MBChB1 Clinical Skills

Session 2015-16

Location

All sessions take place in the Clinical Skills Laboratory, 4th floor, Wolfson Medical School Building.

Important Information

This document contains the Intended Learning Outcomes (ILO’s) and activities which have been designed to introduce you to clinical procedural skills that are taught in year 1. It is mandatory that students view any teaching material recommended in this booklet for each clinical skill prior to the clinical skills practical session.

There are online programmes for Cleanliness Champions, Moving and Handling (Manual Handling) and introduction to the National Early Warning Scoring system.

You cannot possibly become proficient in these skills simply by attending your one session. At that session you will be given just one opportunity to practice this skill, either on a manikin, yourself or your colleagues.

You will then need to make time in your life to practice this skill over and over again so that you become proficient at it. The motto should be: ‘see one, do one and practise, practise, practise…’

Practice can be carried out either in the clinical skills area, if this involves a manikin or model, or at your general practice attachment. You should book into the clinical skills area and use the resources there via Mrs Sam Cameron: sophia.cameron@glasgow.ac.uk

A formative OSCE (Objective Structured Clinical Examination) will be carried out before the Spring break. The mark sheets will be given back to you, with feedback, when possible from the examiners. You may also be examined in the written papers on theory related to some of the clinical skills taught.
### CLINICAL SKILLS
Year 2014-15

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Resources

1. Videos/DVDs/ Podcasts

Most of these have been made ‘in house’ by staff from the University of Glasgow; one was bought commercially. They should be your ‘Gold Standard’ for the technique to be used in the O.S.C.E. in Glasgow.

The videos/DVDs are:

- Year 1

  Examination of the heart: the basics.
  Examination of the respiratory system.
  GALS – examination of the musculoskeletal system.
  Blood pressure measurement (British Hypertension Society)

  Video-Podcasts for year 1 available are:

    Hand washing
    Venepuncture
    Intramuscular injection

The podcasts are all on the Moodle site, and can be downloaded onto laptop/ personal devices/smart phones.

The clinical skills podcasts are also on iTunes University of Glasgow site

Clinical Skills podcasts on iTunesU

or

Clinical Skills videos on YouTube Edu (this site seems easier to access)

You need to download ITunes

www.apple.com/itunes to access these

E-Book via GU library

1. Hand washing

Guidelines on hand washing are at all sinks within the medical school. A video podcast is available on Moodle and it is mandatory that students view this before the first clinical skills practical session. **It is expected that students will carry out proper hand washing technique before any clinical procedure is carried out.**

You will also be expected to be ‘bare below the elbow’ for all clinical skills sessions- this means the removal of rings (plain band wedding rings can be worn) all bracelets, and hair tied up. This skill can be examined in the OSCE at end of Year 1.

Notes on handwashing can be found on The Royal Marsden Hospital Manual of Clinical Nursing Procedures(2015) e-book on the University of Glasgow Library site: **pages 61-68**

2. Injections Technique (Intramuscular and subcutaneous)

**Intended Learning outcomes:**

By the end of the session and further study the student will:

1. Appreciate the rationale for using the injection route
2. Outline the principles of, and issues relating to, administering a drug by injection
3. Discuss health and safety issues, especially for doctors, when giving injections
4. Identify the key principles of practice for administering intramuscular and subcutaneous injections

Extensive notes on injections technique can be found on The Royal Marsden Hospital Manual of Clinical Nursing Procedures(2015) e-book on the University of Glasgow Library site **Pages 731-743**

A PowerPoint presentation and Video-podcast will be available on Moodle and it is mandatory that students view this before the clinical skills practical session
3. Cardiopulmonary Resuscitation (CPR)

Pre-course reading:

The Resuscitation Council (UK) Guidelines 2010.
www.resus.org.uk/pages/prehospital
www.resus.org/pages/adultbasiclifesupport
www.lifesaver.org.uk


Intended Learning Outcomes:

By the end of the session the student will:

1. Describe the indications for basic life support;
2. Demonstrate a safe approach for self and any bystanders. Verbalize potential hazards
3. check of casualty’s responsiveness;
4. demonstrate head tilt-chin lift;
5. demonstrate and describe assessment of breathing and signs of life;
6. describe activation of the emergency services;
7. When obtaining help ask for an automated external defibrillator (AED)
8. Demonstrate initiating and continuing 30 chest compressions followed by 2 breaths using expired air (mouth to mouth) ventilation for at least two minutes.
9. When AED arrives, the student will attach the pads to the casualty’s chest
10. Check for any external factors which may interfere with using the AED.
11. Follow the sequence of visual and verbal prompts/ instructions maintaining safety of all involved.

Assessment:

There is no formal assessment of these skills in year 1, however a formative OSCE will be carried out that will include a resuscitation station.
4. Venepuncture

Aim:
On completion of the Venepuncture programme (completion of the pack, attendance at simulated practice session, supervised practice and successful completion of assessments) the practitioner will be competent in the clinical skill of Venepuncture.

Venepuncture, by definition, is the puncture of a vein with a needle for any therapeutic purpose, for example to remove blood. The collection of blood samples for analysis is almost routine in current clinical practice and performed by a variety of health care professionals throughout various health care settings.

Intended Learning outcomes

1. Demonstrates knowledge of the anatomy and physiology of the blood vessels of the upper arm
2. Identifies and analyses the appropriateness of venepuncture
3. Discusses the indications of venepuncture
4. Selects appropriate venepuncture equipment with rationale for choice
5. Recognises limitations and accesses assistance as required
6. Develops an awareness of the psychological impact of venepuncture for the patient
7. Critically analyses the clinical risks associated with venepuncture and takes appropriate action to manage risk

There is a separate Venepuncture teaching pack developed for NHS Education for Scotland by University of Dundee/ NHS Tayside and NHS Fife that is on the Clinical Skills Moodle site.

This clinical skill pack aims to provide the medical student with the appropriate knowledge and skills to enable him/her to perform venepuncture successfully throughout the five years of the course, but in first year, this is an introduction to the procedure.

A PowerPoint presentation and Video-podcast will be available on Moodle and it is mandatory that students view this before the clinical skills practical session.

Extensive notes on Venepuncture can be found on The Royal Marsden Hospital Manual of Clinical Nursing Procedures (2015) e-book on Pages 519-523, as well as a Venepuncture teaching pack on your moodle site.
5. Measurement of Blood Pressure

Intended Learning outcomes

By the end of the session and further study the student will:

1. Discuss the equipment used for blood pressure measurements and the meaning of the reading obtained
2. Identify the normal values for blood pressure and factors affecting blood pressure
3. Accurately measure a person’s blood pressure using manual and electronic equipment

Extensive notes on recording the blood pressure can be found on The Royal Marsden Hospital Manual of Clinical Nursing Procedures (2015) e-Book Pages 610-618

6. Measuring and Recording the Pulse

Intended Learning outcomes

By the end of the session and further study the student will:

1. Explain the rationale for monitoring the pulse rate
2. Identify the normal values of the pulse for different age groups
3. Locate pulses in different areas of the body, and identify which might be used in specific situations
4. Accurately measure the person’s pulse rate

Extensive notes on recording the pulse rate can be found on The Royal Marsden Hospital Manual of Clinical Nursing Procedures (2015) e-Book on Pages 597-604
7. Measuring and Recording Temperature

Intended Learning outcomes

By the end of this session and further practice the student will be able to

1. Explain the rationale for monitoring temperature
2. Identify the sites and equipment used for measuring temperature
3. Accurately measure a person’s temperature

Extensive notes on recording the temperature can be found on The Royal Marsden Hospital Manual of Clinical Nursing Procedures (2015) e-Book

Pages 634-640

8. Measuring and Recording Respirations

Intended learning outcomes

By the end of the session and further study the student will:

1. Discuss when and why observation of respiration is performed
2. State the normal respiratory rates for different age groups
3. Discuss what other aspects of breathing health care professionals observe when measuring respiratory rates
4. Accurately measure and record the respiratory rate
5. Define terms commonly used for breathing abnormalities

Extensive notes on recording the respiratory rate can be found on The Royal Marsden Hospital Manual of Clinical Nursing Procedures (2015) e-Book

Pages 618-630
9. National Early Warning Score

This system is based on a simple scoring system in which a score is allocated to physiological measurements already undertaken when patients present to, or are being monitored in hospital. Six simple physiological parameters form the basis of the scoring system:

1. Respiratory rate
2. Oxygen saturations
3. Temperature
4. Systolic blood pressure
5. Pulse rate
6. Level of consciousness

A score is allocated to each as they are measured, the magnitude of the score reflecting how extreme the parameters varies from the norm. The score is then aggregated. The score is uplifted for people requiring oxygen. It is important to emphasise that these parameters are routinely measured in hospitals and recorded on the clinical chart. In year 1 we do not teach formally in clinical skills about level of consciousness or oxygen saturations, but they may be mentioned in PBL sessions.

The charts are available for free download at the Royal College of Physicians website www.recplondon.ac.uk/national-early-warning-score and also at

http://tfinews.ocbmedia.com

This is an online training package focused on the use of NEWS has been developed. Students can work through the programme and gain a certificate on completion. This is recommended as mandatory for all healthcare staff engaged in the assessment and monitoring of acutely ill patients.

It would be in your best interests to make yourself aware of this chart and complete the training package before carrying out clinical practice in hospitals, especially if you wish to work in vacation as a health care assistant.
10. First Responder

The principles underlying this session are precisely similar to those for resuscitation.

**Aim:** To develop the students’ understanding of their role in an emergency.

**Intended Learning outcomes**

By the end of the session and further study the student will:

1. Describe the role of the first responder in emergency situations.
2. Outline the aims and responsibilities of the student if they are attending a casualty.
3. Explain the initial assessment process when dealing with an incident.
4. Describe the measures required to ensure safety of the casualty, the person attending and others at risk.
5. Describe what is covered in a primary survey.
6. Describe what is covered in a Secondary survey.

**Websites/ Resources**

First Aid manuals  www.dk.com/firstaidmanual

Or  www.firstaidbook.co.uk

BBC Health and first Aid Café-  www.bbc.co.uk/health/first aid action

St Andrews Ambulance  www.firstaid.org.uk

St John’s Ambulance  www.sja.org.uk

First Aid DVD-  http://safetyshop.com
11. Cleanliness Champions

You are expected to complete this programme by the end of Preparation for Practice in Year 5. Some of you may wish to start the programme now, especially if you want to take some part time work in the NHS as a support worker/phlebotomist and it may be essential to provide evidence of knowledge in this area. This can be covered doing some of the modules offered in the learn.pro materials via NHS Scotland.

1. Register at this link to request an activation code for learn pro


2. Once you have registered you can access this link to guide you to the Cleanliness Champions teaching materials and assessments


Further information can be found at http://www.nes.scot.nhs.uk/education-and-training/by-theme-initiative/healthcare-associated-infections/learnpro.aspx

Also useful are the extensive notes in The Royal Marsden Hospital Manual of Clinical Nursing Procedures(2015) e-Book from pages 61-80, re handwashing, infection control/prevention etc.

Once completed, forward the completed assessment to Vikki

3. Moving and Handling/ Manual Handling course

You are expected to complete this on-line course before clinical practice in year 3; however some of you may wish to start the programme now, especially if you want to take some part time work in the NHS as a support worker/phlebotomist and it may be essential to provide evidence of knowledge in this area. This can be covered doing some of the modules offered in the learn.pro materials via NHS Scotland.

Please use the links as above to access LearnPro and the specific course.
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<td>Measuring pulse, blood pressure, temperature and respiratory rate (Introducing the Early Warning Scoring System)</td>
<td>Blood glucose measurement using reagent strips with and without a glucometer and interpretation</td>
<td>Managing an ECG monitor/performing and interpreting a 12 lead ECG</td>
<td>Recognition and Management of the Acutely Ill Patient (presently at Kirkland’s and Ayrshire Hospitals only)</td>
<td>Acute Care Days:</td>
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<td>Hand washing Cleanliness champion programme (online programme to be completed by graduation)</td>
<td>Subcutaneous administration of insulin</td>
<td>Heart sounds using Harvey</td>
<td>Arterial blood gas sampling and interpretation</td>
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<td>Venepuncture and correct management of specimens</td>
<td>Regional examination of the musculoskeletal system part 1 - lower limb and spine</td>
<td>Faecal occult blood testing</td>
<td>Transcutaneous monitoring of Oxygen</td>
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<td>Administering subcutaneous intradermal and intramuscular injections</td>
<td>Neurological examination [Motor system in limbs]</td>
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<td>Basic Life Support</td>
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<td>Suturing including safe use of local anaesthetics and basic wound management</td>
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<td>Care of the Unconscious Patient</td>
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<td>Examination of the ear</td>
<td>Blood cultures</td>
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<td>Pelvic examination</td>
<td>Preparation for Practice</td>
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<td>Dosage and administration of insulin and sliding scale</td>
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