

UNSW MEDICINE AND HEALTH Phase 1 / Graduate Entry Clinical Skills

Student Guide 2024

Please note: Graduate Entry students can ignore references and terminology relating to Phase 1 courses

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Introduction

The overall objective of the Clinical Skills program is to ensure that you develop competency in the nominated communication, physical examination and procedural skills and are able to apply them within respectful relationships with patients. Specific objectives of the Clinical Skills program are encapsulated by the Graduate Capabilities especially under *Patient Assessment and Management* and *Effective Communication*.

In Phase 1, the focus of the Clinical Skills sessions will be on understanding the impact of the illness on the patient and developing skills to gather information, using both medical history and physical examination.

There is no expectation that you will be able to determine a correct diagnosis of abnormality but you should be able to recognise normality.

An essential element of the program is the patient-centred clinical method. Throughout the course, you should appreciate the importance of fully understanding individual patient circumstances and their unique experience of illness and how this understanding contributes to patient care.

Communication skills are woven into learning activities during sessions on campus and complement the clinical experiences and focus on issues of communication relevant to the scenarios. The emphasis in learning communication skills is to develop your ability to understand patients' perspective of health and illness and to encourage you to reflect on your personal communication style, with a view to improving your ability to elicit information from all patients.

Important note on infectious diseases outbreaks

At the time of writing, the intention of Faculty is for all students to be provided with opportunities to develop all skills as per this Guide. Physical examination and procedural skills are the most problematic should pandemic restrictions be imposed (as occurred during the COVID pandemic). Students are required to use Personal Protective Equipment as directed and to abide by all other restrictions or requirements put in place by Faculty whether on a temporary or permanent basis. Any further impacts on students to acquire physical examination and procedural skills, particularly, will be taken into account for assessments and students will be kept informed of any changes to assessment necessitated by such impacts.



Useful contacts

You may find the following to be useful when trying to resolve any issues related to CS learning and teaching.

Element Convenor (Phase 1) – Hospital and Campus Clinical Skills

Dr Kalli Spencer Email: <u>kalli.spencer@unsw.edu.au</u>

For admin enquiries e.g. SOCA or OSPIA, Kensington campus clinical skills sessions, use of Kensington Clinical Skills Centre contact: Kiran Thwaites Email: <u>csadmin@unsw.edu.au</u>

Student Support for Hospital Sessions

For information particular to the hospital you are attending please contact the appropriate Clinical campus (Clinical Teaching Unit) coordinator.

Prince of Wales Clinical Campus Sophia Espinosa Ph: 9382 2645 Email: <u>powctu@unsw.edu.au</u>

St Vincent's Clinical Campus Violet Stokoe-Miller Ph:8382 2023 Email: <u>stvcs@unsw.edu.au</u>

St George Clinical Campus Rachel Nordien Ph: 9113 2709 Email: <u>stgtu@unsw.edu.au</u> Sutherland Clinical Campus Nicky Bennie and Melinda Camporeale Ph: 9540 7597 Email: <u>tshtu@unsw.edu.au</u>

South Western Sydney Clinical Campus Shalini Saverimuttu Ph: 8738 9601 Email: <u>swsphase1@unsw.edu.au</u>

Port Macquarie Rural Clinical Campus Cara Elvidge Ph:02 5524 1532 Email: <u>c.elvidge@unsw.edu.au</u> Wagga Wagga Rural Clinical Campus Rochelle McPherson Ph: 02 6933 5138 Email: <u>r.mcpherson@unsw.edu.au</u>

Note that for any other Phase 1 enquiry (non-Clinical Skills related), please contact the Undergraduate Teaching Support Unit on: <u>BMed.PM@unsw.edu.au</u>



Objectives of Clinical Skills in Phase 1

Patient Assessment & Management

Clinical skills are primarily addressed by body system. Each course in Phase 1 has a focus on one or more body systems.

The relevant indicator statements in Phase 1 for the *Patient Assessment and Management* graduate capability are:

1.3.1 Elicits important symptoms and signs related to body system(s): You should understand the common symptoms related to a body system including the impact of these symptoms on patients and develop skills in characterising these symptoms. The common symptoms and relevant personal/social features related to each course are noted in the following sections.

There is no expectation that Phase 1 students can diagnose the specific cause of a patient's symptoms, but appropriate questioning based on information given by the patient is expected.

It is important that you demonstrate skills in communicating with a patient and not repeatedly ask closed questions with a possible diagnosis in mind.

1.3.4 Examines a system in isolation: You will be expected to be able to examine a body system. The examination protocol for each system is explained in the following sections. It is important that you understand the systematic approach to the examination of each system.

In the Phase 1 Clinical Skills Examination you will be tested on your ability to perform various aspects of the physical examination. This includes communication and explanation to the patient of what you are doing, correct positioning of the patient, systematic examination using correct technique and recognition of normality.

The emphasis is on correct technique and **not** the detection of physical abnormalities. However, you will be expected to describe observed abnormalities.

General inspection and assessment of vital signs (pulse, temperature, respiratory rate and blood pressure) are part of every body system examination (but do not need to be demonstrated in Clinical Skills examinations unless indicated).

1.3.6 Satisfactorily performs procedural skills: Refers to a list of procedural skills that you are expected to address in Phase 1. These are discussed later.

1.3.2, 1.3.5, 1.3.7 Relates symptoms and signs, examination and procedural skills to relevant underlying basic and clinical sciences: For example, you should understand the anatomical and physiological basis of the normal examination. You will be expected to identify relevant anatomical landmarks when performing the physical examination and understand surface anatomy.

1.3.3 Understands patients should share decision-making and planning of their treatment, including communication of risk and benefits of management options. This includes elements of communication and Quality & Safety of medical practice and is underpinned by the Patient-Centred Care model.

Effective Communication

The relevant indicator statements in Phase 1 for the *Effective Communication* graduate capability are:

1.4.1 Understands principles of good communication (e.g. effective questioning, active listening, understanding the patient perspective including recognising cultural differences and commonalities, acknowledging and working to overcome judgement & prejudice).



1.4.2 Applies these principles to a 1:1 consultation with a patient:

- Establishes rapport.
- Identifies reason for encounter.
- Explores patient problem(s).
- Identifies significant features of history.
- Determines patient's expectations.
- Displays respect and empathy for patients from differing backgrounds.
- Determines impact of problem on patient's life.
- Provides structure to consultation.

1.4.5 Explores patient views about lifestyle and behaviours that may be detrimental to health.

Students need to understand that how they gather information from patients is equally important as the nature of the information itself, and that the process inherently determines the quality of information elicited, as well as the quality of the doctor-patient relationship developed.

Ethics and Legal Responsibilities

Students should also note that clinical skills are conducted in the professional interaction between student and patient, and thus issues relating to professionalism are also of prime concern. A separate section on professionalism is found later in this guide (Appendix 1) and also in the Phase 1 Guide, but in terms of graduate capability expectations, students' attention is drawn to the relevant indicator statement in Phase 1 for the *Ethics and Legal Responsibilities* graduate capability:

1.7.8 Demonstrates professionalism, honesty and integrity in all academic and professional contexts

Recommended texts and other resources

The recommended texts for Clinical Skills are:

Epstein, O., Perkin, G.D., Cookson, J. and de Bono, D. (2008). *Clinical Examination* (4th ed.). Edinburgh; New York: Mosby. [Electronic access via UNSW Library] All references to page numbers for Epstein in this guide refer to the electronic version held online by UNSW Library).

Silverman, J., Kurtz, S. and Draper, J. (2013). *Skills for Communicating with Patients* (3rd ed.). Abingdon, Oxon, UK; New York: Radcliffe Medical Press. [Electronic access via UNSW Library]

Clinical Skills videos and many other resources, including on communication skills, are found in the Clinical Skills module of Moodle: <u>https://moodle.telt.unsw.edu.au/course/view.php?id=7698</u>. Many other resources address Clinical Skills. Keep in mind the objectives of this course when accessing other sources.

Beware that many textbooks focus on the detection and interpretation of physical abnormalities. In particular, *Talley NJ, O'Connor S. Clinical Examination: A Systematic Guide to Physical Diagnosis* presents a more advanced approach to the physical examination than what is expected in Phase 1. If you are using this text, focus on the descriptions of the components of the examination that are required in this guide. **Talley is not recommended for reading up on communication skills.**

Textbooks with sections called "The Medical Interview" often focus on the structure of the medical interview and deriving a diagnosis rather than the principles of good communication. Effective communication is much more than a list of questions and is not solely focussed on determining the diagnosis (important as this is).

Useful resources are also linked out of the Clinical Skills module in Moodle. These include videos showing physical examination of the different systems and audio files of heart sounds and breath sounds. There are also many websites which provide other excellent digital resources. These types of resources often have an emphasis on demonstrating abnormality and thus go beyond (and often well beyond) the expectations of students at the Phase 1 / Graduate Entry level.

Resources differ on how to communicate with patients and perform physical examinations, as do tutors and practising clinicians. It is fine for you to adopt a different approach to that described in your recommended texts or this guide, providing you can demonstrate the skills described in the objectives.



Practising your clinical skills

The Clinical Skills program comprising the campus-based and hospital-based sessions will provide an **introduction** to the range of skills to be assessed. There is not sufficient time in these sessions for all students to practice all skills. You will need to practice in your own time as well.

N.B. Attendance at hospital sessions necessitates:

- Students be fully compliant with various NSW Health requirements for clinical placements. Please refer to the Phase 1 Guide for more detail, but note that failure to be compliant will result in disqualification from hospital sessions and instigation of a Professionalism process.
- Students complete mandatory HETI modules. All info is available at <u>https://www.heti.nsw.gov.au/Placements-Scholarships-Grants/clinical-placements/e-learning-for- students.</u> Helpful FAQs are also found here: <u>https://www.heti.nsw.gov.au/Placements-Scholarships- Grants/clinical-placements/faqs-for-students.</u> See later pages in this Guide. Failure to complete mandatory HETI modules can also result in disqualification from hospital sessions and clinical assessments (including the End of Phase 1 Clinical Assessment) and instigation of a Professionalism process.

And for all skills sessions, students must familiarise themselves with the UNSW Medicine Professionalism in Medicine Student Code of Conduct found at: <u>https://medprogram.med.unsw.edu.au/getting-started-0</u>

It is essential that you take the opportunity to practice clinical skills between sessions and throughout Phase 1 / Graduate Entry teaching periods.

These skills cannot be 'crammed' the night before the exam. It takes many hours of repetitive practice to become proficient at communication and physical examination. You must constantly revise and practice systems you have learned in the past in addition to the system you are currently learning. As you will be expected to demonstrate your skills in the normal physical examination, you should also practice system examinations on your peers, friends or family (whoever will freely consent in addition to patients). Take as many opportunities as possible to practice on suitable volunteers. This will allow an appreciation of the differences required by individuals in explaining what you are doing, as well as the range of normal variations in physical examination.

Under normal circumstances, Year 2 students are encouraged and expected to see patients independently of their clinical tutor.

Under normal circumstances, independent study can be done either before or after your scheduled session, or you can visit your teaching hospital at other times. It is preferable that you practice with at least one other student so that you can provide feedback to each other. Change your practice partner regularly to get a fresh insight on your performance. Use the Assessment Form toward the end of this Guide to help you provide feedback to each other.

Year 1 students should check with their tutor after Foundations to see if they are ready to go to the wards outside the scheduled sessions. It is advised Year 1 students are accompanied by a Year 2 or more senior student.

Prior to approaching patients, you must introduce yourself to a member of the nursing staff on the ward. It is essential that the nursing staff know who you are and why you are on the ward. Make sure your ID badge is clearly visible. The nursing staff can assist in identifying suitable patients and will also advise you of patients who are not suitable. You must not see a patient if nursing staff have informed you that they are not suitable.

After gaining permission from nursing staff, you then need to obtain consent from the patient themselves, or guardian where appropriate. When approaching patients for permission to practice your skills, be precise in explaining that you are a medical student and in explaining specifically what you are asking to do. Keep your goals focused and advise the patient how long you wish to spend with them. Do not attempt to do everything on the one patient – focus on one system. Explain to the patient that your examination is not necessarily related to their presenting illness and will not be contributing to their overall medical care – but is helping you with your learning and training. As you are not trying to detect abnormalities, it is best that you DO NOT examine patients with an illness affecting that system. Remember and be respectful that patients can withdraw consent, without any negative consequences for their care, and cease the interaction at ANY time. You should actively assess and



have an ongoing sensitivity to how comfortable patients are with your involvement and politely disengage if you feel this is needed.

Always introduce yourself and your fellow student(s) and then take the opportunity to speak to the patient about their illness. Apart from giving you extra opportunities to develop your communication skills, it is proper that you demonstrate this interest in the patient.

Traditionally, all examinations of patients on a bed or couch are conducted by the student being on the patient's right-hand side. This can be modified for certain examinations or parts thereof e.g. having the patient sit up (if able) on the side or end of the couch/bed.

Always ask the patient if they have any pain or tenderness before you touch them. Expose the patient appropriately, making sure that you only ever palpate body parts in direct view - never feel under clothes/blankets, as you may be pressing on the site of a recent scar ("Look before you leap").

Ensure the patient understands that you are a medical student at an early stage of your training. Do not comment on the patient's diagnosis or treatment. If asked, simply indicate that you do not have sufficient knowledge at this stage. Do not indicate to the patient if you think you have found an abnormality on examination, but you should e.g. check in the patient record for any corroboration, and/or talk to the treating team.

When positioning a patient, it is always better if you ask them to move themselves into position. If they can't, offer help. Make sure you have reviewed Manual Handling skills, as per your HETI modules (see below), as this shows you how to move/aid patients minimising injury to them and yourself.

At the end, ask the patient to give you some feedback on your skills. Hospitalised patients are assessed by many doctors and are often very capable of providing useful feedback. Also, it is good practice to ask the patient if they have any questions. You may not be able to answer these – and should not answer questions about diagnosis and management – but you should refer them on to the treating team.

You cannot progress to the stage of detecting abnormalities unless you have practiced normal examination to the point of being able to effortlessly and seamlessly perform each system examination.

Assessing patients in the clinical environment is an important part of your work in Phase 1. It is imperative that you also understand that there are expectations of how you go about this, including expectations around professional behaviour and dress in hospitals and clinics. You must familiarise yourself with these expectations – refer to Appendix 1-3 to review, become familiar with and demonstrate these.

A word on examination techniques in this guide

The examination techniques presented in this guide are a deliberately limited version of the full examinations that are employed in clinical practice. These techniques represent the essential framework that will be expanded and built on in Phase 2 and Phase 3. They are regarded as the minimum expected for Phase 1.

The techniques presented in this guide represent an 'accepted' technique. There is more than one way to do most examinations and you will see some of these variations from your various clinical tutors, doctors in practice and around the hospitals. We do suggest that you start by practicing the technique as presented in this guide until you develop experience and understanding behind the various techniques. The important outcome is not necessarily how you get there but that you arrive at the correct outcome, i.e. you do not miss signs and (later) that you arrive at the correct conclusion.



Communication Skills

Communicating effectively with patients, family and peers is a fundamental clinical skill. In a high proportion (70% is a frequently stated figure) of adverse events and outcomes there is a significant contribution that can be attributed to problems in communication. You need to reflect on and be aware of how you communicate in order to work safely as a clinician in the future.

The recommended text is Silverman, Kurtz, and Draper (2013) which is available in open reserve at UNSW library and also as an electronic text: <u>access via UNSW Library</u>

It is a book well worth reading as you learn the fundamentals of taking a medical history and interacting with patients. You are strongly encouraged to refer to this text to learn the terminology of communications skills – words and phrases like 'open questions', 'attentive/active listening', 'facilitative responses' and 'internal summary' which are used frequently in skills sessions are defined here. You are strongly encouraged to refer to this text when reflecting on your SOCA tasks, in order that you use appropriate terminology, but also to provide you with / remind you of the patient perspective, which is the recurring theme in the text.

Effective Doctor-Patient communication improves:

- **Patient recall and understanding** understanding their condition, the information provided to them, how they are coping with their health problem, how to manage their condition etc.
- Patient adherence to medical regimes if patients feel their doctor takes into account their needs and perspectives on their situation then it is more likely that patients will manage their condition effectively.
- **Patient satisfaction** when doctors show a degree of empathy with patient's situations
- Diagnosis how else can we find out what is happening for the patient and what aspects in their lives are affected
- Health outcomes because they manage their health better
- Job satisfaction for doctors because their patients are healthier and more involved in their own care, reducing the burden on the doctor
- **Patient safety** most complaints around medical error and negligence are associated with communication problems

If a pharmaceutical company found a pill that could achieve similar improvements, it would be worth many, many billions of dollars! How you communicate with your patients in your clinical interactions with them throughout your career is of the most critical importance. We make no apologies for devoting a significant amount of time to assisting you in developing these skills in your undergraduate medical program. Recall too, if nothing else (that is, apart from the benefit to your future patients, which should surely be enough!) that you are assessed on your communication skills and must be proficient in them such that you pass your end of phase clinical skills exam.

Use of pronouns and WaveLength videos

One important feature of an effective interaction is to start well. In recent years this begins even with the Introduction between you and your patient. Use of pronouns is generally by younger people but is likely to be more widespread over time. Checking in with a person as to how they would like to be addressed can be a very important demonstration of inclusiveness right from the start of an interaction. You might just start by saying, "My name is X and I'm a Year 1 medical student. I use the pronouns she/her. How may I address you?" You can explore this more on the Wavelength Med Ed website here: https://www.wavelengthmeded.org/ - you'll need to login and then access the Gender - Wavelength LGBTI Medical Education course. The second video in the series focuses on use of pronouns. Scroll down the Homepage to find the Pronouns video.



Overview of the Patient Medical History

The following diagram (from Silverman et al) provides a useful schematic to visualise the 2 fundamental stories that are involved in taking a medical history. It is common to focus on the "disease" story when you first conceptualise a medical history, but this is only half of the story. Seeing patients and listening to their "illness story" helps you to integrate their experiences and assists in not only diagnosing but also in establishing rapport (showing you care about the patient as a unique individual), supporting the patient and managing their health problems within their individual context.



Such an approach is concordant with the biopsychosocial model as first described by Engel in 1977.

During Clinical Skills sessions we will cover the various components of a general medical history and provide you with opportunities to practice these on peers and on volunteer patients, namely:

- History of the presenting complaint
- Past medical history
- Medications and allergies
- Family history
- Psychosocial history

See: Engel, G. (1977). The need for a new medical model: A challenge for biomedicine. *Science, 196*(4286), 129-136. doi:10.1126/science.847460 https://unsw.alma.exlibrisgroup.com/leganto/public/61UNSW_INST/citation/52973434320001731?auth=SAML

Note that your role is always as a student grateful to the patient for their time, letting you practice your skills. You are not in a position yet to actually advise or treat the patient.



The Consultation Template

- Introductions student states their name and role, then ask the patient's name, enquire about pronouns to be used when appropriate
- Establish rapport the doctor's manner and first few sentences to a patient are critical. That is when the patient makes their initial judgement and it sets the tone of trust or distrust. This can be very hard to change later.
- Agenda setting and consent- identifies reason for encounter, states what would be involved in simple terms, asks for consent.
- Asks patients age, then occupation (as separate questions)
- Explores patient problem and concerns (using Medical History Template see below)
- Empathic Listening skill used
- Establish impact of problem on patient's life
- Main concerns confirms the patient's main concerns and expectations and terminates the consultation courteously
- Provides structure throughout the consultation

Medical History template

For your current stage of training, here's a template for the medical history you need to elicit from your patient under the following sections:

- Presenting Complaint
- History of Presenting Complaint (SOCRATES or OATES)
- Establish main concerns (IC(E))
 - Internal summary goes here
- Medical and Surgical History / Past History
- Medications & Allergies
- Family History
- Psycho-Social History (OALDS)
 - Occupation
 - Alcohol/smoking/drugs
 - Living situation
 - Diet and exercise
 - o Stresses
 - Others as relevant to the PC

• Main concern- (re-)confirm main concern (have usually elicited this in the HPC)

The presenting complaint

Also called the presenting (or principal) issue/problem/symptom. The 'thing' that has got the patient to present themselves to a doctor. Usually kept to one or a very limited number of things, listed in point form.

To elicit the PC you might say (after the introduction, "So, NAME, can you tell me what seems to be the problem today?" or "NAME, can you tell me what the problem is you want to talk about today?". However, some situations (such as seeing a patient for the first time who has already been in hospital for a little while) might call for a different approach e.g. "Thanks for agreeing to speak with me, NAME. Perhaps you can tell me what is the main health problem you are facing right now?"

Doctor's agenda – Characterising symptoms	Patient's agenda – Understanding reasons for
(SOCRATES or OATES)	attending (IC(E))
Site (omit if not relevant)	Ideas/impact
Onset and duration	Concerns
Character / Pattern (omit if not relevant)	Expectations (Not a P1 requirement)
Radiation (omit if not relevant)	
Associated symptoms	
Timing / frequency	
Exacerbating and relieving factors	
Severity	

History of the presenting complaint:



Note!!: The importance of using open questions!

When you think of characterising symptoms and ascertaining a patient's reasons for attending you may think it easier to see it as a list of questions but when you use more open questions appropriately, the benefit is that you *build meaning into what you are hearing* not simply checking off a list.

- Recognise the usefulness of SOCRATES/OATES and IC(E) mnemonics, but these are simply an aide memoire and must not form a list of questions that you 'tick off'
- SOCRATES is designed to investigate pain and OATES is a subset of SOCRATES that is very useful for almost all other presenting complaints
- The best open questions are often the simplest and may not even be a question in the strictest sense, but more an open invitation to speak e.g. "I see. Tell me more about that." Or "Go on, I'm interested to know more." Or "I'm keen to understand this problem more, from your perspective."
- There is clearly content that may not be revealed by using open questions and this will need to be clarified or inquired for with more direct closed questions to check details e.g. "Was there any blood in your sputum?"
- However, there is still an opportunity to explore what has happened in an open manner, especially around:
 - The events surrounding the presentation e.g. "Can you tell me everything that's been happening in relation to this problem, perhaps in order of what happened when?"
 - What has occurred that resulted in the presentation now "And tell me, is there something in particular that prompted you to come to see me today?"
 - Impacts, concerns (and expectations) e.g. "And how is this affecting you [and you family/work situation etc]?", "Do you have a particular concern/worry/issue that is bothering you in regard to this problem [beyond what you've already told me]?" *
 - Even if one major concern is revealed it can also be very instructive to ask, "Is there something else bothering you at present" (a recent article highlights the importance of one word in this question: <u>https://insightplus.mja.com.au/2021/28/managing-multiple-patient-concerns-in-a-gp-consultation/</u>)
 - What they think the problem is e.g. "And from your perspective, do you have any ideas or suspicions of what the problem might be?" *
- We often witness students going straight for the detail of symptom characterisation (SOCRATES) and using it as a list of questions when the open question approach will elicit much of this, but often much more besides, and better still it comes from the patient's perspective "Can you tell me more about that?"
- Open questions allow more connections to be made, rather than eliciting a list of answers that are not well connected asking a list of questions ONLY gets you a list of answers!

* Asking for a patient's concerns can be 'tricky' at this stage of your training, as it can often result in the awkward (and undesirable) situation when a patient states a concern to which the student is left uncertain how to respond, and as a result of the uncertainty either fails to respond at all, or fails to respond adequately at this important 'revelation'.

- One option in this situation might be to say, "I wish I could help but I am a medical student at the moment.
 I suggest bringing this concern up with your doctor as I am sure they would be able to help'. You are not 'attached' to a clinical team in P1, so saying that you will "get issues sorted" or that you will "report to my supervisors and they'll get back to you" lacks authenticity.
- Another option might be to say something like, "I really hear that concern and I can see why it would be a
 worry for you." And if there is more pressing from the patient, "I understand you are looking for an answer
 to this and that's only natural, but I'm a Year 2 medical student and I'm not in a position to yet provide
 answers or reassurance. I hope you understand that this interview is for me to learn/be assessed on my
 communication skills with patients and not to be involved in patient management."

The latter approach helps you to develop ways to manage professional boundaries – a skill in itself – which you can modify as appropriate as you move through your program. For example in P2, you still won't have a team to confer with, so I'd expect your response to be similar to above, but you are more embedded in the clinical environment and there is more onus on you reporting such information to e.g. the patient's named nurse. In P3, you are absolutely one of the team and you can and should definitely be more involved in eliciting and conveying concerns and problems to the team in order to optimise management and improve patient outcomes.

In collecting IC(E) (Impact/ideas, concerns (and expectations) you will need empathy and awareness of intersectionality with unconscious bias (see below).



Past medical history

Information gathered to include:

- other medical problems?
- serious illness?
- operations or procedures?
- been to GP or hospital or any other health care provider for any reason?

To any positive reply it is worth asking whether the condition still exists or still causes a problem i.e. detail is required on:

- current status of the problem;
- ongoing impact on the patient's life and functioning; e.g. "Can you tell me more about X and how it's affecting you [your life] currently?"
- dates of events placing events in a timeline is useful.

These details are as important as the presence of the problem itself and should not be forgotten.

Why is it relevant?

- may be related (in a variety of ways) to what they have presented with today e.g. diagnostic influence; known association with or complication of a current or past condition; suggests what medication may be on and so consider side effects of meds as cause of problem presented; consider risk factors (e.g. RFs for heart disease are similar to those for stroke)
- may be important to take into account when considering management options
- gives insight into the overall health of the patient
- may lead to important aspects on how well (or poorly) they manage their health overall or reflect whether or not they have seen many doctors!

Medications and allergies

Worthwhile pointing out that sometimes referred to as a Drug History, but students must avoid confusing this with enquiry into recreational drug use – these are not the same.

Medication

Information gathered to include:

- What medication is the patient taking? In *Phase 1 it is sufficient that students just note down what medications a patient takes (without doses and instructions)*. However, need to get used to knowing generic and brand names of drugs e.g. Panadol/Panamax both = paracetamol
- Ask the patient if they know what the medication is for e.g. Patient might say "I take little white pills for my blood pressure." At this stage that they are for blood pressure, may be enough, as you do not know much about medications anyway.
- Commonly 'forgotten' prescription meds may need to be specifically asked about e.g. oral contraceptive pill, asthma inhalers, creams/ointments etc.
- Over the counter medication (i.e. non-prescription) may also need to be specifically asked about commonly pain relief but can be other medications like creams, inhalers etc.
- All types of complementary and alternative therapies:
 - Supplements e.g. vitamins, minerals, omega 3's etc.
 - Chinese / Indian / herbal medicines
 - Homeopathics and similar

Why is it relevant?

- May be related to their current situation e.g. side-effects or known effects (but heightened/exacerbated somehow), complications, overdose
- May interfere with any proposed management of health problems
- Provides an insight into the patient's approach to managing their health
- Compliance issues may be hard to judge!



Allergies

Consider the distinction between an undesirable side effect and a true allergic response - you will need to ensure that the latter is clearly documented. 'Allergy' in this section is about **allergies to medicines**. Allergic conditions e.g. nut allergy, hay fever etc. should be noted in Past Medical History.

Information gathered to include:

- Causative agent (allergen) the medication!
- The allergic reaction what symptoms did they have
- The severity of the reaction a mild skin rash is one thing, an admission to Intensive Care is another!
- What treatment was necessary

Why is it relevant? Knowing this information saves lives! Or perhaps most importantly, prevents doctors from causing patient morbidity and mortality!

Family history

Information gathered to include:

- Any major illnesses/ conditions in the family?
- Health of parents and siblings
- A sensitive enquiry whether the patient's parents/siblings are alive if not ask how they died and at what age (this information needs to be documented)
- Alternatively/additionally, one might ask whether anyone in the family has died at a relatively young age (and this could include miscarriages and stillbirths)

Why is it relevant? Such information can impact on management as well as communication issues e.g. having several members of a patient's family with cancer may:

- increase a patient's actual risk of cancer
- increase their anxiety around cancer
- increase their knowledge about cancer
- be that they are themselves caring for people with cancer, etc.

Psychosocial History (PSH)

Consider the 'target model' below. It aims to illustrate that a person's illness does not exist outside of the rest of the person's life but is, in some ways, *central* to it, and to that of their family's and/or carer's lives. The psychosocial history can be regarded as the outer section of the 'target'. The importance of this outermost section is NOT lesser, but might be better thought of as being foundational – providing the incredibly variable, unpredictable yet essential context for a patient's presentation.

One common (but rather brief/reductionist) version of the PSH might be captured in the mnemonic **OALDS**:

- Occupation
- Alcohol/smoking/drugs
- Living situation
- Diet and exercise
- Stresses

You might like to consider the PSH as divided into the 4 categories below. Note that this categorisation is a suggestion only and other categorisations are used.

Lifestyle factors:

- drugs tobacco smoking
- tobacco smokir
 alcohol
- alco
- diet
- exercise
- sexuality/relationships (how health issues may affect them)

Activities:

- job / school
- hobbies
- pets/animal exposure
- travel



Home:	Personal aspects could include:
 family and social circumstances (supports or lack of them) activities of daily living access physical aspects of home (stairs etc) 	 Stress factors – stressors and what they do in response to stress? Economic circumstances – ask students what might be relevant here? Attitude and expectations about health Cultural and religious factors – especially beliefs about health Coping styles What else? (Anything relevant to that particular person!)

Communication issues arise when eliciting the PSH e.g.:

- how you ask these personal questions
- how you are affected by, enquire about and react to a person whose psychological and/or social circumstances differ markedly from your own, and
- how you understand this information to be relevant to both the cause and management of the underlying diseases?

Signposting and Segues – Connecting the sections and moving from one part of the history to the next

Having dealt with each section individually, the remaining issue for you is how to move smoothly and meaningfully between those sections. This movement from one section to the next is also frequently referred to as a **transition** or **segue** (pronounced 'seg-way').

Suggestions:

- Use some kind of introductory statement. E.g. "I want to understand what may be affecting your health in a more general way." This is sometimes referred to as **signposting** in Silverman and allows you to then ask PMH ("about your health more generally"), FH ("the health of your family") or the PSH ("Now I would like to move on to know a bit about your lifestyle"), because you have let your patient know (in advance the 'signpost') that this is what you want to know about. Or there are lots of similar phrases for different transitions e.g. "OK, I feel like I have a good grasp of the medical issue at hand and the immediate context of that, but now I'd like to ask some quite varied questions about your lifestyle, home arrangements and other issues that will help me understand everything even more fully, is that OK with you?"
- You can also 'normalise' questions, but only if you think it is needed. This can be done in different ways, but one common way is to say something like, "This is important information that I need to understand from all my patients, because of the impact it can have on people's health". Thus your patient would understand that these are not weird and wonderful questions with no apparent purpose! You've explained to them that you would ask these questions 'normally' (thus they are 'normalised') and that they have a relevant purpose.
 - Note the phrasing suggested above is different from a common formulation "I need to ask these questions of all my patients" which assumes the patient will understand why rather than explains why you are asking these questions and can be experienced as 'insisting' that the patient reveal this information.
- As often as possible, explain the link with a question and how it affects their health. E.g. "You said you are on the building site for long hours. How has this injury affected your ability to work?" and "How do you feel about the impact on your work?" Could lead into a discussion about e.g. handling stress. This 'sharing of your thinking' helps to involve the patient, and encourages them to add more detail, as well developing the relationship between you and the patient.
- Use an **'internal' summary** to show you believe you are finished with the history of the PC. Importantly though, you must then **clarify** with your patient that you have understood them correctly as well as **check** with them if there is anything to add. Only then should you move on to the next section/question. E.g. "So, can I just check that I've got this correct? You mentioned you have X that started 2 days ago and involves Y, which came on yesterday, and Z which began today. You tried doing A to relieve it but it doesn't seem to help, and in fact nothing helps, and it's definitely getting worse. You are worried because it seems similar to your mother's problem B, but your priority at the moment is to get X under control and then we can take a look at B after that. Is that right? Have I missed anything? Or would you like to add anything else?"



- Facilitative comments- Consider the importance of minimal encouragers ("I see", "go on" or just "yes" or "ok" or "mm-hmm", "ah ha" or just nodding your head, with good eye contact) when a patient gives you an answer. These will help them add more information so that you get a really complete picture of the situation.
 - However, also be aware that some responses may discourage the provision of more information e.g. if you asked about tobacco and alcohol and the patient responds that they do not use either and you respond with an emphatic "That's good!" this may then impact on the patient giving a truthful answer to e.g. a subsequent question about recreational drug use, for fear of being judged (with the patient believing that if not smoking or drinking is so good then "How can I tell them about my drug use?!")
 - Be aware of whom you are talking to! "Cool!", "wow" or "awesome" might be common words in 0 informal conversation but should not feature in professional interactions with patients about their health. Younger people might not be concerned but it can be irritating to older people. In any case, more neutral responses are important to practice e.g. "I see" but often no 'comment' from you is required at all.

You don't have to ask every question of every patient.

How much you ask and which aspects are relevant for that particular person will depend on the context and person – in some instances it may be quite brief but in others more detailed. Think about whom you have in front of you! If you have female aged 18, it may be more important to ask about some things compared to a 90-yearold (with whom other aspects of the history should be much more detailed). Consider also that some population groups are particularly at risk for certain conditions, and so you will need to check these when you see patients from these groups. This latter aspect is where Effective Communication overlaps with another capability, Social and Cultural aspects of Health and Disease. The understanding of when to ask certain people more questions, or feel confident to keep some aspects brief, can only come with practice to develop your experience and skills.

Note that you should guard against NOT enquiring about particular parts of PSH (or any other part of the history) simply because you feel uncomfortable doing so!

Process: Remember the value of:

- **Open questions** •
- Summarising (internal) what you understand your patient to have told you, in order to ensure a shared understanding
- Explicitly acknowledging concerns and feelings you should not rely on warm body language/facial • expression here (although these are encouraged!), but add a variety of spoken phrases that you feel comfortable using e.g. "I'm so sorry to hear that - it sounds like things must be really difficult for you right now."
- Showing that you are connecting the information provided to build and understand the patient's story as fully as possible.

Why do we need this information? How does it help the doctor?

Definition of 'Psychosocial': An interplay of a person's experience of the world and how the world/society shapes and influences them.

e.g. different people with a similar diagnosis of cancer may respond quite differently to the diagnosis. One may feel less inclined to pursue treatment whilst another may pursue all options vigorously. Without asking questions from the PSH, it may be very difficult to discern and/or understand this critically important difference from one patient to the next.

Broadly speaking psychosocial information may influence:

Diagnostic possibilities

•

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- Management aspects, such as:
 - Compliance
 - Attendance e.g. may not present until condition is quite severe 0
 - Affordability/availability of medications/treatments e.g. if they have private health insurance, 0 or are they rurally located
 - Ability of patient to understand information (educational level) 0
 - 0 Patients' understanding of their problem (health literacy)





Sample wording for the Consultation Template with Medical History Template embedded

There are so many ways to ask these questions, and these are just a few suggestions to start with. You will eventually develop your own style and each set of questions should vary with each unique patient. You may ask things differently from young people to very conservative senior people. These ideas are just a start...

- Introductions "Hello, my name is Jess Chow. I'm a first-year medical student at the University of New South Wales. How should I address you? Or if you judge it to be relevant, "I use she/her pronouns. Can I ask how I can address you?"
- Establishes rapport "It's nice to meet you," and if necessary when they say Elise Sanders and you need to know if they want to be called by their first name, a shortened version, or formally addressed as Mrs. Sanders (or another formulation (e.g. Mx Sanders) "How would you like to be addressed?".
- Consent and agenda setting "I'd like to ask you some questions about your medical history, would that be alright with you?"
- Ask age and occupation (separate questions usually best to ask patients one question at a time, for any topic)
- Explore the patient's problem (the Medical History Template see below)
 - Presenting Complaint "What is the problem troubling you today?"
 - History of Presenting Complaint "Can you tell me more about X?"
 - Use SOCRATES or OATES as needed (see below)
 - Elicit the concerns and impacts use IC(E) as needed
 - "Have you had anything like this before?"
 - Past Medical History "Thank you for that information. Now I'd like to know more about your health in general... do you have any diagnosed medical conditions?" Then more detailed questioning.
 - Medications "Do you take any medications?", "Any vitamins or supplements?" and Allergies "Do you have any allergies?" If positive, "What happened? What treatment did you require?"
 - **Family History** "Now I'd like to know more about your family. How is the health of the rest of your family members?" ...or "Are there any conditions that run in your family?"
 - Psychosocial History "I'd like to move on to your life in general and lifestyle in particular" OALDS (Occupation if not asked earlier, Alcohol, smoking, drugs, Living situation, Diet and Exercise, Stresses)
 - Smoking "Do you smoke cigarettes?" or "Have you ever smoked?" if they do, "How many per day and for how long?"
 - **Alcohol** "Can you tell me about your alcohol intake? or "Do you drink alcohol?" If so find out how many days a week and how much they drink per day.
 - Diet "Can you tell me about your diet?" Exercise "How much exercise do you do?"
 - **Living situation** if relevant, "Tell me about your living situation who's at home with you?", "What sort of accommodation do you live in?"
 - Stresses "Other than this problem, are there any major stresses in your life at the moment?"
 - Main concerns Restate "So I understand you have come in about the skin rash" and "Were there any other problems you've been having that I have missed?"



Target model of the medical history

Takes the view that the presenting complaint/illness/problem is central to the history and the other parts of the history give context to that presenting issue.

The outermost 'layer' - the psychosocial history - establishes the presenting problem in the wide context of the person's lifestyle, habits and activities, home circumstances and other personal factors.



IC(E) (impact, concerns (and expectations)) and EMPATHY

Central to patient centred care is to understand the individual patient and their unique experience of illness. This is EMPATHY. Sympathy is a more generic expression of concern, for example if a close family member has died "I am sorry for your loss", whereas empathy involves understanding that particular patient's experience. For example, it may be important to recognise that not all loss is sad, in fact to some, it may be a welcome relief so generic sympathy may not address how the patient actually feels. Our job as doctors is to understand that patient and their unique experience. So a better empathic response to a close relative's death might be "how are you managing?" "How are you coping?" accompanied by an appropriate facial expression. Mastering this takes time and PRACTICE. At first this skill can be very awkward but please persist.

Impact is likely to be expressed in the PC and HPC but if not, you could ask for example ask, "How is this problem/situation affecting you?"

Concerns likewise may come out in the PC and HPC. It may be helpful to summarise the patient's main concerns back to them at the end of the history for example "So I understand your main concern is the cough and how to manage it as you have an important presentation to give in 2 days. Is that correct, and are there any other concerns you have that I have missed?"

Expectations are likely to be more of a P2 and P3 requirement as they usually pertain to management.



Active Listening Skills and Empathy

Simply knowing the *structure* of the medical history is *not sufficient*. Active listening skills underpin all the communication issues that will be discussed, and they are fundamental to all parts of the process involved in interacting with patients, their families/carers and peers. In order to develop these within the medical context you will be provided with opportunities to practice followed by receiving feedback from staff and peers. As part of this feedback process, you will complete Student-Patient Observed Communication Assessment (SOCA) tasks which will contribute towards your Portfolio. More information on the SOCA is below.

Active listening demonstrates empathy and your desire to interact with the patient empathically. Empathy is a higher-level emotional response and requires work to demonstrate – you can (and must) learn and practice how to develop this skill and demonstrate it consistently in patient interactions.

Empathy is understanding and acknowledging the unique patient's experience. We can only learn about that patient by listening and asking questions such as "And how has this affected you?" or "And how are you managing?" We will address expression of empathy as a clinical skill in depth in BGDA. By using empathic listening, we will collect the patient's IC(E) (impacts/ideas and concerns (and possibly their expectations as well) – although the latter is more a P2 and P3 requirement).

Empathy - how and when to respond

"The patient will never care how much you know, until they know how much you care" Attributed to Terry Canale, Orthopaedic surgeon.

Principles of empathic listening for P1 = OA/AR

- Observe
- Ask / Acknowledge
- Refer

OBSERVE for emotional content in a consultation

- It may be verbal e.g. "I am so frightened because my 18-year-old son has just been diagnosed with leukaemia. He is in hospital and I am not allowed to visit because of Covid. I can't sleep, I can't think, I am so frightened."
- Or it may be in the body language. The patient may state that their son has just been admitted to hospital with leukemia. Although not stating they are distressed, you can guess they may be by reading their body language (closed body language, distress seen in face and eyes, tears, hand wringing or similar)

ASK how the patient feels

- How the patient feels. For example, "That sounds so bad. How are you managing?" OR "I can see that this is distressing for you. How are you coping?"
- Key is that the patient knows you understand their particular situation and its emotional impact or at least, that you are trying to do so.
- There is no perfect response, it depends on what the patient has said and the doctor's communication style but inquiring about how the patient feels is a VERY important step to developing trust, which in turn allows them to be open with you.

ACKNOWLEDGE - If the patient verbalises – or shows – emotion about their situation, you need to try to show that you understand.

Possible techniques

- 1. You can simply reflect back "So your son is in hospital with leukemia and you can't even visit?"
- And/or make a simple statement e.g. "That sounds very hard". Wait for the patient to say more if they want. Always give patients time in empathic listening. Try to avoid filling the silence listen, don't speak! (This takes practice!)
- **3.** Or a simple summary might be "I can't imagine how stressful that would be. You are having trouble sleeping and managing everyday life. Can you tell me any more about that?"



REFER

- Most doctors, from GPs through to orthopaedic surgeons, will refer major emotional distress in a patient to a specialist in the field (psychiatrist or psychologist) and you need to be able to conclude and 'refer' to the best of your ability at present if needed. Once you understand how the patient is feeling, you could say "Thank you. It's so important that you brought this up."
- You could then ask if the patient is alright to go on with some more questions, or
- To conclude this part of the interaction you could suggest the patient talk to their doctor about the experience if needed.

Empathic Listening - Key Points

- Aim is for the patient to know they are truly understood
- Listening alone is very powerful in the healing process
- Students can and do provide just as much by listening as practitioners can and you will at the Hospital
- Assume nothing you need to ask and listen to understand
- Avoid judgement or advice this is not about you
- Allow silences, give patients time. If a patient cries, let them cry, they have a right to be sad. Offer tissues and wait for the tears to subside.
- It's hard at first to know when to ask patients about their feelings but practice makes progress
- Develop your own style by trial and error with peers and SPs



Some important communication skills considerations and challenges

Trauma Informed Care

- In Foundations you will discuss traumatic experiences in the case they were due to adverse childhood ٠ experiences (ACE)
- Doctors need to be aware that any patient may have trauma in their background
- Patients may make trauma explicit; some express it in words, others in their body language
- Some may present with symptoms in which trauma may be an underlying cause e.g. addiction, depression, anxiety - screening for this will be addressed in HM courses and in P2
- Students need to be able to show empathy ask, listen and acknowledge when a patient has suffered • any kind of trauma
- Listening so that the patient feels truly understood by someone is a powerful tool in recovery.
- If the doctor dismisses or minimizes trauma, then the patient may be re-traumatised

Common pitfalls when listening to patients

- Assume nothing a divorce or a death may be blessed relief you need to find what the meaning is for that unique, individual person in front of you
- Judgement people, including doctors, tend to judge what they hear through the lens of their values and experience (unconscious bias) - for example 'people who take drugs are bad' or 'it's always sad or bad when someone dies'
- Avoid 'reassuring' without understanding first. For example, a friend fails an exam we may say "Don't worry, it will be OK, lots of people fail". This runs the risk of shutting the friend down, leaving them unable to express how they actually feel.
 - Reassurance is VERY tempting, but best avoided as it can be (paradoxically) damaging!

The skill of empathy requires awareness of factors that may affect the patient or the doctor or student themselves. This includes societal pressures.

Gender/sexuality

Students need to understand terminology related to the LGBTIQA+ community and be very comfortable using these terms, when appropriate, with the patient. Review the glossary of terms https://aifs.gov.au/sites/default/files/publication-documents/22-

02 rs lgbtiga glossary of common terms 0.pdf (quite comprehensive and useful document!)

Also see resources such as a video on use of appropriate pronouns and Terminology modules produced by University of Melbourne, Wavelength Meded Courses: https://www.wavelengthmeded.org/courses/. On the home page - scroll all the way down or you may need to sign in, but it is free to access.

Intersectionality

Understanding the concept of intersectionality is important because it helps the doctor-

- 1. be aware that they themselves hold unconscious bias (unwittingly stigmatise certain people) -see below resource to test yourself
- 2. be aware of the patient 's potential fear of being stigmatised by the doctor resulting in distrust.

The headings on the wheel show some of the evidence-based parameters by which society is (officially and unofficially) stratified. People may suffer disadvantage and stigma just based on their gender, sexuality, economic status, education etc. For example, there are now several studies showing that Australian Emergency doctors carry unconscious bias towards Aboriginal patients resulting in increased failure to diagnose a treatable infection.

The concept of Intersectionality arose from the evidence that stigma compounds. For example, racial, economic and gender bias may intersect, resulting in poorer treatment by doctors and equally increasing the reluctance of the patient to present to a doctor fearing such bias.

We as practitioners need to be aware that we may carry unconscious bias for example that people with a disability are less intelligent or that obese people are lazy and do not care about their health.



And patients may carry a sense of stigma fearing that the doctor will judge and treat them differently for being obese or for their sexuality.

We need to be VERY careful to identify our unconscious biases and try to overcome them. You can test yourself on The Harvard Implicit Association Test. <u>Harvard Implicit Association Test (IAT)</u> that is made available free by Diversity Australia.

We as doctors need to make the patient feel respected from the very start of any interaction. We do that by establishing rapport with care and making sure we treat the patient as we would any other, avoiding biased assumptions.



Principles of Motivational Interviewing

Communicating with Patients about what affects health

Part of your future role as a doctor includes your role as an "educator":

- Helping patients understand their health problems
- Helping patients understand what they need to do to improve their health
- Supporting and educating patients about preventative health strategies

As a doctor (and even now) you will know that some of your patients' lifestyle choices are detrimental to their health, but the management of health problems is NOT an objective in Phase 1. However, **understanding the patient perspective** is a goal and associated with this is the notion that people 'choose' to behave and engage in activities that are clearly detrimental to their health - smoking, alcohol, drug abuse and poor diet are the obvious ones. An introduction to the principles of motivational issues will be included within sessions although there is



no expectation that you are equipped to do this with patients at the end of Phase 1. Again, though, you are encouraged to explore patients' views about their lifestyle choices.

When negotiating lifestyle modification (e.g. change of diet, quitting smoking etc) it is very important to keep in mind the following principles during any discussion with patients. **Phase 1 students need to understand the principles of motivational interviewing but** *are not expected to counsel patients*. This will be developed further in the phases 2 and 3.

It is very helpful to start by assessing the person's 'stage of change': <u>https://www.blackdoginstitute.org.au/wp-content/uploads/2020/04/11-change_stagesofchange.pdf</u>. N.B. if they are in the precontemplation stage any effort you expend in motivating them may be wasted.

Overview of Motivational Interviewing

Sta	ge 1 (relevant to Phase1)	Sta	ge 2 (relevant to Phases 2 and 3 of the Program)
•	Provide an opening structure - raise the issue	•	Building motivation for change
•	Ask open-ended questions ("How do feel about	•	Strengthening commitment
	your [behaviour]?", "Tell me more about that.")	•	Ask key questions
•	Listen reflectively	٠	Give information and advice (with the
•	Affirm (e.g. "I can see that you care about this.")		patient's/client's permission)
•	Identify motivators for and against the	•	Qualify any suggestions
	problematic behaviour ("What do you think	•	Offer a menu of suggestions
	would help you stop/start?")	•	Assist the patient to specify how they will move
•	Identify impact and implications of problematic		to the next stage of change i.e. from pre-
	behaviour on the patient as well as others in		contemplation to contemplation or from
	their lives ("It's clear that this is causing you X		contemplation to action etc
	problem(s)")	•	Negotiate a plan and acknowledge possible
•	Elicit self-motivational statements ("I wonder if		barriers to any promoting change
	you have thought of ways to tackle this	•	Set goals
	yourself?")	•	Consider change options
•	Summarise key issues "So I can see that you are	•	Arrive at a plan
	struggling with X. But that you are keen to make	•	Elicit commitment
	changes due to Y. You have thought about Z,		
	which is great and can see the benefits (a, b, c)		
	but also have some understandable concerns		
	about p, q, r."		
-			

Some excellent video resources show the process in action:

Watch this video first https://www.youtube.com/watch?v=80XyNE89eCs

Then watch the follow-on video carefully: <u>https://www.youtube.com/watch?v=URiKA7CKtfc</u>

The following article then provides more information on the various techniques illustrated in the Motivational Interviewing video: <u>http://www.racgp.org.au/afp/2012/september/motivational-interviewing-techniques/</u>

Another good approach when negotiating lifestyle modification (e.g. change of diet, quitting smoking etc.) is to keep in mind the following 'RULE' principles during discussion with patients:

- Resist the 'righting reflex' (don't jump to 'solution mode'!)
- Understand the patient's own motivations (open Qs, listen, affirm)
- Listen with empathy (open Qs, listen, affirm)
- Empower the patient (reflect back self-motivational statements)

Material based on:

- Prochaska, J.O., DiClemente, C.C. & Norcross, J.C. (1992). In search of how people change: Applications to addictive behaviour. *American Psychologist*, *47* (9):1102-14. [Via the library]
- Lubman DI, Hall K, Gibbie T. (2012) Motivational interviewing techniques Facilitating behaviour change in the general practice setting. AFP Volume 41, Issue 9: <u>https://www.racgp.org.au/afp/2012/september/motivational-interviewing-techniques</u>



Managing the overly chatty patient

Principles:

- 1. Give them all your attention, then excuse yourself. Acknowledge you are making an interruption.
- 2. Empathize. Let the patient know you've heard their complaints. This demonstrates respect and understanding.
- 3. Explain. Let the patient know your reason for interrupting = time limits

In practical terms:

Give them all your attention. Show you are listening very carefully with your body language, eye contact and 'uh huhs' etc. Use occasional reflective listening so you establish that you are a good listener - always but especially useful in this situation. So when you later take back control of the direction of the consultation, they have experienced that you care and you listen.

Once you realize they are overly chatty...

At first opportunity, break in, apologise, explain your reason and say, for example, "That's fascinating (or interesting or whatever), and I am very sorry to break in, but I am conscious of the time limitation today. We only have 5 minutes left, and I need to collect specific information so would it be OK if I ask you some specific questions to clarify things? I understand ..." <internal summary so far> and then ask next Q.

Keep showing you are listening very carefully with your body language, eye contact and 'uh huhs'. This helps to prevent them being offended.

This is NOT EASY, but you get better at it with practice!

These are patients that you might use more closed questions with but it takes time and practice to learn to shift mode so continue with open questions in P1. In any assessed interaction, the examiner can hear that the patient is 'over-inclusive' which is our polite medical term for chatty! They won't expect you to manage this perfectly at this stage.

Suggestions for communicating with people with hearing loss

- Communicate with warmth, honesty, and feeling. All people are sensitive to facial expressions, body language, and voice tones.
- Check for hearing and understanding by giving a simple instruction that will require a response.
- If you suspect a problem, ask if they use (and have in place) a hearing aid and is it switched on and working properly?
- Keep noise to a minimum private setting if possible. Do not stand in front of a window or a bright light

 limits lip reading. Locate yourself in front of and at eye level with the person. Talk slowly, calmly, and deliberately, giving the person time to respond. Do not exaggerate how you speak as it can sound patronising!
- Use short, simple language and sentence structure. You may need to write down instructions.
- Find another way to express the information, if the person does not appear to understand
- If you are struggling to make yourself understood, limit open ended question and ask more closed questions
- Check that the person understands and is satisfied with the information given / is given time to respond to the questions posed



Student-Patient Observed Communications Assessment (SOCA)

Students are to undergo assessment of oral communication skills. The purpose of this assessment is to encourage students to:

- interview patients,
- gain feedback from a variety of sources and on multiple occasions,
- reflect upon and respond to such feedback arising concerning their oral communication skills, and
- show development in these skills over the course of the Phase.

Each interview will be observed and/or feedback will be provided, and performance graded. Each episode of feedback is also an opportunity on which students are required to write a short reflective paragraph, guided by three consecutive questions. Ultimately feedback and grades and student reflections contribute to summative assessment of the Effective Communication and Reflective practitioner capabilities in the end of the Phase Portfolio assessment.

The task relates directly to the campus Clinical Skills session activities by exploring generic communication skills, and to hospital Clinical Skills session activities which also address generic communication skills, but tend to emphasise clinical communications skills. It complements the Clinical Skills examination, which emphasises assessment of clinical communications skills, though also includes assessment of generic communication skills.

Requirements of this assessment task

Students are required to collect feedback on **at least** four episodes of communication with patients. Collection of your formal (non-practice) SOCA evidence will start in HM in Year 1 to HM in Year 2 (both inclusive). The requirement is that you complete at least four SOCA forms in total, AND complete at least one in each of four out of the five courses in that period. Each encounter must be observed and/or with feedback provided and a grading completed.

Students may interact with a mix of real and simulated patients. Simulated patients may include role-playing student peers in supervised campus sessions, or simulated patients included in sessions, either on campus or online, using the Online Simulated Patient Interaction and Assessment (OSPIA) platform (see below for more details). At least **one** assessment must be with a real patient in hospital, assuming no COVID constraints.

Sources of feedback, assuming no COVID constraints, might include at least one of each of the following:

- hospital clinical skills tutors, and/or another hospital clinician (a medical doctor) in the student's allocated clinical campus
- campus clinical skills tutor or Clinical Skills Demonstrator (trained senior student) or trained simulated patient
- an online simulated patient using the OSPIA platform

SOCAs will be required from students in the following sequence, assuming no COVID constraints.

- 1. Foundations- nil
- 2. BGDA practice SOCA using OSPIA for Year 1's does not go to eMed
- 3. HM all students SOCA using OSPIA and campus/hospital goes to eMed
- 4. AE Year 1 only, unless Y2s need more SOCAs for some reason (these students will be contacted after the SOCA audit), SOCA using OSPIA and campus/hospital goes to eMed
- 5. SH Year 2s only, SOCA using OSPIA and campus/hospital goes to eMed
- 6. BGDB nil

SOCA feedback/grading forms will be entered into eMed (except where indicated). The Clinical Workplace Assessment (CWAapp) or an alternative may be used. Apps allow feedback data to be recorded on an enabled device and uploaded directly into eMed. Information regarding use of apps will appear in the Clinical Skills module of Moodle and you will be notified if use of such an app is required.



Students are required to reflect on development in their communication performance. Students **must** *submit a short reflective paragraph with each formal SOCA task* done. Reflections will be guided by the following questions:

- Describe how you felt the interview went for you at the time.
- Describe how this compares with the grade and comments entered by the assessor.
- Describe what this means to you for how you will continue to develop your communication skills.

Students for whom specific issues are identified can raise these in the subsequent campus clinical skills sessions and discuss how additional input from these tutors (or others, including Clinical Skills Demonstrator) contributed to your development in oral communication skills in subsequent interviews/reflection.

Portfolio assessors will see the ratings for each encounter and have access to the observer feedback as well as the student reflection on their performance. All formally graded interviews will be entered into eMed – students will not be able to choose the 'best' four.

Grading

The usual assignment grading descriptors will be used, maintaining continuity with the Portfolio. Accumulation of F and P- grades will trigger a diagnostic and remedial intervention in the AE course of Year 2. In addition, it would be expected that students would self-reflect and get advice from others (as discussed above) should these grades be awarded.

Since students are still early in clinical skills learning, it is to be expected that students will not necessarily achieve the higher grades from the outset (of course, if they do, that is great). The reason for requiring a series of communication assessments that students will undertake over a year, and the fact that they get feedback that they can reflect on, and make improvements as required, is to **show development** (not perfection) in these skills across the Phase.

More data on these skills may be required for students who are consistently yet to meet expectations (P grades). Students who are identified as performing as such may be required to take an additional assessment task in the AE course of Year 2. This additional assessment would be for the purposes of collecting additional performance data under more controlled conditions. The exact nature of this assessment may be decided on a case-by-case basis, but could be in the form of further SOCAs or a Communication Assignment. Students will be advised of the requirements for an additional assessment task at such time that this becomes necessary.

The feedback, grading results and student reflection on each SOCA task will contribute to the EC and RP grades in the P1 Portfolio, using the usual four-point scale.

Rating form

The rating form will include the grades (F/P-/P/P+) for each element of the interview. These are:

- 1. Provide structure
- 2. Gather information
- 3. Build relationships & develop rapport
- 4. Ensure a shared understanding of patient's needs and perspective/impact of problem

The Student-Patient Observed Communication Assessment (SOCA) form follows for your information only – do NOT print off, and/or attempt to submit scanned forms.

Contact

SOCA tasks and communication skills: Campus clinical skills tutors are a first source of information and clarification.

There is also a discussion board regarding this assessment available in Moodle: <u>https://moodle.telt.unsw.edu.au/mod/forum/view.php?id=588364</u>.

Before posting a question or contacting us please read other posts on the discussion board which may resolve your enquiry. You should also consult the FAQ document, found here: <u>https://moodle.telt.unsw.edu.au/mod/resource/view.php?id=651128</u>

Submission issues: See the document regarding use of CWAapp in the CS module of Moodle: <u>https://moodle.telt.unsw.edu.au/mod/resource/view.php?id=1938019</u> If this does not resolve your problem, check the FAQ document. Thereafter, please contact MED Admin Clinical Skills – <u>csadmin@unsw.edu.au</u>

N.B. It's your responsibility to complete the SOCA task as described. If, for whatever reason, you have not been able to do so, you MUST inform us in a timely manner, in order that we can respond to any issue you identify. However, this does not mean that we will necessarily create further opportunities for you to become compliant, but we will certainly not do so if you are not in touch with us as soon as the problem comes to light.

Online Simulated Patient Interaction and Assessment (OSPIA) platform

The OSPIA platform has been created to provide you with more, and more flexible, opportunities to interact with patients, in this case, trained simulated patients playing a role in a patient-case scenario. It is designed for communication skills teaching and assessment, with SOCA assessments performed by the SP. Amongst your SOCA tasks, you must complete at least one assessed OSPIA (you may do several more depending on circumstances). The resulting SOCA form and your reflection will lodge direct from the OSPIA platform into eMed.



On the OSPIA website you will find everything you need to conduct an interaction. Please carefully review the information available on the platform as well as look out for comprehensive instructional emails from CS Admin.



_Course: ___

UNSW Medicine – Student-Patient Observed Communication Assessment (SOCA) form

_____Patient MRN or SP name:_____

Student:

Date:

Year: 1st 2nd GE

(circle)

Assessor: Campus Tutor / CSD / Hospital tutor / Other hospital clinician / Simulated Patient (circle)

Observe student interviewing patient (real or simulated) and comment on the student's ability to:				
1. Prov	ide structure			
Please circle any descriptors below that were NOT achieved and then to the right, circle grade awarded.				
Α.	Initiates the session appropriately with introductions, defining of the purpose and agenda	P-		
В.	Clarifies and summarises at key points during the interview	•		
C.	Uses transitions and signposting	Р		
D.	Manages time effectively	•		
Ε.	Closes the session appropriately	P+		
2. Gath	ner information			
Please ci	rcle any descriptors below that were NOT achieved and then to the right, circle grade awarded.			
		F		
Α.	Encourages the patient to tell their story in their own words			
В.	Explores the patient's problems and perspectives (beliefs, worries, feelings, goals)	P-		
C.	Uses open questions initially, listens attentively, and then synthesizes closed questions as			
	appropriate	Р		
D.	Facilitates patient's responses using encouragement, pause/silence, repetition, paraphrasing,			
	interpretation – with limited interruptions	P+		
E.	Avoids using jargon and requests clarification and further information where needed			
3. Build	relationships & develop rapport			
Please ci	rcle any descriptors below that were NOT achieved and then to the right, circle grade awarded.			
Α.	Picks up and acknowledges patient's non-verbal behaviour (e.g. body language, speech, facial expressions, affect)	F		
В.	Demonstrates respectful, encouraging and non-controlling non-verbal behaviour (eye	P-		
^	Contact, facial expressions, posture, position, movement) and vocal rate, volume and tone	-		
U.	Acknowledges patient's perspective and enorts to cope and is non-judgemental	Р		
D. E	Handles uncontrol table topics sensitively	Β.		
с.	dilemmas	P+		
4. Ensu	are a shared understanding of patient's needs and perspective/impact of problem			
Please ci	rcle any descriptors below that were NOT achieved and then to the right, circle grade awarded.	F		
Α.	Explores impacts, concerns and expectations	•		
В.	Relates subsequent questioning and explanations to previously elicited ideas, concerns or	D_		
	expectations	r-		
С.	Checks interpretation of information with the patient – clarifying and asking for any corrections or questions	Ρ		
D	Recognises and prioritises patient's needs	F		
-1	······	P+		

Skills to focus on - *Please tick any/all that apply*

- □ 1. Providing structure
- □ 2. Gathering information
- □ 3. Building relationships and developing rapport
- □ 4. Ensuring a shared understanding of patient's needs and perspective/impact of problem



Medicine and Health

(Continued)

Please provide further overall or specific feedback to the student:

Undergraduate

Assessor name: ______

Designation / position: _____

Signature: ______

Grade	F	P-	P	P+
	(outright)	(still a Pass grade)	(includes Credit)	(Distinction level)
Explanation of grade (Do not mark grades here)	The student does not really have the skills in the criteria.	The student has an understanding of the skills but still has a lot of room for improvement, and there will be particular aspects to work on.	The student has an appropriate level of the skill for a student at their level. You felt safe, and comfortable, but you were still aware that they are learning.	The student shows outstanding skill, beyond their level. Skills that you would expect from a practicing doctor, perhaps.



UNSW Medicine - Student-Patient Observed Communication Assessment (SOCA) form

Glossary / explanation of terminology

1C: Uses transitions and signposting

The student is able to move from one part of the conversation to the next without abruptness, awkwardness or confusion, and can explain when and why they are doing this where necessary.

2C: Uses open questions initially, listens attentively, and then synthesizes closed questions as appropriate

The student starts all new lines of enquiry with an open question (i.e. allowing the patient to explain things in their own way, not a yes/no, or 2-3 word answer). Closed questions (those with yes/no, or 2-3 word answers) are used to clarify information given in answer to open questions.

2D: Facilitates patient's responses using encouragement, pause/silence, repetition, paraphrasing, interpretation – with limited interruptions

Encouragement – affirmative statements like "Tell me more", "Right", "I see", "Aha", etc.

Pause/silence – choosing not to speak rather than filling the silence to give the patient more time to say something (as they may be processing, or thinking about their answer)

Repetition – saying back to the patient what they have heard, to remind the patient, or ensure the patient said what they really meant

Paraphrasing – rewording what the patient has said, to show that they have properly listened, and ensure they understand what the patient meant

Interpretation – using what the patient has said, and explaining to the patient what they think this means to the patient, or to them in terms of the clinical (including the psychosocial) picture

2E: Avoids using jargon and requests clarification and further information where needed

Avoids words that may not be understood by a non-medical person, and where ideas or descriptions are unclear, or perhaps misinterpreted, asks further questions using different language to clarify.

3A: Picks up and acknowledges patient's non-verbal behaviour (e.g. body language, speech, facial expressions, affect)

Non-verbal behaviour means any element that is not in the content of the words.

Body language includes all physical positions and movements, and how they can express underlying feelings and emotions.

Speech refers to the rate, volume, and tone.

Facial expressions are body language behaviours specific to the face e.g. frowning, smiling

Affect refers to the emotion that is expressed by the person's non-verbal behaviour

3D: Handles uncomfortable topics sensitively

During discussions about topics that either the patient or the student may find uncomfortable, the student is aware of this risk, requests permission to talk about this, allows the patient to control how much information is discussed, and shows no judgement of the information provided.

4B: Relates subsequent questioning and explanations to previously elicited ideas, concerns or expectations

As they progress through the interview, the student is able to frame questions and explanations in relation to the patient's situation, knowledge and understanding, rather than in general or clinical terms only, and actively refers to and incorporates information previously elicited.

Physical examination skills

Conducting more intimate physical examinations

Who's this for?

The following principles assist in showing respect for each and every patient as an individual, who may vary in their comfort with, and consent to, exposure and examination of the different body systems. You should assume that **anyone** may be self-conscious when exposing their torso to enable assessment of the cardiorespiratory system, spine and upper limbs; similarly, exposing the abdomen and pubic region for the purposes of gastro-renal or lower limb examination may create embarrassment. A modesty drape, in the form of a gown, folded sheet or towel, should always be provided and offered. Within the simulated clinical skills settings this may be less relevant due to the nature and training of the simulated patients, however this is of paramount importance in the real clinical environment. When relevant, especially for internal examinations, you should request a chaperone of the same sex as the patient to be present, irrespective of your gender.

Commencing

Always ensure all available doors are shut and curtains fully drawn before conducting any examination. Be aware that consultation room doors may have windows and so you must block this line of sight with the screen provided.

Closing

Always offer to help the patient get dressed at the end of any examination. Ensure you leave them in an appropriate state (e.g. replace modesty drapes yourself once the examination is concluded, and ensure the patient is safe to dress themselves if that is their preference). After finishing your examination, make sure you help the patient back into their original position (or whichever position they request – as long as you are sure this is clinically appropriate).

See specific sections for further advice relating to each body system.

Communication with patients around intimate examinations

The language you use when consenting and preparing a patient for an intimate examination is critical to their comfort and willingness to co-operate, which in turn facilitates an effective and thorough assessment. Certain words can be interpreted positively or negatively in this delicate situation, and unless you spend time reflecting and experimenting with the 'best' way to approach this issue, you may find in the heat of the moment that you broach the subject in a suboptimal way.

For example, using the words 'feel' and 'look' are not advisable, particularly in relation to a breast exam; 'are you happy for me to perform a breast exam? (or similar) is more professional and goal-orientated. Use a polite but confident tone of voice when asking questions such as this; do not deliberately avoid eye contact with the patient, act shyly or gesture in a way which suggests you are uncomfortable with the situation, as this may instantly be detected and then reflected by the patient.

Similarly, asking a patient to show you their 'belly' may make them feel vulnerable and self-conscious about any excess weight they may be carrying. Consider what other words you might use such as 'stomach', 'tummy' or 'abdomen' (most patients know what this means). In the case of a per rectal/vaginal exam, asking if you may examine the patient's 'rectum' or 'vagina' is not commonplace; instead, more tactful words such as 'back passage' and 'internal' or 'vaginal' exam are preferred. It is not possible to provide an exhaustive list of such words and phrases in this guide, however the above examples provide a direction for further reading and reflection. Indeed, you are encouraged to start to make your own list of these words and phrases. It is important to think about these **before** seeing patients – try them out on friends and family and see how you/they feel asking/being asked.

You need to gradually develop your own style and adapt it for each individual patient – they are all different! What follow are some examples.



Sample wording to consent to examination of a skin lesion on posterior chest wall

Agenda setting: You might say "Now I'd like to have a look at your skin problem, would that be OK?"

Consent: "Would you feel comfortable removing your shirt, but keeping underwear on?" If the patient is not so keen "I can manage just looking at the site of the skin problem itself'. If they prefer not to remove their shirt then "Would it be OK if I lift the back of your shirt just to see the skin problem?"

Talking patient through the examination: It is important to explain in simple terms what you are doing/seeing rather than examine in an awkward silence. Explain in simple terms what you are doing. For example, "I am going to check your pulse rate, and then report the number". Another example - "Would it be OK to listen to your heart?", then after you could say they are sounding good.

Sample wording to examine the anterior chest usually for cardiovascular or respiratory examination:

You could say "Now I need to examine your heart/your lungs. If you are comfortable it would be helpful to remove your gown (leaving your underwear on) but if you are not, I can manage with your help." Assuming they are not comfortable, then ask the patient to lift the lower end of their gown sufficiently to expose the 5th left intercostal space, for example. You guide where the gown needs to be held but they actually hold the gown.

Then when you need to examine upper chest, you can ask the patient to hold the gown down from the top, enough to access the second intercostal space – again they hold the gown in position needed. It is important to let the patient know some of what you are doing. For example, "I am going to feel for the heartbeat first (apex beat), then I am checking for the valves in the heart (thrills and heaves), then I am going to listen to the heart beats (auscultation)". Note that simulated patients will generally be comfortable removing their shirt but you must consent them as you would anyone else.

Sample wording to consent examination of the abdomen

"I need to examine the stomach now, that will involve just lifting the gown enough to feel under your ribs on both sides. Would that be OK with you?" So you explain to the patient in lay terms what you need to do. Simple explanations as you go help distract the patient from being self-conscious and are better than examining in silence e.g. "On the right side, here, I'm feeling for your liver." The patient feels involved and knows what is happening next. Then return gown to its normal position and thank your patient.

Working with Simulated Patients in campus sessions

A Simulated Patient (SP) is a well person playing the role of a patient for the purpose of assisting students to learn clinical skills.

Essentially you should deal with an SP in exactly the way you would a real patient in hospital or other clinical setting. You should:

- Be appropriately dressed for patient interaction.
- Attend the session punctually and follow the directions of all staff assisting with the sessions.
- Volunteer to work with the SPs. They have given up their time to assist with your education and you will learn a lot from working with them, so take the opportunity to do so.
- Ensure your ID badge is visible or that you are clearly identified to the SP (which may just be through you making a clear verbal introduction). Ensure the patient understands that you are a medical student at an early stage of your training.
- Obtain consent from the patient, which requires that you be precise in who you are and what you are asking to do.
- Keep goals focused or follow the task(s) that you have been instructed to perform, and ensure you have consent to do all that you intend to do.
- Advise the patient how long you will spend with them (which you should know in advance).
- Demonstrate good communication skills throughout the interaction.
- Explain to the patient what examination or procedure, if any, you plan to perform.
- Always ask about pain or tenderness before you touch them, even with SPs. Expose the patient appropriately, making sure the patient's modesty is preserved to the best extent possible at all times.
- Be aware of the environment and position yourself and your SP so as to maximise your ability to successfully perform the tasks required of you.



- Alert your tutor if you think you have elicited some information that should be acted upon e.g. the patient discloses some real symptoms that concern you, or you believe you have found an unexpected abnormality on examination.
- Ask patients to give you some feedback on your skills, if time allows. You will get feedback from tutors or demonstrators in any case. Also ask the patient if they have any remaining questions or concerns before you leave them and refer these on to the treating team as required.
- Maintain confidentiality, remembering that some of the information divulged by an SP may be drawn from their own experiences and history, rather than being part of the fictional scenario.
- Do not discuss the patient scenario in detail with your colleagues as this may seriously detract from their opportunity to learn from it.
- Reflect upon the interaction and document important learning arising.



Phase 1 Clinical Skills and Procedural Logbook

This logbook has been introduced for all students starting Year 1 in 2024.

Purpose: To provide a record of attainable clinical/procedural skills to be eligible for the End of Phase Clinical examination (OSCE). The logbook will allow both students and staff to track progression of required skills and ensure attendance at hospital sessions.

What's required?

You are the owner of the logbook and responsible for ensuring it is signed off as required and not lost. It is recommended that you take a photo with your phone after every signature obtained and ensure you upload or sync it to the Cloud/One Drive AND/OR email it to yourself.

What are the components of the logbook?

- 1. List of procedural skills to be signed off on campus.
- 2. Online and in person Basic Life Support course.
- 3. Compulsory Hospital SOCA with real patient
- 4. Attendance at hospital sessions and your role at the session (BGDA/B, HMA/B, AEA/B, SH)
- 5. Final signature from Clinical Associate Dean

What are the procedural skills to be signed off on campus?

- 1. Taking a temperature
- 2. Taking manual blood pressure measurement (non-invasive)
- 3. Urinalysis
- 4. Assessing patient's peak flow
- 5. Fitting oxygen mask

It is important to know how to perform these procedural skills and there will be ample opportunity during university campus-based session to master them, but if the opportunity arises and the equipment is available, they can be done during hospital visits as well. For those who weren't able to get the procedure signed off on campus, approach the CTU staff at the clinical campus to let them know and document this and then liaise with your hospital tutor (if possible) to witness you doing the procedure in the hospital and to sign you off.

How does the Hospital SOCA work?

Every student is required to do at least **ONE** SOCA with a real patient at their hospital session. Please let your hospital tutor, and/or another hospital clinician (a medical doctor) in your allocated clinical campus know that you would like to do this. Please discuss with them which areas you would like specific feedback on prior to commencement. Feedback should be entered into the Clinical Workplace Assessment (CWAapp) or an alternative. There is space in the logbook to complete more than one SOCA if you have time available, a willing tutor and your colleagues have all got their one SOCA (with preference give to Year 2's).

When can a hospital SOCA be done?

Hospital SOCA's can be done in the following courses: HM (Year 1/2) AE (Year 1's) SH (Year 2's) BGDB (Year 2's at your allocated clinical campus, but not with obstetric patients)

How is the logbook used for hospital sessions?

The logbook is not used to assess competence but rather to confirm attendance at a session and document what was done at the session.

Roles you may take on at a hospital session may be:

- 1. History taker
- 2. Communication observer
- 3. Performed examination
- 4. Content observer
- 5. Attended discussion about history taking, examination or a Phase 1 procedural skill



Across the three hospital sessions of every course, it is strongly advised you have an opportunity to take a history and perform an examination while being observed by your hospital tutor and obtain feedback. Where relevant this history can be used to fulfil one of your hospital SOCA requirements.

What happens if part of my logbook cannot be completed?

Procedural skill on campus

If you can't attend an on-campus clinical skills session, please let your campus tutor know and ensure you make up the session. Please ask your tutor to observe you performing any required procedural skills. If the required procedural skill can't be done on campus it can be arranged to be done at your clinical campus or during the hospital session and signed off by your hospital tutor. Please let clinical campus CTU staff know that this is required.

Hospital tutor absent

If a hospital tutor doesn't show, document it and let the hospital CTU staff know, you will not be penalized.

Student absent at hospital session

It is strongly recommended that students do not take self-care days on hospital/campus days.

If you are unable to attend your hospital/clinical session, please inform CTU staff and ask them to document your absence in the logbook for you.

Non-completion of the book according to the above conditions, or sign-off by non-designated staff, may prevent you from sitting the end of Phase 1 Clinical Examination (OSCE).

What happens if my logbook is lost?

Reporting of loss of logbooks at the end of Phase 1 will be regarded as non- completion.

To avoid this from happening take a photo with your phone after every signature obtained and ensure you upload or sync it to the Cloud/One Drive OR email it to yourself.

What happens at the end of Phase 1?

The **original** Phase 1 logbook should be signed off by a Clinical Campus Senior Staff Member. Please ensure CTU staff have a copy of this signed page for you to be able to proceed to the End of Phase Clinical Exam (OSCE). Keep your logbook as evidence of what you have completed in Phase 1 and to monitor your progression as you proceed to Phase 2 and 3.



Foundations (Skin)

N.B. Interview and examination skills are all covered in the preceding pages of this Guide. Only course specific examination components are covered under this (and each following) course specific section.

Skin lesions

You will be expected to use proper terminology when describing observed skin abnormalities, including ulcers, to an examiner. Figure 3.10 in Epstein illustrates various terms. You will also be expected to communicate descriptions to patients using readily understood terms.

The description of a skin lesion should note the following characteristics:

mspection.	Palpation:		
 Often called the 'S's' of skin! Type of lesion Site in anatomical terms Size Shape linear annular, round, oval reticulated (web, lacy) serpiginous (slowly progressive, "creeping") Solitary or not – one lesion or more Colour (shade) erythematous (blanches) pigmented, depigmented, hyperpigmented, hyperpigmented, hyperpigmented, starter of purpuric (do not blanch); small (5 mm) are petechiae, larger lesions are purpura. Surface Surrounds edge-well circumscribed, irregular, diffuse surrounding skin – normal, erythematous 	 Type (inspection and palpation) Macule (flat, circumscribed area of colour change, less than 1cm diameter) Patch (flat, circumscribed area of colour change, larger than 1cm diameter) Plaque (plateau-like elevation of skin, greater than 1cm diameter) Papule (palpable, less than 1cm diameter) Papule (palpable, solid, greater than 1cm) Vesicle (small palpable collection of fluid) Bulla (elevated collection of pus, <1cm) Erosion (superficial area of tissue loss) Ulcer (circumscribed loss of tissue, deeper than erosion) Surface/texture (inspection and palpation) smooth rough fleshy scales (excess keratin) crusted (dried exudate) 		

Dermatology terms from the Dermatology Quiz

- Macule (flat, circumscribed area of colour change, < 1cm) •
- Patch (flat, circumscribed area of colour change, > 1cm)
- Plaque (plateau-like elevation of skin, > 1cm)
- Papule (palpable, < 1cm) •
- Nodule (palpable, solid, > 1cm) •
- Vesicle (small palpable collection of fluid) •
- Bulla (elevated collection of fluid (clear, serous or haemorrhagic), >1cm)
- Pustule (visible collection of pus, <1cm) •
- Erosion (superficial area of tissue loss)
- Ulcer (circumscribed loss of tissue, deeper than erosion)

The S's of dermatological description

- Name of lesion (use dermatology terms) •
- Site (part of body using proximal, distal, anterior, posterior if relevant) •
- Size (in cm roughly) •

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- Shape (circular, ovoid, irregular...)
- Shade (red (erythematous), pigmented etc.) •




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- Surface including shade (scaly, rough, shiny....)
- Surrounds- edge of lesion (well demarcated or poorly demarcated) and surrounding skin (normal, red....)
- Solitary or not
- Symmetry of rash if multiple lesions

Example of a description:



Lesion: There is a pustule Site – Probably on an arm – hair-bearing skin Size – It is approximately 0.5cm in diameter Shape – It is round Shade – Green in appearance (purulent – contains pus) Surface – The surface is smooth Surrounds – It is well demarcated with surrounding skin looking slightly erythematous (approx. 0.5cm irregular circumferential red border) but otherwise normal Single or multiple – There is only one lesion visible

Lumps & Bumps (a special subset of skin lesions)

You will also be expected to examine and describe readily palpable "lumps & bumps". You will be expected to use proper terminology when describing these lesions but there is no expectation of making a diagnosis.

The description of a lump should note the following characteristics:

Inspection:	Palpation:
Type of lesion	• Consistency (soft, firm, rubbery, hard, bony)
Solitary or not	Tenderness
• Site	Warmth
• Size	• Mobility to surrounding tissues (skin, muscle,
Shape	bone)
Shade	Fluctuance (soft, boggy feeling usually
Surface	indicative of pus collection underlying)
 Surrounds- edge and surrounding skin 	Transillumination
Symmetry	

Ulcers (another special subset of skin lesions)

- The description of an ulcer should note the following characteristics:
- Position
- Size
- Shape
- Base clean, fleshy, necrotic
- Edge flat, raised, undermined
- Surrounding skin:
 - o extent of erythema, warmth, tenderness
 - trophic skin changes
 - o **oedema**

Asking About Sun Exposure

Required in skin histories in which sun exposure may be a causative factor.

Open Q first "Can you tell me about your sun exposure?" or "... how much sun do you get, day to day?"

Then closed questions if needed

If in the sun, do you use any sun protection?



- Important to ask about sunscreen, but also hat, long sleeved clothing, sunglasses.
- What would your sun exposure have been like in the past?
- If they do not use sun protection How often would you be out in the sun?

Degrees of sun exposure

- High often in sun between 10 am and 4pm without sun protection in summer
- Moderate occasionally in sun unprotected between 10 am and 4 pm in summer
- Low rarely exposed to sun or often protected
- Too low never exposed to sun unprotected or 10am-4pm here there is some concern re vitamin D levels



Beginnings, Growth & Development A (Year 1)

Obstetric & Gynaecology element

This element builds on content delivered in BGD-A coursework.

The Menstrual History

You will be expected to be able to take the menstrual history of a biological woman and recognise when it is important to do so, beyond primary O&G issues. It is important that you consider the need to communicate sensitively with women and consider their concerns when they present with menstrual symptoms. Features to be elicited are:

- Age of menarche, menopause (if relevant)
- Bleeding
 - Cycle
 - Regularity
 - Duration of flow
 - Volume of monthly blood loss
- Pain
 - Associated features
 - Breast tenderness
 - Back/other pain
 - Psychological manifestations

The above 'parameters' of menstruation, or perhaps better described as (abnormal) uterine bleeding, are presented in the Table below (taken from Fraser IS, Critchley HOD, Munro MG (2007). Abnormal uterine bleeding: getting our terminology straight. Current Opinion in Obstetrics and Gynaecology, 19:591–595). Modified according to: Li, K., Urteaga, I., Wiggins, C.H. et al. Characterizing physiological and symptomatic variation in menstrual cycles using self-tracked mobile-health data. npj Digit. Med. 3, 79 (2020). https://doi.org/10.1038/s41746-020-0269-8

Clinical dimensions of menstruation and menstrual cycle	Descriptive terms	Normal limits (5th to 95th percentiles)
Frequency of menses (days)	Frequent	<24
	Normal	24 – 38
	Infrequent	>38
Regularity of menses (cycle to cycle variation over 12 months; in days)	Absent	
	Regular	Variation +/-2 to 20 days
	Irregular	Variation >20 days
Duration of flow (days)	Prolonged	>8
	Normal	3-8
	Shortened	<3



Clinical Skills

Clinical dimensions of menstruation and menstrual cycle	Descriptive terms	Normal limits (5th to 95th percentiles)
Volume of monthly blood loss (ml)	Heavy	>80
	Normal	5 – 80
	Light	<5

Obstetric History

Pregnancy is characterized by a number of possible symptoms, with significant variation between individuals and also between trimesters.

These symptoms include:

- Fatigue
- Mood variations
- Breast tenderness and enlargement
- Nausea and vomiting
- Urinary frequency
- Fluid retention
- Backache
- Weight gain

You will be expected to be able to question a pregnant woman about her pregnancy including assessing the impact of the pregnancy and her concerns. It is important that you do not focus solely on medical symptoms but consider these in the context of the pregnancy and the woman's concerns.

The history of the pregnancy should include:

- The estimated duration of the pregnancy (date of last menstrual period or estimated dates based on ultrasound)
- The development of any symptoms during the pregnancy including symptoms common to pregnancy.
- Past pregnancies, both full term and non (miscarriages/ terminations):
 - Gravidity indicates the number of times a woman is or has been pregnant, regardless of the pregnancy outcome. A current pregnancy, if any, is included in this count. Twin pregnancy is counted as 1.
 - Parity indicates the number of pregnancies reaching viable gestational age (including live births and stillbirths). The number of fetuses does not determine the parity. Twin pregnancy carried to viable gestational age is counted as 1.
 - NB Viable gestational age in Australia is defined as 20 weeks (+0) and stillbirth is defined as the birth of a baby without signs of life after 20 weeks' gestation.
 - Any medical conditions during past pregnancies (e.g. specifically asking about diabetes and blood pressure)
 - How parturition proceeded normal vaginal deliver (was induction or instrumentation required?) versus caesarean section (elective vs. emergency)
 - o Postnatal period e.g. coping/psychological impact/postnatal depression, feeding

There are no objectives specifically related to the examination of a pregnant woman. Phase 1 students will not be expected to palpate the abdomen of a pregnant woman to ascertain features of the pregnancy. However, you may be asked to conduct a physical examination in a pregnant woman to demonstrate your examination skills generally e.g. measuring BP, examination of the lungs etc.



Beginnings, Growth & Development B (Year 2)

Paediatrics element

You will be expected to be able to take a history of a child's illness through a parent and assess the impact of the illness on the child and family. It is important that you do not focus solely on the medical history but demonstrate an ability to communicate with parents about their concerns relating to their child's illness.

The history of illness in a child should include:

- Antenatal period
 - Problems during pregnancy overlaps with Obstetric Hx, include problems such as Gestational Diabetes or hypertension
- Perinatal (or 'around time of birth') events
 - Problems at birth e.g. Normal Vaginal Delivery (NVD) vs Instrumentation / Surgical (e.g. forceps/Ventouse vs Caesarean section (elective or emergency)
- Infant/Child/Adolescent periods
 - Immunisation record Up to date with all required vaccinations?
 - o Developmental history and milestones Motor (gross and fine), Language, Cognitive, Social
 - o Other relevant history Past Medical, Family, Psychosocial (dependent on context and age of child)

You will not be expected to conduct a physical examination on a young child. However, you will be expected to understand the approach to assessment of a child's development, including developmental milestones. You should understand the use of growth charts in assessing a child's development and be able to measure the relevant indicators.

(This is a good resource on the topic: <u>https://www.rch.org.au/childgrowth/Child_growth_e-learning/</u>).

Examination of the Ear, Nose and Throat (Phase 1 Clinical Skills video): https://moodle.telt.unsw.edu.au/mod/mediagallery/view.php?g=123751

Ear examination

The examination of the ears is addressed in this course. Refer to Epstein Ch 4, p82 onward. [Electronic access via UNSW Library]

- 1. Prepare the auroscope.
 - Use a clean speculum for each patient (or each ear if there is any infection or discharge in the external canal, which could be transferred to the normal ear).
 - Check that the batteries are OK (switch light on).
- 2. Examine the ear externally.
- 3. Gently apply traction to the pinna.
 - Note any pain, which is a good indicator of pathology in the external canal.
 - In adults, generally pull the pinna up and back; in children the canal is more horizontal and tends to only need to be pulled back. In any case you can adjust direction of traction as needed to straighten the canal when you are inserting the auroscope.
- 4. Place the tip of speculum into ear, asking the patient to remain still.
 - Hold the auroscope placing the hand in a position whereby if bumped or if the patient moves suddenly the tip will not be able to extend unintentionally forward into the canal (usually this means side of hand gently leaning on side of face).
- 5. While looking through auroscope, advance slowly towards the tympanic membrane, noting the canal wall and then adjust the angle of the scope to visualise the tympanic membrane.
- 6. After taking auroscope out of ear, remove speculum and put in sterilising facility or dispose of if appropriate.

NOTE when examining patients always examine the normal ear first in order to avoid cross contamination of good ear from 'bad' e.g. infected ear.



The ear examination will be taught in conjunction with the throat examination, since this is how these examinations are almost always combined in clinical practice.

Image of normal right tympanic membrane



https://commons.wikimedia.org/wiki/File:TM_RIGHT_NORMAL.jpg_This_file_is_licensed_under_the_Creative Commons Attribution-Share Alike 4.0 International license. Attribution: Michael Hawke MD



BGDB: Mental health element – Mental State Examination

This comprises mental health history and examination.

The original description of the Mental State Examination was developed in 1918 by Adolf Meyer. It included the gathering of information from passive observation observed during the interview with data acquired by direct questioning to determine the patient's mental status at that time. This approach is used to identify diagnose and monitor signs and symptoms of mental illness (Voss and Das, 2018).

What is different about assessing mental state?

It is important to understand the 'subjective world' of the patient and the doctor/student.

The subjective world

- 1. How an individual makes sense of themselves and the world around them in a personal and unique way
- 2. The doctor/student also has a subjective world view, a 'lens of understanding'
- 3. This then interacts with the patient's world view in the consultation
- 4. Encompasses:
 - a. Language
 - b. Culture
 - c. Personal background
 - d. Personality
 - e. Emotional state

Students need to be aware how the particular patient affects them as this may influence their interaction with, and future management of, the patient. They need to understand they have a 'lens of understanding' and a potential for unconscious bias. Students should recall intersectionality and concepts related to the LGBTQIA+ community and others from Foundations. These factors affect the emotional experience of both the doctor and the patient.

It is important to bear in mind that your mental state may affect the interaction with the patient e.g. if you have just been criticized by a tutor, how does it influence your emotional state as you interview a patient in front of that tutor?

e.g. you see a patient who you know did something you disapprove of, like the male perpetrator of violence against a child, how will this influence your interview?

e.g. a patient who is openly homophobic, racist or misogynist?

Eliciting the Mental Health History – Structure

During the mental health interview, the student will have first impressions of the patient that they will test and modify by questioning. The mental state is constantly expressed through the consultation and may change.

- PC
- HPC –OATES, HEADSSS (see below) and IC(E)
- Internal summary
- Medical and surgical history
- Meds and allergies
- FH
- **Psychosocial** already mostly covered in HEADSSS but need to add extra questions such as diet and exercise, travel etc. if relevant
- Review the patient's main concern and conclude interview

HEADSSS

This mnemonic is widely used by GPs when assessing mental health. It is very useful whenever the doctor wants to learn more about the patient and their life in general and particularly in the mental health assessment. It covers most of the Psychosocial content of the usual medical history template.

The focus is on the feelings about the various topics in a patient's life rather than the factual details and includes:



- Home/ childhood
- Employment/education
- Activities and friendships
- Drugs, alcohol and smoking
- Sleep
- Serious harms- Suicidality/safety (if relevant)
- Sexuality/gender (if relevant)

When and how to ask about sexuality/gender

We have had many discussions in CS about how and when to ask about gender/sexuality. In usual clinical practice the doctor has the advantage of the patient having completed an admission or other information form. One question on such forms is usually 'What is your gender?' The usual choices are M/F/non-binary. This enables the doctor to enquire "I noticed that you have ticked non-binary, I wondered if you could tell me a little bit more about that?" or similar wording if it seems likely to be an important factor in the patient's presentation.

It is harder for the student who does not have access to that admission sheet information to initiate a question about gender/sexuality but students will need to know how to initiate such a discussion if the consultation makes the question relevant. Gender/sexuality may be a very important part of a patient's presentation as there are still societal barriers to queer people. Students need to be comfortable with the terminology as was introduced in Foundations and use their empathic skills (OA/AR) from BGDA to listen to the patient's experience if relevant.

IC(E)

It is important to establish the patient's impacts, concerns and in P2/P3, their expectations.

Sample wording for asking the mental health history questions

All the history skills need practice. Use the scripted cases booklet in Moodle. Here are some suggestions to get you going until you develop your own wording.

PC

What is the problem that brings you here today? How have you been feeling recently? How are things going in your life at the moment? 'Can you tell me more about...?' How have you been feeling in yourself lately?

HPC

OATES

- Onset When did you start to feel like this? Has this ever happened before?
- Associated symptoms Have you noticed any other things in the body since you have felt so anxious?
- Timing Are these feelings any worse at particular times of day? Do you feel like this all the time?
- Exacerbating and relieving factors?
- Severity How much is this situation affecting your life?

HEADSSS

- Home How are things at home? how was it at home when you were growing up?
- Employment/ education What sort of work/study are you doing? How are you feeling about work?
- Activities-if relevant What do you do to relax? How are things with friends?
- Drugs, alcohol, smoking
- **Sleep** How is your sleep?
- Serious harms / Suicidality "Sometimes when people are feeling like you do they think life isn't worth living? Have you had those thoughts?" possibly plus "If you did try to take your life, how do you think you would do it?", or "Have you ever harmed yourself?"
- **Personal and sexual safety** Do you feel safe (at home)? Does your partner ever force sex or make you do things you don't feel comfortable with?
- Sexuality/gender Ask about this if relevant: "I noticed on the admission form that you ticked 'nonbinary', would you feel Ok to tell me a little bit about that?"



IC(E)

By this point of the consultation you have probably ascertained the impact and main concerns, in which case you repeat the impact and main concern and check you are right. If you are not clear, then you can ask "How is this impacting your everyday life?" or "What is your main concern today?"

How to respond to a disclosure of suicidal thoughts or other serious harms

Firstly, just listen. Say you are glad they told you, ask them to tell you more about it, have they thought about seeing someone about it? A counsellor, a GP?

Doctor/student self-care – Debrief **your own** experience with a trusted person, family, friend, teacher, mentor, counsellor, healthcare professional.

Mental State Examination - ASEPTIC

This is the here-and-now 'examination' – what you see and hear from the patient in front of you:

- Appearance and behaviour
- Speech
- Emotion mood and affect
- Perception (not required at Phase 1)
- Thought form and content (not required at Phase 1)
- Insight and judgment
- Cognition and sensorium

Then complete the normal medical history but noting psychosocial is already mostly covered (except diet and exercise and questions such as travel, pets, hobbies etc. as relevant to the PC)

Appearance and behaviour

What do you notice about this person?

- Appearance
 - o grooming,
 - o hygiene,
 - o clothes,
 - o scars, tattoos etc.
 - Motor / behaviour
 - o slowed down (psychomotor retardation) through to agitated and hyperactive

• Attitude to examiner

• Cooperative through to antagonistic

Speech

- Quantity
 - 'Poverty of speech' (very little) or mute (none) through to a lot!
- Rate
 - Slow through to pressured and rapid
- Volume
 - Quiet through to loud

Emotion – Mood and Affect

- **Mood** is a clinical *symptom*, as elicited in the history. Mood is pervasive and sustained emotion that colours the perception of the world.
 - Descriptors of Mood e.g.:
 - \circ $\;$ Anhedonic lack of pleasure in most or all activities of daily life
 - Depressed persistent feeling of low mood
 - o Euphoric elevated mood, full of energy and ideas, ecstasy, joy
- Affect (is a clinical sign so is observed by you the examiner)
 - Your observation of the patient's emotional expression at that time
 - Appropriate to their circumstances? e.g. pet just died and they are laughing
 - Descriptors of Affect e.g.:



- appropriateness does it match the other aspects of the presentation especially the spoken content
- o flat (face expressionless, no signs emotional expression, monotonous voice)
- o normal (euthymic)
- o labile (very variable)
- o euphoric
- o sad, angry, guilt-ridden, anxious, depressed, agitated etc.

Perception (not P1 requirement but included here for completeness)

Hallucinations are experiences where the patient can hear, see, smell, touch, or taste things that seem real to them but only exist in their mind. Examples:

- Auditory Hallucinations of Persecution Hearing a voice, non-stop, commenting on their actions, 'don't do that, stop, stop, you are disgusting' - often very negative and critical
 - Visual Seeing objects as the wrong shape, moving abnormally e.g. faces, animals that aren't there
- Tactile e.g. insects crawling all over the body, a snake wriggling inside them

Thought (not P1 requirement but included here for completeness)

- Form of thought often called thought disorder disturbances in the logical process of thought does the thinking (expressed in speech) make sense? e.g.
 - Flight of ideas (rapid thoughts with loose associations)
 - Incoherence (loss of associations)
- **Content** of thought delusions e.g.
 - o Grandiose e.g. I am Jesus and I will save the world
 - o Jealousy
 - o Guilt
 - Control e.g. Jeff Bezos put a microchip in their head controlling all their thoughts and actions

Insight and judgement

1. Insight

The patient's understanding of their condition (their explanation of their situation) Does the patient realise if their thoughts/actions/behaviours/emotions are outside normal range? Ranges from

- Denial e.g. may deny their illness or blame others
- Partial acceptance that their emotions and behaviours are outside the normal range
- Full acceptance

e.g. a person stopping the car in the Harbour Tunnel because they feel the tunnel is closing in on them. The patient would demonstrate insight if they realise this is due to severe anxiety but not have insight if they really believe that the Tunnel is actually closing in on them.

2. Judgement

Does the patient understand the likely outcome of their behaviour? e.g. if they don't wear a mask, they are more likely to get Covid e.g. their brother is not an alien so it's not a good idea to kill him

Cognition

Taught in AEB - This only needs formal testing if patient clearly cognitively impaired - not in P1 cases

- Level of consciousness using the Glasgow Coma Scale (GCS)
- Cognition -using The Mini Mental State examination (MMSE)



Sample Mental State Examination Summary

Stem

Lloyd is a 63-year-old academic engineer. 2 days ago he had a panic attack driving (for the first time) through the Sydney Harbour Tunnel. He stopped the car in the lanes of traffic and walked out of the Tunnel, feeling too anxious to keep driving.

Sample summary of examination

On examination, Lloyd was well groomed and behaviour is appropriately responsive (**Appearance** and behaviour) His **Speech** is fast but of normal volume.

His mood (**Emotion**) is normal but <u>affect</u> is slightly depressed when talking about his failure to manage his anxiety and his shame walking out of the Tunnel.

His **Perception** is normal but described the tunnel felt as if it was closing in on him.

Form of **Thought** is normal. Content is focussed on his anxieties.

Insight is good. He realises his fears are often not rational.

Cognition is normal.

Sample Interview Videos

- Anxiety with panic attacks: <u>https://youtu.be/G-fS19jm5zs?t=226</u>
- Endogenous Depression: <u>https://youtu.be/4YhpWZCdiZc?t=30</u>
- OCD: <u>https://www.youtube.com/watch?v=syM6XYzht20&ab_channel=Dr.ToddGrande</u>
- Alcohol withdrawal day 3 delirium tremens ("the DTs"): <u>https://youtu.be/kUbOw0IAW9Y?t=43</u>
- More sample clips compiled by Yale University in 2020, choose any of interest: <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7082206/table/T1/?report=objectonly</u>



Health Maintenance A (Cardiovascular)

The focus of this course is the cardiovascular system. Refer to Chapter 6 of Epstein. [Electronic access via UNSW Library]

Also see the video of the Phase 1 level physical examination of this system and assessment of blood pressure video via the CS Moodle module: <u>https://moodle.telt.unsw.edu.au/mod/mediagallery/view.php?g=123751</u>

The common symptoms related to the cardiovascular system include:

- Chest pain
- Dyspnoea (shortness of breath)
- Palpitations
- Syncope.

You will be expected to question patients about personal and lifestyle factors relevant to cardiovascular illnesses. Specifically you will be expected to be able to question a patient about risk factors for cardiovascular disease.

Surface anatomy and anatomical landmarks

The heart lies obliquely in the chest with the apex located in the 5th left intercostal space (LICS) 1cm medial to the mid-clavicular line (MCL). Conventional terms for areas of heart include: apex, base (located at lower left sternal edge), aortic area (upper right sternal edge) and pulmonary area (upper left sternal edge).

Cardiac sounds, which originate from the cardiac valves, are typically heard with greater intensity in specific regions of the chest:

- 1st heart sound = apex and base
- 2nd heart sound = aortic/pulmonary area



Similarly, cardiac murmurs are best heard in certain regions although it is important to note that the site of loudest intensity is not always indicative of the origin of the murmur because of radiation of the sound.



Position & exposure	Position the patient in bed reclining at 45 °: Expose the anterior chest (covering breasts in women until examination of the praecordium).		
General inspection	General inspection and vital signs. Observe for respiratory distress. Peripheral cyanosis.		
Dulco and PD	Palpate radial pulse (rate and rhythm).		
Pulse and BP	Measure BP.		
Head & Neck	Examine JVP. Palpate and auscultate carotid pulses.		
	Inspection (chest wall deformities, visible pulsations).		
	Palpate apex beat (position and character). Palpate apex, base and aortic area for thrills.		
	Reclining position: Listen with bell of stethoscope over apex.		
Praecordium	Listen with diaphragm over apex, base and aortic/pulmonary areas.		
	Palnate anex again		
	Listen with bell and diaphragm over apex.		
	Sit patient up and lean forward:		
	Palpate for thrills in aortic & pulmonary areas.		
	Listen with diaphragm over base and aortic and pulmonary areas.		
	Listen in held expiration.		
	Inspect legs for trophic changes and ulcers.		
Peripheral vascular system	Palpate for oedema. Palpate all peripheral pulses.		
	Auscultate femoral arteries.		

Phase 1 students are expected to perform these components of the cardiovascular examination:

Phase 1 students are not expected to develop skills in these components of the cardiovascular examination:

- 1. Peripheral signs of cardiac disease (other than those mentioned above).
- 2. Detection of abnormalities on examination including detection and interpretation of added heart sounds and cardiac murmurs.
- 3. Examination of the peripheral venous system.

Position & exposure

The patient must be positioned in a reclining position at 45°. It is important that you understand the rationale for this position in the cardiac examination (see Figure 6.51 in Epstein). [Electronic access via UNSW Library]

The anterior chest must be fully exposed to conduct the cardiac examination. Leave exposing the chest until you ready to examine the praecordium.

General inspection

Observe the patient for general comfort or distress or respiratory distress. Inspect fingers and toes for colour (blue being peripheral cyanosis).

Radial Pulse (Rate and Rhythm)

- 1. Compress the radial artery with index and middle fingers.
- 2. Note whether the pulse rate is regular or irregular. An irregular pulse rate is often associated with variability in the amplitude of the pulse as well.
- 3. Count the pulse for 15 seconds and multiply by 4.
- 4. Count for a full minute if the pulse is irregular.
- 5. Record the rate and rhythm.



Pulse Classification in Adults (At Rest)		
Normal	Bradycardia	Tachycardia
60 to 100 bpm	less than 60 bpm	more than 100
Regular	Regularly Irregular	Irregularly Irregular
Evenly spaced beats, may vary slightly with respiration	Regular pattern overall with "skipped" beats	Chaotic, no real pattern, very difficult to measure rate accurately

Blood pressure

Accurate measurement of blood pressure is a very important part of the physical examination. You will be expected to demonstrate the correct technique and accurately measure a patient's blood pressure to determine if it is normal, high or low. This includes correct choice of cuff size.

Approach to patient and application of the cuff:

- Explain to patient what is happening or more simply ask them if they have had their blood pressure taken before.
- Select appropriately sized cuff.
- Ensure all the air is squeezed out of the cuff.
- Correctly position upper arm so that the antecubital fold is at heart level.
- Identify the brachial artery
- Apply cuff 2.5cm above the antecubital fossa with the centre of the bladder over the brachial artery (or look for the manufacturer's marking). The cuff needs to be tight enough so that only a maximum of two fingers can be tightly inserted between the cuff and the skin.

Estimate BP using palpation method

- Secure cuff as above
- Palpate radial pulse as above
- Inflate cuff until the radial pulse is no longer palpable
- Slowly deflate the cuff and note when the pulse returns as an estimate of the systolic BP

Measure BP using auscultation method

- Use the estimated systolic BP as per the palpation method.
- Inflate the cuff to 20-30mmHg above palpated systolic pressure.
- Auscultate for BP with stethoscope (applied gently) over the brachial artery.
- Deflate the cuff at 2-3mmHg/sec. Note the Korotkoff sounds and measure the BP formally.

Korotkoff sounds are the sounds heard over the brachial artery with a stethoscope, when the cuff pressure is gradually lowered.

- Phase I: First appearance of clear, repetitive, tapping sounds. This coincides approximately with the reappearance of a palpable pulse. Corresponds to systolic pressure.
- Phase II: Sounds are softer and longer, with the quality of an intermittent murmur.
- Phase III: Sounds again become crisper and louder.
- Phase IV: Sounds are muffled, less distinct, and softer.
- Phase V: Sounds disappear completely. Corresponds to diastolic pressure.

Watch videos of manual blood pressure measurement:

Official P1 UNSW Medicine video: <u>https://moodle.telt.unsw.edu.au/mod/mediagallery/view.php?g=123751</u> New England Journal of Medicine training video (NB Contains elements that may not be applicable at the P1 level): <u>https://www.nejm.org/doi/full/10.1056/nejmvcm0800157</u>



Medicine and Health Undergraduate

Interpretation of blood pressure

Blood Pressure Classification in Adults		
Category	Systolic	Diastolic
Normal	<130	<85
High Normal	130-139	85-89
Hypertension		
Mild or Stage 1	140-159	90-99
Moderate or Stage 2	160-179	100-109
Severe or Stage 3	180-209	110-119
Crisis Hypertension	>210	>120

Jugular venous pressure

The jugular venous pressure is an indirect measure of the venous filling pressure of the right atrium. It is difficult to measure accurately. You will be expected to demonstrate proper technique in examining the JVP but you will not be expected to accurately measure it nor determine the waveform.

- 1. Ensure the patient is reclining at 45° looking straight ahead or very slightly away to the left.
- 2. Use tangential, side lighting to observe for venous pulsations in the neck. Looking from a distance is often easier than from very close ("quiet neck" versus "very active").
- 3. Look for a rapid, double (sometimes triple) wave with each heartbeat. Use light pressure just above the sternal end of the clavicle to compress the venous pulsations thus ruling out a carotid origin. If the pulsation is difficult to see apply light pressure as above to cause the jugular veins fill up and stand out to identify the line of these veins. Once identified release the pressure.
- 4. Identify the highest point of pulsation. Using a horizontal line from this point, measure vertically from the sternal angle. This measurement should be less than 4 cm in a normal healthy adult.

See an additional P1 level video on JVP measurement here, though note an error made where measurement is indicated from the suprasternal notch (incorrect) rather than the sternal angle (correct): https://moodle.telt.unsw.edu.au/mod/mediagallery/view.php?g=123751

Carotid pulse

The carotid pulse is palpated to assess the pulse waveform, which is abnormal in cardiac valvular diseases. You should appreciate what the normal waveform feels like.

- 1. Observe for carotid pulsations.
- 2. The carotid pulse may be felt from in front of the patient placing the thumb or fingers over the artery on one side or from behind the patient by placing fingers over the artery on one side. Place thumb or fingers at the level of and lateral to the larynx. Press firmly but not to the point of discomfort in a posterior direction compressing the artery between your thumb or fingers and the spine, not the trachea.
- 3. Repeat on the opposite side. Must not examine both sides simultaneously.
- 4. If the patient is late middle aged or older, auscultate for bruits. A bruit is often, but not always, a sign of arterial narrowing and risk of a stroke.
 - Place the diaphragm of the stethoscope over each carotid artery in turn. Use the bell if the patient's neck is highly contoured.
 - Ask the patient to hold their breath.
 - Listen for a blowing or rushing sound. You may need to distinguish this from sounds or murmurs transmitted from the heart.

Inspection of praecordium

Assess for:

- shape of chest (e.g. pectus excavatum in Marfan's Syndrome)
- for praecordial movement
- visible veins (SVC obstruction)
- visible apex beat (LVH)



Palpation of praecordium

- 1. Palpate the apex of left ventricle (apex beat), the furthest inferior and most lateral point of pulsation detectable. This is also referred to as the point of 'maximal impulse'.
 - With the patient in the reclining position, feel for the apex beat in the 5th Left Intercostal Space (ICS) 1cm medial to the Mid-Clavicular Line or MCL (approximately just below the nipple in a male) using the flat of the hand and fingers. This represents the furthest point of pulsation of the heart in the healthy individual. In a female with large breasts, you need to place your hand under the breast and lift, rather than trying to feel through breast tissue.
 - Once you have located the point of maximal impulse, demonstrate the position of this apex beat by determining the ICS (count down from the sternal angle (2nd LICS) and the relationship to the MCL (or other vertical axis e.g. the anterior axillary line).
 - You should appreciate the character of the normal apex beat and also understand what factors other than cardiac disease may affect the position of the apex beat.
- 2. Palpate remainder of praecordium for **thrills**. A thrill is a vibratory sensation elicited by gentle palpation of the praecordial chest wall, most usefully in the same positions as will be used for auscultation. They result from very turbulent blood flow across heart valves and could be described as "palpable murmurs".

Auscultation

You will be expected to demonstrate a systematic approach to listening to the heart. You should listen to the heart in the following positions, using both the bell and diaphragm of the stethoscope and at different times of the respiratory cycle. The diaphragm is used for detecting high-pitched sounds characteristic of most cardiac sounds. The bell is used for detecting low-pitched sounds (characteristic of e.g. mitral stenosis and the 3rd heart sound), and also when auscultating the apex. You will be expected to explain the basis of normal cardiac findings and the reasons for the steps in the examination.

The following sequence is recommended:

- 1. Reclining position:
 - Listen with bell of stethoscope over apex.
 - Listen with diaphragm over apex, base (lower L sternal edge) and aortic/pulmonary areas (upper L & R sternal edges).
 - Listen for differences in sounds during phases of respiration. If necessary, ask patient to hold breath after inspiration or expiration to listen. Hold your own breath at the same time so you do not leave the patient holding his/her breath for too long.
- 2. Position patient in L lateral position:
 - Palpate apex beat again. (This may allow you to feel the apex beat easier to assess its character or feel for a thrill. However, you cannot determine the position of the apex beat in this position.)
 - Listen with bell and diaphragm over apex this position accentuates mitral sounds and murmurs.
- 3. Sit patient up and lean forward:
 - Listen with diaphragm over base and aortic and pulmonary areas.
 - Listen in held expiration. Ask patient to breath in deeply, breath out and hold breath. This position accentuates the 2nd HS and aortic murmurs.

As you move through the above sequence, it is essential that you focus on listening to a particular sound.

- 1. The 1st heart sound (HS) is best heard at the apex with the bell or diaphragm in the reclining position.
- The 2nd HS is best heard in the aortic/pulmonary area with the diaphragm with the patient sitting forward. Listen for normal splitting of the 2nd HS during inspiration.

In most normal patients, you will only hear the normal 1st and 2nd heart sounds. The detection of added heart sounds and murmurs is also dependent on position, stethoscope and respiration. You will not be expected at this stage to detect or interpret added heart sounds or murmurs.

If you are uncertain of the timing of the heart sounds (or murmurs), simultaneously palpate the carotid artery so you can time the cardiac cycle. The carotid pulse is subtly related to the heart sounds (1^{st} HS at onset of pulse, 2^{nd} HS when pulse fades). Do not palpate the radial artery for this purpose.



Peripheral vascular system

Examination of the peripheral vascular system typically focuses on the lower limbs. You will not be expected to examine the venous system other than describing related skin changes.

- 1. Inspect the legs for signs of vascular disease. As in other systems, you will be expected to describe what you observe:
 - Oedema.
 - Trophic changes: shiny skin, loss of hair.
 - Leg ulcers.
 - Changes due to chronic venous congestion: pigmentation, scarring, thickened skin, dry skin.
- 2. Palpate for peripheral oedema and for the skin temperature.
- 3. Palpate peripheral pulses bilaterally, starting from femorals, then popliteal, posterior tibial and dorsalis pedis. You will be expected to accurately locate these pulses based on anatomical landmarks (e.g. the dorsalis pedis artery lies just lateral to the extensor hallucis longus tendon). The popliteal is the most difficult to feel but you should know where to palpate.
- 4. Auscultate over the femoral arteries to listen for a bruit.

The peripheral pulses are not always palpable in normal subjects. Either the dorsalis pedis or posterior tibial pulses may be absent in up to 10% of subjects however at least one of these pulses should be palpable. The absence of both foot pulses is indicative of peripheral arterial disease.

Cardiorespiratory system - respectfully conducting the examination

Due to the nature of the cardiovascular examination, there may be sensitivities when examining patients, particular women, but not only women – people of any sex or gender may also be sensitive to revealing the chest for a variety of reasons, which must be respected.

Although it is unusual for the bra to have to be completely removed to perform the relevant steps, you should consider using one or more of the following techniques to facilitate a sensitive yet thorough examination. While patient dignity is paramount, simulation centres provide a rare opportunity for you to examine medically well patients in a setting which is optimised for your learning. You should therefore make attempts to maximise patient exposure within the bounds of their comfort and clinical indication.

- 1. Always provide a modesty drape and offer to stand outside the bay (drawing the curtains behind you) while the patient undresses in preparation for the examination
- 2. Use the modesty drape to cover the front of the chest when it is not being examined
- 3. Ask the patient if they (or you, with their permission) can undo any bra strap for the duration of the posterior chest wall examination
- 4. If the breasts are ptosed (drooping), thus precluding auscultation of heart sounds (e.g. in the mitral area) or the lower zones of the lungs or palpation of the apex beat, then the breast can be reflected superiorly. After obtaining verbal patient consent (e.g. 'do you mind if I lift the breast upwards to examine your heart properly?'), place the dorsum of a flat hand under the breast and gently push upwards to reveal the chest wall. Gripping the lower aspect of the breast between the fingers to elevate it is more intrusive and not recommended. You can also ask your patient to lift their own breast. Note this manoeuvre may be necessary whatever the sex or gender of your patient.

If the patient is not prepared to be examined in this way (and this includes any patient who may be self-conscious about exposing their bare chest), you can ask the patient to roll up their gown themselves just enough to expose the lower chest. As they do this, if necessary, guide their hand to lift the breast with the gown and support it themselves while you perform auscultation of the heart or lower zone of the lung, or palpation of the apex beat. The advantage of this approach is that you have both hands free to perform your examination. The same approach can be used to examine the upper chest – guide the gown down as far as is needed and ask the patient to hold it in this position while you examine, keeping the breasts and/or lower chest covered.



Health Maintenance B (Gastrointestinal and Renal)

The focus of this course is the gastrointestinal and renal systems. Refer to Chapter 7 of Epstein. [Electronic access via UNSW Library]

The common symptoms related to the gastrointestinal system include:

- Nausea and vomiting
- Abdominal pain
- Weight loss
- Constipation and diarrhoea

Common urinary symptoms include:

- Dysuria (pain on urination)
- Urinary frequency
- Haematuria

See the Phase 1 physical examination of the abdomen video: https://moodle.telt.unsw.edu.au/mod/mediagallery/view.php?g=123751

You will also be expected to question patients about personal and lifestyle factors relevant to these systems. Specifically, you will be expected to be able to elicit a patient's dietary history and his/her alcohol intake. You will be expected to use the Alcohol Use Disorders Identification Test (AUDIT), but you do not need to memorise it.

Surface anatomy and anatomical landmarks

- Boundaries and divisions of abdomen
- Upper boundary = costal margins
- Lower boundary = iliac crests, inguinal ligaments and pubic bone. Inguinal ligament runs from anterior superior iliac spine to pubic tubercle

Quadrants divided by vertical line from xiphisternum to pubic symphysis and horizontal line drawn through the umbilicus.

In addition, the abdomen may be divided into nine compartments: two vertical lines dropped from mid-clavicular points, upper horizontal line drawn across lowest point of costal margins and lower horizontal line drawn between tubercles of iliac crest (transtubercular plane). Resulting divisions are R & L hypochondrium, epigastrium; R & L lumbar (flank) regions and umbilical regions; R & L inguinal regions (or iliac fossae) and suprapubic region (or hypogastrium).

Abdominal Regions and Quadrants



This file is licensed under the <u>Creative Commons Attribution 3.0 Unported</u> license. Download for free at <u>http://cnx.org/contents/17e4eea8-a005-45af-b835-f756a014cd48@3</u> Relevant surface anatomy is described below.



Position & exposure.	Ask patient if he/she is comfortable to lie flat.
	Lie patient flat with only head resting on pillow.
	Arms resting by the side.
	Expose abdomen from lower chest to pubis.
General observation.	Wasting
	Pallor
	Jaundice
Inspection of abdomen.	Inspect abdomen from above and tangential to the surface.
	Localised swelling.
	General distension.
	Scars.
Systematic palpation of abdomen.	Warm hands first.
	Systematic light palpation for tenderness.
	Systematic deep palpation for masses or enlarged organs.
Palpation & percussion of liver.	Palpate from right iliac fossa up towards right costal margin with deep
	respiration.
	Palpate along liver edge (if palpable).
	Percuss from below up to costal margin if liver not palpable for lower
	border of liver.
	Percuss lower chest for upper border of liver.
	Measure liver span.
Palpation of spleen.	Palpate from right iliac fossa up to left costal margin with deep respiration.
	Position patient in R lateral position and palpate below costal margin.
Palpation of kidneys.	Bimanual palpation for kidneys. Includes balloting.
General percussion.	Percuss from midline to flanks to detect dullness in flank. Check for 'shifting dullness'.
Auscultation.	Auscultate for bowel sounds and bruits.

Phase 1 students are expected to perform these components of the gastrointestinal and renal/urological examinations:

Phase 1 students are **not** expected to develop skills in these components of the gastrointestinal and renal/urological examinations:

- 1. Peripheral signs of gastrointestinal and liver disease
- 2. Detection of abnormalities on examination of the abdomen
- 3. Examination of the groin and scrotum
- 4. Rectal examination

The abdominal examination requires cooperation from the patient and it is important that you understand the need to carefully explain each component of the examination to the patient.

The examination of the patient with abdominal pain and tenderness requires particular care and should be avoided in Phase 1.

Position and exposure

It is essential that you correctly position the patient and gain adequate exposure of the abdomen. The correct position will assist in relaxation of the abdomen.

The lower chest should be exposed – in general this should not require exposure of the breasts. If upper garments must be removed to gain adequate exposure, ensure that the breasts are covered until it is essential to gain access to the lower chest.

The lower abdomen should be exposed to the pubic symphysis.

General observation

Observe the patient for generalised wasting (especially of muscle mass), pallor of periphery and conjunctiva, and jaundice of skin and sclera.



Inspection of abdomen

Inspect the abdomen from above and tangentially to the surface for localised swelling, general distension, dilated veins or scars.

Systematic palpation of abdomen

Palpation of the abdomen is performed with the hand relatively flat to abdominal surface with the leading edge of the index finger slightly deeper. A rolling/massaging motion using the distal finger pads and fingertips aids in obtaining a better feeling of masses or organs. Do not dig fingertips into abdomen – movement should be limited to the metacarpophalangeal joints.

- 1. Begin by asking the patient if there is any tenderness and warm hands.
- 2. Palpate the abdomen lightly to detect any tenderness moving systematically through all nine compartments of the abdomen.
- 3. Observe the patient's face rather than your hands to detect any evidence of discomfort.
- 4. Repeat the process palpating more deeply to detect any masses or enlarged organs.

If the patient has pain in an area or tenderness is expected anywhere palpation should begin away from this area.

Note that the lateral edges of the rectus muscles may be palpable and should not be confused with masses. Asking the patient to sit up against resistance will cause the muscles to tense.

Liver

Surface anatomy:

- Upper border horizontal line across the 5th ribs
- Lower border oblique line from lowest point of R costal margin across to L 5th rib in mid-clavicular line (MCL)

The liver descends vertically during inspiration towards the iliac crest.

- 1. Begin by palpating from the right iliac fossa and moving vertically up towards the costal margin lateral to the lateral margin of the rectus muscle.
- 2. Ask patient to breathe deeply and adjust position of hand during expiration to be in place prior to the next inspiration. As the patient inspires, allow the hand to lift over the descending liver edge. Do not apply too much pressure or this lifting movement will not be felt.
- 3. If the liver is not palpated, move upward 1-2cm until your hand is palpating against the costal margin.
- 4. Percuss the lower border of the liver. Place the hand in a position so that your percussed finger is parallel to and below the expected lower border in the mid-clavicular line and moving upwards percuss softly. The lower edge of the liver is thin and the difference between the edge and abdominal cavity is subtle and hence percussion needs to be soft. Confirm the border changes position with respiration. Note the lower border (avoid drawing marks on patient).
- 5. Percuss the upper border of the liver. Begin in the 3rd intercostal space and percuss firmly downwards. The upper border should be readily audible. Confirm the border changes position with respiration. Note the upper border (avoid drawing marks on patient).
- 6. Measure liver span in the MCL. The lower border is based on palpation or percussion. It is not necessary to use tapes or rulers as the measurement is not precise.

Palpating the liver is a reliable sign but this is not necessarily indicative of hepatomegaly. The lower edge of the liver may be palpable normally. In addition the liver may be palpable if it is ptosed (rotated).

The liver span is normally 8 - 12cm. Measurement by clinical techniques underestimates the span of the liver and has poor reproducibility. Hence a liver, which is judged to be large clinically, is probably large whereas a liver judged to be small clinically might not be small.

Spleen

Surface anatomy:

- The spleen lies obliquely under the lower L ribs
- The lower pole 8th intercostal space lateral to the anterior axillary line



The spleen descends during inspiration in a medial direction towards the R iliac fossa.

- 1. Place the left hand posterolaterally over the left lower ribs.
- 2. With the right hand, begin palpating in RIF and swing upwards in a curve towards the LUQ moving upwards and laterally towards the left costal margin. The hand should be placed obliquely (pointing towards axilla) so that, if present, the descending spleen hits the fingertips.
- 3. Ask patient to breathe deeply and adjust position of hand during expiration to be in place prior to the next inspiration. As the patient inspires, allow the fingertips to lift over the descending spleen. Do not apply too much pressure or this lifting movement will not be felt.
- 4. If the spleen is not palpable, ask the patient to roll towards the examiner. Ensure the patient's left arm is not stretched backwards as this will tense the abdominal muscles. If necessary, ask the patient to place their left arm across the upper chest. Palpate below costal margin.

The spleen needs to be enlarged 2-fold to be palpable and hence palpating the spleen is a reliable sign of splenomegaly.

Kidneys

Surface anatomy:

- The kidneys are placed posteriorly in the retroperitoneal space
- Viewed from behind the kidneys lie in the renal angles formed by the 12th rib and lateral margin of the vertebral column. The kidneys extend from T12 to L3 (the right kidney is slightly lower)

The kidneys are not normally palpable and have to be significantly enlarged to palpate from the anterior surface of the abdomen. Deep bimanual palpation is required.

- 1. After palpating for the spleen in the right lateral position return the patient to the supine position.
- 2. Position the right hand over the left loin with the fingertips in the left renal angle. Position the fingertips of the left hand below the left costal margin, lateral to the rectus muscle and overlying the position of the right hand.
- 3. As patient inspires deeply, press fingertips towards each other to feel for lower pole of descending kidney.
- 4. If kidney is palpated, attempt to lift kidney anteriorly by pressing fingertips of right hand, lying posteriorly, in an upward direction. This will bring the kidney towards and impact on the left hand. This is called ballottement.
- 5. Repeat this procedure placing the left hand behind the right kidney and the right hand below the right costal margin.

General Percussion (Ascites)

Performed to determine whether abdominal distension is due to gas or fluid (ascites).

In the presence of fluid, there will be a horizontal level at which the percussion note changes when percussing over gas (resonant) to fluid (dull).

- 1. Ensure patient is lying flat.
- 2. Percuss from midline moving laterally, usually to the left flank. Place finger parallel to rectus muscle. Dullness should not be evident until reaching the lateral abdominal wall.
- 3. If dullness is detected earlier, then test for shifting dullness. Shifting dullness need not be performed if there is no flank dullness.
- 4. The level of dullness should be noted (simply done by leaving the finger at the point of dullness) and the patient asked to roll over towards the right resting in the right lateral position. Wait 30 secs to allow fluid to settle.
- 5. Percuss at original point of dullness shifting dullness is evident if it has become resonant in the lateral position. Further percussion laterally will confirm shifting dullness. Further percussion medially will assess extent of shifting dullness.

The absence of flank dullness is a reliable sign for excluding ascites and hence it is not necessary to test for shifting dullness if there is no flank dullness. In contrast, flank dullness alone is not sufficiently reliable to conclude the presence of ascites and shifting dullness should be tested.



Auscultation

- 1. Listen with the diaphragm for normal bowel sounds due to peristalsis intermittent gurgling noises. May occur infrequently need to listen for at least 30 secs to one minute before concluding that bowel sounds are absent. Can be heard at any point on abdomen usually place stethoscope in mid-abdomen. Described as present or absent in Phase 1, though other descriptions are used, and you will learn these in Phase 2 and beyond.
- 2. Listen with the bell for bruits. Place stethoscope in midline of abdomen above umbilicus to listen for bruit from abdominal aorta.

Gastro-renal system – respectfully conducting the examination

Modesty drapes can be used to great effect here to achieve considerable exposure in a sensitive fashion. Tuck one side of the drape into the waistline of the underwear so that it hangs down over the upper thighs and pubic region. This can then be used to pull down underwear to just above the genitalia without making the patient feel self-conscious. You should place the drape over the patient's lap/upper thigh area **before** asking them to expose their abdomen. This allows the above manoeuvre to be performed seamlessly and quickly as the top is lifted, thus minimising awkwardness for the patient.

The patient's top should be lifted up so that the costal margin, epigastrium and hypochondria are easily seen. If the top is loose or large it can be rolled up on itself to just under the bra/nipple line to achieve adequate exposure.

An example of appropriate draping of a patient:



Ageing & Endings A (Musculoskeletal)

The focus of this course is the musculoskeletal system. Refer to Chapter 10 of Epstein. [Electronic access via UNSW Library]

The common symptoms related to the musculoskeletal system include:

- Joint and muscle pain
- Joint swelling
- Joint stiffness
- Giving way and locking

You will also be expected to question patients about personal and lifestyle factors relevant to these systems. Specifically you will be expected to be able to question patients about the impact of their illness on their ability to carry out normal activities of daily life.

See the Phase 1 physical examination of the Musculoskeletal system video: <u>https://moodle.telt.unsw.edu.au/mod/mediagallery/view.php?g=123751</u>

Surface anatomy and anatomical landmarks

You should be familiar with the appearance of normal joints in the upper and lower limbs. In particular, you should be familiar with the bony and soft tissue landmarks around the joint. You will be expected to identify and locate specific bony and soft tissue structures in the hands / wrists, and the knees.

Phase 1 students are expected to perform these components of the musculoskeletal examination:

- 1. General approach to examination of any joint in the upper and lower limbs.
- 2. Examination of the hand and wrist including functional assessments.
- 3. Examination of the knee including assessment of joint stability.
- 4. The musculoskeletal screening examination (MSAL).

Phase 1 students are not expected to develop skills in these components of the musculoskeletal examination:

- Examination of the spine and sacroiliac joints (other than that required in the musculoskeletal screening examination)
- Special techniques used in the examination of joints other than those described in the examination of the hands/wrists and knees

General Approach to Examination of Joints

The musculoskeletal examination requires cooperation from the patient and it is important that you carefully explain each component of the examination to the patient.

The examination of the patient with joint pain and tenderness requires particular care and should be avoided in Phase 1.

- Observe the patient during history taking for any limitation of movement, abnormal gait, or evidence of pain
- Ensure adequate exposure to inspect the joint and adjacent structures and to allow unimpeded movement of the joint
- Enquire about pain and tenderness before palpating the joint and attempting to move the joint
- Compare examination findings on one side with the other side (always examine the normal side/joint first)

Inspection

You should be familiar with the appearance of normal joints in the upper and lower limbs. You will be expected to describe any of the following observable abnormalities, but you will not be expected to make a diagnosis:

- Joint position at rest
- Joint swelling
- Joint deformity
- Overlying skin changes
- Appearance of surrounding structures, especially muscle wasting



With regard to joint deformity, you should understand the use of the following terms:

- Varus and valgus deformity
- Subluxation and dislocation

You will not be expected to recognise specific deformities such as "swan neck" or "boutonniere" deformities of the fingers.

Palpation

Palpation of any joint should note the following:

- Normal bony and soft tissue landmarks
- Abnormal swelling: you should be able to determine the consistency of an abnormal swelling hard, boggy, fluid. You will not be expected to diagnose an abnormality
- Tenderness and/or warmth

Movement

The range of movement around a joint is assessed by passive movement. Active movement is assessed if testing for muscle weakness, neurological abnormalities or during functional assessments.

- Test for range of movement in all directions applicable to the joint being examined. Test flexion and extension in hinge joints and all movements (flexion, extension, abduction, adduction, internal and external rotation and circumduction) in ball-and-socket joints. Note range of movement may not only be decreased but can be increased. Describe range of movement in degrees.
- Test for excessive movement around a joint in abnormal directions to assess joint stability (knee).
- Feel for crepitus during movement of the joint.
- Assess function (e.g. hand) and gait if relevant.

Examination of hands & wrists

Ask patient to sit opposite you and rest hands on a pillow or table.

- Inspect hands and wrists, begin with dorsal surface and then palmar surface:
 - \circ $\;$ Observe position of MCP joints for any non-alignment
 - Look for swellings and deformities
 - Look for muscle wasting
 - Inspect for asymmetry:
 - Ask patient to place hands in the prayer position with forearms horizontal and both palms pressed fully together so that fingers and wrist are extended
 - Then do the inverse, with the forearm in the same position now oppose dorsal surfaces of the hands so both wrists are now flexed at around 90 degrees, but the fingers are still fully extended
- Palpate and assess movement of wrists, MCPs and IP joints:
 - o Palpate the wrist and then passively flex and extend the joint and assess ulnar and radial deviation
 - Then gently squeeze the MCP joints from the side and then palpate each one individually for tenderness, assess passive movements (flexion and extension) as you go
 - Move on to palpate and passively move the IP joints
- Assess function of hands:
 - Grip strength ask patient to squeeze two of the examiner's fingers
 - Key (pincer) grip ask patient to bring pulp of index finger and thumb together; examiner tries to force these apart. Alternatively, the patient can hold a thin object (key or sheet of paper) between thumb and index finger and examiner can try and pull it out
 - o Opposition strength patient opposes thumb and little finger examiner tries to force these apart
 - \circ $\,$ $\,$ Practical test ask patient to undo a button or write with a pen $\,$



Examination of knees

You should understand the normal anatomy of the knee joint including the ligaments.

Examine the patient standing initially and then lying supine in bed. Ensure both knees are properly exposed, such that everything below the thighs are visible.

- Inspect:
 - Normal alignment of joint
 - $\circ \quad \text{Swelling of joint-effusion} \\$
 - o Quadriceps wasting
 - Posterior aspect of knee (in the standing position)

• Palpate

- Effusion:
 - Patellar tap test compress the suprapatellar pouch with your left hand to push any fluid into the joint. Press down on patella using fingers of right hand with a quick movement, feeling for fluid resistance and bobbing of the patella on this fluid
 - Bulge sign compress the suprapatellar pouch with the left hand and use the left index finger to anchor the patella. First stroke upwards any fluid out of the medial side. Then stroke upwards the lateral surface of the joint looking for bulge or return of fluid on the medial side
- \circ $\;$ Flex the knee to 90° and palpate along joint margin for boggy swelling and tenderness
- Return the knee to the straight position and palpate behind knee in popliteal fossa for swellings such as a Baker's cyst
- Movement
 - Move knee through flexion and extension. Place left hand over joint while moving leg with right hand (hold the ankle):
 - Knee normally flexes to 150°
 - Extension limited to 0°; hyperextension to 10° can occur normally
 - Assess for crepitus while moving the joint
 - Move patella medially and laterally across the joint to assess pain and mobility
- Test for stability of joint (ligaments)
 - Lateral stability (collateral ligaments):
 - Place left hand against lateral surface of thigh just above the knee joint. Place right hand on medial side of lower leg
 - With the knee slightly flexed, attempt to abduct the lower leg medial collateral ligament damage will allow excess abduction (or in the acute setting cause considerable pain)
 - Repeat process by reversing position of hands and test for excess adduction suggesting significant damage to the lateral collateral ligament
 - Movements of > 5°-10° are abnormal
 - Cruciate ligaments:
 - Bend the knee to approximately 90°. Fix leg by sitting on foot (explain to the patient what you are doing)
 - Pull the tibia anteriorly (towards you) to test the anterior cruciate ligament; push the tibia posteriorly (towards the head of the examination couch) to test the posterior cruciate ligament. Excess movement (> 7mm) reflects cruciate ligament damage
- Assess function of knees:
 - After completing the examination with the patient in bed, the patient should be asked to stand.
 - \circ \quad Observe the joint in the standing position, anterior and posterior aspect
 - Then ask patient to walk to assess gait
 - In both standing and walking, look for any valgus or varus deformity as a result of weight-bearing, remembering that this may not be apparent in the lying (that is, non-weight-bearing) position



Musculoskeletal Screening Examination

The **screening** examination is referred to as MSAL (move, spine, arms, legs). The P1 version of this examination can be viewed on video at: <u>https://moodle.telt.unsw.edu.au/mod/mediagallery/view.php?g=123751</u>

For interest, Epstein describes a similar screening examination referred to as GALS (p.272). [Electronic access via UNSW Library]

Move

Gait is a test of function, which brings together neurological and musculoskeletal function. Disturbances in gait may relate to neurological, muscular and skeletal abnormalities.

Observe the patient walking:

- o Symmetrical movements of arms, legs and pelvis
- No leg weakness or foot drop
- o No valgus or varus deformities of knees or ankles
- No flattening of arches

• Spine

Stand behind the patient:

- Inspect spine for abnormal spinal curvature and posture vertical (kyphosis or lordosis) or lateral (scoliosis), localised angulation (gibbus)
- Observe for level shoulders and hips
- Symmetrical muscle bulk without spasm

Stand to side of patient and again observe spinal curvature.

• Place fingers on lumbar spine and ask patient to bend forward – observe increase in distance between fingers on lumbar flexion.

Stand in front of patient and test lateral cervical movement.

• Ask patient to bend neck sideways trying to place ear on the shoulder.

• Arms

Stand in front of patient:

- Inspect the hands looking for joint swelling or deformity or muscle wasting
- Assess pronation and supination
- o Assess fist formation and pincer function
- o Compress MCP joints for tenderness
- Assess elbow extension
- Assess elevation and external rotation of the shoulders (ask patient to place palm of hands on back of neck)

• Legs

Ask patient to lie down in bed:

- Flex each hip and knee while holding the knee (feeling for crepitus)
- Internally rotate each hip in flexion
- o Palpate patella for tenderness and effusion
- o Test ankle flexion and extension
- Compress metatarsals for tenderness
- Inspect feet for callosities



The Musculo Skeletal System Screening Examination - MSAL images





Musculoskeletal system – respectfully conducting the examination

The perineum becomes particularly exposed when the knee and hip are moved into a flexed position. Placing the modesty drape across the lap (as for the gastro-renal examination) will not provide adequate cover in this instance. Instead, loosely roll up the drape into a cylinder and place between the legs in a cranio-caudal fashion. The lower abdomen will also need to be exposed to fully assess the hip; if the patient wishes, a narrow drape can be placed across the lower abdomen with the lower edge approximately at the level of the anterior superior iliac spines.

Ideally, the patient should be exposed to their underwear (and bra for women) to properly assess the gait. If the patient is comfortable doing this, then you should proceed appropriately. It may be necessary for you to offer for some of your colleagues to step out of the bay for this part of the examination, since a group is more intimidating than one or two students. If full exposure is not possible, ask the patient if you can undo the back of the gown to assess the spine and pelvis as they walk, as well as asking them to lift up their gown when inspecting the lower limbs in the erect position.



Ageing & Endings B (Neurological)

The focus of this course is the nervous system. Refer to Chapter 11 of Epstein. [Electronic access via UNSW Library]

The common symptoms related to the nervous system include:

- Headache
- Weakness
- Alteration in sensation including symptoms related to vision and hearing

You will be expected to question patients about personal and lifestyle factors relevant to neurological illnesses. In particular, the impact of neurological disability on normal daily activities should be assessed.

See the Phase 1 physical examination of the Neurological system video: https://moodle.telt.unsw.edu.au/mod/mediagallery/view.php?g=123751

Surface anatomy and anatomical landmarks

The concepts of surface anatomy and anatomical landmarks are not readily applicable to the nervous system. However, an understanding of neuroanatomy is essential for interpreting the physical examination. You will be expected to understand the relationship between neuroanatomy and patterns of physical signs (e.g. a stroke affecting the motor cortex in the right cerebrum will cause a contralateral hemiparesis), but you will not be expected to detect abnormalities during examination.

General observation		General inspection and vital signs
		Posture
		Wasting
		Absence of normal movements
		Involuntary movements
		Presence of walking aids, indwelling urinary catheter.
Examination of Inspection		Posture of upper limbs – evidence of muscle contractures
upper limbs		Inspect and palpate muscles for wasting (small muscles of hands,
		shoulder girdle).
		Look for tremor/involuntary movements (hands)
		Look for fasciculations
	Motor	Assess tone (wrist rotation, forearm pronation and supination)
		Assess power (see below for recommended sequence)
	Reflexes	Biceps
		Triceps
		Brachioradialis
	Sensation	Light touch
		Proprioception (fingers, MCPs, wrists)
		Vibration (MCPs, wrists)
Examination of	Inspection	Posture of lower limbs – evidence of muscle contractures.
lower limbs		Inspect and palpate muscles for wasting (calves, thighs, buttocks).
		Look for fasciculations
	Motor	Assess tone (knee)
		Clonus (ankle)
		Assess power (see below for recommended sequence)
	Reflexes	Knee
		Ankle
		Plantar (Babinski)
Γ Γ	Sensation	Light touch
		Proprioception (1 st MTP, ankle)
		Vibration (1 st MTP, ankle, patella)
Gait		Gait

Phase 1 students are expected to perform these components of the neurological examination:



Examination c	f Eyes	Look for ptosis, proptosis.
cranial nerves	ranial nerves	Visual acuity
		Visual fields
		Pupils – size, equality, regularity, light reflexes (direct and consensual), accommodation.
		Eye movements – failure of movement, diplopia, nystagmus.
	Face	Look for facial asymmetry and wasting of temporalis or masseter
		muscles.
		Test sensation (light touch)
		Test muscle power of temporalis and masseter muscles.
		Jaw jerk
		Test power of facial muscles.
	Hearing	Test hearing
		Weber's test
		Rinne's test

Phase 1 students are not expected to develop skills in these components of the neurological examination:

- 1. Cranial Nerves
 - a. Sense of smell
 - b. Corneal reflex
 - c. Fundal examination
 - d. IX, X, XI & XII
- 2. Examination of cerebellum. Some cerebellar signs such as nystagmus and ataxia could be noted as part of examination of relevant areas.
- 3. Abdominal & cremasteric reflexes.
- 4. Higher cortical function including assessment of parietal lobe function (e.g. apraxia) or speech disturbances.

General Comments

The neurological examination requires additional equipment including a reflex hammer, tuning forks (128 Hz for testing vibration and 512 Hz for testing hearing), cotton wool and neurological pins for testing sensation and a torch for testing pupillary reflexes. You may wish to purchase a reflex hammer and torch and carry these as a 'neuro kit' so as you can practice using these frequently, however purchasing these is not a requirement. Whilst this equipment should be available on the wards, it is frequently missing.

The neurological examination requires a great deal of cooperation from the patient and it is important that you carefully explain each component of the examination to the patient.

Look for relative differences in the patient rather than absolute differences between patients when assessing neurological function (motor, sensory or reflexes). Judging an abnormality is easier by comparing a suspected abnormality with a reference area in the same patient. You should be comparing:

- Right to left
- Upper to lower
- Proximal to distal
- Medial to lateral

Muscle Tone

- 1. Ask the patient to relax.
- 2. Support the patient's elbow with one hand and holding the hand with the other, rotate the wrist with supination/pronation of the forearm.
- 3. Flex/extend patient's knee.
- 4. Vary the speed of movement.
- 5. There is normally a small, continuous resistance to passive movement.
- 6. Feel for increased (rigid/spastic) or decreased (flaccid) tone.

Muscle tone can also be tested in other muscles groups e.g. at the ankle, by rocking the whole leg in a medial and external rotational motion through the hip and observe the foot wobbling on the end of the tibia.



Clonus

If muscle tone appears increased, test for ankle clonus:

- 1. Support the knee in a partly flexed position
- 2. With the patient relaxed, quickly dorsiflex the foot and hold in dorsiflexion
- 3. Feel for sustained rhythmic contractions

Patellar clonus can also be tested by suddenly pushing the patella distally and holding and feel for the rhythmic contraction of the quadriceps muscle.

Muscle Power

Power is assessed by gauging the examiner's ability to overcome the patient's full voluntary resistance.

Motor examination is not a test of the strength of the examiner – use of proper techniques, which gives the examiner a mechanical advantage, allows an assessment of power irrespective of the strength of the examiner or patient.

Weakness is judged by comparison with a reference area and can be graded using the MRC scales (Epstein p348).

MRC Muscle Power Scale

Score	Description
0	No contraction
1	Flicker or trace of contraction
2	Active movement, with gravity eliminated
3	Active movement against gravity
4	Active movement against gravity and resistance
5	Normal power

The patient's age, gender and build should be taken into account when assessing weakness. Painful joint or muscle disease will limit ability to assess power.

Recommended sequence for testing power in upper limbs:

- 1. Shoulder abduction (C5, C6) and adduction (C6, C7, C8)
- 2. Elbow flexion (C5, C6) and extension (C7, C8)
- 3. Wrist flexion (C6, C7) and extension (C7, C8)
- 4. Finger flexion ("grip") (C7, C8)
- 5. Finger extension (C7, C8)
- 6. Finger abduction (C8, T1)
- 7. Opposition of the thumb (C8, T1)

Recommended sequence for testing power in lower limbs:

- 1. Hip flexion (L2, L3) and extension (L5, S1, S2)
- 2. Knee flexion (L5, S1) and extension (L3, L4)
- 3. Plantar flexion (S1, S2) and dorsiflexion at the ankle (L4, L5)



Reflexes

The patient must be relaxed and positioned properly before starting (<u>Epstein</u> contains images of correct positions). The force of the stimulus affects the response of the reflex - use no more force than needed to provoke a definite response. The degree of reflex response can vary from no response to very brisk, even a few beats of clonus. Comparison to the other side and other reflexes and putting the response together with other signs (and the history) determines the significance of the response. In other words, no reflex response *may* be a normal finding in some individuals.

If the response is absent, reflexes can be reinforced by having the patient perform isometric contraction of other muscles, immediately before applying stimulus (e.g. clenching teeth). This can often help to elicit a response that otherwise would not have been.

Reflexes should be graded (Epstein p365). [Electronic access via UNSW Library]

Biceps (C5, C6)

- 1. The patient's arm should be partially flexed at the elbow. Use a pillow to support the arm if required.
- 2. Place your thumb or finger firmly on the biceps tendon.
- 3. Strike your finger with the reflex hammer.
- 4. Watch for contraction of biceps and flexion of forearm the former may be more obvious than the latter. You may feel the response even if you can't see it.

Triceps (C6, C7)

- 1. Flex the elbow to approximately 90°, exposing the triceps tendon.
- 2. Strike the triceps tendon 2-3 cm above the elbow.
- 3. Watch for contraction of triceps and extension of forearm.

Brachioradialis (C5, C6)

- 1. Have the patient rest the forearm on the abdomen or lap in the semipronated position. Use a pillow to support the arm if required.
- 2. Strike the radius approx. 10cm above the wrist.
- 3. Watch for flexion and supination of the forearm.

Knee (L3, L4)

- 1. Have the patient sit or lie down with the knee flexed. If the patient is lying, support the semi-flexed knees (60°) from below.
- 2. Strike the patellar tendon just below the patella.
- 3. Note contraction of the quadriceps and extension of the knee.

Ankle (S1)

- 1. Position the leg by abducting and externally rotating the hip, flexing the knee and ankle. Hold the foot in dorsiflexion ensuring the patient is not actively assisting.
- 2. Strike the Achilles tendon.
- 3. Watch for contraction of the calf and plantar flexion at the ankle. Should be able to feel plantar flexion.

Plantar Response (Babinski) (L5, S1, S2)

- 1. Explain procedure to patient warning that it may be unpleasant.
- 2. Firmly run the end of a reflex hammer or key from heel to little toe on the lateral aspect of the sole of each foot.
- 3. Note movement of the toes.
- 4. Normal (negative) response is plantar flexion of the big toe.
- 5. Abnormal (positive, withdrawal) response is dorsiflexion of the big toe with fanning of the other toes.

UMN and LMN lesions

You would be expected to understand how muscle tone, pattern of muscle weakness and reflexes differ in upper motor neuron from lower motor neuron lesions.

Sensation

Abnormalities in sensation may include absence of sensation ("tell me when you feel this? did you feel that?") or alterations in sensation ("does this feel different?").

Sensation is also assessed by comparing areas of suspected abnormality with a reference area.

Explain each test before you do it. It is important that the patient appreciates what the normal sensation feels like.

The patient's eyes should be closed during the actual testing.

• Light Touch

- 1. Use cotton wool to touch the skin lightly avoid stroking the skin. Apply to a test area e.g. upper chest, so as patient appreciates the normal sensation.
- 2. With the patient's eyes closed, test medial and lateral surfaces moving up the limbs.
- 3. Ask the patient to indicate when he/she feels the sensation and note any differences in sensation.

• Position (Proprioception) Sense

- Grasp the patient's big toe on the sides of the toe and hold it away from the other toes to avoid friction. It is important not to grasp the digit or limb on the anterior or posterior surfaces as pressure there can lead to the patient identifying the direction from the pressure rather than by proprioception.
- 2. Show the patient "up" and "down."
- 3. With the patient's eyes closed, gently move the toe. Ask the patient to identify the direction that you moved the toe. Repeat 2-3 times.
- 4. The degree of movement may be increased if the patient is not sensing the movement.
- 5. If position sense is impaired, move proximally to test the ankle joint.
- 6. Test the fingers in a similar fashion. If proprioception is incorrectly identified, move proximally to subsequent joints until correct identification is attained.

• Vibration

- 1. Use a low-pitched tuning fork (128Hz). Avoid striking the fork so hard that a sound is elicited.
- 2. Apply to a test area (e.g. upper sternum) to ensure that the patient can detect the vibration.
- 3. Place the stem of the fork over the 1st metatarsophalangeal joint of the patient's big toe.
- 4. Ask the patient to tell you if he/she feels the vibration. The vibration can be stopped by gently pinching the tongs ask the patient to state when the vibration stops.
- 5. If vibration sense is impaired proceed proximally medial malleoli to patella.
- 6. Test the metacarpophalangeal joints in a similar fashion. If indicated, move proximally to the wrists and elbows.

• Pain

You should understand the technique for assessment of pain sensation. However it is inappropriate for you to be practicing pain testing on patients.

- 1. Use a specially designed neurological pin. *Venepuncture needles and other sharp objects are not suitable as they may readily puncture the skin.*
- 2. Explain to the patient that you are testing the painful quality of the stimulus and not simply contact. Alternate between the sharp and blunt end of the object to distinguish the sensations.
- 3. With the patient's eyes closed, test medial and lateral surfaces moving up the limbs.
- 4. Ask the patient to distinguish sharp from dull.

It is important that you understand the infection risk associated with using sharps and that sharps cannot be reused.

Gait

While assessment of gait is an important element of the physical examination, you will not be expected to detect gait abnormalities at this stage. You should understand the rationale for the following manoeuvres. Ask the patient to:

- 1. Walk across the room, turn and come back. Opportunity to observe for all gait disorders
- 2. Walk heel-to-toe in a straight line to assess cerebellar ataxia
- 3. Walk on their toes in a straight line difficult with a S1 lesion
- 4. Walk on their heels in a straight line difficult with L4/L5 lesion causing footdrop



Romberg Test

- 1. Explain fully to patient what you wish them to do.
- 2. Stand behind or in front of patient and be prepared to support the patient if they are unstable.
- 3. Ask the patient to stand with the feet together and arms outstretched with eyes open initially. Observe any unsteadiness.
- 4. Then close eyes for 5-10 seconds without support.
- 5. Marked unsteadiness with the eyes open or closed is indicative of cerebellar or vestibular dysfunction. The test is positive if the patient becomes unstable only when the eyes are closed. This indicates a problem with proprioception.

Cranial Nerves

The examination of each of the cranial nerves is outlined below. It is practical to sort the examination into examination of the eyes (II, III, IV, VI), face (V, VII) and hearing (VIII). Phase 1 students are not expected to examine the IX-XII nerves.

Visual Acuity (II)

- 1. Allow the patient to use their glasses or contact lens if available. You are testing the patient's corrected vision.
- 2. Use a 3-metre or a 6-metre Snellen's (eye/visual acuity) wall chart (if available). Position the patient 6 metres in front of the wall chart. Always check the correct distance for the chart you are using some are 3m and they should be marked as such.
- 3. Have the patient cover one eye at a time with a card or the other hand, provided they cannot see anything with the non-test eye.
- 4. Ask the patient to read the smallest line that he/she can.
- 5. Record the smallest line the patient read successfully (6/6, etc.). Success is granted when no more than two letters are identified incorrectly on a line.
- 6. Visual acuity is then expressed as the ratio of the distance between the patient and the Snellen chart (6m) to the figure on the chart of the smallest visible line. A visual acuity (VA) of 6/18 indicates the patient is able to read down only to 18m line when positioned 6m from the chart or in 'real life' they can only read at 6m what others would be able to read at 18m.

Charts read at other than 6m are all calibrated to be documented as if read at 6m (that is, the result is always 6/x, not e.g. 3/x), so it is always 6 on the top line and the denominator is always the lowest line they can read (i.e. 6/6 or 6/36 etc..). Even if you measured it at 3 m with a 3m chart, always report it as if it was checked at 6m (and thus 6 is always the numerator)

7. Repeat with the other eye.

Visual Fields (II)

- 1. Position yourself about 1 metre in front of the patient. You must be on the same horizontal level as the patient, so an ideal way is for the patient to be sitting in a chair and you sit opposite them on a chair at equal height. Ask the patient to look into your eyes. The patient's eyes must remain fixed on the examiner's eyes. You may need to prompt the patient several times during the examination, as the natural tendency is to look at the object in the peripheral vision.
- 2. Test each eye separately. Both patient and examiner should cover the eye not being tested (mirror image, not the same eye).
- 3. Use either a white-tipped hatpin or your finger. Bring the pin into the visual field from the four main quadrants diagonally towards the centre of vision.
- 4. Note when the patient first sees the pin.
- 5. An alternate technique is to test each quadrant by presenting two fingers in each quadrant and asking the patient to tell you when you start moving them. A technique which is useful for detecting parietal lobe lesions is for the examiner to present two hands simultaneously and ask the patient to detect which fingers are moving R, L or both.

You should understand how the visual fields are affected by lesions at different points of the visual pathway (from retina to visual cortex).



Pupils (II, III)

- 1. Examine the pupils for size and that they are equal in size, regular and circular, central and conjugate.
- 2. Test light reflexes:
 - a. Dim the room lights as necessary.
 - b. Ask the patient to look into the distance. (specify a point to look at)
 - c. Shine a bright light obliquely into each pupil in turn.
 - d. Look for both the direct (same eye) and consensual (other eye) reflexes.
- 3. Test accommodation:
 - a. Hold your finger about 20cm from the patient's nose.
 - b. Ask them to alternately look into the distance and at your finger.
 - c. Observe the response pupillary constriction with convergence of the eyes.

Eye movements (III, IV, VI)

- 1. Stand or sit 1 metre in front of the patient.
- 2. Ask the patient to follow your finger with their eyes without moving their head.
- 3. Check eye movement in the six cardinal directions using an "H" pattern.



- 4. Ask the patient if there is any double vision (diplopia). If there is any diplopia, then each eye must be tested separately by covering the eye.
- 5. Pause at the extremes of upward and lateral gaze to check for nystagmus.

Face (V, VII)

- 1. Test sensation by light touch following the three divisions of the trigeminal nerve.
- 2. Test temporal and masseter muscle power (V).
 - a. Ask patient to clench his/her teeth and palpate for contraction of temporalis and masseter muscles.
 - b. Ask patient to open mouth and hold open while you attempt to close it by pushing up the lower jaw (pterygoid muscles).
- 3. Jaw jerk (V)
 - a. Explain clearly or patient will be frightened when you approach the mouth region with a tendon hammer.
 - b. Ask patient to open the mouth slightly. Place your finger on tip of jaw.
 - c. Strike finger with reflex hammer. Normally there is little response in UMN lesion, jaw jerk is exaggerated.
- 4. Test power of facial muscles (VII)
 - Ask patient to do the following, noting any lag, weakness, or asymmetry: frown, raise eyebrows (wrinkle forehead), keep both eyes closed against resistance, smile, clench teeth while depressing the corners of their mouth and puff out cheeks.
 - b. In UMN facial nerve palsy, muscles of the forehead are preserved (wrinkling, frowning).
- 5. Corneal reflex (V, VII)

You will **not** be expected to perform this test in Phase 1 but should be familiar with how it is done and what it is testing.

- a. Lightly touch the cornea (not the conjunctiva) with a wisp of cotton wool must approach eye from the side and avoid eyelashes.
- b. Reflex blinking of both eyes is a normal response.



Hearing (VIII)

Test hearing

- a. Face the patient and hold out your arms with your fingers near each ear.
- b. Rub your fingers together on one side.
- c. Ask the patient to tell you when and on which side they hear the rubbing.
- d. Increase intensity as needed and note any asymmetry.
- e. If abnormal, proceed with the Weber and Rinne tests.

Weber's Test

- a. Vibrate a 512 Hz tuning fork.
- b. Place the base of the tuning fork firmly on top of the patient's head (vertex or forehead).
- c. Ask the patient where the sound appears to be coming from (normally in the midline).

Sound is perceived better by the intact ear in perceptive (sensorineural) deafness and by the affected ear in conductive deafness.

Rinne's Test

- a. Vibrate a 512 Hz tuning fork.
- b. Place the base of the tuning fork against the mastoid bone behind the ear.
- c. When the patient no longer hears the sound, hold the end of the fork near the patient's ear and assess whether the patient again hears the sound or not (air conduction is normally greater than bone conduction).

In perceptive deafness, air conduction is still greater than bone conduction whereas in conductive deafness it is reversed.

Mental Status

The mini-mental state examination (MMSE) is a useful screening tool. The MMSE is outlined in <u>Epstein</u> (Fig 11.9). A score of 24 or less indicates possibility of dementia - severe (\leq 9 points), moderate (10-20 points) or mild (21-24 points). The score may need to be corrected for educational attainment, mental disorders, physical problems e.g. poor hearing, motor deficits etc. The MMSE should not be performed during periods of acute cognitive impairment e.g. delirium.

You will be expected to perform a MMSE but you will not be expected to memorise it. One version is the Standardised MMSE from the IHPA which we reproduce in the following pages. You should also get copies of the MMSE used in your hospital geriatric/neurology ward and carry it with you to practice.




Name of patient:		DOB:	11	Name of examiner:	Date test:	of _/ /
	Standar	dised Mi	ni-Ment	al State Exam	nination (SMN	ISE)
	Please see a	iccompanyin _.	g guideline	s for administratio	n and scoring instr	uctions
Say: I am best you c	going to ask an.	you some que	estions and	give you some probl	ems to solve. Please	∍ try to answer as
1. Allo	w ten secon	ds for each i	reply. Say:			
	a) What b) What seas c) What mont d) What	year is this? season is thi on, accept eith month is this h, accept eith is today's dai	(accept exa s? (during th her) ? (on the fir: er) te? (accept	ct answer only) ne last week of the ol st day of a new mont previous or next date	ld season or first we th or the last day of t e)	/1 ek of a new /1 he previous /1 /1
	e) What	day of the we	ek is this? ((accept exact answe	r only)	/1
2. Allo	w ten secon	ds for each i	reply. Say:			
	a) What b) What c) What d) <ath numt ⊲n f e) <ath ⊲n fa</ath </ath 	country are w state are we city/town are torne > What is per or equivale acility > What is torne > What is	ve in? (acce in? (accept we in? (acc athe street a ent in rural a is the name soom are we loor of the b	pt exact answer only exact answer only) pept exact answer on address of this house areas) of this building? (acc in? (accept exact an wilding are we on? (a	/) e? (accept street nar cept exact name of ir swer only) accept exact answer	/1 /1 ne and house /1 nstitution only)/1 /1 only) /1
3. Say wha appr	: I am going t they are be oximately on	to name three cause I am go e-second inte	objects. W ing to ask y rvals).	'hen I am finished, I v rou to name them ag	vant you to repeat th ain in a few minutes	i <i>em. Remember</i> (say slowly at
	Ball Car	Man				
	For repeate	d use: Bell, jar	, fan; bill, ta	ar, can; bull, bar, pan		
Say	/: Please rep mpt)	eat the three	items for m	e (score one point fo	r each correct reply (on the first /3
Allo to a	w 20 second maximum of	s for reply; if t f five times (bu	he person c ut only score	did not repeat all thre e first attempt)	e, repeat until they a	ire learned or up
4. Say baci zero	: Spell the w wards pleas). Refer to ac	ord WORLD (e (allow 30 se ccompanying g	you may he conds; if the guide for sc	lp the person to spel e person cannot spel oring instructions (sc	l the word correctly) I world even with as: ore on reverse of thi	. Say: <i>Now spell it</i> sistance, score is sheet)
						/5
5. Say	: Now what v	vere the three	objects I a	sked you to rememb	er?	/3
(sc	ore one point	for each corre	ect answer r	regardless of order; a	allow ten seconds)	
6. Sho	w wristwatc	h.Ask: What	is this calle	d?		<i>.</i> /1
(sc) etc	ore one point ; allow ten se	for correct reseconds)	sponse; acc	ept 'wristwatch' or 'w	vatch'; do not accept	'clock' or 'time',

1

7.	Show pencil. Ask: What is this called?	/1
	(score one point for correct response; accept 'pencil' only; score zero for pen; allow ten second reply)	s for
8.	Say: I would like you to repeat a phrase after me: No ifs, ands, or buts	/1
	(allow ten seconds for response. Score one point for a correct repetition. Must be exact, e.g. no or buts, score zero)	ifs
9.	Say: Read the words on this page and then do what it says	/1
	Then, hand the person the sheet with CLOSE YOUR EYES (score on reverse of this sheet) on the subject just reads and does not close eyes, you may repeat: <i>Read the words on this page a</i> <i>then do what it says</i> , a maximum of three times. See point number three in Directions for Administration section of accompanying guidelines. Allow ten seconds; score one point only if t person closes their eyes. The person does not have to read aloud.	it. If nd ne
10	. Hand the person a pencil and paper. Say: <i>Write any complete sentence on that piece of paper</i> (allow 30 seconds. Score one point. The sentence must make sense. Ignore spelling errors).	/1
11	. Place design (see page 3), pencil, eraser and paper in front of the person. Say: <i>Copy this desig please.</i> Allow multiple tries.	n /1
	Wait until the person is finished and hands it back. Score one point for a correctly copied diagra The person must have drawn a four-sided figure between two five-sided figures. Maximum time minute.	m. : one
12	Ask the person if he is right or left handed. Take a piece of paper, hold it up in front of the person and say the following: <i>Take this paper in your right/left hand</i> (whichever is non-dominant), <i>fold to paper in half once with both hands and put the paper down on the floor</i> .	n 1e

 Takes paper in correct hand
 /1

 Folds it in half
 /1

 Puts it on the floor
 /1

 TOTAL TEST SCORE:
 /30

 ADJUSTED SCORE:
 /

The SMMSE tool and guidelines are provided for use in Australia by the Independent Hospital Pricing Authority under a licence agreement with the copyright owner, Dr D. William Molloy. The SMMSE Guidelines for administration and scoring instructions and the SMMSE tool must not be used outside Australia without the written consent of Dr D. William Molloy.

Molloy DW, Alemayehu E, Roberts R. Reliability of a standardized Mini-Mental State Examination compared with the traditional Mini-Mental state Examination. *American Journal of Psychiatry*, Vol. 14, 1991a, pp.102-105.







CLOSE YOUR EYES



Society & Health (Respiratory)

The focus of this course is the respiratory system. Refer to Chapter 5 of Epstein. [Electronic access via UNSW Library]

The common symptoms related to the respiratory system include:

- Chest pain
- Dyspnoea (shortness of breath)
- Cough (noting presence of sputum and/or haemoptysis)
- Wheeze

You will be expected to question patients about personal and lifestyle factors relevant to respiratory illnesses. Specifically, you will be expected to be able to assess a patient's smoking history.

See the Phase 1 physical examination of the Respiratory system video: <u>https://moodle.telt.unsw.edu.au/mod/mediagallery/view.php?g=123751</u>

Surface anatomy and anatomical landmarks (read this in conjunction with an anatomy textbook)

The upper and lower lobes of both lungs are separated by the two oblique fissures which course from the T3 vertebra posteriorly to the 6th rib in the anterior MCL. On the right side anteriorly the upper and middle lobes are separated by the horizontal fissure which lies level with the 4th costal cartilage. The lower borders of the lung at end tidal inspiration are 6th rib anterior MCL (slightly higher on the right due to the underlying liver), 8th rib mid axillary line and T10 posteriorly.

Examination of the front of the chest is largely upper lobe on the left; the right has upper lobe to rib 4 and middle lobe below this. Posteriorly it is largely lower lobes with the upper lobes above T3. The lateral aspects of the chest divide diagonally with the lower lobes postero-inferior and upper lobes found supero-anterior. The middle lobe on the right is found on the lateral aspect of the chest, infero-anterior to rib 4.

Coloured pictures to illustrate this surface anatomy of the lung lobes can be found in Moodle CS module, here: https://moodle.telt.unsw.edu.au/pluginfile.php/1130709/mod book/chapter/82085/Surface%20anatomy%20 of%20lung%20lobes.pdf

Surface anatomy is used to locate abnormalities found on physical examination to the relevant lobes adding whether they are anterior, posterior or lateral. Abnormalities in the apices and bases are defined as such. This is because free air (pneumothorax) in the apex and free fluid (pleural effusion) in the bases, are outside the lung. Some doctors use the radiologists' terms 'zones' (for reporting PA and AP x-rays when no lateral film is available to localise pathology to the lobes) and locate examination findings to upper, middle and lower zones.

Phase 1 students are expected to perform these components of the respiratory examination:

From front of patient	
General observation	General inspection and vital signs. Respiratory rate. Signs of respiratory distress (see below).
Position & exposure	Sit patient on edge of bed allowing you to examine from in front and behind. Expose chest.
Inspection of chest	Look for scars and deformities. Signs of airways obstruction (wheeze, prolongation of expiration, signs of hyperinflation).
Palpation of the trachea	Palpate trachea from in front of patient.



From behind patient – posterior chest			
Chest expansion	Observe movement of chest anteriorly.		
	Thate hands on lower posterior chest and assess movement or chest.		
Percussion	Percuss side to side from apices to bases comparing right to left.		
Vocal fremitus (optional)	Same sites and manner as percussion.		
Auscultation	Same sites and manner as percussion. Listen throughout inspiration and expiration to note quality of breath sounds (normal sounds are described as vesicular) and intensity (normal, increased or reduced). Perform vocal resonance on same sites as percussion.		
From front of patient – anterior and lateral chest			
Chest expansion	Observe movement of chest anteriorly (this may be sufficient) OR Place hands on upper anterior chest and assess antero-posterior movement of chest.		
Percussion	Percuss in the supraclavicular fossa and anterior and lateral chest comparing right to left.		
Vocal fremitus (optional)	Same sites and manner as percussion.		
Auscultation	Same sites and manner as percussion. Listen throughout inspiration and expiration to note quality of breath sounds (normal sounds are described as vesicular) and intensity (normal, increased or reduced). Perform vocal resonance at same sites as percussion.		

The procedure of examining the posterior chest should then be repeated on the anterior chest and lateral chest.

Phase 1 students are not expected to develop skills in these components of the respiratory examination:

- 1. Peripheral signs of respiratory disease.
- 2. Detection of abnormalities on examination including the detection or interpretation of abnormal breath sounds.

Respiratory distress

You will be expected to recognise a patient in respiratory distress. Signs of respiratory distress include:

- Increased respiratory rate (tachypnoea); respiratory rate is normally 12-20/min. Observe respirations over at least 30 secs. Note if it gets significantly worse on minimal exertion (e.g. changing position in bed).
- Difficulty speaking because of shortness of breath.
- Use of accessory muscles of respiration including the sternocleidomastoids and strap muscles of the neck.
- Cyanosis need to look inside mouth with a torch to confirm central cyanosis (lips may be blue due to peripheral cyanosis).

Position & exposure

The examination of the chest can be performed with the patient sitting in bed (at approximately 45°) or, preferably, sitting on the edge of the bed. The latter position allows better access to the posterior chest. Ask the patient if they would be comfortable in this position before moving.

Patient's arms should be folded in front when examining the posterior chest. This causes the scapulae to move forwards exposing more of the posterior chest.

Adequate exposure of both anterior and posterior chest is needed. However only expose anterior chest, especially in women, when ready to examine. If only examining the posterior chest, it is proper to allow the patient to hold clothing to anterior chest to minimise exposure.



Airway obstruction

Clinical signs of airways obstruction may be evident on observing the patient:

- Barrel shaped chest
- Audible wheeze during expiration
- Prolonged expiration with pursing of lips
- Tracheal tug and costal indrawing during inspiration indicate hyperinflation

Palpation of trachea

- 1. Warn the patient that there will be momentary discomfort. ("I'm now going to feel for your windpipe. It may be a bit uncomfortable for a few seconds").
- 2. Palpate the trachea from in front of the patient.
- 3. Place one finger in sternal notch on each side of the trachea. Do not press directly on the trachea.
- 4. There should be an approximately equal space on each side of the trachea indicating it is in the midline.



The remainder of the examination is described on the posterior chest. However, it is important to include the same manoeuvres on the anterior chest and lateral chest to complete the respiratory examination.

It is important that you become familiar with variations in findings in the examination of normal chests. When examining the chest, look for relative differences in the patient rather than absolute differences between patients. Judging an abnormality is easier by comparing a suspected abnormality with a reference area in the same patient. You should be comparing right to left and upper to lower zones.

Always explain each step to the patient prior to doing it. Be particularly careful when you are behind the patient, as they cannot get non-verbal clues.

Posterior Chest

Chest expansion

- 1. Place hands on lower chest posteriorly. Fan fingers out to "grip" both sides of chest keeping thumbs off the surface. You are trying to feel the movement of the ribcage and not the soft tissue, so you will need to grip more firmly in an obese patient.
- 2. Position hands so as thumbs are just touching in midline with patient breathing quietly.
- 3. Ask patient to breathe in deeply and observe extent of movement of both thumbs. There should be equal movement of both thumbs away from the midline.



Percussion

It is essential that you practice the technique of percussion. When percussing the chest the sound should be readily audible. Practice on walls and desks to achieve a consistent percussion note.

- 1. Place middle finger on chest, parallel to and in between the ribs, in the intercostal space. Percuss in the space between the vertebral column and the medial edge of the scapula.
- 2. Begin in the apices percussing down from side to side of the chest to detect any difference between the two sides.
- 3. Keep in mind the lower border of the lung posteriorly when you go below this the percussion note will be dull.

Vocal fremitus

This test is of little value as it is inferior to vocal resonance (see below) and provides no additional information. You will not be penalized if you do not perform it as part of your examination.

Auscultation

- 1. Use diaphragm of stethoscope. Ensure it is sitting evenly and firmly on the chest wall. Movement of the stethoscope as the patient breathes can produce "abnormal" sounds. If necessary, use the bell in thin, bony patients.
- Ask patient to breathe deeply (not a full breath) and quietly through the open mouth. Nose breathing can transmit nasal sounds to the chest. Listen through the whole of inspiration and expiration – don't lift the stethoscope off too early.
- 3. Follow the same routine as above for percussion.
- 4. Listen for the quality (vesicular=normal) and intensity of breath sounds. You should be able to recognise normal breath sounds at different regions of the chest. Normal breath sounds over the upper sternum have a bronchial quality.

Students should not take too long when listening to the chest, because prolonged heavy breathing can cause patients to feel faint. If necessary, interrupt the examination to allow the patient to breathe quietly for a period.

Students should understand the basis of normal vesicular breath sounds and how these are described.

Vocal resonance

- 1. While listening with the stethoscope, ask patient to say "ninety-nine" repeatedly.
- 2. Follow the same routine as above for percussion and auscultation.

Anterior Chest and Lateral Chest

The above should now be repeated for the anterior chest (starting with percussion and auscultation in the supraclavicular fossa) and lateral chest.

Examination of the relevant lymphatic drainage

Be aware that examination of the relevant lymphatic drainage is appropriate with/after a respiratory exam – see examination of the supraclavicular and axillary lymph nodes.



Examination of the lymphatic system

Examination of lymph nodes is usually performed when examining various body regions while conducting a general examination. Lymph nodes are also examined as part of a haematological examination, or individual group of nodes are examined when examining various body systems (e.g. cervical and axillary lymph nodes are examined as part of the respiratory system).

In a patient with a local abnormality (e.g. skin lesion or subcutaneous mass), the draining lymph nodes are examined to exclude regional lymphadenopathy. The remainder of the lymphatic system, including the spleen and tonsils, should be examined if a patient has regional lymphadenopathy.

You would be expected to know which regional lymph nodes should be examined in a patient with a local abnormality and should be able to examine the cervical, axillary and inguinal regions. You will be expected to know the anatomical distribution of lymph nodes in these regions.

Clinical Skills Phase 1/Graduate Entry level Examination of the Regional Lymph Nodes video: <u>https://moodle.telt.unsw.edu.au/mod/mediagallery/view.php?g=123751</u>

• Cervical lymph nodes

The distribution of the cervical lymph nodes is shown in Figure 2.70 in <u>Epstein</u>. (Please note the persisting error on this Figure where the submandibular nodes are erroneously labelled as 'submaxillary'.) [Electronic access via UNSW Library]

The neck may be examined from in front or behind the patient, who is preferably sitting. Both sides of the neck are palpated at the same time.

- 1. Make sure the neck is fully exposed, including the supraclavicular fossa (means patient must remove their top (or, at very least, open their shirt) females can leave bra but shoulder straps should be moved).
- 2. Observe for scars, swellings and asymmetry.
- 3. After asking about tenderness, begin palpation with the submental nodes and move along the lower jaw feeling for the submandibular nodes.
- 4. Feel for the pre-auricular nodes and then move behind the ear to palpate the posterior auricular (mastoid) and occipital nodes.
- 5. Progress down the neck in the posterior triangle (formed by the clavicle, the anterior border of trapezius and the posterior border of sternocleidomastoid (SCM)) to the scalene node which lies behind the clavicle and anterior to the scalene muscles which insert into the upper two ribs.
- 6. Now move fingers into the anterior cervical triangle (formed by the mandible, the midline and the belly of sternocleidomastoid (SCM)) to palpate for the superficial and deep anterior cervical chains of lymph nodes. Superficial nodes may be easily palpable as they overly SCM, but deep nodes are much harder to feel (even when enlarged), because they are situated deep to SCM and/or are more deeply located in the neck, closely located to and invested around the neurovascular bundles.

Anterior / posterior cervical triangle





7. Palpate the supraclavicular fossae and feel behind the clavicle while getting patient to shrug shoulders. Nomenclature of these lymph nodes (especially those of the cervical chains) varies from text to text. Those named here are widely agreed upon.

Note that swellings in the neck are not always from lymph nodes- in particular, thyroid lumps can appear similar.

The following is not necessarily covered in Foundations or Beginnings, Growth & Development A (Year 1) but will be covered in Society and Health in relation to the Respiratory System. It is included here because of its relationship to the Lymphatic System.

• Axillary nodes

The distribution of the axillary lymph nodes is shown in Figure 2.71 in Epstein. [Electronic access via UNSW Library]

The axilla is examined from in front of the patient who may be lying or sitting. The examiner should support the arm in a resting abducted position.

- 1. Palpate behind the pectoralis major muscle (anterior axillary fold) to the apex of the axilla.
- 2. Palpate over the lateral wall of the chest up to the apex of the axilla.
- 3. Palpate against the posterior axillary fold.
- 4. Palpate over the medial surface of the upper arm.

'Walls' of the right axilla





• Inguinal nodes

The distribution of the inguinal lymph nodes is shown in Figure 2.72 in Epstein. [Electronic access via UNSW Library]

The inguinal region is examined from in front of the patient who is in a supine position. The region should be exposed taking care to cover the genitalia.

- 1. Palpate below the line of the inguinal ligament (from anterior superior iliac spine to the symphysis pubis).
- 2. Palpate along the upper portion of the femoral vessels (extending below the mid-inguinal point in a slightly medial direction).

The following is not necessarily covered in Foundations or Beginnings, Growth & Development A (Year 1) but will be covered in Beginnings, Growth & Development B (Year 2). It is included here because of its relationship to the Lymphatic System.

• Throat examination (see p.98 in Epstein)

The tonsils are part of the lymphatic system and should be examined when conducting a systematic examination of the lymphatic system. The examination of the oral cavity includes more than looking at the tonsils but the focus here is on examining the tonsils.

The throat should be examined first with the tongue resting in the mouth. It may be possible to observe the tonsils (tonsillar beds) without any manipulation.

Ask the patient to protrude the tongue and say "aaah" while observing the posterior pharynx including tonsils. Use a tongue depressor, if necessary, to obtain a better view of the pharynx. It is important that the tongue depressor does not cause the patient to gag.

The examination of the spleen is covered in the abdominal examination (Health Maintenance B).



The General Examination

At the completion of Phase 1, you would have developed skills in the physical examination of the major body systems and the mental state examination. In clinical practice, the examination of a patient is not restricted to isolated systems but performed as a whole. The nature of the patient's presenting illness will determine the focus of the physical/mental state examination and the complete assessment of a patient requires a general examination.

You will only be expected to perform a general examination in Phase 2. You should take the opportunity to practice this as you prepare for the Phase 1 Clinical Skills Examination, but you will not be specifically assessed on this.

There is no single routine to performing the general examination. Some clinicians prefer to examine the system of interest (based on the history) first. Parts of the examination which will cause discomfort to the patient (e.g. abdominal examination in a patient with abdominal pain) may be left to last to avoid causing discomfort and interrupting the examination. Examination of the child usually needs to focus first on obtaining signs that require the child to be settled and quiet. As previously stated, traditionally, all examinations of patients on a bed or couch are conducted by the student being on the patient's right-hand side. This can be modified for certain examinations or parts thereof e.g. having the pt. sit up (if able) on the side or end of the couch/bed.

The following illustrates one routine in performing a general examination. At each step, you need to consider what signs may be present in relationship to all the systems. *There are some aspects of this examination that you have not yet addressed.*

Position and exposure

Begin the examination with the patient in a reclining position with minimal clothing to allow easy exposure of different regions. It is best not to assume that exposure will be granted, or that certain patients will necessarily feel comfortable when exposed. In general, do not expose regions until necessary, or until you have ascertained that your patient is comfortable with exposure of particular areas, including areas that **you** may feel are not 'sensitive' or 'intimate'.

General Observation

- Although you may have made some relevant observations when taking a history, take the time to observe the patient before you begin the examination.
- As you examine each region, it is important that you look for observable abnormalities.

Hands

- Inspection of the hands can detect physical abnormalities related to different systems. You have not learnt these abnormalities at this stage.
- Palpate the radial pulse after inspecting the hands.
- Measure the respiratory rate.

Measure BP

Head and neck

- Inspection of the head and neck (including eyes and mouth) can detect physical abnormalities related to different systems. You have learnt about some observable abnormalities related to the respiratory and cardiovascular system.
- Examine the jugular venous pressure.
- Palpate the carotid arteries.
- Palpate the trachea.
- Examine the cervical lymph nodes from in front of the patient. The cervical lymph nodes may also be examined from behind the patient after you have examined the posterior chest.

Anterior Chest

- Inspection of the anterior chest observing any abnormalities especially related to the respiratory and cardiovascular system.
- Examine the anterior and lateral aspects of the respiratory system
- Examine the praecordium.



Posterior Chest

- Conduct examination of the posterior chest as per the respiratory system.
- If the focus of the patient's illness suggests a possible respiratory cause, you should also examine the lateral and anterior chest wall.
- Examine the axillary lymph nodes. This may be left until late in the examination if the patient is particularly sweaty, the examiner should wash his/her hands before examining other regions and/or use gloves.

Abdomen

- Ask patient to lie down and position for abdominal examination.
- Examine the abdomen.
- Examine the inguinal lymph nodes.

Legs

- While the patient is lying down, expose the legs.
- Examine the peripheral vascular system.

Neurological examination

- Unless it is the focus of the presentation, the neurological examination is usually left to last. It can be tiring for the patient, and it is preferable to perform it in an uninterrupted sequence.
- Examine cranial nerves.
- Examine upper and lower limbs.

Musculoskeletal examination

• Specific joint examination may be required, or a screening examination performed

Mental State Examination

• Is observed and tested throughout the mental health history and any subsequent physical examination

Other specific examinations

- Other body systems may need to be examined (see Phase 2 and beyond)
- Also always remember that patients often present with injuries (head, limb, torso) that require specific examination and for you to consider what systems might need (further) special consideration in light of the type of injury



Procedural Skills

At the completion of your medical degree, you will be required to be competent at a number of procedural skills. The UNSW Medicine program teaches these skills in an integrated way throughout all 3 phases of the course, using a combination of self-access packages and clinical instruction ('skills sessions').

To achieve competence in procedural skills, a number of processes need to be understood:

- 1. The reason(s) why the procedure might be performed
- 2. The pathophysiology of the process
- 3. The equipment required and the basis on which it works
- 4. The technical aspects of actually performing the skill, including the explanation to the patient
- 5. Interpretation of the results obtained from performing the skill

Procedural skills, like clinical examination, require repetitive learning. Learning on a model or in a simulated environment is preferable to learning on patients, and it is essential that students do not perform procedures on patients until the full learning package has been accessed.

It is essential that procedural skills be practiced regularly once learned. Do not underestimate the amount of practice required, or the degree of 'de-skilling' that can occur, if practice does not take place.

Learning resources are available for most of the procedural skills listed below on Moodle, here: <u>https://moodle.telt.unsw.edu.au/mod/page/view.php?id=5385760</u>. You should review these online resources carefully, and combine this review with practice in the campus Skills Centre and/or your assigned clinical school.

Skill	Course
Hand hygiene – "5 moments of hand hygiene"	Online resources
Manual handling	Online resources
Measurement of non-invasive blood pressure	HM-A with CVS exam (also BGDA)
Introduction to oxygen devices and 02 therapy	S&H (Online resources and equipment available at Clinical Skills Centre plus Clinical school) or with Respiratory exam
Pulmonary function using a peak flow meter	S&H or with Respiratory exam
Temperature	BGD-B or with Respiratory exam
Urinalysis	HM-B or with Abdominal exam
Auroscopy	BGD-B (part of ENT exam)

The following procedural skills should be learned at this stage:

Each of these skills will be addressed during the relevant course either within the clinical sessions, in practical classes or as self-access online resource packages in Moodle. The opportunity to practice the skill in your own time is facilitated for many skills by having equipment available at your hospital.

In the end-of-phase clinical examination, you may be asked to demonstrate your ability in performing any one or more of the above procedural skills. It is essential that in this situation you recognise that you are performing the skill on a patient and not a "model". This includes explaining to the patient what you are doing, what you require the patient to do and ensuring that they are comfortable during the procedure. You will be expected to demonstrate an understanding of each of the five processes of learning a skill (as above).



Hand hygiene, "standard precautions" and infection control

This is addressed in Foundations.

There is a resource on hand hygiene (Five Moments for Hand Hygiene) in Moodle. You also need to be aware of other relevant infection control policies and procedures, especially (but not solely) in relation to COVID. For these, please refer to local guidelines in hospitals you attend, follow all direction on infection control from admin, nursing and medical staff and keep abreast with requirements through NSW Health: https://www.health.nsw.gov.au/Infectious/Pages/default.aspx. Students at Phase 1 level would never be expected or required to don full PPE and/or interact with patients with serious infections. If students do not feel suitably trained for any interaction or the PPE required for it, they should politely decline the opportunity.

You will be expected to apply these precautions when interacting with patients at any time, including in the endof-phase clinical examination.

You must clean your hands either by hand washing or using an alcohol-based handrub after each patient you visit, irrespective of whether you examined the patient (you almost certainly would have shaken hands, touched bedclothes, etc.).

You should wear appropriate fitting gloves if asked to examine a wound or ulcer, and dispose of them appropriately in contaminated waste bins.

Ensure that when you handle equipment and their components that you do not facilitate the transmission of microorganisms, for example, always examine the 'good' ear first when using an auroscope.

Students must also be aware that expectations around hand hygiene have expanded in recent years to encompass other elements of infection control and patient safety more broadly. Students are expected to comply with procedures relating to aspects of dress, including (but not limited to) bare below the elbows procedures, which are now mandatory in NSW Health facilities. See Appendix 2 and Appendix 3 for further details.

Manual handling

It is essential that you learn how to move patients around a bed - sitting the patient up, getting the patient out of a bed or chair, etc. This is to protect you from injury as well as to ensure the patient's safety.

Mandatory HETI modules - My Health Learning

Note that infection control and manual handling are part of the mandatory HETI modules that P1 students are required to complete prior to their first hospital session in BGDA:

Module code	Module Name
42063430	Hand Hygiene
90688727	Between the Flags – Tier 1: Awareness, Charts and Escalation
349301434	Cyber Security Fundamentals
326771159	Privacy – It's Yours to Keep
326771497	Work, Health, Safety and Hazardous Manual Tasks
46777047	Infection Prevention and Control Practices
294450660	Personal protective equipment for combined transmission-based precautions
319438161	Donning and fit checking of P2 or N95 respirators in NSW healthcare settings
194502198	Security Awareness – All Staff
266237812	Introduction to eMR (N.B. This module does not automatically appear on your HETI dashboard like the other modules – you need to do a search for it)

Information about My Health Learning: <u>https://www.heti.nsw.gov.au/education-and-training/my-health-learning</u> FAQs: <u>https://www.heti.nsw.gov.au/education-and-training/my-health-learning/mandatory-training/frequently-asked-questions</u> Login page: <u>https://spzsso.cit.health.nsw.gov.au/oaam_server/login.do</u>



Measurement and interpretation of non-invasive blood pressure

This is addressed in a rostered session in the Campus Skills Centre. Opportunities to practice this skill will be available at each clinical school.

You will be expected to:

- 1. Understand the reason(s) why blood pressure measurement might be performed
- 2. Understand the pathophysiology of blood pressure
- 3. Understand the range of equipment available and the principles of how they work
- 4. Understand the technical aspects of taking a BP, including explanation of the procedure to the patient
- 5. Measure a patient's blood pressure and determine if it is normal, high or low

Watch videos of manual blood pressure measurement:

Official P1 UNSW Medicine video: <u>https://moodle.telt.unsw.edu.au/mod/mediagallery/view.php?g=123751</u> New England Journal of Medicine training video (NB Contains elements that may not be applicable at the P1 level: <u>https://www.nejm.org/doi/full/10.1056/nejmvcm0800157</u>)

Introduction to oxygen devices and oxygen therapy

This is addressed in Society & Health or when learning the respiratory examination. This module consists of a PowerPoint presentation on Moodle explaining oxygen therapy and devices. The campus Clinical Skills Centre and your clinical school will have a box of labelled masks, which should be used in conjunction with the presentation. Make sure you practice how to fit the mask and ensure you know the broad indications for when each mask is used.

Pulmonary function using a peak flow meter

This is taught during one of the clinical sessions in Society & Health. Your clinical tutor will provide you with some peak flow meters to practice with. You can access further information (e.g. peak flow recording chart) online. https://moodle.telt.unsw.edu.au/mod/page/view.php?id=5385760

You will be expected to assess a patient's respiratory function using a peak flow meter. You will be expected to:

- 1. Understand the reason(s) why peak flow measurement might be performed
- 2. Understand the pathophysiology of peak flow measurement
- 3. Understand the range of peak flow meters available and the principles of how they work
- 4. Understand the technical aspects of taking a peak flow, including explanation of the procedure to the patient
- 5. Measure a patient's peak flow and determine if it is normal or reduced

Temperature

This is addressed in in the Clinical Skills sessions. There is also a self-access module which consists of a PowerPoint presentation (available on Moodle). You need to practice using various forms of temperature measurement devices which are available in the Clinical Skills Centre and at your clinical school. https://moodle.telt.unsw.edu.au/mod/page/view.php?id=5385760

You will be expected to:

- 1. Understand the reason(s) why core body temperature is measured
- 2. Understand the pathophysiology of core body temperature control
- 3. Understand the principles of how various thermometers work
- 4. Understand the technical aspects of taking a temperature from various body points, including explanation of the procedure to the patient
- 5. Measure a patient's temperature and determine if it is normal, high or low



Urinalysis

This is addressed in Health Maintenance B in the Clinical Skills sessions. There is also a self-access package available on Moodle. See: <u>https://moodle.telt.unsw.edu.au/mod/scorm/view.php?id=2357427</u>

You will be expected to:

- 1. Understand the reason(s) why urinalysis is performed
- 2. Understand the pathophysiology of excretion of solutes in the urine
- 3. Understand the principles of how various urinalysis strips work
- 4. Understand the technical aspects of performing a urinalysis, including explanation of specimen collection to the patient
- 5. Perform a patient's urinalysis and record abnormalities

Summarising Findings

In the clinical and communication skills (P1 OSCE) examination you will be asked to summarise key findings to the examiner. The examiner has listened to you take a history and observed your examination, but it is important that you demonstrate your ability to summarise the pertinent features of the patient's illness. A summary is a purposeful and succinct presentation of your clinical findings. Consider the purpose of your summary. In general terms this may be educational or related to patient care. In Phase 1, the purpose of your summaries is educational, for example in the context of a clinical skills or bedside tutorial or an OSCE. However, in the future, this may be related to patient care for example, *"I am not sure what type or rate of fluid to chart this patient..."* and then present your summary. Or *"I saw this patient for advice regarding diagnosis and further investigation of his vomiting", followed by the summary*. In these contexts, it is important to consider the purpose and the audience for the summary and start with your question or targeted introductory statement.

- Focused on the relevant issues and findings
- Brief 'dot points'; take care using terms like "unremarkable" or "normal" use these very judiciously
- Structured just like the overall structure of the whole consultation, but more succinct!

Summarising the history in an educational setting (e.g. bedside or clinical skills tutorial or clinical assessment e.g. CXO):

- Begin with a brief description of the patient and the presenting problem e.g. Mr X is a 54-year-old [occupation], who is married with 3 children. He presents with a one-week history of chest pain on a background of hypertension and smoking.
- Outline the course and pertinent features of the presenting illness.
- In the example above, identify the important positive and negative features of the chest pain.
- Include relevant features related to the patient's personal/social, past medical and family history. Note that for some sections there may be nothing to report that is relevant to this particular patient. Remember the examiner has heard your history so will know that you took a thorough history.
- Briefly convey how this illness is impacting on the patient and any particular concerns/expectations that the patient may have.

Sample template of a patient history summary for a patient summary

- Name is a (age) year old a (retired?) [occupation]
- Presenting with a length of time history of PC
- Characterised by HPC features (symptoms positive and relevant negative) impacting the patient in X way / causing the patient to have X concerns
- "On a background of" relevant PH, risk factors and relevant FH
- Past history also reveals significant diseases and surgeries
- Medications are and is allergic to X
- Relevant psychosocial history support, living situation, diet and exercise, stresses. Currently smoking (or not): Smokes pack year history of X. Alcohol light, moderate or heavy drinker (or standard drinks/day or week). Drugs quantify as best able.
 - Omit or re-order PSH elements if more or less relevant.
- The main impact on the patient is X (if not stated above) and the patient's main concern/s is/are Y

Summarising the examination in an educational setting (e.g. bedside or clinical skills tutorial or OSCE):

- Use the patient's name.
- Begin with a comment on the patient's general observation. As most of the patients in an examination are volunteers, it is unlikely that you will observe any abnormality. A common general description of a well person is "On general inspection, Mr X appears well at rest and in no obvious distress".
- Describe the normal examination findings e.g. "On auscultation of the heart, the first and second heart sounds were of normal intensity. There were no murmurs or extra heart sounds." So do not begin with negative findings. You are **not** expected to detect murmurs or extra heart sounds, but you are expected to hear the normal heart sounds, so report this. Practice how you would report normal examination findings in other systems.
- There is nothing wrong in admitting if you cannot detect something that should be found in the normal examination, providing you have examined the patient properly e.g. in an obese patient, it may be difficult to feel the apex beat of the heart. If you could not locate the apex beat, then report this. Provided you have



demonstrated that you have felt for the apex beat in the proper position and with correct technique, you will not be penalised.

When inspecting the patient as part of the examination, it may be appropriate to describe to the examiner
what you are observing or what you are looking for at the time e.g. if inspecting the chest as part of a
respiratory examination, you may state that inspection of the chest wall reveals no deformity or scarring
and then comment on any further features you are looking. Another example may be while inspecting the
hands as part of a musculoskeletal examination, you may state that the hands appear normal and then
comment on what you are looking for. However, note comments in the FAQ document regarding 'reporting
back'.

Example summary – neurological examination:

"On examination, [pt. name] appeared well and undistressed. Upper limb sensory findings showed light touch preserved symmetrically and throughout all dermatomes, whilst vibration sense and proprioception were normal in the distal joints tested, left and right. As for motor findings, these were also symmetrical, with normotonia and normoreflexia noted throughout and power was 5/5 on the MRC scale for all muscle groups."

What to avoid when summarising:

- Retelling the whole history and all the exam findings!
- Going through each component of the history and believing that you need to say something about each. You are able to leave out large sections of both history and exam findings if they are not relevant.
- Saying that everything is "unremarkable" or "normal" there are usually better and more informative words (especially clinical terminology) that can be used to good benefit.
- Telling your examiner everything you did literally "I did x, then y". Remember that in an OSCE station, they saw and heard you do it too!
- Unstructured blurb.

Students should also see the FAQ document in Moodle for further information on summarising and 'reporting back': <u>https://moodle.telt.unsw.edu.au/mod/resource/view.php?id=588324</u>

Making a diagnosis:

You are **not expected to make a diagnosis** so do not suggest a diagnosis unless prompted by your examiner. Your examiner may ask what you think may be the cause of the patient's presenting problem or ask how you can relate elements of the presentation.

e.g. in the above CVS history example, you may suggest that chest pain occurring in a patient with risk factors for cardiovascular disease (hypertension and smoking) raises concerns about ischaemic chest pain and that the features of the pain are consistent with this.

Further questioning:

The Clinical Skills Examination (OSCE) is primarily a test of your skills not knowledge. However, the examiner may question you about the basis of your findings.

- You may be asked about the relevance of the questions you used. e.g. what is the relevance of asking about early morning stiffness in a patient with joint pain?
- You may be asked about the surface anatomy relevant to your examination.
 In the example above, if you cannot locate the apex beat in a patient, you may be asked where it should be located.
- You may be asked about the functional anatomy relevant to your examination. e.g. you may be asked which cranial nerves are tested when eliciting the pupillary reflexes.
- You may be asked about the physiological basis for a physical finding. e.g. what causes physiological splitting of the second heart sound?



Assessment

Student-Patient Observed Communications Assessment (SOCA)

The SOCA extends over several courses in Phase 1, commencing in BGDA of Year 1 and completing in HM of Year 2. The BGDA SOCA is for practice only. The requirement is that you complete *at least* four formally assessed SOCA interactions in total, reasonably evenly distributed across the relevant courses. Each SOCA submission is to be accompanied by a reflective paragraph discussing development in generic communication skills. SOCA submissions provide evidence of achievement in Effective Communication as required for the Phase 1 portfolio examination; hence results are lodged into the eMed system for review by you and your Portfolio assessor. See below for more information about the SOCA. Information regarding SOCA for Grad Entry students will be provided separately.

Phase 1 / Graduate Entry Clinical Skills Examination ("OSCE")

You must pass the Clinical Skills examination to progress to Phase 2. Frequently known as the OSCE (pronounced 'os-key'). Your level of achievement in the Clinical Skills program will be assessed in a clinical examination held at the end of Phase 1. This clinical examination is a barrier examination equivalent to the Portfolio and end-of-phase written examination.

The examination will consist of multiple stations at which you will be required to demonstrate competency in all Clinical Skills, that is, generic and clinical communication (guaranteed focus), and examination/procedural skills (dependent on opportunity). Each of these components will be assessed separately and you must pass all assessed components.

The examination will be held at the end of Year 2 before proceeding to Phase 2. (For Grad Entry students this exam will occur at the end of the Summer Teaching Period Bridging Course.) Details on the dates and venues will be posted in good time for the exam.

The following is the usual OSCE format, but this is subject to change dependent on infectious disease outbreaks / interruptions to learning opportunities. Any changes will be communicated widely to students at the earliest possible point in time to assist you in your preparation.

- Each student will be assessed at six stations.
- Each station is 15 minutes.
- One examiner will be present at each station.
- You will be given instructions advising you what you are required to do at the station.
- Each station will include components of communication and clinical skills.
- The examiner will assess your performance against nine criteria. An example of the proposed assessment form follows. The generic form will be modified at each station to reflect the specific requirements of the station. Criteria (7) and (8) are duplicates as more than one skill will be assessed at each station.
- In order to achieve an overall pass for this assessment, students need to pass each of the three domain skills (generic communication, history taking and physical examination/procedural skill). In addition, it may be required that a minimum number of stations are also passed.

Borderline performance

The Borderline or B grade represents a borderline performance for a criterion. This indicates that the student has failed to address an essential element OR the student has an understanding of the skill but has not demonstrated an overall satisfactory level of competency for this element of the station; this student is not a CLEAR FAIL, nor a CLEAR PASS on this criterion.

Using a statistical algorithm, information from all the examination grades will be used to reclassify all the B's to either F or P. The leading principle of the algorithm is that it considers all the examination grades across all criteria and across all students and estimates the difficulty of each criterion and the ability of each student which is relevant to the B grade achieved. Based on these estimations the algorithm reclassifies all the B grades to either P or F. Consequently, when results are published to students, only the 'resolved' grades (F, P and P+) will be seen.

See SOCA and P1 OSCE FAQs or ask questions on the Discussion Board: https://moodle.telt.unsw.edu.au/course/view.php?id=7698



Assessment Form [generic version] Student Details: [sticker to be provided]

Assessor:

Date:

Assess the student's ability to:	Mark - Circle one grade for each			
1. Initiate and end the consultation				
greet patient, introduce self, outline agenda, seek permission	F	В	Р	P+
to proceed, thank the patient and offer help with repositioning,	Fail	Borderline	Pass	Exceptional
dressing etc				
2. Listen attentively, engage patient and maintain respect				
allow patient to use his or her own words without premature	F	В	Р	P+
interruption, use open and closed questions, reflect important	Fail	Borderline	Pass	Exceptional
feelings, pick up verbal and non-verbal cues, display sensitivity				
to patient's needs, respect boundaries, gain patient's trust				
3. Elicit a relevant clinical history				
establish reason for presentation, course and nature of	F	В	Р	P+
symptoms; summarise patient's symptoms to check	Fail	Borderline	Pass	Exceptional
understanding				
4. Elicit a psychosocial history				
ask patient about relevant family, social support, cultural,	F	В	Р	P+
lifestyle factors, employment issue, as appropriate	Fail	Borderline	Pass	Exceptional
5. Gather relevant past medical and family history				
ask about past personal and family history, as well as specific	F	В	Р	P+
risk factor history where appropriate	Fail	Borderline	Pass	Exceptional
6. Communicate with patient and ensure patient comfort				
when conducting a physical examination/ skill	F	В	Р	P+
explain to patient what is being done, provide suitable	Fail	Borderline	Pass	Exceptional
instructions, ensure the patient's privacy and comfort				
7. Perform technically competent physical examination or				
skill	F	В	Р	P+
correct positioning of patient, adept with equipment,	Fail	Borderline	Pass	Exceptional
competent approach to examination				
8. Perform technically competent physical examination or				
skill	F	В	Р	P+
correct positioning of patient, adept with equipment,	Fail	Borderline	Pass	Exceptional
competent approach to examination				
9. Summarise Case Findings				
Should use medical jargon, identify patients' key concerns and	F	В	Ρ	P+
reason for presenting and summarise relevant history and	Fail	Borderline	Pass	Exceptional
examination findings				

Additional comments



General expectations for the Phase 1 Clinical Skills Examination

- You should introduce yourself to every examiner and the patient and seek permission to interview and examine them. It is important to tell the patient what you intend to do in the time available for the station. Do not assume that because it is an examination that you do not need to do this.
- You should seek to establish rapport with the patient. Although the patient is there to assist with the examination, do not treat the patient as an exam "object". Begin with general questions ask about their age, how they are feeling, to create rapport but also to help you work out what the problem may be.
- You are expected to demonstrate your ability to communicate with a patient when taking a history. You are not expected to make a diagnosis or provide advice or counselling to a patient.
- You should begin your history with open-ended questions even though you may be told what the patient's presenting symptom is. Allow the patient to describe the symptom in their own words. Give the patient time to respond to your questions. Do not prompt the patient with answers that you think fit a particular diagnosis.
- You must ask the patient about their personal/social circumstances and the impact of the illness and their concerns. Do not focus solely on the disease.
- You should acknowledge the feelings and concerns expressed by a patient. You need to demonstrate that you have heard and understood these important issues. Do not ignore what a patient says and move onto another question about the symptoms.
- You should confirm your history with the patient by briefly summarising it for them.
- You should explain to the patient what you are going to do in the physical examination or a procedural skill and ensure your instructions to the patient are clear and understood.
- You are expected to demonstrate good technique in the physical examination you are not expected to find abnormalities.
- You are unlikely to be asked to conduct a complete system examination. Ensure you understand what aspect of the physical examination you have been asked to perform.
- You should report to the examiner a synthesis of your history and examination (if applicable). This should include the concerns that the patient raised and the significant features of the history. You should use appropriate clinical terms when describing symptoms and physical findings. It is not expected that you will provide a diagnosis.

A video has been produced which provides further information and tips on preparing for this exam. Please view here: <u>https://moodle.telt.unsw.edu.au/mod/page/view.php?id=5385566</u>

Approaches to Examples of Examination Stations

The following tables illustrate the range of approaches to two example examination stations. The assessment criteria represent the criteria used in the OSCE.

Station 1:

Mrs G has just performed a home pregnancy test, which is positive. She is anxious because she has had a number of miscarriages before this. She presents to discuss her pregnancy with you.

- a. Take a history of the pregnancy and explore its social and psychological impact on Mrs G.
- b. Take Mrs G's pulse and blood pressure.
- c. Summarise your findings to the examiner.

Station 2:

Mr H has been experiencing chest pain on exertion. He is quite worried that it may be his heart.

- a. Take a history of the chest pain and explore the patient's concerns.
- b. Assess the patient's radial and carotid pulses.
- c. Summarise your findings to the examiner.



		Station 1		
Criteria	F	В	Р	P+
1. Initiate and end the consultation	Fails to introduce self and check patient's name. Launches straight into history. Doesn't sit down.			Greets patient by their name and clearly states own name. Sits down and appears comfortable and checks patient comfort. Outlines the agenda for the time.
2. Listen attentively, engage patient and maintain respect	Glosses over anxieties or concerns or tells patient 'There's nothing to worry about" (because there is, false reassurance is not a good tactic). Inappropriate demeanour. Not engaging with the patient- doesn't seem caring or concerned or interested.	Asks but appears uncomfortable discussing patient's anxiety i.e. looks perplexed when patient asks if she will be alright (should say something like "I'm not qualified to give you that information).		Empathetic and attentive; acknowledges anxiety- "It must be both exciting and anxiety provoking for you". Thanks patient at end of interview.
3. Elicit a relevant clinical history	Fails to ask fundamentals of clinical history (early pregnancy); date of last menstrual period, symptoms of early pregnancy etc.	Asks only a few features of clinical history.	Asks many features of clinical history.	Asks all relevant features: date of LMP, symptoms - nausea, breast tenderness/swelling, etc.
4. Elicit a psychosocial history	Fails to ask fundamentals of psychosocial history- how she is coping, why she is so concerned about a miscarriage (need to acknowledge this and ask more about it), who is at home with her (does she have other children?), what major other stresses exist in her life (financial, work etc).			Asks all relevant features: how she is coping, how she is trying to reduce her anxiety, who is at home with her, what other major stresses exist etc.
5. Gather relevant past medical and family history	Fails to ask fundamentals of past medical and family history.			Asks all relevant features of past medical and family history e.g. other medical problems that may contribute to medical risk, family history of miscarriage etc.



	Station 1			
Criteria	F	В	Р	P+
6. Communicate with patient and ensure patient comfort when conducting a physical examination/ skill	Starts doing skill without explaining first i.e. picks up patient's arm. Explanation non-existent or so weak as to not give patient idea what is going to happen.	Some explanation but may be inadequate; also obvious that student unsure how to do the measurement or what the parts of the instrument are called.	Explanation adequate but not completely reassuring to the patient.	Explains that you are going to feel her pulse and take her BP. Asks if patient has experienced this before. Explains how you will do each of these BEFORE the equipment is applied. Acknowledges that BP cuff can be tight and uncomfortable.
7. Perform technically competent physical examination or skill	Can't explain- doesn't know terminology; order of findings is told illogically and chaotically.	Attempts explanation but is haphazard and mainly repeats what patient said without any analysis or summary.	Some analysis (e.g. "symptoms of early pregnancy including nausea, tiredness").	Findings summarized in logical order and with use of medical terminology and interpretation, rather than just repeating exactly what patient said.
8. Perform technically competent physical examination or skill	Duplicated since there are usually two s component parts that are assessed sep	separate tasks e.g. one part of an examinat arately.	tion, followed by a procedural skill. Occ	asionally, a system exam is broken into two
9. Summarise Case Findings	Retells the whole history and all the exam findings, going through each component of the history laboriously or says everything is "unremarkable" or "normal"		►	Well-structured and tightly focused summary of the relevant issues and findings



		Station 2		
Criteria	F	В	Р	P+
1. Initiate and end the consultation	Fails to introduce self and check patient's name. Launches straight into history. Doesn't sit down.			Greets patient by their name and clearly states own name. Sits down and appears comfortable and checks patient comfort. Outlines the agenda for the time.
2. Listen attentively, engage patient and maintain respect	Glosses over anxieties or concerns or tells patient 'There's nothing to worry about" (because there is, false reassurance is not a good tactic). Inappropriate demeanour. Not engaging with the patient- doesn't seem caring or concerned or interested.	Asks but appears uncomfortable discussing patient's anxiety i.e. looks perplexed when patient asks if she will be alright (should say something like "I'm not qualified to give you that information).	Acknowledges that the situation is potentially worrying and advises Mr H that after taking a comprehensive history and suitable tests they may be in a better position to explain his pain and hopefully provide better information about the long-term health issues	Empathetic and attentive; Acknowledges that Mr H must be anxious and offers some reassurance in the form of "I understand you are worried by this pain and the possibility that you have a heart problem like your father, but we really need to get more information about your health to get the whole picture. I appreciate that it is quite hard for you, not knowing."
3. Elicit a relevant clinical history	Fails to ask fundamentals of clinical history.	Asks a few features of clinical history.	Asks many features of clinical history.	Asks all relevant features: general health history, previous health problems features of chest pain, gets comprehensive family history of heart problems.
4. Elicit a psychosocial history	Fails to ask fundamentals of psychosocial history.		•	Asks all relevant features: smoking, diet, concerns about family history, stress in life, lifestyle, impact of lifestyle, social support, impact on family if ill, including financial.
5. Gather relevant past medical and family history	Fails to ask fundamentals of past medical and family history.		•	Asks all relevant features of past medical and family history e.g. other medical problems that may contribute to medical risk, family history of miscarriage etc.



Station 2				
Criteria	F	В	Р	P+
6. Communicate with patient and ensure patient comfort when conducting a physical examination/ skill	Starts doing skill without explaining first i.e. picks up patients arm or just goes to neck without any warning. Explanation non-existent or so weak as to not give patient idea what is going to happen.	Some explanation but may be inadequate. May use jargon not understood by patient.	Explanation adequate but not reassuring to patient and patient still not totally understanding of what will be done. Use of jargon not understood by patient.	Explains that you are going to take pulse in 2 places, the wrist and neck. Explains how you will do each of these prior to "laying of the hands." Provides some brief information about what they measure e.g. "Your pulse is 78 which I believe is within the normal range."
7. Perform technically competent physical examination or skill	Appears never to have performed the skill. Cannot locate pulse easily, or palpates both carotids simultaneously (risking giving patient stroke!). Laughing or joking at own incompetence.	Attempts skill but may be obvious that has only done it seldom or that does not know where to find pulses easily, or needs to have many attempts before gets a measurement. May not approach measurement of carotid from the correct position. Gets different measurement at radial and carotid pulses.	Measurement of pulses displays good technique but may not locate them first time - second attempt before they find them. Measures left and right sides separately.	Performs skill competently. Evidence that skill has been done many times before.
8. Perform technically competent physical examination or skill	Duplicated since there are usually two two component parts that are assesse	o separate tasks e.g. one part of an examined separately.	nation, followed by a procedural skill. (Dccasionally, a system exam is broken into
9. Summarise Case Findings	Can't summarise or doesn't use suitable terminology; order of findings is illogical and chaotic. Overlooks the concerns of the patient.	Attempts explanation but may be haphazard or repeats what patient said without sufficient analysis or summary Not sufficiently able to distil the really important information of the patient's concerns and results.	Some analysis of information – notes patient's main concerns, results of tests using suitable descriptive terminology.	Findings summarized in logical order and with use of medical terminology and interpretation. Includes a summary of the patient's perspective on the issues at hand.



Appendix 1: Excerpt from UNSW Medicine Professionalism in Medicine, Student Code of Conduct

Students attention is drawn to the following excerpts from the document issued to them at the start of Phase 1 and discussed and signed off in Year 1. Please be familiar with the full text (see Phase 1 Guide and <u>here</u>), but these excerpts are particularly relevant to conducting Clinical Skills and when interacting with patients and staff.

Professionalism: A set of values, behaviours, and relationships that underpins the trust that the public and society has in doctors.

Beginning your professional career in medicine

During your medical education, you will have privileged access to people and their families, and to their health information. The trust that people place in doctors and medical students carries considerable responsibility and expectation regarding your behaviour. It is important that you are aware of these responsibilities and expectations from the beginning of your medical training.

You also have a responsibility to your fellow students and your teachers to always act professionally, honestly and with integrity. Your behaviour outside the clinical environment, including your personal life, may have a lasting impact on your fitness to practice and professional standing. Your behaviour as a medical student should justify the trust that individuals and society place in the medical profession.

These principles operate in conjunction with current State and Federal Acts, Regulations and Codes of Practice that you will need to become familiar with during your training. These include the Good Medical Practice (Medical Board of Australia 2014) and the Health Information Privacy Act (2002).

In addition to the UNSW Student Code of Conduct and the Policies of UNSW Medicine you are registered with the Medical Board of Australia as a student and are governed by NSW Health policies with respect to clinical placements. You must be familiar with and comply with these organisations' documents and policies.

When interacting with patients, staff, and the public in clinical settings, as a medical student you will:

- 1. Be aware and respectful that healthcare settings, including teaching hospitals, are workplaces whose principal function is to treat the sick or injured. Dress and act appropriately. Prioritise the running of healthcare for patients over your own learning or personal benefit.
- 2. At all times, treat patients, their families and all healthcare/hospital staff politely and considerately.
- 3. Respect the dignity and privacy of patients. Maintain confidentiality of patient information, whether spoken, written or electronic.
- 4. Understand that your own values and beliefs may differ from those of patients and healthcare staff. Manage these possible influences on your interactions and respect the autonomy of patients and their families.
- 5. Introduce yourself to patients, ensuring that they understand that you are a medical student. Clearly inform patients (or where applicable, family members and legal guardians) of your role and the purpose and nature of any proposed interaction with them.
- 6. Prior to undertaking any clinical activity, check that the patient understands your request and obtain their consent. Ensure that the patient understands that refusing or withdrawing consent will not impact in any way on their own healthcare.
- 7. If you are asked to carry out clinical duties, be aware of the limits of your knowledge and skills. Ensure that you have appropriate supervision and support when undertaking unfamiliar clinical activities.
- 8. Ensure that your written communications into patient's medical records, such as admissions or ward rounds, follow best practice. If you are documenting into an electronic medical record, ensure that the entry is finalised with sign-off by a clinician.
- 9. Your clinical teachers may be junior or senior doctors, nurses, or allied health professionals. Understand that most clinicians who teach medical students are not directly employed to do so. Respect their generosity with your timely attendance and engagement during any scheduled clinical teaching activities.

Consequences of unprofessional behaviour

Incidents of unprofessional behaviour (i.e. breaches of the student code of conduct) may result in serious consequences, ranging from:

- a reprimand;
- a permanent record in your portfolio;
- failure in an assessment or course;
- notification to the Medical Board of Australia (N.B. <u>Fitness to Practice policy</u>)
- Suspension or expulsion from the UNSW Medicine program (N.B. <u>Student misconduct policy and procedure</u>)



Appendix 2: Dress code when working in clinical environments (includes SP's)

Students must note the following excerpt from NSW Health procedural document 'Uniforms Provision, Dress Code and appearance for Clinical and Corporate Services Staff'. This document states "COMPLIANCE WITH THIS DOCUMENT IS MANDATORY". UNSW Medicine also expects this from students.

Staff not required to wear a uniform:

Clothing must be neat and in good repair.

- The following items are considered unacceptable:
 - Singlet, low cut and revealing tops
 - Clothing with writing, logos or advertisements
 - Patches/ fringes on clothing
 - Thongs/ crocs
 - Leggings
 - Midriff blouses
 - Tracksuit pants, scruffy jeans, very short skirts

Shoes

- Closed footwear (i.e. not open toed or backless) with non-slip soles, of a solid colour (black, brown or navy blue) and with non-slip soles must be worn at all times
- Footwear should be leather/vinyl and impervious to hazards in the workplace
- A risk management approach is to be adopted when assessing suitability of footwear requirements within individual working environments

All Staff

Hair

- Hair below collar length should be tied back at all times
- Head/ hair protection is mandatory in certain areas including kitchens and operating theatres
- Facial hair should be neat and trimmed

Jewellery

- Clinical staff are advised that jewellery should be removed wherever possible prior to patient contact
- Fashion jewellery (long necklaces and earrings) are a WHS risk and are considered unacceptable.
 - Similarly, ID badges (specifically lanyards), ties and scarves that may present a WHS or infection risk if contact with patients occurs should be removed wherever possible or secured so as not to make contact with the patient or surrounds.
- Hand and wrist jewellery, including watches are to be removed as they present an infection risk. Simple/ plain wedding bands are the only acceptable piece of jewellery to be worn by clinical staff below the elbow.
- All jewellery, including wedding bands are to be removed prior to performing aseptic procedures to reduce the risk of infection and promote patient safety.

Hand Accessories

- All staff that have direct contact with patients are advised that artificial fingernails or fingernail extensions present an infection risk and are therefore considered unacceptable during work hours.
- Natural fingernails should be no longer than 0.5cm in length and be free of nail polish to reduce the risk of infection to patients.

Men's Attire

- Men's ties are only acceptable in non-clinical areas. Exceptions may be made where it is deemed appropriate, such as general consultation between a medical staff member and a patient. In these cases, ties should be secured so as not to make contact with the patient or surrounds.
- It is expected that shirt sleeves be rolled to above the elbow by all staff in clinical areas to aid hand hygiene and decrease the risk of infection to patients.

Religious/ Cultural Items

• Articles of clothing/ jewellery considered to have cultural/religious significance are acceptable if they comply with the acceptable standards set out above.



Appendix 3: Hand Hygiene, hand care and bare below the elbows procedures

Students must note this NSW Health procedural document which states **"COMPLIANCE WITH THIS DOCUMENT IS MANDATORY"**. UNSW Medicine also expects this from students. Current link is: <u>https://www.cec.health.nsw.gov.au/ data/assets/pdf file/0010/383239/IPC-Practice-Handbook-2020.PDF</u> The document may also be accessed from: <u>https://www.cec.health.nsw.gov.au/keep-patients-safe/infection-prevention-and-control/healthcare-associated-infections/policies,-guidelines-and-handbook</u>

Hand hygiene as per '5 moments of Hand Hygiene' is expected to be conducted by medical students. Posters of this policy can be found in the Clinical Skills Area in Wallace Wurth and is reproduced below. Students must also comply with the Hand Care and 'Bare below the elbows' requirements.

Students must familiarise themselves with PPE requirements, guidance, training and resources in response to COVID-19 in NSW Health: <u>https://www.cec.health.nsw.gov.au/keep-patients-safe/COVID-19/personal-protective-equipment</u> and complete the PPE Module online activity available in Moodle.

Bare below the elbows

Medical students in clinical areas need to adhere to the following aspects of NSW Health Procedure document SESLHDPR/343 4.9:

Hands/wrists and fingers

• Fingernails

- Neat, no longer than the tip of the finger
- No nail polish, acrylic/gel nails, nail extensions or nail art or other adornments

• Fingers

- One significant plain ring is acceptable. Rings with large or multiple settings or detailed scrollwork must not be worn
- If a plain ring is worn, the ring should be removed or "loosened" each time hand hygiene is performed. The area under the ring must be washed, rinsed and thoroughly dried if using soap and water, attention to these areas and drying of bands including areas under ring should be considered when using

drying of hands including areas under ring should be considered when using Alcohol Based Hand Rub

Hands and wrists

- No jewellery, rings with large or multiple settings or detailed scrollwork
- If a wristwatch is necessary for clinical care, it must be removable and able to be cleaned
- All hand and wrist jewellery must be removed for all invasive procedures, including preparation of aseptic or sterile field
- Prior to commencing a surgical hand scrub, HCWs must remove: all hand and wrist jewellery, including the significant ring
 - If, for cultural reasons hand or wrist jewellery cannot be removed, a risk assessment will need to be attended by the service manager
- Staff wearing support bandages, splints or casts that cover any part of the hand cannot perform the 5
 Moments for Hand Hygiene when providing patient care and therefore must be found alternative duties until the support bandage, splint or cast is removed

Arms

- Clothing that extends below the elbows must be removed or sleeves rolled up to the elbows during direct patient care.
- Patient gowns must not be worn over clothing/uniforms at any time

Head and neck

- Long neck scarves must not be worn
- Long hair must be tied back
- Head scarves, if worn for cultural reasons, must be secured so as not to hang free at the front
- Ties should not be worn, consider 'no tie or bowtie' unless secured by a tie pin
- Lanyards must not be worn by persons involved in direct patient care
 - ID badges ideally should be attached to a 'zinger' (recoiling device) at the waist









5 Moments for HAND HYGIENE



APAHENI	Why: To protect the patient against acquiring harmful germs from the hands of the HCW.
2 BEFORE A PROCEDURE	When:Clean your hands immediately before a procedure. Why: To protect the patient from harmful germs (including their own) from entering their body during a procedure.
3 AFTER A PROCEDURE OR BODY FLUID EXPOSURE RISK	When: Clean your hands immediately after a procedure or body fluid exposure risk. Why: To protect the HCW and the healthcare surroundings from harmful patient germs.
4 AFTER TOUCHING A PATIENT	When:Clean your hands after touching a patient and their immediate surroundings. Why: To protect the HCW and the healthcare surroundings from harmful patient germs.
5 AFTER TOUCHING A PATIENT'S SURROUNDINGS	When:Clean your hands after touching any objects in a patient's surroundings when the patient has not been touched. Why: To protect the HCW and the healthcare surroundings from harmful patient germs.





http://www.hha.org.au/ForHealthcareWorkers/promotion.aspx

Students must be aware of the impact of COVID which has caused an appropriate tightening of infection control requirements, but these are changing with the caseloads. Please

- refer to local guidelines in hospitals,
- follow all direction on infection control from admin, nursing and medical staff and
- keep abreast with requirements through NSW Health: <u>https://www.health.nsw.gov.au/Infectious/covid-19/Pages/ppe.aspx.</u>

Students at Phase 1 level would never be expected or required to don full PPE and/or interact with COVID infected or suspected patients. If students do not feel suitably trained for any interaction or the PPE required for it, or suitable PPE is not available, they should politely decline the opportunity.

