds (looks, listens and feels)

If the 'patient' is not breathing, goes to get help, and ensures a cardiac arrest call has been put out

Performs two effective rescue breaths using a pocket-mask

Checks for signs of a circulation for 10 seconds

If no carotid pulse, performs 15 chest compressions using the correct technique

Continues resuscitation using the correct ratio of two breaths to 15 chest compressions until help arrives



### Global marks

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Examiner global rating

**KEY TIPS** 

You are expected to know advanced life support (ALS) prior to becoming a PRHO, and most medical schools normally run a compulsory course for all students to attend. You will probably not be asked to perform ALS in the OSCE due to the practical difficulties of it, but what you will be required to do is perform BLS and to answer questions with regard to ALS, perhaps even demonstrating aspects of it on a mannequin. You should know how to connect the mannequin to a cardiac monitor and where to place the paddles, and you should be able to talk through defibrillation. You should recognize rhythm strips for supraventricular tachycardia, ventricular tachycardia, ventricular fibrillation and asystole, and know the principles of electro-mechanical dissociation. You will be expected to know the drug doses that form part of the ALS algorithm.

We recommend that you learn the most current algorithms for BLS and ALS, which can be found on the UK Resuscitation Council website ([www.resus.org.uk](http://www.resus.org.uk)).



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