

University of
Hertfordshire



Student Clinical Logbook

2019/20

MSc Physician Associate Studies

University of Hertfordshire

NAME:

If found, please return to:

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Clinical And Pharmaceutical Sciences Department
College Lane
Hatfield
Hertfordshire
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Introduction

Please use this logbook as a record of all clinical examination and procedural skills activities throughout your clinical placements (General Practice and Hospital Placements including Psychiatry Placements).

Why use a clinical log book?

The clinical part of the MSc Physician Associate course is less structured and calls for more self-direction and initiative than earlier parts. This means that you must take responsibility for directing your own learning in the hospital and general practice environment. This clinical log book is intended to help you with this and we hope you will find it useful. It will:

- show you what you should be observing, doing and practising when you are in the wards, clinics, theatres and in general practice;
- help identify any gaps in your learning and guide you in remedying them;
- prepare you for the Objective Structured Clinical Examination (OSCE), at which you will be assessed on your performance of the skills described in this book.
- In your E portfolio you will have further instructions on how to complete the core curriculum matrix conditions.

These instructions are for guidance only, but we hope that it will help you plan and monitor your learning.

Core Assessment Tools:

The essential and core assessment tools in the portfolio consist of DOPS, Mini-CEXs and CBDs which are each divided up into domains such as “Communication Skills & Professionalism”, “Technical Ability”, “Organisation/Efficiency”, “History Taking”, “Clinical Examination”, etc.

These domains, within each assessment tool, are assessed based on a four-level grading scale as follows:

1. Did not Attempt
2. Attempted but not yet Competent
- 3. Competent**
4. Unable to Comment

Grading Scale & Categories:

Based on the explanations above, the grading scale we use is described as below:

Grading Scale:	Description:
“Competent”	A student is assessed as “Competent” in a particular skill or attribute if they are considered by a qualified professional to have demonstrated safe and effective practice in a particular skill, such as History Taking or performing an Arterial Blood Sample, within the context of professional, ethical, empathetic, open, honest, evidence-based and reflective practice.
“Attempted but not yet Competent”	If the student demonstrates some ability which is not as yet considered competent to allow them to repeat this procedure without supervision, they may be deemed by the qualified professional as “Attempted but not yet Competent.”

“Did not Attempt”	If the student does not perform the procedure or a component thereof or indeed forgets an aspect of the procedure, skill or assessment, they may be considered by the healthcare professional as “Did not Attempt.”
“Unable to Comment”	If an aspect of the assessment tool is not relevant to the specific procedure, skill or assessment in question, or if indeed an aspect of the procedure, skill or assessment in question was not completed, conducted or observed for whatever reason, the healthcare professional select “Unable to Comment” for that particular domain and then explain in detail in the free text area of the assessment tool.

The student is expected to gain ongoing and formative feedback using the DOPS, Mini-CEXs and CBDs throughout all their clinical placements, and by the end of the first year of the PA programme, they must be able to have a minimum amount of documents as stated in the year one portfolio criteria. Students must be passed as **“Competent”** in each domain of each assessment.

The process continues in Year 2 of the PA programme, by the end of which they are expected to gain a set of documents to evidence learning and be passed as “Competent” in each domain of each assessment.

In line with medical and other training of students, the PA students will be able to gain feedback and assessment using these tools from any healthcare professional who is at least two grades above them. In practice, this translates to Foundation Year 1 and Year 2 doctors, ST1/2/3 and above doctors, qualified Physician Associates, senior and specialist nurses (Band 5 and above), advanced nurse practitioners, qualified pharmacists, as well as other any other healthcare

professionals (such as Occupation Therapists, Physiotherapists, Social Workers, Phlebotomists, etc) for specific skills and procures that fall within their competencies.

Definition of “Competence”:

The national [Competence and Curriculum Framework](#) describes, explains and defines “**Competence**” as follows:

“In this Framework competence is defined within a professional context as the broad ability with which a professional person is able to practice to the required standards in a predetermined range of clinical fields and across a range of situations. This broad definition includes attributes that can be applied, clinical performance (Stuart 2003), and the use of professional judgment (Carr 1993). More specifically, in the medical context, a newly qualified PA must be able to perform their clinical work at the same standard as a newly qualified doctor. And similarly an experienced PA must be able to perform at the same standard as an experienced junior doctor, asking for help from the consultant as needed, in the same way that a junior doctor would. This principle is based on the moral requirement that patients are entitled to first-class treatment which is not endangered by the involvement of new practitioners and the principle underpins the setting of a national examination and the close involvement of experienced doctors in teaching and assessing PAs.” (DH, 2012).

For each assessment, and within each assessment tool, there is space for free text feedback, agreed learning outcomes and needs for the assessor to use and discuss with the student.

Learning Needs Analysis Form:

The Learning Needs Analysis Form is a core/essential form to be completed at the start of each clinical placement in order to provide formative feedback to the student on their progress up to the point just prior to starting their current placement.

Using this form, at the beginning of each placement, the clinical supervisor and student must meet to discuss the student's ongoing and specific learning needs and personal development plan. This discussion could be informed by the students' own learning needs, feedback from colleagues, academic performance to date and clinical feedback in previous placements.

Using this form, the aim of the clinical supervisor is to establish what the student already knows and has achieved and what areas the student needs to develop and gain further learning opportunities and experiences in during their placement.

Learning needs can change during placement and the supervisor and student are expected to discuss any additional learning needs as and when they develop and to complete additional Learning Needs Analysis Forms if required.

Initial, Mid- and End-of-Placement Meeting Forms:

Within each placement, the clinical supervisor and student must meet to complete an Initial, Mid- and End-of-Placement Form. The student must complete all three meetings per clinical placement in order to pass that placement.

In the End-of-Placement Meeting Form, the clinical supervisor will make an overall professional judgement, based the student's overall performance, assessments, supervision, professionalism, attendance, team-working and communication

skills, as well as the evidence of assessments, learning and reflection in their portfolio, in addition to formal and informal feedback from the multi-disciplinary team, whether the student has passed as “Competent” or not for that rotation. The grading scale used is based on the same definitions and categories as that for all other assessment tools in the portfolio, namely:

1. Did not Attempt
2. Attempted but not yet Competent
- 3. Competent**
4. Unable to Comment

All placement forms and documentations can be found within the e portfolio platform.

Log book Practical Skill Assessments signoff criteria

Assessment of all practical skills should be completed and formally documented by the end of Year 2. Failure to complete all the assessments by the end of Year 2 means the student has not fulfilled the required expectation will not pass the portfolio element of the module.

Each topic within the student log book requires the 3 signatures, date and contents namely within: Teaching, Peer to Peer and Clinical.

Stages of Assessment

There are 3 stages to the assessment for each practical skill.

1. Teaching Assessment (Stage 1)

Teaching columns refer to the date the student was taught the procedure or examination and by which member of staff. Depending on the complexity of the topic, this column will usually be completed by either:

- A Clinical/Educational supervisor
- An AHP/Nurse
- A medic of F2 and above

2. Peer to Peer Assessment (stage 2)

Once a particular practical skill has been taught, students are expected to practice this skill in the clinical skills centre or placement until they are confident. All skills must then be peer assessed and signed off by their appropriate peers.

Peer to Peer columns, again depending on complexity, can be completed by

- A Clinical/Educational supervisor
- An AHP/Nurse
- A medic of F2 and above

3. Clinical Assessment (stage 3)

Before a clinical assessment (stage 3) can be undertaken, the peer to peer assessment (stage 2) must have been completed.

Clinical assessments (stage 3) must be completed by a senior clinical member of staff* who regularly undertakes the particular skill and the assessment must be recorded.

By signing columns, assessors are confirming the student has achieved most if not all of the elements of the topic listed.

On submission of the logbook, students are confirming that all documentation and signatures are from genuine clinicians and colleagues. A series of logbooks will be randomly selected and evaluated for accuracy and validations. Students should be prepared to vary signatures if requested.

**Senior Nurse, Senior Operating Department Practitioner, Physician's Associate, Midwife, Practice nurse, Physiotherapist, Clinical Skills Tutor, GP or Hospital Doctor (F3 or above).*

Overview of Practice Portfolio **criteria Year one**

Summative Assessment Component Parts:

- A. Completion of 70% the Year One student **Clinical Skills and Examination logbook**

- B. Students will use a variety of tools to demonstrate **competences of a variety of conditions from the Matrix of Core Clinical Conditions** and will have to submit a minimum of
 - ❖ 10 case-based discussions
 - ❖ 6 reflective logs
 - ❖ 6 multi-source feedback of which
 - One must be the Clinical/Educational supervisor
 - One must be AHP/Nurse
 - One must be a medic of F3 and above

Conditions **cannot** be duplicated within each element of the above and students must be signed off as competent in all the submitted documentation.

- C. Please complete the following **e-learning for Health modules**:
 - ❖ Emergency medicine/critical care/shock module
 - ❖ Emergency medicine/critical care/Adult cardiac arrest and Peri-Arrest resuscitation
 - ❖ Emergency medicine/medicine/Dermatology/anaphylaxis

- ❖ Acute medicine (ACUMEN)/ACUMEN knowledge/Neurology/Dealing with an unconscious patient
- ❖ Anaesthesia/Core training - clinical/e-LA Module 03/introduction to critical care/04 unconscious patient/general principles/examination of unconscious patient
- ❖ Blood transfusion
- ❖ Death Certification
- ❖ Pain module
- ❖ Statutory and mandatory module **EXCEPT**
 - Preventing Radicalisation - Basic Prevent Awareness
 - Preventing Radicalisation - Awareness of Prevent (Level 3)
 - Preventing Radicalisation (Mental Health) - Level 3
 - Resuscitation - Level 1
 - Resuscitation Adults - Level 2
 - Resuscitation Paediatric - Level 2
 - Resuscitation Newborn - Level 2
 - Health Education England Learning Path
 - Retired Courses

D. **Record of placement hours:** - Students need to demonstrate attendance of all placement hours as per the 7LMS0214 module requirements. Students missing more than 10% of practice will normally be awarded a FREN for this module and will need to re-enrol.

E. Students will log within their e portfolio tracker sheet any conditions they have encountered and reviewed however in year one there is no minimum number of conditions to be reviewed.

Overview of Practice Portfolio criteria Year Two

Summative Assessment Component Parts:

Students will use a variety of tools to demonstrate competences of a variety of conditions from the Matrix of Core Clinical Conditions.

Section A

- a) 80% of conditions within the 1A category and a minimum of 20% in all the other 3 categories (1B, 2A, 2B) combined. The 20% must not be duplicated from conditions submitted last year. The 80% is inclusive of any conditions submitted in year one.

Students will be required to populate the e portfolio spreadsheet tracker to demonstrate learning however will only have to submit:

- 6 best case-based discussions;
- 6 best mini CEX;
- 10 reflective logs;
- 6 student teaching assessment
- 8 multi-source feedback of which
 - One must be the Clinical/Educational supervisor
 - One must be AHP/Nurse
 - One must be a medic of F3 and above
- Emergency presentations as detailed below
- Core procedural and examination skills as detailed below
- Medical presentations as detailed below

Conditions cannot be duplicated within each element of the above or repeated from year one and students must be signed off as competent in all the submitted documentation or evidenced with e-Learning.

- b) Assessment of all **core procedural and examination skills** - To pass this element of assessment students must complete the entire clinical examination and procedural log book.
- c) All **emergency presentations** as listed in appendix (Two) using a combination of e learning, reflection and case-based discussion evidence.
- d) **Medical presentations** (see appendix One) - To pass this element of the assessment the student normally must achieve a level of competence in 50% of the medical presentations using a combination of Case-based discussion and mini CEX documentation.

Section B

Record of placement hours: - Students need demonstrate attendance of required placement hours in the second year. Students missing more than 10% of practice attached to the 7LMS0215 module will normally be awarded a FREN for this module and will need to re-enrol.

Students are reminded that if at any point they feel they are unable to achieve the above criteria, it is their responsibility to approach their supervisors (in the hospital or at the University) for support by June at the latest especially in achieving the required procedural and examination skills.

On submission of the e-portfolio for assessment, students will be required to sign a final declaration stating that the portfolio is

their own individual work and all the signatures and information are correct and authentic to the best of their knowledge.

Students are reminded of the University policy on Academic Offenses **UPR AS14**.

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1. ABDOMINAL EXAMINATION

Instructions

1. Introduce self, gain consent, co-operation and conform ID of patient.
2. Perform hand hygiene, roll up sleeves, and remove watch.
3. Explain procedure to patient.
4. For inspection: position the patient supine on an examining table or bed, with arms at the sides and head and knees supported.
5. Observe the general contour of the entire abdominal wall.
6. Check the flanks for any bulging.
7. Inspect wall skin for abnormalities such as the bluish discoloration of the umbilicus or flanks, striae and surgical scars.
8. Check the skin for engorged veins in the abdominal wall and the direction of blood flow in these veins.

Place the tips of the index fingers together, compressing a visible vein. The fingertips are then slid apart, maintaining compression, producing an empty venous segment between the fingers. A finger is removed from one end and the vein is watched for filling. The procedure is then repeated, but the opposite finger is removed and the vein again checked for filling. Above the umbilicus, blood flow is normally upward; below the umbilicus, it is normally downward. Obstruction of the inferior vena cava will cause reversal of flow in the lower abdomen.

9. In addition to these large dilated veins, note should be made of any spider angiomas of the abdominal wall skin.
10. Inspect the abdomen for masses from several angles. The mass should be examined for movement with respiration or for pulsation with each heartbeat. Also, the mass should be observed for peristalsis, as it may well represent dilated bowel.
11. Observe the abdominal wall for motion with respiration.
12. For auscultation: position the patient supine on an examining table or bed, with arms at the sides and head and knees supported.
13. Use the stethoscope to listen over several areas of the abdomen for several minutes for the presence of bowel sounds. The diaphragm of the stethoscope should be applied to the abdominal wall with firm but gentle pressure for a full 3 minutes.
14. Perform auscultation for abdominal bruits
15. For palpation and percussion position the patient supine on an examining table or bed, with arms at the sides and head and knees supported.

Take the history and perform inspection and auscultation before palpation, as this tends to put the patient at ease and increases cooperation. In addition, palpation may stimulate bowel activity and thus falsely increase bowel sounds if performed before auscultation. Ask patients with abdominal pain to point to the area of greatest pain.

16. First gently examine the abdominal wall with the fingertips. This will demonstrate the crunching feeling of crepitus of the abdominal wall, a sign of gas or fluid within the subcutaneous tissues. In addition, it will demonstrate any irregularities of the abdominal wall (such as lipomas or hernias) and give some idea as to areas of tenderness.
17. Begin deep palpation of the abdomen by placing the flat of the hand on the abdominal wall and applying firm, steady pressure: start deep palpation in the quadrant directly opposite any area of pain and carefully examine each quadrant.
18. If abdominal tenderness or rebound tenderness is elicited, it should be described as to its location (quadrant), depth of palpation required to elicit it (superficial or deep), and the patient's response (mild or severe).
19. Leave clinical area tidy and perform hand hygiene.
20. Thank your patient.
21. Consider your findings and how to present them in a logical and fluent order.
22. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

2. ARTERIAL BLOOD GAS SAMPLING

Instructions

Normal Blood Values

Gas analysis can be measured in the following units: *NOTE: 1 kilopascal=7.5mmHg*

- mm of mercury (mmHg)
- kilopascals (kPa)

Normal Values

- PaO₂ >10 kPa (75mmHg) when breathing air
- FiO₂ 0.21 (on air)
- pH 7.35-7.45
- PaCO₂ 4.7-6.0 kPa (35-45 mmHg)
- HCO₃ 22-26 mmol/l
- Base excess -2 to +2

When interpreting blood gases – check the following:

- Oxygen status – this determines arterial oxygenation
 - Ventilatory status – determined by PaCO₂
 - Gas exchange – combination of PaO₂, PaCO₂
 - Acid base status – evaluation of pH, PaCO₂, HCO₃
1. Introduce self, explain procedure and gain consent.
 2. Ensure the patient is comfortable and privacy is maintained.
 3. Assemble the equipment necessary for performing an ABG.
 4. Roll up sleeves, remove watch, wash hands and put on gloves (non-sterile).
 5. Check patient identity against request form.
 6. Examine limbs, select and support chosen site.
 - a. Radial artery – Lies at the base of the thumb proximal to the 'bracelet' of wrist skin creases.
 - b. Femoral artery – Locate the A.S.I. crest and the Pubic tubercle. The femoral artery would be midpoint between these two points.
 7. Perform Allen's test if indicated / check distal pulses.
 - 1) Ask the patient to make a fist to force the blood from the hand.
 - 2) Apply pressure to compress the ulnar and radial arteries, elevate hand.
 - 3) Ask the patient to relax their hand (the palms and fingers will appear blanched / white).
 - 4) Remove pressure from the ulnar artery only. The hand should become flushed within 10 seconds indicating adequate ulnar perfusion.

If the test shows poor ulnar perfusion of the hand, then the radial artery in that limb must not be used for sampling.

8. Remove blood gas syringe from packet ensuring that the needle is firmly attached to the syringe.
9. Ensure the safety guard (pink needle guard) is pulled back from the needle.
10. Pull back the plunger to 1.6mls (volume of arterial blood needed).
11. Check local equipment (here: BD Preset)
12. Palpate artery for maximum pulse.
13. Encourage the patient to hyper expand the wrist ensuring that you are providing support by a pillow etc.
14. Clean site with a chlorhexidine swab thoroughly and allow to air dry.
15. Hold syringe at 45 degrees (pointing in the opposite direction of arterial flow).
16. Keeping the pink needle guard facing upwards will ensure that the bevel of the needle is up. Puncture the skin and enter artery.
17. Allow the syringe to auto fill with blood. Then using one hand cover the needle with the guard as you withdraw the needle ensuring you apply pressure to the puncture site – five minutes if no clotting issues/ten minutes if clotting issues known.
18. Remove needle from syringe and discard into sharps bin.
19. Expel air from syringe and apply cap. Gently mix the sample.
20. Label syringe and take for analysis with request form and agitate gently.
21. Ensure patient is comfortable.
22. Leave clinical area clean and tidy, wash hands. Do all in a professional manner.
23. Thank your patient.
24. Consider your findings and how to present them in a logical and fluent order.
25. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

3. BEING COMPETENT IN THE USE OF LOCAL ANAESTHETICS

Instructions

1. Introduce self, gain consent, co-operation and conform ID of patient.
2. Perform hand hygiene, roll up sleeves, and remove watch.
3. Explain procedure to patient.
4. Check the drug against the prescription chart.
5. Check the dose against the prescription chart.
6. Check the route against the prescription chart.
7. Check the expiry against the prescription chart.
8. Draw solution up using a drawing up needle.
9. Expel any air.
10. Remove drawing up needle and place directly into sharps bin.
11. Place syringe back into its outer packaging to follow ANTT guidelines.
12. Select appropriate site and positions patient.
13. Connect new needle to syringe.
14. Insert the needle swiftly at an angle of 90 degrees to the skin.
15. Remove needle and place directly into sharps bin.
16. Leave clinical area tidy and perform hand hygiene.
17. Document drug administered and sign on the drug chart.
18. Thank your patient.
19. Consider your findings and how to present them in a logical and fluent order.
20. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

4. BI-MANUAL EXAMINATION

Instructions

1. Introduce self, gain consent and co-operation. It is really important that you don't rush this and that you spend time explaining the reasons for bi-manual examination.
2. Make sure a chaperone is available.
3. Ensure privacy and dignity is maintained throughout.
4. Ensure that the patient has emptied her bladder if necessary and a urine specimen collected if required.
5. Give the patient clear instructions as to what clothes will need to be removed i.e. "You will need to remove all clothes from the waist down". Ensure that a gown is provided and state that you will return in a few minutes.
6. Roll up sleeves, remove watch, wash hands and put on gloves (non-sterile).
7. Help the patient into the correct position and then tell the patient that you now need to expose her. Ensure that there is adequate lighting.
8. Inspect:
 - a. Inspect the vulva and perineum noting appearance, any abnormalities, soreness, inflammation, swelling, discharge, warts and any other signs. Labia may require to be parted to ensure adequate exposure of clitoris and urethral meatus.
 - b. Apply lubrication to your fingers. Warn the patient that you are about to begin the examination and that you are about to touch her. (It helps to prepare the patient if you initially touch an area away from the genitals before parting the labia with your non dominant hand).
 - c. Rest both your index and middle finger on posterior fourchette and look at your patient. Ask the patient to try and relax, gently insert the fingers as she relaxes and aim for the posterior vaginal fornix. This is in a slightly downward and posterior direction.
9. Cervix:
 - a. Palpate the cervix noting its position, shape, consistency, regularity, mobility and tenderness. Palpate the cervix noting its position, shape, consistency, regularity, mobility and tenderness. Is the internal OS open or closed (only open in evitable miscarriage and labour/postpartum)
10. Uterus:
 - a. Once you have found the cervix, place your fingers behind it so that you can gently push the cervix towards the abdomen.
 - b. With your other hand start pushing down on the abdomen. Most information is often obtained with this hand.
 - c. This should then allow you to feel the uterus between your hands.
 - d. Note the position of the uterus (anteverted / retroverted / axial) and its size and shape.
 - e. The retroverted uterus can be difficult to find. To help, move your fingers anteriorly to the cervix and push down. This brings the uterus up.
11. Adnexal:

- a. Now move your fingers to the right of the cervix into the right fornix and then push down with the abdominal hand. This will allow you to palpate between your fingers.
 - b. Try and palpate the right ovary. Note the size, shape, consistency and mobility. (It is frequently not possible to feel the ovary).
 - c. Palpate for any masses.
 - d. Observe your patient as you do this watching for signs of discomfort, tenderness and pain. It is really important that you build up a good relationship with the patient as she will be able to tell you how it feels. Constantly reassure and explain what you are doing.
 - e. Repeat the above on the left side.
12. Cervical excitation:
- a. Be aware of cervical excitation identified as part of a bi-manual examination.
 - b. Warn the patient that this might feel strange but should not be painful. Place a finger either side of the cervix. Push the cervix from side to side. This will stretch the pelvic peritoneum. Watch your patients face for signs of pain. The presence of excitation implies peritonism.
 - c. Remove fingers and comment on any discharge (colour and smell).
13. Allow the patient to get dressed and explain that you will speak to them about the examination once they are dressed.
14. Wash hands.
15. Thank your patient.
16. Consider your findings and how to present them in a logical and fluent order.
17. Then consider the possible clinical significance of these findings.
18. Leave clinical area clean and tidy.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

5. BREAST EXAMINATION

Instructions

1. Introduce self, gain consent, co-operation and confirm ID of patient.
2. Perform hand hygiene, roll up sleeves.
3. Explain procedure to patient.
4. Make sure a chaperone is available.
5. Ask the patient to disrobe to the waist and then sit on the exam table with her arms at her sides.
6. Inspect and compare both breasts and nipples for colour, size, shape, contour, symmetry, dimpling, texture, and nipple inversion, eversion, or retraction.
7. Continue to inspect the breasts and nipples with the patient in each of these positions: arms overhead, hands pressed against the hips, leaning forward at the waist, and supine.
8. Continue the exam with the patient in the sitting position, arms at her side.
9. Perform a chest wall sweep of each breast: sweep your palm downward from the clavicle to the nipple and assess for lumps.
10. Next, perform bimanual digital palpation of each breast. Place one hand under the breast while pressing the top of the breast with the fingers of the other hand.
11. Assess for lumps as the breast tissue is compressed.
12. Palpate the axillary lymph nodes, down the arm to the elbow and the supraclavicular and infraclavicular area.
13. Ask the patient to lie on the exam table and continue palpation with the patient supine.
14. Position the patient's arm overhead and place a small pillow or towel under the side being examined.
15. Palpate, using the fingertips, in small circles from the axilla to below the bra line in a linear technique.
16. Continue palpation in this manner using three different depths of pressure to reach all of the breast tissue.
17. Palpate the entire breast and well into the axilla for the tail of the breast (the tail of Spence).
18. Complete palpation by depressing the nipple inward toward the chest wall.
19. When palpating the breast mass, note the consistency and mobility of the lesion and the delineation of its borders.
20. Allow the patient to get dressed and explain that you will speak to them about the examination once they are dressed.
21. Wash hands.
22. Thank your patient.
23. Consider your findings and how to present them in a logical and fluent order.
24. Then consider the possible clinical significance of these findings.
25. Leave clinical area clean and tidy.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
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Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

6. CAPILLARY BLOOD GLUCOSE MONITORING

Instructions

1. Introduce self, gain consent and co-operation, confirm ID of patient.
2. Perform hand hygiene, roll up sleeves and remove wrist watch.
3. Measure the blood glucose
4. Ensure the patient has washed their hands.
5. Turn on the blood glucose monitor – ensure it is calibrated.
6. Insert the test strip into the glucose monitor – ensure the strip is within date.
7. Put on gloves.
8. Remove the protective cap from the lancet.
9. Prick the patient's finger – ideally the side of the finger (as this is usually less painful).
10. Gently squeeze the finger to produce a blood droplet.
11. Touch the tip of the test strip against the droplet of blood.
12. Apply gauze to the puncture site to stop the bleeding.
13. Note the reading from the blood glucose meter.
14. Dispose of lancet into sharps bin.
15. Dispose of gloves and cotton wool into an appropriate clinical waste bin.
16. Wash hands.
17. Document the blood glucose reading on the appropriate chart.
18. Thank your patient.
19. Consider your findings and how to present them in a logical and fluent order.
20. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

7. CARDIOVASCULAR EXAMINATION

Instructions

1. Introduce self, gain consent and co-operation, conform ID of patient.
2. Perform hand hygiene, roll up sleeves and remove watch.
3. Explain the procedure to the patient.
4. General Observation
 - a. of patient (colour, conscious level, any pain or breathing difficulty, build)
 - b. of bedside (oxygen or other bedside equipment, GTN spray/medication)
5. Hands and Nails: clubbing, nicotine staining, splinter haemorrhages, tendon xanthoma, Janeway lesions, Osler's nodes, pale palmar creases, palpate to ascertain capillary refill time which should be < 2 seconds.
6. Pulse (see vital signs)
7. Blood Pressure (see vital signs)
8. Face – general colour, malar flush of mitral stenosis
9. Eyes, lips and tongue:
 - a. look in the eyes for xanthelasma, a corneal arcus and for pallor of conjunctivae.
 - b. look at the lips for peripheral cyanosis and under the tongue for central cyanosis. Ascertain general dental hygiene.
10. Neck
 - a. carotid pulse: palpate and listen for bruits
 - b. JVP: should be examined and measured with the patient rested at 45 degrees.
11. Chest/Praecordium
 - a. Observation – look for scars (sternotomy, thoracotomy), a pacemaker, and for visible pulsations or heaves
 - b. Palpation
 - i. Locate the Apex Beat (should know expected site is 5th intercostal space, mid-clavicular line
 - ii. Heaves – use the flat of the hand to feel for parasternal heaves indicative of LVH or RVH
 - iii. Thrills – use the lateral border of the hand to palpate all 4 valve areas for palpable murmurs
 - c. Auscultation
 - i. Auscultate all 4 valve areas (Aortic, Pulmonary, Tricuspid and Mitral) and carotid arteries with the diaphragm of the stethoscope – ascertain the heart sounds and for any added heart sounds or murmurs.
 - ii. It is important to palpate the carotid pulse whilst auscultating the heart sounds because if an added sound is present to determine if this is occurring in diastole or systole by timing with the carotid pulse.
If a murmur is present try to ascertain at which valve area it is heard and whether there is any radiation, for example into the carotids or into the apex.

- iii. Listen at the mitral area with the bell and the patient leaning onto their left hand side – this makes it easier to listen for the low pitched diastolic murmur of mitral stenosis.
- iv. Listen at the tricuspid area with the diaphragm of the stethoscope and your patient sat forward in held expiration which will intensify a murmur due to aortic regurgitation.
- v. Auscultate the lungs, particularly looking for fluid at the bases which may be due to heart failure.

Peripheral Oedema:

- a. look for and palpate for sacral and ankle oedema which may indicate right sided heart failure.
 - b. press into the area of oedema for 5 seconds to establish whether an indentation remains which indicates pitting oedema.
- d. End Pieces
- a. Lying and standing BP
 - b. Abdomen
 - c. Observation for scars, visible pulsations
 - d. Palpation
 - e. Organomegaly – hepatosplenomegaly can occur due to engorgement from right sided heart failure
 - f. Abdominal Aortic Aneurysm – expansile (aorta can be palpable in thin individuals and is pulsatile)
 - g. Palpate femoral pulses
 - h. Auscultation
 - i. for renal and femoral bruits
 - j. Vascular Examination of the Lower Limbs
 - k. (covered separately)
 - l. Fundoscopy – to check for hypertensive and diabetic retinopathy.
- e. Thank your patient.
 - f. Consider your findings and how to present them in a logical and fluent order.
 - g. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
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8. COMMENCING AND MANAGING NEBULISED THERAPY

Instructions

1. Introduce self, gain consent and co-operation, confirm ID of patient.
2. Perform hand hygiene, roll up sleeves and remove watch.
3. Explain the procedure to the patient.
4. Check patient prescription is valid and dated and drug not been administered.
5. Assembly equipment – drug chart, drug to be administered, nebuliser machine, nebuliser chamber, face mask and tubing.
6. Ensure patient is sitting upright and that they're comfortable.
7. Administer correct dose to neb chamber, connect the neb chamber to the face mask, connect the tubing to the neb chamber and the nebuliser machine.
8. Place mask on patient face using a snug fit, ensure the neb chamber is upright at all times.
9. Ask patient to breathe normally, advise that the neb may take up to 10 minutes to finish and that all the solution should be gone from the chamber before patient removes their mask.
10. Dispose of the waste appropriately and perform hand hygiene.
11. Sign the drug chart.
12. Thank your patient.
13. Consider your findings and how to present them in a logical and fluent order.
14. Then consider the possible clinical significance of these findings.

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Date:	Date:	Date:
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9. COMMENCING AND MANAGING OXYGEN THERAPY

Instructions

1. Introduce self, gain consent, co-operation and confirm ID of patient.
2. Perform hand hygiene, roll up sleeves, and remove watch.
3. Explain procedure to patient.
4. The method of delivery will depend on the type and severity of respiratory failure, breathing pattern, respiratory rate, risk of CO₂ retention, need for humidification, and patient compliance. Each oxygen delivery device comprises an oxygen supply, flow rate, tubing, interface & humidification. (Humidification should be used for patient comfort, presence of thick tenacious secretions, or flows >4 L/min.)
5. Choose an appropriate oxygen delivery device.
6. Choose an initial dose:
 - a. Cardiac or respiratory arrest: 100%
 - b. Hypoxemia with PaCO₂ < 40 mmHg: 40-60% initially
 - c. Hypoxemia with PaCO₂ > 40 mmHg: 24% initially
7. Decide on the acceptable level of SaO₂ or PaO₂ and titrate oxygen accordingly.
8. If possible, try to measure a PaO₂ in room air prior to giving supplementary oxygen. (This is not necessary, especially if the patient is in severe respiratory distress or is hypoxic.)
9. Work with nursing staff, respiratory therapist, or outreach services for support in setting up equipment.
10. Apply the oxygen and monitor via oximetry (SaO₂) and/or repeat ABGs (PaO₂) in 30 minutes.
11. If hypoxemia continues, the patient may require respiratory support either invasively or noninvasively—consult with a respiratory specialist.
12. Stop supplementary oxygen when tissue hypoxia or arterial hypoxemia has resolved.
13. Thank your patient.
14. Consider your findings and how to present them in a logical and fluent order.
15. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
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10. CRANIAL NERVE EXAM

Instructions

1. Wash your hands, introduce yourself to the patient and clarify their identity.
2. Explain the procedure and obtain consent.
3. The Olfactory nerve (CN I) is simply tested by offering something familiar for the patient to smell and identify, for example orange/lemon peel, coffee, or vinegar.
4. The Optic nerve is tested in six ways:
 - a. Visual Acuity – tested using Snellen charts. If the patient normally wears glasses or contact lenses, then this test should be assessed both with and without their vision aids.
 - b. Colour – tested using Ishihara plates which identify patients who are colour blind.
 - c. Visual Field – tested by asking the patient to look directly at you whilst you wiggle one of your fingers in each of the four quadrants. Ask the patient to identify which finger is moving.
 - d. Visual Inattention – tested by moving both fingers at the same time and checking the patient identifies this.
 - e. Visual Reflexes – place one hand vertically along the patients nose to block any light from entering the eye which is not being tested. Shine a pen torch into one eye and check that the pupils on both sides constrict. This should be tested on both sides.
 - f. Fundoscopy
5. Oculomotor Nerve (CN III), Trochlear Nerve, Abducent Nerve (CN VI) – Asking the patient to keep their head perfectly still directly in front of you, you should draw two large joining H's in front of them using your finger and ask them to follow your finger with their eyes. It is important the patient does not move their head. Always ask if the patient experiences any double vision, and if so, when is it worse?
6. Trigeminal Nerve (CN V)
7. There are 3 sensory branches of the trigeminal nerve: ophthalmic, maxillary and mandibular.
 - a. Initially test the sensory branches by lightly touching the face with a piece of cotton wool followed by a blunt pin in three places on each side of the face: around the jawline, on the cheek and on the forehead.
 - b. The corneal reflex should also be examined as the sensory supply to the cornea is from this nerve. Do this by lightly touching the cornea with the cotton wool. This should cause the patient to shut their eyelids.
 - c. Motor Supply
 - i. Ask the patient to clench their teeth together, observing and feeling the bulk of the masseter and temporalis muscles.
 - ii. Ask the patient to then open their mouth against resistance.
 - iii. Finally perform the jaw jerk on the patient by placing your left index finger on their chin and striking it with a tendon hammer. This should cause slight protrusion of the jaw.

8. Abducens Nerve –tested in the same manner as the oculomotor and trochlear nerves, again in eye movements.
9. The Facial Nerve – tested by asking the patient to crease up their forehead (raise their eyebrows), close their eyes and keep them closed against resistance, puff out their cheeks and reveal their teeth.
10. The Vestibulocochlear Nerve – provides innervation to the hearing apparatus of the ear and can be used to differentiate conductive and sensori-neural hearing loss using the Rinne and Weber tests.
 - a. To carry out the Rinne test, place a sounding tuning fork on the patient's mastoid process and then next to their ear and ask which is louder. A normal patient will find the second position louder.
 - b. To carry out the Weber's test, place the tuning fork base down in the centre of the patient's forehead and ask if it is louder in either ear. Normally it should be heard equally in both ears.
11. The Glossopharyngeal Nerve – provides sensory supply to the palate. It can be tested with the gag reflex or by touching the arches of the pharynx.
12. The Vagus Nerve – provides motor supply to the pharynx. Asking the patient to speak gives a good indication to the efficacy of the muscles. The uvula should be observed before and during the patient saying "aah". Check that it lies centrally and does not deviate on movement.
13. The Accessory Nerve – gives motor supply to the sternocleidomastoid and trapezius muscles. To test it, ask the patient to shrug their shoulders and turn their head against resistance.
14. The Hypoglossal Nerve –provides motor supply to the muscles of the tongue. Observe the tongue for any signs of wasting or fasciculations. Ask the patient to stick their tongue out. If the tongue deviates to either side, it suggests a weakening of the muscles on that side.
15. Thank your patient.
16. Consider your findings and how to present them in a logical and fluent order.
17. Then consider the possible clinical significance of these findings.
18. Report any findings.

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Date:	Date:	Date:
Name:	Name:	Name:
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11. EXAMINING CHILDREN

Approach

Instructions

Examination of children varies depending on the age and cooperation of the child. Older children may require having their parents nearby, while toddlers might only be possible to examine on the parent's lap. If the child is asleep, much of the examination ought to be completed before they wake up.

1. Undressing: let the parent undress the child, and only expose the part of the body you will be examining.
2. Positioning: some children may prefer to be examined standing up. Only lay the child down when you have to, as this can be very threatening.
3. Putting the child at ease: Slowly introduce yourself to the child's space during the examination by exchanging toys, for example. Explain what you are going to do and be repeatedly reassuring, children can be embarrassed by silence after a provider's question but will be comforted by endless rambling.
4. Examination: First, use a hands-off approach. Allow the child to look at you, and let them play in your presence. Watch the child. How do they interact with their parents? Do they look well or ill? Do they look clean, well nourished, and well cared for? Kneel on the floor so that you are at the child's level. Use a style and language appropriate to the age.
5. Be opportunistic: Do not adhere to a rigid examination protocol – e.g., you may have to listen to the heart first while the child is quiet, then look at the hands later. Never examine the presenting part only. Be thorough and train yourself to be a generalist. Sometimes, demonstrating with a cooperative older sibling, parent, or a stuffed toy may put a child more at ease about what is to be done. Leave unpleasant procedures, such as examination of the ears and throat, for last.

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Completing a Paediatric Growth Chart

Instructions

1. Weighing and measuring:
 - a. Weight: for children up to 2 years, remove all clothes and nappy; children older than 2 years should wear minimal clothing only. Always remove shoes.
 - b. Length (before 2 years of age): proper equipment is essential (length board or mat). Measures should be trained. The child's shoes and nappy should be removed.
 - c. Height (from 2 years): use a rigid rule with T piece, or stadiometer; the child's shoes should be removed.
 - d. Head circumference: use a narrow plastic or paper tape to measure where the head circumference is the greatest. Any hat or bonnet should be removed.
2. Plot each measurement on the relevant chart by drawing a small dot in pencil where a vertical line through the child's age crosses a horizontal line through the measured value. The lettering on the charts ('weight', 'length', etc.) sits on the 50th centile, providing orientation for ease of plotting
3. Gestational correction: This should only be used for infants born before 37 weeks. Plot measurements at the child's actual age and then draw a line back the number of weeks the infant was preterm. Mark the spot with an arrow (see diagram below): this is the child's gestationally corrected centile. Gestational correction should continue until at least 1 year of age and until 2 years for infants born before 32 weeks.

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Name:	Name:	Name:
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Developmental assessment for children

Instructions

Development is a continuous process, the rate of which varies considerably among normal children.

Development is divided into four areas:

- Gross motor
- Fine motor and vision
- Speech and hearing
- Social

Delay in all four areas is usually abnormal but delay in one area may not be. For example, some children become expert at bottom shuffling or scooting. Thus, having learned an effective means of traveling, the need to walk becomes less important.

Performing a developmental assessment (use chart):

- Observation is key. Young children will often not cooperate. Take a history from the parents about milestones the child has.
- Be systematic and evaluate each of the four developmental areas.
- Learn a few essential milestones, as it is difficult to remember them all.
- If an infant was born prematurely, allow for this by calculating their corrected age from their expected due date.
- Limit distractions and present one task at a time.

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Measuring blood pressure in children

Instructions (using Doppler)

1. Ensure the child is comfortable.
2. Apply the cuff, ensure the internal bladder encircles 90-100% of the upper arm circumference.
3. The arrow on the cuff should be placed over the brachial artery.
4. The first BP reading should be estimated by placing a Doppler over the pulse and pumping up the cuff, when the pulse sound disappears this is your estimated BP, now deflate the cuff quickly.
5. Keep the Doppler over the pulse, pump the cuff up to a pressure 30mmHg higher than the estimated BP.
6. Reduce the pressure slowly (you should see a green light on the right-hand side of the monitor, this indicates that the pressure is reduced at the correct speed).
7. The 1st repetitive sound is recorded as the systolic BP.
8. If you need to repeat the BP you should wait 1 minute to give the vessels a chance to refill.
9. Record the systolic BP measurement immediately.
10. Thank your patient.
11. Consider your findings and how to present them in a logical and fluent order.
12. Then consider the possible clinical significance of these findings.

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Date:	Date:	Date:
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12. FLUID MANAGEMENT

Instructions

1. Fluid balance over 24 hours is roughly:

Input (1mL water): drink = 1500 + in food = 1000 – TOTAL 2500

Output (1mL water): urine = 1500 + insensible loss = 800 + stool = 200 – Total = 2500

2. If fluids cannot be given orally, they are normally given intravenously into a peripheral vein.
3. Alternatives are via a central line or subcutaneously. There are three main principles to consider:
 - a) To maintain normal daily requirements.
 - b) To replace other losses i.e. from drains.
 - c) Consideration of individual needs related to their medical condition.
4. A common regimen often used to maintain normal fluid requirement = 2–3 litres/24 hours which allows for loss from faecal, urinary and insensible loss. This is often prescribed as 2 litres of 5% dextrose and one litre 0.9% Saline in 24 hours.
5. 20–30mmol of potassium is often added per litre of fluid.
6. This regimen will vary as other considerations are taken into account such as heart failure, renal failure, liver failure and age.
7. Daily weights are required.

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13. FUNDOSCOPY

Instructions

1. Introduce self, gain consent, co-operation and conform ID of patient.
2. Perform hand hygiene, roll up sleeves, and remove watch.
3. Explain procedure to patient.
4. Darken room, ask patient to look at the same point as far as possible in the room (this will help to dilate the pupil).
5. Wedge scope against your cheek with hand and then head/hand/scope should move as one unit.
6. Use your right hand & your right eye to look at the patient's right eye. (Less important if using the PanOptic.)
7. Look through the ophthalmoscope, if you are near-sighted and have taken off your glasses, you may need to adjust the focusing wheel towards the negative/red until what you see at a distance is in focus.
8. Direct the ophthalmoscope 15 degrees from center and look for the red reflex. Simply follow the red reflex in until you see the retina. If you lose the red reflex, come back until you find it again and repeat.
9. To look around the retina using a traditional direct ophthalmoscope, you should "pivot" the ophthalmoscope, angling up, down, left and right. If using the PanOptic, you can slightly "pivot" or ask the patient to look up to see upper retina, down to see lower retina, medial to see medial, lateral to see lateral and finally to look at the light to visualize the macula.
10. Leave clinical area tidy and perform hand hygiene.
11. Thank your patient.
12. Consider your findings and how to present them in a logical and fluent order.
13. Then consider the possible clinical significance of these findings.

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Date:	Date:	Date:
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14. HAND EXAMINATION

Instructions

1. Introduce self, gain consent, co-operation and conform ID of patient.
2. Perform hand hygiene, roll up sleeves, and remove watch.
3. Explain procedure to patient.
4. Rest the patient's hands on a pillow on their lap.
5. Expose both arms to above elbow.
6. Look:
 - a. Ask patient to hold palms down.
 - b. Inspect for swellings (articular and extra-articular), deformity, muscle wasting (interossei) and scars.
 - c. Look for rashes, skin thinning and bruising.
 - d. Look at nails for pitting onycholysis nail fold infarction or vascular compromise of the finger tips.
 - e. Symmetry and distribution of any joint abnormalities.
 - f. Ask patient to turn hands over.
 - g. Assess whether supination is a problem for them.
 - h. Ask patient to hold palms up.
 - i. Inspect for thenar or hypothenar muscle wasting Look for palmar erythema.
7. Feel:
 - a. Palpate any tender area to establish from which anatomical structure it is arising.
 - b. Assess any intra- or extra-articular swellings.
 - c. Ask patient to hold palms up.
 - d. Check radial and ulnar pulses.
 - e. Check capillary refill.
 - f. Check bulk of thenar and hypothenar eminence.
 - g. Test median / ulnar nerve sensation. Is it equal over thenar and hypothenar eminence and the index and little finger?
 - h. Ask patient to turn palms down.
 - i. Test radial nerve sensation – web space between thumb and index finger.
 - j. Assess temperature over forearm, wrist and MCPs.
 - k. Look for sites of joint swelling CMC joint of thumb or MCPs / PIPs.
 - l. Compare with own joints for size. Squeeze MCPs gently – watch face for pain.
 - m. Palpate any swollen MCP PIP DIP joints bimanually – is it synovitis? = warm swollen and tender or is it bony? = hard, no temperature change.
 - n. Bimanually palpate wrists for swelling, warmth and tenderness.
 - o. Run hands over extensor surfaces for rashes and nodules.
8. Move:
 - a. Check active movement – wrist, fingers and thumb.
 - b. Check passive movement – See general principles above.
 - c. Feel joints for crepitus.

- d. Assess motor function in Radial, Median and Ulna Nerves: Thumb abduction = median N; Finger abduction (spread) = ulnar N; Wrist extension = Radial N.
9. Function and special tests:
 - a. Phalen's Test (forced wrist flexion) in carpal tunnel syndrome (CTS).
 - b. Tinel's Test (tap over median nerve at wrist crease) for CTS.
 - c. Allen's Test for radial and ulnar artery function.
 - d. Assess power grip (squeeze 2 of examiner's fingers).
 - e. Assess precision grip (Pick up coin from palm surface).
 10. Thank your patient.
 11. Consider your findings and how to present them in a logical and fluent order.
 12. Then consider the possible clinical significance of these findings.

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Date:	Date:	Date:
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15. HANDWASHING

Instructions

Hand hygiene must be performed:

- a. Immediately before every patient contact.
 - b. After touching anything in the bed space area i.e. within the bed curtain area.
- There are many products that we can use to perform good hand hygiene such as: liquid soap, antiseptic hand wash – chlorhexidine gluconate (e.g. Hibiscrub) and alcohol hand rub (e.g. Spirigel).

Liquid Soap will remove most micro-organisms but not all.

Handwash:

- Will remove most micro-organisms.
- Contains an antimicrobial agent which, with continual use, has a cumulative effect.
- Will remove organic matter from the hands.

Alcohol-based hand gel:

- Quick and easy way to decontaminate socially clean hands, 99% effective in thirty seconds.
- Cannot be used if hands are visibly soiled.
- Do not use if you have dealt with organic matter, e.g. body fluids.
- **Should NOT be used in cases of Clostridium Difficile associated diarrhoea or viral diarrhoea and vomiting – use water and alcohol-based hand gel in these cases.**

Points to remember:

- Nails should be kept short.
 - Avoid wearing rings with ridges or stones.
 - Remove wrist watches and wrist jewellery. If you are wearing long sleeves roll them up before hand washing and at all times in clinical areas. Tuck in ties/no tie or bow tie, ensure lanyard badge is not in the way, and tie hair back.
 - Nail brushes are not used for routine hand hygiene.
 - Hands must be wet before applying the recommended amount of soap and water and rinsed thoroughly before drying.
 - If hands are not rinsed or dried adequately there is a potential for skin damage to occur.
 - The use of gloves is not a substitute for hand hygiene.
 - Keep your hands healthy; cover any cuts with a water proof dressing.
 - Gloved hands should not be washed or cleaned with alcohol hand-rubs.
- Barrier Nursing:** Look for barrier nursing signs; leave notes wear apron, gloves and wash hands. speak to the nurse for advice.

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16. HERNIA EXAMINATION

Instructions

1. Introduce self, gain consent and co-operation and confirm ID of patient.
2. Fully explain the reasons for the examination and to answer any questions they may have.
3. Make sure a chaperone is available.
4. Check if the patient has any pain before you begin.
5. Ask the patient to stand (if able) or lay down whilst you observe for the following:
6. Note any evidence of pain (e.g. stance/grimacing)
7. Note the patient's overall colour (e.g. pallor secondary to anaemia or jaundice)
8. Note any evidence of abdominal distension (may suggest bowel obstruction, possibly due to an incarcerated hernia)
9. Note any muscle wasting or cachexia suggestive of underlying malignancy
10. Look around the bed for evidence of vomit bowls or medication boxes
11. Inspect the patient from the front and both sides (whilst the patient is standing or lying down), looking for evidence of:
 - a. Asymmetry
 - b. Scars on the abdomen and in the groin
 - c. Obvious lumps protruding from the abdomen or groin
 - d. Any testicular lumps or swellings
12. Ask the patient to cough, which should accentuate any hernia that is present.
13. If a lump is noted during the inspection, you should start with a generic lump assessment, before moving onto a more specific hernia assessment:
 - Site
 - Size
 - Shape
 - Colour
 - Contour
 - Consistency
 - Tenderness
 - Temperature
 - Tethering
 - Cough impulse
 - Transillumination
 - Bruit
 - Lymphadenopathy
14. Assessment of a suspected hernia (should be performed on both sides of the groin, to avoid missing bilateral inguinal hernias):
 - a. Check reducibility:
 - i. Check if the lump can be reduced (you can ask the patient to do this, or do it yourself)

- ii. If reduced completely, it may only reappear if the patient increases pressure (e.g. by coughing)
 - iii. You can ask the patient to lie down and if the lump reduces spontaneously, this makes the diagnosis of a hernia highly likely.
 - iv. Hernias are typically reducible, however, if a hernia is painful and irreducible it suggests that it is strangulated (this is a surgical emergency)
 - b. Perform scrotal examination – inguinal hernias can extend into the scrotum.
 - c. Perform auscultation – can be used to assess for the presence of bowel.
15. Allow the patient to get dressed and explain that you will speak to them about the examination once they are dressed.
 16. Leave clinical area clean and tidy, wash hands.
 17. Thank your patient.
 18. Consider your findings and how to present them in a logical and fluent order.
 19. Then consider the possible clinical significance of these findings.

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Date:	Date:	Date:
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17. HIP/PELVIC EXAMINATION

Instructions

1. Introduce self, gain consent, co-operation and conform ID of patient.
2. Perform hand hygiene, roll up sleeves, and remove watch.
3. Explain procedure to patient.
4. Firstly, examine the patient standing in the anatomical position (Can choose to assess GAIT first if desired).
5. Patient requires to be stripped to underwear (or shorts).
6. Look
 - a. Assess muscle wasting (gluteal).
 - b. Ask patient to change position to lie face up on the couch.
 - c. Compare legs for an obvious flexion deformity at the hip
 - d. Assess leg length (with tape measure):- Apparent shortening – this is when one leg looks shorter than the other but the underlying reason is that the pelvis is tilted (this may be fixed or correctable).
 - e. Test – square the pelvis first to see if this corrects the shortening. If the pelvis is fixed then measure from the umbilicus or xiphisternum to the medial malleolus of each ankle and compare.
 - f. True Shortening – this is when one leg looks shorter than the other and the underlying reason is a true discrepancy in length between one femur or tibia and the other.
 - g. Test – Measure from the ASIS to the medial malleolus of each leg and compare.
 - h. Check for scars (hip replacements – longitudinal scar on lateral aspect of thigh).
7. Feel
 - a. Check for tenderness over greater trochanter.
 - b. Palpate any tender area to establish from which anatomical structure it is arising.
8. Move
 - a. Perform active and passive motion combined by gently guiding the patient's leg as they move it actively then pushing it a little further if possible passively.
 - b. Assess flexion - Flex knee and hip together – watch face for pain.
 - c. Assess abduction – Place one hand on the opposite ASIS as you abduct the leg to make sure that the pelvis does not tilt. Tilting of pelvis indicates the limit of hip joint abduction.
 - d. Assess Adduction – Place one hand on the ipsilateral ASIS as you adduct to make sure the pelvis does not lift. Lifting of pelvis indicates the limit of hip adduction.
 - e. Assess internal and external rotation in flexion and extension.
 - f. A fixed flexion deformity at the hip can be masked by a hyperlordosis at the lumbar spine which tilts the pelvis in order to flatten the leg. This can be

unmasked by Thomas' test :- Hand under the lumbar spine – you should feel the gap of a lumbar lordosis Flex the normal hip up as far as possible – this tilts the pelvis back flat and abolishes the lumbar lordosis which you should feel by pressure on your hand. If the other leg lifts off the bed (usually it will bend at the knee rather than lift entirely into the air) this indicates a fixed flexion deformity of that hip.

9. Function and special tests
 - a. Ask patient to walk.
 - b. Assess gait: Antalgic – painful. Limp with short stance phase. Stiff knee – swings leg out to side; Foot drop – lifts leg higher than other side to clear foot; Trendelenberg – waddling gait that shifts weight form side to side.
 - c. Perform Trendelenberg test (assesses gluteal muscle strength).
 - d. Stand in front of patient and place your hands on their ASIS while they grasp your forearm.
 - e. Ask patient to stand on one hip at a time.
 - f. A positive test is the pelvis level falling on the non-weight-bearing side.
10. Thank your patient.
11. Consider your findings and how to present them in a logical and fluent order.
12. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

18. INSERTING A NASOGASTRIC TUBE

Instructions

Guidelines as equipment and policy varies from trust to trust

1. Aware of contraindications to nasogastric tube insertion i.e.
 - Severe facial trauma (cribform plate disruption)
 - Anatomical alterations due to surgery such as fl ap repair
 - Coagulation problems etc
2. Introduce self, gain consent and co-operation, confirm ID of patient.
3. Perform hand hygiene, roll up sleeves, remove watch put on gloves (non-sterile) and apron.
4. Check for a swallow assessment/Check NBM status.
5. Prepare the equipment on equipment trolley.
6. Assist patient to sit in a semi-upright position in the bed or chair supporting the patient's head with pillows, slightly tilted forward.
7. Unconscious patients should be supine, chin in line with the sternum to reduce the risk of tracheal intubation.
8. Estimate the length of feeding tube to be inserted by measuring it against the patient's nose, around their ear and then to the xiphisternum noting the marking on the tube. Check regional.
9. Arrange a communication signal if the patient wishes you to stop.
10. Make sure the guide wire is firmly engaged in the tube.
11. Lubricate nasogastric tube with tap water. (Do not use KY Lubricant unless clinically specified by the nutrition team) then pass the tube gently into the nostril backwards and inwards along the floor of the nose to the nasopharynx.
12. When the tube is inserted to 20cm, ask /assist the patient to tilt their head forward, putting their chin on their chest and ask them to swallow. Swallowing opens the glottis, enabling the tube to pass into the oesophagus. If needed the patient can take sips of water to help the tube pass, keep water to a minimum of 1-2 sips otherwise it will create a gastric pH>5. Do not be alarmed if the patient begins to cough and/or retch as this is a natural response.
13. Continue to pass the tube up to the pre measured length, stop if resistance felt.
14. Aspirate with a 60ml purple enteral feeding syringe, with the wire still in the tube. Only 2-3 drops of aspirate is needed.
15. Place a few drops of aspirate on pH strip.
16. Allow the colour to develop.
17. Read after 10 seconds and within one minute. A reading of 1-5.5 indicates gastric placement.
18. If no aspirate, DO NOT FEED.
19. Turn patient on to the left side, sitting or lying down. Inject 10 – 20ml air to clear tube, re aspirate.
20. If still no aspirate advance tube 10 – 20 cm, aspirate again.

21. If still no aspirate consider if the tube length is likely to be in the stomach, if not reposition tube. (Seek senior advice.)
22. Consider chest x-ray.
23. Secure the tube to the nostril with nasofix, remove guide wire and fix the tube to cheek using transparent fixation bandage.
24. Be aware each time you go to place fluid down the tube you must always repeat the aspiration test which must show acidity before use.
25. Thank your patient.
26. Consider your findings and how to present them in a logical and fluent order.
27. Then consider the possible clinical significance of these findings.

NOTE

If the patient was nil by mouth pass an N/G tube instead of water, ask the patient to swallow air.

Poor swallow: encourage the patient to try and swallow and feel for a swallow when passing the tube.

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Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

19. INSTRUCTING PATIENTS IN THE USE OF INHALED MEDICATION

Instructions (for meter dosed inhaler)

1. Ask the patient to sit up straight or stand up and lift their chin to open the airways.
2. Remove the cap from the mouthpiece and shake the inhaler vigorously.
3. Explain: if you haven't used the inhaler for a week or more, or it is the first time you have used the inhaler, spray it into the air first to check that it works.
4. Ask the patient to take a few deep breaths and then breathe out gently, explaining that they must immediately place the mouthpiece into their mouth and put their teeth around it (not in front of it and do not bite it), and then seal their lips around the mouthpiece, holding it between their lips.
5. Ask the patient to start to breathe in slowly and deeply through the mouthpiece. As they breathe in they need to simultaneously press down on the inhaler canister to release the medicine. One press releases one puff of medicine.
6. Continue to encourage the patient to breathe in deeply to ensure the medicine gets into the lungs.
7. Then ask the patient to hold their breath for 10 seconds or as long as they comfortably can, before breathing out slowly.
8. If the patient needs to take another puff, wait for 30 seconds, shake the inhaler again then repeat steps 4 to 7.
9. Replace the cap on the mouthpiece.
10. Thank your patient.
11. Consider your findings and how to present them in a logical and fluent order.
12. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

20. IV CANNULATION

Instructions

1. Introduce self, gain consent and co-operation and confirm ID of patient.
2. Perform hand hygiene, roll up sleeves, remove watch and put on gloves (non-sterile).
3. Prepare tray for cannulation to include cannula, chlorhexidine wipe, Tegaderm/clear film dressing, flush (saline not water), 5/10ml syringe, tourniquet, sharps bin, gauze, octopus (needle free connection system), blue needle/drawing up needle and label.
4. Prepare flush 0.9% Sodium Chloride using 10ml syringe and label syringe with contents.
5. Prepare needle free connection system by flushing through 0.9% Sodium Chloride using aseptic non touch technique (ANTT) guidelines.
6. Re-confirm patient identity if left patient's side to prepare equipment.
7. Position arm, check and select suitable vein. Rest arm onto a pillow.
8. Place tourniquet on arm, clean skin with chlorhexidine wipe and wait 30 seconds or until the area is dry.
9. Hold cannula correctly.
10. Pass the cannula into the vein at an angle of 15-25 degrees and observe for flash back. (If you do not anchor the vein enough when entering the skin it will move and you will fail to hit the vessel).
11. Gently withdraw the needle back until you can see the needle (bevel) within the plastic tube.
12. Slide the whole cannula into the vein maintaining traction to the skin.
13. Release tourniquet.
14. Remove the needle and immediately place the needle into a sharps bin.
15. Place octopus (needle free connector) onto cannula, secure and flush.
16. Leave clinical area tidy, perform hand hygiene and fill in cannula care plan.
17. Thank your patient.
18. Consider your findings and how to present them in a logical and fluent order.
19. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

21. KNEE EXAMINATION

Instructions

1. Introduce self, gain consent, co-operation and conform ID of patient.
2. Perform hand hygiene, roll up sleeves, and remove watch.
3. Explain procedure to patient.
4. Firstly, examine patient standing. Can choose to assess GAIT first if desired.
5. Patient requires to be stripped to underwear (or shorts).
6. Look
 - a. Assess symmetry and alignment of both knees
 - b. Look for deformity valgus (knock knee) or varus (bow legged)
 - c. Examine the patient lying on the couch
 - d. Look for flexion deformity – where knee cannot straighten on the couch
 - e. Look for erythema, intra- and extra- articular swelling, muscle wasting (quadriceps), rashes and scars
7. Feel
 - a. For heat – back of the hand compare knee joints with mid calves
 - b. Palpate any tender area to establish from which anatomical structure it is arising
 - c. Assess any intra- or extra-articular swellings
 - d. Palpate for tenderness around patella, patella tendon and tibial tuberosity.
 - e. For Baker's cyst behind the knee in popliteal fossa between the hamstring muscles
 - f. Perform patellar tap
 - g. Slide one hand down the thigh to push fluid out of supra-patellar pouch
 - h. Push firmly on patella - does it tap against femur?
 - i. If patella tap negative try cross fluctuation test for small effusion Firmly stroke medial side of knee joint upwards to move fluid into joint cavity and suprapatellar pouch
 - j. Then stroke the supero-lateral aspect of the knee downwards - watch medial side for a bulge of fluid if there is an effusion.
 - k. Flex knee to 90 degrees
 - l. Palpate joint line from anteriorly to posteriorly
8. Move
 - a. Check active movement
 - b. Check passive movement – See general principles above
 - c. Feel for crepitus
 - d. Test integrity of extensor mechanism by asking patient to lift extended leg off bed.
9. Function and special tests
 - a. Stability Tests – consider how sore patient is before performing these.
 - b. Flex knee to 90° and check for knee falling backwards (posterior cruciate ligament laxity).
 - c. Perform Anterior draw test.

- d. Place thumbs on tibial tuberosity and hands round upper tibia with index fingers tucked behind the hamstrings. Stabilise the tibia with your forearm and pull tibia forwards (anterior cruciate ligament laxity).
 - e. Hold knee at 15° with the hand behind the knee.
 - f. Stress medial and lateral collateral ligament by gently pushing other hand against each side of the knee.
 - g. Ask patient to stand – look for valgus and varus deformity
 - h. Ask patient to walk – look for antalgic or stiff knee gait
10. Thank your patient.
 11. Consider your findings and how to present them in a logical and fluent order.
 12. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
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Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

22. MALE GENITAL EXAMINATION

Instructions

Method allows detection of lumps, asymmetry of the testicles, pain, inflammation, swelling, congenital abnormalities and presence of the testicle. This examination should also include a complete examination of the genital organs (penis, scrotum and testicles). Testicular cancer is not a common cancer but does affect young men between 15–35 years of age; health education should promote self-examination techniques.

1. Introduce self, nature of examination, gain consent, confirm ID of patient.
2. Make sure a chaperone is available.
3. Wash hands and wear gloves.
4. Lay the patient down at first for a general examination of the abdomen, groins, penis, scrotum and testicles; you should repeat this with the patient standing too (for example a varicocele may only be present on standing).
5. It is typical for one of the testicles to hang slightly lower which is more obvious on standing.
6. If necessary, ask the patient to hold their penis away from the scrotum and palpate each testicle in turn for presence, size, texture and lumps. It is important to compare one side to the other.
7. Palpate each testis and epididymis between your thumb and first two fingers, and then palpate each spermatic cord, including the vas deferens.
8. If you find a mass, perform transillumination as a testicular tumour and fluid is too dense for light to pass through. Remember to dim the lights of the room before you do this.
9. Palpate lymph nodes in the groin.
10. Finish off the examination informing the patient that they can now dress and then discuss your findings and treatment/ referral options if necessary with your patient.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

23. MENTAL STATE EXAMINATION

Instructions

1. Introduce self, gain consent and co-operation, conform ID of patient.
2. Perform hand hygiene, roll up sleeves and remove watch.
3. Explain the procedure to the patient.
4. Appearance and behaviour:
 - a. **Appearance:** Describe patient in detail:
Are they making eye contact? Facial expression? Anything unusual in their clothing or is it appropriate? Do they look their age? Do they look physically well? Level of consciousness? Anything striking about them? Hair colour? Distinguishing features? Are they clean, neat, tidy? Or unkempt, dishevelled? Any smells?
 - b. **Behaviour:** How are they behaving? Is it appropriate? Are they friendly? Suspicious? Hostile? Overfamiliar? Anxious? Wringing hands? Sitting still? Restless? Standing up? acing around the room? Any tics or mannerisms? Banging the table? Singing? Or withdrawn?
5. Speech - comment on:
 - a. Rate and quantity: is it spontaneous?
 - b. Pressured or difficult to interrupt as in mania?
 - c. Slow as in depression?
 - d. Mute?
 - e. Flow, rhythm: Is it spontaneous or person only responds to questions?
 - f. Volume, tone: quiet or loud?
 - g. Do they make sense?
 - h. Or is there evidence of formal thought disorder?
 - i. Are there neologisms?
 - j. Give examples
6. Mood:
 - a. Subjective: How does patient describe their mood?
 - b. Objective: How do they appear to you? Appropriate to circumstances? depressed (if cries, note what is being discussed at the time), irritable, anxious, elated, constant or changeable
7. Thought Form (also discussed partly in speech) – concerns the ways in which thoughts are linked together. Normally thoughts make sense, are logical and linked together.
 - a. Is there evidence of loosening of associations where thoughts don't link together? Or where the patient goes off on a tangent=tangential thinking or off on completely the wrong track= derailment or made up words= neologisms?
 - b. Or go round the houses instead of answering the question=circumstantiality
 - c. Or flight of ideas?
8. Thought Content
 - a. Record any delusions the patient is describing, including delusions of passivity, ideas of reference, delusions of thought interference.
 - b. Describe any other pre-occupations e.g. guilty thoughts or ruminations as in depression, preoccupations with health as in health anxiety
 - c. Describe any obsessions

- d. Describe any phobic symptoms
- e. Describe any overvalued ideas
- 9. Risk – record your risk assessment
 - a. Any thoughts re life not worth living: thoughts of ending life?
 - b. Plans to end life? What's stopped them?
 - c. Any thoughts to harm others? Any plans? Weapon?
- 10. Perception – describe any perceptual abnormalities here and give examples
 - a. Are they experiencing any hallucinations?
 - b. Which modality i.e. auditory, visual, tactile, gustatory, olfactory
Describe in detail
 - a. If auditory are they second or third person?
 - b. What do they say? Running commentary? Arguing amongst themselves?
Command? Who? How many?
 - c. Describe any illusions
- 11. Insight
 - a. Does the patient think that they are unwell? What do they think is wrong?
Are they prepared to accept treatment?
- 12. Thank your patient.
- 13. Consider your findings and how to present them in a logical and fluent order.
- 14. Then consider the possible clinical significance of these findings.

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Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

24. MANUAL HANDLING OF THE PATIENT

ONLINE – E- Learning

25. NECK EXAMINATION

Instructions

1. Introduce self, gain consent and co-operation, confirm ID of patient.
2. Perform hand hygiene, roll up sleeves and remove wrist watch.
3. Inspection for lumps, skin changes, pulsation, visible changes on swallowing or tongue protrusion.
4. Palpate the Lymph nodes in sequence:
 - 1) Preauricular
 - 2) Posterior auricular
 - 3) Occipital
 - 4) Tonsillar
 - 5) Submandibular
 - 6) Submental
 - 7) Superficial cervical
 - 8) Posterior cervical
 - 9) Deep cervical chain
 - 10) Supraclavicular
5. Attachment to adjacent structures.
6. Lumps, specific feature identification (site, size, shape, consistency, margins).
7. Identify the trachea and thyroid gland.
8. Bruits or transillumination.
9. Leave clinical area tidy and perform hand hygiene.
10. Thank your patient.
11. Consider your findings and how to present them in a logical and fluent order.
12. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
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Feedback:	Feedback:	Feedback:

26. NEUROLOGY BALANCE EXAMINATION

Instructions

1. Introduce self, gain consent, co-operation and confirm ID of patient.
2. Perform hand hygiene, roll up sleeves.
3. Explain procedure to patient.
4. Gait:
 - a. Ask the patient to stand up. Observe the patient's posture and whether they are steady on their feet.
 - b. Ask the patient to walk, for example: to the other side of the room, and back. If the patient normally makes use of a walking aid, allow them to do so.
 - c. Observe the different gait components (heel strike, toe lift off). Is the gait shuffling/waddling/scissoring/ swinging?
 - d. Observe the patients arm swing and take note how the patient turns around as this involves good balance and co-ordination.
 - e. Ask the patient to walk heel-to-toe to assess balance.
 - f. Perform Romberg's test by asking the patient to stand unaided with their eyes closed. If the patient sways or loses balance, then this test is positive. Stand near the patient in case they fall.
 - g. Whilst Romberg's test does not directly test for cerebellar ataxia, it helps to differentiate cerebellar ataxia from sensory ataxia. In cerebellar ataxia the patient is likely to be unsteady on their feet even with the eyes open.
 - h. Check for a resting tremor in the hands by placing a piece of paper on the patient's outstretched hands.
 - i. Test tone in the arms (shoulder, elbow, wrist).
5. Co-ordination:
 - a. Test for dysdiadochokinesis by showing the patient how to clap by alternating the palmar and dorsal surfaces of the hand. Ask them to do this as fast as possible and repeat the test with the other hand.
 - b. Perform the *finger-to-nose test* by placing your index finger about two feet from the patients face. Ask them to touch the tip of their nose with their index finger then the tip of your finger. Ask them to do this as fast as possible while you slowly move your finger. Repeat the test with the other hand.
 - c. Perform the *heel-to-shin test*. Have the patient lying down for this and get them to run the heel of one foot down the shin of the other leg, and then to bring the heel back up to the knee and start again. Repeat the test with the other leg.
6. Thank your patient.
7. Consider your findings and how to present them in a logical and fluent order.
8. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

27. OBTAINING CERVICAL SMEAR

Instructions

1. Introduce self, gain consent and co-operation and confirm ID of patient.
2. Ensure privacy. Consider a chaperone.
3. Perform hand hygiene, roll up sleeves, remove wrist watch, put on apron.
4. Remember to make the patient comfortable and allow privacy.
5. Explain to the patient that you are about to insert the speculum into the vagina (to visualise cervix) and provide reassurance that this should not be painful.
6. Warm the speculum under running water.
7. Test the temperature of the speculum on the inner thigh (warning the patient before this is done).
8. Using the left hand, open the lips of the labia minora to obtain a good view of the introitus.
9. Hold the speculum in the right hand with the main body of the speculum in the palm and the closed blades projecting between index and middle fingers.
10. Gently insert the speculum into the vagina, held with your wrist turned such that the blades are in line with the opening between the labia.
11. The speculum should be angled down and backward due to the angle of the vagina.
12. Maintain a posterior angulation and rotate the speculum through 90° to position handles downward. When it cannot be advanced further, maintain a downward pressure and press on the thumb piece to hinge the blades open, exposing the cervix and vaginal walls.
13. Once the optimum position is achieved, tighten the thumbscrew or engage the locking mechanism (plastic speculum).
14. Insert the plastic broom so that the central bristles of the brush are in the endocervical canal and the outer bristles in contact with the ectocervix.
15. Using pencil pressure, rotate the brush 5 times in a clockwise direction.
16. The bristles are bevelled to scrape cells only on clockwise rotation.
17. Rinse the brush thoroughly in the preservative or break off brush into the preservative
18. If using a cytobrush, spatula, and slide, obtain adequate endocervical (cytobrush) and ectocervical (spatula) samples and apply the specimen to the slide (roll the brush across the slide; apply a thin smear of material from the spatula to the slide) and apply fixative.
19. Place the slide in transport packaging with a completed request form.
20. Remove the speculum – this should be conducted with as much care as insertion. You should still be examining the vaginal walls as the speculum is withdrawn.
21. Undo the thumbscrew or lock and withdraw the speculum.
22. The blades should be held open until their ends are visible distal to the cervix to avoid causing pain.
23. Rotate the open blades in an anticlockwise direction to ensure that the anterior and posterior walls of the vagina can be inspected.
24. Near the introitus, allow the blades to close, taking care not to pinch the labia or pubic hairs.

25. Perform the bimanual exam.
26. Allow the patient to get dressed in privacy.
27. Thank your patient.
28. Consider your findings and how to present them in a logical and fluent order.
29. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

28. OBTAINING ENT / SKIN SWABS

Instructions

1. Introduce self, gain consent and co-operation, conform ID of patient.
2. Perform hand hygiene, roll up sleeves and remove watch.
3. Advise the patient to assume appropriate position. Assist if necessary.
4. Put on gloves.
5. Open swab packet as far as will enable removing the swab without contaminating it.
6. Remove top from transport container.
7. Take swab appropriately for type to be obtained:
8. Nose swab:
The patient needs to tilt their head backwards so that you have a clear view of their nostrils. Moisten the swab with normal saline before use to prevent discomfort for the patient. Insert the swab inside the anterior nares with the tip directed upwards and gently rotate it. Repeat with the other nostril.
9. Throat swab:
The patient needs to sit upright facing a strong light, their head tilted backwards, mouth open and sticking their tongue out. This will enable you to see the throat and mouth easily and therefore take a swab from the throat and not contaminate it in the mouth when inserting and removing it. The patient may gag during the procedure so depress the tongue gently with the tongue depressor to prevent it from contaminating the swab when being removed. Also, to enable the patient to relax at this time, ask them to say 'ah'. Quickly but gently roll the swab over any area of exudate or inflammation or over the tonsils and posterior pharynx. Carefully remove the swab. Avoid touching other areas of the mouth while doing so.
10. Skin swab:
If area to be swabbed is dry moisten the swab with sterile saline. This is because organisms adhere better to a moist swab than a dry swab. Roll swab along area of skin to be swabbed.
11. Put swab in transport container, ensure securely placed.
12. Ensure patient comfortable.
13. Remove gloves and apron.
14. Dispose of rubbish.
15. Wash hands.
16. Label swab container. Complete request form.
17. Send swab and form to laboratory. Document in notes.
18. Thank your patient.
19. Consider your findings and how to present them in a logical and fluent order.
20. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

29. OTOSCOPY

Instructions

1. Introduce self, gain consent and co-operation, conform ID of patient.
2. Perform hand hygiene, roll up sleeves and remove watch.
3. Explain the procedure to the patient.
4. Position patient (usually sat upright on chair).
5. Check patient comfortable.
6. Start with the “normal” ear first.
7. Begin with general inspection of the external ear for evidence of:
 - a. Lesions
 - b. Redness
 - c. Swelling
 - d. Discharge
 - e. Bleeding
 - f. Debris, etc

*Make sure behind the pinna is inspected
8. Gently pull pinna of ear up and back to straighten the external auditory canal.
9. Introduce the tip of the otoscope into the external auditory canal under direct visualisation. You may wish to rest your hand against the patient’s cheek to provide stability.
10. Inspect the external auditory canal for evidence of:
 - a. Lesions
 - b. Redness
 - c. Swelling
 - d. Discharge
 - e. Bleeding
 - f. Debris, etc
11. Inspect the tympanic membrane for evidence of:
 - a. Redness
 - b. Light reflex
 - c. Bulging
 - d. Retraction
 - e. Fluid level
 - f. Perforation
 - g. Scarring
 - h. Grommets, etc
12. Gently withdraw otoscope.
13. Depending on clinical findings may also wish to:
 - a. Check gross hearing, Rinnes/Webers tests
 - b. Perform vital signs
 - c. Swab discharge if present
 - d. Check for lymphadenopathy
 - e. Palpate mastoid area

- f. Perform cranial nerve examination, etc
- 14. Dispose of single use ear piece in relevant clinical waste bin and clean otoscope.
- 15. Wash hands.
- 16. Document findings and discuss with patient.
- 17. Thank your patient.
- 18. Consider your findings and how to present them in a logical and fluent order.
- 19. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

30. PEAK FLOW

Instructions

1. Introduce self, gain consent and co-operation.
2. Perform hand hygiene, roll up sleeves and remove watch.
3. Ask patient to stand if possible, or if not, to sit as upright as possible.
4. Set peak flow meter to zero.
5. Connect disposable mouthpiece.
6. Ensure patient's fingers do not obstruct the slide of the mini peak flow meter.
7. Instruct patient to inhale deeply, place their lips around the meter and holding the meter horizontally exhale forcefully.
8. Note the reading.
9. Repeat twice more unless patient is unable to do so.
10. Record the highest of the three measurements or if the patient is only able to do one reading due to extreme coughing, wheezing etc. document that only one reading was recorded.
11. Leave clinical area tidy and perform hand hygiene.
12. Thank your patient.
13. Consider your findings and how to present them in a logical and fluent order.
14. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
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31. PERFORMING AND INTERPRETING A 12 LEAD ECG

Instructions

1. Introduce self, gain consent and co-operation, conform ID of patient.
2. Perform hand hygiene, roll up sleeves and remove watch.
3. Pull around the curtains to ensure privacy and consider using a chaperone.
4. Prepare patient for 12 lead ECG which includes: exposure, clipping chest if hair present where contact points required and wash the area if the patient is sweaty and clammy (chlorhexidine wipe can be used for quickness).
5. Place the electrodes correctly on the limbs and thorax.
6. Chest leads: 6 chest leads produce 6 views in the horizontal plane V1, V2, V3, V4, V5, V6
7. Limb leads: 4 limb electrodes: Red = right arm, Yellow = left arm, Green= left foot, Black = right foot; produce 6 views in the vertical plane I, II, III, aVL, aVR, aVF
8. Chest leads and corresponding sites of the heart: V1 – Fourth intercostal space at right sternal angle; V2 – Fourth intercostal space at left sternal angle; V4 – Mid-clavicular line in the fifth intercostal space; V3 – Halfway between V2 and V4; V6 – Mid-axillary line horizontal to V4; V5 – Anterior axillary line nearly horizontal to V4; • Anterior view • Lateral view
9. Limb leads and corresponding sites of the heart: I, aVL - Lateral view II, III, aVF – Inferior view
10. Once a 12 lead ECG has been obtained remove electrodes and cover the patient up.
11. Document onto the ECG tracing the patients name, hospital number, time of 12 lead ECG and date of ECG.
12. Document presence of chest pain or absence of chest pain.
13. Thank your patient.
14. Consider your findings and how to present them in a logical and fluent order.
15. Then consider the possible clinical significance of these findings.
16. Leave clinical area tidy and perform hand hygiene.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
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32. PERFORMING FLUORESCEIN DYE EXAMINATION OF THE CORNEA

Instructions

1. Introduce self, gain consent and co-operation, confirm ID of patient.
2. Perform hand hygiene, roll up sleeves.
3. Ask the patient to remove contact lenses.
4. Each eye should be tested individually, unaided and then with pinhole, with the fellow eye occluded.
5. Topical anaesthetic drops will assist in making the patient comfortable enough to open eyes if they are in pain. This will however nullify sensation testing.
6. Use a torch or direct ophthalmoscope to examine the cornea and note any haziness of the cornea, foreign bodies, or abnormalities of the pupil shape.
7. Compare findings with the fellow eye.
8. Apply fluorescein dye using a paper strip applicator that is wet with saline and gently place over the inferior cul-de-sac of the eye. Once the patient blinks, the dye is spread over the cornea – any epithelial defects will stain green.
9. The stain shows up best under blue light (present on some ophthalmoscopes). This can, however, be adequately demonstrated with a standard torch. The tear film will become apparent and the lacus lacrimalis can be assessed.
10. If the patient has suffered penetrating ocular trauma, then leaking aqueous humor may be seen (Seidel sign). Examine the anterior chamber for evidence of iritis (cells and flare).
11. Examine the eyelids for herpes zoster scars, lid lacerations, burns. Lid malposition should be excluded. Facial nerve function must be assessed as dysfunction could affect eyelid closure (e.g. lagophthalmos). Eversion of the upper lid is important to exclude a foreign body abrading the cornea. Corneal exposure from eyelid defects, ectropion or lagophthalmos may result in exposure keratitis.
12. Document details of the procedure in the notes and inform other members of staff of this procedure and any follow up that may be required.
13. Thank your patient.
14. Consider your findings and how to present them in a logical and fluent order.
15. Then consider the possible clinical significance of these findings.
16. Leave clinical area tidy and perform hand hygiene.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
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33. PERIPHERAL NERVOUS SYSTEM – LOWER LIMB

Instructions

1. Introduce self, gain consent and co-operation and confirm ID of patient.
2. Examine your patient sat on a bed with their legs extended in a relaxed position in front of them.
3. Start by rolling each leg gently from side to side and observe foot movement to gauge whether there is any increase or reduction in muscle tone. Then passively flex and extend the knee, then the ankle.
4. Understand the significance of any findings: increased tone/decreased tone.
5. Test each muscle group.
 - a. Hip flexion, extension, abduction & adduction: ask your patient to raise their extended leg from the bed, ask them to keep their leg there whilst you resist the movement at the quadriceps. Then ask the patient to return their leg down onto the bed passively, then against resistance.
 - b. Knee flexion & extension: ask the patient to bend their knee (and hip). Stabilise their thigh with one hand and ask them to kick-out their leg, then pull their heel back in towards them. Then test the same movements against resistance.
 - c. Ankle dorsiflexion & plantarflexion: Ask the patient to bend their foot towards them and then back down to the bed. Then support their lower leg with one hand and test the same movements against resistance.
 - d. Big Toe flexion & extension: Stabilise the foot, then ask the patient to bend their big toe towards them, then back down towards the bed. Then test the same movements against resistance.
6. Coordination
 - a. Heel-shin test: ask your patient to place their left heel on their right knee, then run the left heel down towards the right ankle. Then ask them to lift their heel and replace it onto their right knee and repeat the movement several times as quickly as possible. Compare with the other side.
 - b. Toe-tapping: ask your patient to repetitively tap their foot quickly against the floor as quickly as possible, then compare sides.
7. Reflexes:

You should know which nerve roots are being tested with each reflex: Patella (L3/4), Ankle jerk (S1/2), Plantar / 'Babinski reflex': support the ankle and 'scratch' the sole of the foot starting at the lateral side of the heel, moving up the lateral side of the foot, then underneath the toes.

 - a. Clonus: holding the lower leg with one hand, suddenly dorsiflex the ankle and hold it in this position. Clonus is when sustained and rhythmical contraction of the gastrocnemius muscle causes the foot to move backwards and forwards. This occurs if there is an upper motor neurone lesion.
8. Sensation
 - a. light touch sensation (using cotton wool) in each dermatome comparing sides. Then repeat the process testing for sharp touch sensation (using a neuro-tip).

- b. Joint position sense/Proprioception: Test this at the DIP joint of the big toe. Stabilise the base of the big toe and ask your patient to close their eyes. Move the tip of the big toe up and down, explaining which movements you are performing to your patient as an example. Then move the tip of the big toe either up or down and ask your patient to sense the direction of that movement. Test 3 times. If your patient correctly detects the movement their joint position sense is intact. If they are not able to do this test a more proximal joint e.g. ankle joint, knee until joint position sense can be accurately detected.
9. Vibration sense
- a. Confirm that your patient can detect the vibration of a 128hz tuning fork on their sternum.
- b. Then ask your patient to close their eyes and test whether they are able to detect the same vibration on the DIP joint of their big toe, and also when the vibration stops. If your patient correctly detects this their vibration sense is intact. If they are not able to detect this test a more proximal joint e.g. ankle, knee, until vibration sense can be accurately detected.
10. Romberg: ask your patient to stand with their eyes open and feet apart. Then ask the patient to bring their feet together, then close their eyes. If they become unsteady they have a positive Romberg's test. If they are unsteady with their eyes open this suggests a cerebellar lesion, if they become unsteady only when closing the eyes this suggests a sensory ataxia.
11. Gait: general observation of gait may indicate a broad-based ataxic gait suggestive of a cerebellar lesion, the spastic gait of hemiplegia, the shuffling gait of Parkinsonism, or the high-stepping gait which occurs with foot-drop.
12. Thank your patient.
13. Consider your findings and how to present them in a logical and fluent order.

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34. PERIPHERAL NERVOUS SYSTEM – UPPER LIMB

Instructions

1. Hold the patient's hand, as if shaking their hand, and with the other hand support their arm at the elbow.
2. Start by flexing and extending the wrist, then the elbow, pronate and supinate the forearm, and finally rotate the shoulder. Compare sides.
3. Understand the significance of any findings: increased tone/decreased tone.
4. Ascertain whether your patient is right or left-handed.
5. Pronator Drift: ask your patient to extend their arms, with their palms facing upwards. Ask them to close their eyes. If there is an upper motor neurone lesion, the affected arm will pronate and fall. This is a positive pronator drift sign.
6. Test each muscle group: firstly, ask your patient to perform the movement, and then test power against resistance, comparing the sides. You should know which muscle groups you are testing with each movement.
 - a. Shoulder abduction & adduction: ask your patient to flex their elbows, then abduct their arms against resistance applied to the upper arm. Then ask your patient to abduct and adduct an outstretched arm from the shoulder.
 - b. Elbow flexion & extension: ask your patient to flex their elbows to 90 degrees. Use one hand to support their upper arm, and the other to provide resistance to their forearm as you test flexion and extension.
 - c. Wrist flexion & extension: ask patient to hold out their arms and make a fist, then to flex and extend at the wrist.
 - d. Finger adduction, abduction, flexion & extension: ask your patient to squeeze your fingers, then open their fist against resistance. Ask them to spread their fingers wide, then to bring their fingers together.
 - e. Thumb adduction & abduction: ask your patient to lift their thumb away from a flat palm, and then bring it back towards a flat palm.
7. Test coordination. Perform finger-nose test:
 - a. Position yourself so you are facing your patient. Ask your patient to touch their nose with their index finger. Then ask them to reach out to touch your finger help in front of them. (You should hold your finger so that they have to fully extend the arm to reach it). Then ask them to repeat this movement backwards and forwards as between their nose and your finger as quickly as they can. Compare sides.
 - b. Look for past-pointing and intention tremor suggestive of cerebellar lesions but note that coordination will also be affected by weakness or sensory disturbance.
8. Dysdiadokokinesis:
 - a. Ask your patient to hold one hand out with the palm facing upwards.
 - b. Then ask them to place the other hand, also palm upwards, into the other hand.
 - c. Then ask them to turn the hand over so the back of their hand faces upwards and repeat as quickly as possible.
9. Dysdiadokokinesis is present when these movements are erratic in force and rhythm.

10. Reflexes. You should know which nerve roots are being tested with each reflex: Supinator (C5/C6), Biceps (C5/C6), Triceps (C6/C7).
11. Sensation
 - a. Test for light touch sensation (using cotton wool) in each dermatome comparing sides.
 - b. Then repeat the process testing for sharp touch sensation (using a neuro-tip).
12. Joint position sense/proprioception:
 - a. Test this at the DIP joint of the index finger. Hold the finger-tip at the sides of the finger distal to the DIP joint, whilst stabilising the joint below this.
 - b. Ask your patient to close their eyes.
 - c. Move the finger-tip up and down, explaining this to your patient as an example.
 - d. Then move the finger-tip either up or down and ask your patient to sense the direction of that movement. Test 3 times.
 - e. If your patient correctly detects the movement their joint position sense is intact.
 - f. If they are not able to do this test a more proximal joint e.g. MCP joint, wrist, elbow until joint position sense can be accurately detected.
13. Vibration sense
 - a. Confirm that your patient can detect the vibration of a 128hz tuning fork on their sternum.
 - b. Then ask your patient to close their eyes and test whether they are able to detect the same vibration on the DIP joint of their index finger, and also when the vibration stops.
 - c. If your patient correctly detects this their vibration sense is intact.
 - d. If they are not able to detect this test a more proximal joint e.g. MCP joint, wrist, elbow until vibration sense can be accurately detected.
14. Thank your patient.
15. Consider your findings and how to present them in a logical and fluent order.
16. Then consider the possible clinical significance of these findings.

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35. PERIPHERAL VASCULAR EXAMINATION

Instructions

1. Introduce self, gain consent and co-operation, conform ID of patient.
2. Perform hand hygiene, roll up sleeves and remove watch.
3. Explain the procedure to the patient.
4. Position and expose patient appropriately.
5. Perform general inspection.
6. Inspect hands.
7. Compare temperature and capillary refill time of both hands.
8. Assess radial pulse – rate / rhythm / radio-radial delay.
9. Palpate brachial pulse and record blood pressure.
10. Assess carotid pulse appropriately – palpation and auscultation.
11. Inspect abdomen closely – pulsatile mass.
12. Palpate aorta, then auscultate aorta.
13. Inspect lower limbs and perform gross motor assessment of lower limbs.
14. Assess and compare lower limb temperature.
15. Assess capillary refill time in both lower limbs.
16. Palpate femoral pulse and assess for radio-femoral delay.
17. Auscultate femoral pulse.
18. Palpate popliteal pulse / auscultate popliteal pulse.
19. Palpate posterior tibial pulse.
20. Palpate dorsalis pedis pulse.
21. Perform gross sensation assessment of lower limbs.
22. Leave clinical area tidy and perform hand hygiene.
23. Document your findings.
24. Thank your patient.
25. Consider your findings and how to present them in a logical and fluent order.
26. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
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36. PREGNANCY TESTING

Instructions

1. Introduce self, gain consent, co-operation and confirm ID of patient.
2. Perform hand hygiene, roll up sleeves, and remove watch.
3. Explain procedure to patient.
4. Provide appropriate equipment to enable the patient to obtain a clean sample of urine.
5. Wash hands, apply non-sterile gloves and apron.
6. Check that pregnancy test stick package is sealed and expiry is within date.
7. Dip testing stick into urine for 10 seconds, to line and not beyond, noting time (check manufactures instructions).
8. After 3 minutes, read result: 2 lines = pregnant, 1 line = not pregnant (check brand details if different).
9. Discuss the result with the patient.
10. Leave clinical area tidy and perform hand hygiene.
11. Document your findings.
12. Thank your patient.
13. Consider your findings and how to present them in a logical and fluent order.
14. Then consider the possible clinical significance of these findings.

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Date:	Date:	Date:
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37. PREGNANT ABDOMEN EXAMINATION

Instructions

1. Introduce self, gain consent, co-operation and confirm ID of patient.
2. Perform hand hygiene, roll up sleeves, and remove watch.
3. Explain procedure to patient.
4. Make sure a chaperone is available.
5. Ask the patient whether she would like to first empty her bladder before the examination.
6. Perform general inspection: check overall appearance for discomfort, body habitus, jaundice:
 - a. hands – pulse rate, capillary refill time, peripheral oedema
 - b. face – conjunctival pallor, jaundice, melasma, oedema
7. Begin close inspection.
8. Position the patient:
 - a. supine
 - b. left lateral position (in late pregnancy) to avoid inferior vena cava compression
9. Expose the abdomen – xiphisternum to the pubic symphysis.
10. Inspect the abdomen:
 - a. the shape of the abdomen as this may give an indication of the foetal lie
 - b. foetal movements
 - c. surgical scars
 - d. cutaneous signs of pregnancy (Linea nigra, striae gravidarum, striae albicans)
11. Begin palpation – Ask about abdominal tenderness before palpating the abdomen and continue to monitor the patient's face for signs of discomfort throughout the examination.
12. Lightly palpate the 9 regions of the abdomen surrounding the uterus: note any tenderness, guarding or rebound.
13. Lightly palpate the uterus: identify the borders of the uterus, feeling for its upper and lateral edges
14. Determine foetal lie:
 - a. place your hands either side of the mother's uterus (facing the mother)
 - b. apply gentle pressure to the sides of the uterus
 - c. one side should feel full in nature (this is likely the foetal back)
 - d. on the opposite side, you may be able to feel the foetal limbs
15. Presentation:
 - a. Ensure you are facing the mother to observe for signs of discomfort
 - b. Warn the mother this may feel a little uncomfortable
 - c. Place your hands either side of the lower pole of the uterus (just above pubic symphysis)
 - d. Apply firm pressure angled medially, feeling for the presenting part:
 - A hard-round presenting part is suggestive of a cephalic presentation (head first)

- A broader, softer, less defined presenting part is suggestive of a breech presentation
16. Measure symphyseal-fundal height – measure the distance between the fundus and pubic symphysis – measure using tape and compare with LMP or Ultrasound Gestational age; this is only accurate after 20 weeks gestation.
 17. Begin palpation just inferior to the xiphisternum
 - a. Palpate using the ulnar border of the left hand
 - b. Locate the fundus of the uterus (firm feeling edge at the upper border of the bump)
 - c. Now locate the upper border of the pubic symphysis
 - d. Measure the distance between the two in centimetres using a tape measure
 - e. This distance should correlate with the gestational age in weeks (+/- 2cm)
 18. In late pregnancy, the level of engagement should be assessed. Engagement refers more than 50% of the presenting part (usually the head) having descended into the pelvis.
 19. Allow the patient to get dressed and explain that you will speak to them about the examination once they are dressed.
 20. Wash hands.
 21. Thank your patient.
 22. Consider your findings and how to present them in a logical and fluent order.
 23. Then consider the possible clinical significance of these findings.
 24. Leave clinical area clean and tidy.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
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38. RECTAL EXAMINATION

Instructions

1. Introduce self, gain consent and co-operation and confirm ID of patient.
2. For patients this is an examination that they may dread, time needs to be taken to fully explain the reasons for the examination and to answer any questions they may have.
3. Make sure a chaperone is available.
4. Prepare equipment (gloves – non-sterile), KY jelly, apron and tissues).
5. Give clear instructions to which items of clothes will need to be removed i.e. “You will need to undress from the waist down including underwear”.
6. Provide the patient with a gown or towel.
7. Allow the patient to undress in privacy and tell them when you will return.
8. Help patient to lie on their left side with their buttocks close to the edge of the examination table.
9. Ask the patient to bring their knees up towards their stomach.
10. This position allows a good view of the perianal and sacrococcygeal areas.
11. Other positions such as the lithotomy position are sometimes used and may help you to palpate a tumour which is high up in the rectum. It also permits a bimanual examination.
12. Occasionally clinicians may carry out the examination by asking the patient to stand with hips flexed and the upper body resting across the examining table or in the ‘knee-elbow position’.
13. Roll up sleeves, remove watch, wash hands, put on gloves and apply KY jelly to your index finger.
14. Ask patient to try to relax and you then part the buttocks. Inspect the sacrococcygeal and perianal areas for inflammation, rashes, skin tags, warts, herpes, haemorrhoids, anal fissure etc.
15. Warn the patient you are about to perform the examination and explain to them that they may feel as if they are going to open their bowels, reassure them they will not do so.
16. Ask the patient to strain down; you can then inspect the anus looking for any lesions.
17. With your lubricated index finger place the pulp of the finger (not the tip) flat on the anus and wait a few seconds as the patient may tense.
18. Ask the patient to continue to strain down and as the sphincter relaxes gently insert your finger in a direction towards the umbilicus.
19. If severe pain occurs while attempting this manoeuvre abandon further examination and look again for any lesions such as an anal fissure which may have caused pain.
20. Also consider patient anxiety.
21. If you are able to proceed without causing undue discomfort note the anal tone which should close snugly around your finger.
22. If you have any doubt ask the patient to squeeze on your finger or to cough (coughing will induce a brisk contraction of the external anal sphincter).

23. If the patient has a cauda-equina syndrome, an anal prolapse or is suffering from other neuromuscular causes of anal incontinence almost no contraction will be felt.
24. Carry out full examination of the rectum. Rotate your fingers around to palpate the posterior wall, lateral walls and anteriorly.
25. Try to palpate as much of the rectal surface as possible.
26. The hollow of the sacrum and coccyx can be felt posteriorly.
27. Laterally, on either side, it is usually possible to feel the side walls of the pelvis.
28. In men one should feel anteriorly for the rectovesical pouch, seminal vesicles and the prostate.
29. Normally the seminal vesicles and rectovesical pouch are not palpable.
30. The prostate: Normally felt as a rubbery firm swelling about the size of a walnut (2.5cm in length).
31. Note the shape, size, consistency; palpate each lateral lobe which should be smooth and regular.
32. The median sulcus can be felt between the two lateral lobes.
33. If any nodules are evident note the size and if the prostate feels hard attempt to assess the extent of enlargement whether the lateral edge is distinct and whether there is any extension into the seminal vesicles.
34. Remove finger and note the presence of faecal material looking at colour, consistency and smell.
35. Also look for the existence of any blood or mucus.
36. Note the amount and colour.
37. Clean the anus with tissue and tell the patient the examination is now complete.
38. Allow the patient to get dressed and explain that you will speak to them about the examination once they are dressed.
39. Dispose of equipment, wash hands.
40. Thank your patient.
41. Consider your findings and how to present them in a logical and fluent order.
42. Then consider the possible clinical significance of these findings.
43. Leave clinical area clean and tidy.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
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39. REMOVAL OF SUTURES

Instructions

1. Review notes to determine number of sutures.
2. Introduce self, gain consent and co-operation, confirm ID of patient.
3. Perform hand hygiene, roll up sleeves, remove watch and wear apron.
4. Prepare and arrange equipment before starting and put on gloves (sterile). Use aseptic technique.
5. Inspect wound for evidence of healing, inflammation or infection, prior to removal of sutures.
6. Note the position of the suture to determine where to cut the suture.
7. Using forceps lift up the suture by the knot.
8. Using the other hand now hold the stitch cutter flat against the skin; slide it under the suture to cut it. (You do this to prevent surface suture being dragged through the wound.)
9. Remove one or two sutures, reassess if safe to proceed then remove alternative sutures before removing all of them.
10. Dispose of sharps safely.
11. Leave clinical area tidy and perform hand hygiene.
12. Note within the medical notes number of sutures removed.
13. Thank your patient.
14. Consider your findings and how to present them in a logical and fluent order.
15. Then consider the possible clinical significance of these findings.

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Date:	Date:	Date:
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40. RESPIRATORY EXAMINATION

Instructions

1. Introduce self, gain consent and co-operation, conform ID of patient.
2. Perform hand hygiene, roll up sleeves and remove watch.
3. Explain the procedure to the patient.
4. General Observation
 - a. of patient (colour, SOB/respiratory distress, audible respiratory sounds, position of patient and whether this is to aid breathing, general habitus)
 - b. of bedside (oxygen, inhalers, nebuliser)
5. Inspection of hands and nails: observe for clubbing, tar staining, peripheral cyanosis, and measure capillary refill time.

Clubbing – know the stages of clubbing and know possible diagnoses this can indicate:

- Stage 1 – increased sponginess of nailbed
 - Stage 2 – loss of hyponychial angle
 - Stage 3 – increased curvature of nail
 - Stage 4 – drumstick appearance of nail
 - Stage 5 – HPOA (hypertrophic pulmonary osteoarthropathy)
6. Check for flap indicative of CO₂ retention by asking patient to hold out their arms with wrists dorsi-flexed and fingers held in extension for 30 secs (know a similar flap can occur in liver failure). Other signs suggestive of CO₂ retention include dilation of the veins and increased temperature of the hands.
 7. Respiratory Rate – also consider breathing pattern and respiratory effort.
 8. Pulse – see vital signs
 9. Face, lips and tongue – observe general colour, check conjunctivae for pallor, lips for peripheral cyanosis, check tongue for central cyanosis
 10. JVP – should be examined and measured with the patient rested at 45 degrees
 11. Lymphadenopathy – palpate for occipital, post and pre-auricular, anterior and posterior cervical, submental, submandibular (including scalene) and supraclavicular lymph nodes.
 12. Chest/Praecordium: Inspection: scars (axillary scar from thoracoscopy, thoracotomy, sternotomy)
 13. Palpation
 - a. Locate trachea (which should be central) and apex beat (which should be 5th intercostal space mid-clavicular line).
 - b. Measure chest expansion (which should be >4cm with maximal inspiration)
 - c. Check for tactile vocal resonance by palpating the lung fields with the lateral border of your hand whilst your patient says '99'.
 - d. Tactile vocal fremitus is increased over areas of consolidation and decreased or absent over areas of effusion or collapse.

14. Percussion – percuss all areas of the lung fields, as for auscultation, remembering to compare sides. Know the significance of tympanic, hyperresonant and dull percussion.
15. Auscultation
 - Auscultate using the diaphragm of the stethoscope whilst listening to the patient inhale and exhale through their mouth. (Listen in a J-shape as per diagram)
 - Listen to all areas of the anterior, posterior and lateral lung fields, including the apices. Compare the breath sounds on each side.
 - Check for additional breath sounds such as stridor, wheeze, pleural rub.
 - Auscultate for vocal resonance: ask your patient to say ‘99’ whilst auscultating the chest. Vocal resonance is increased over areas of consolidation and decreased or absent over areas of effusion or collapse.
 - Examine sacrum and legs for oedema.
16. Remember to check PEFr: ask patient to stand, to hold the monitor horizontally and not to obscure measurement counter, to make a tight seal around the cardboard tube with their mouth, to take a deep breath in then blow out as hard and fast as they can. Take the best of 3 measurements as reading to record.
17. Measure temperature, BP, SpO₂ and examine any sputum.
18. Thank your patient.
19. Consider your findings and how to present them in a logical and fluent order.
20. Then consider the possible clinical significance of these findings.

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Date:	Date:	Date:
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41. SCRUBBING, GLOVING AND GOWNING

Instructions

1. Remove any watches and rings from your hands.
2. Ensure that your sleeves are at least two to three inches above your elbows.
3. Open out your gown pack onto a clean table, only grabbing the outermost edges to maximise the sterile field.
4. Open your glove packet and let it drop onto the clean area.
5. Collect a nail pick and brush.
6. Put on a face mask, securing appropriately.
7. Scrubbing:
 - a. Allow the water to run and cover the nail pick and brush with soap, using your elbows on the soap dispenser; clean your nails and remove any gross debris from your hands.
 - b. Start by scrubbing your hands and forearms, down to your elbows, using the appropriate hand washing procedure for the hands and a rotational action for your forearms for at least one minute.
 - c. Wash the soap from your hands and forearms by holding up your arms with your hands elevated under the tap, such that the water runs off into the sink from your elbows.
 - d. Repeat this procedure a further three times, initially down to the mid-forearm, then down to the wrists, then just for the hands, each time lasting for at least one minute
 - e. Keeping your arms elevated, dry your hands and forearms with the sterile towels in the gowning pack, using a dabbing motion instead of a wiping motion; use one towel for each hand, before throwing them away.
8. Gowning and Gloving:
 - a. Take the sterile gown and gently shake it out, taking care not to let anything else touch it.
 - b. Open it up and place your hands into the sleeves; keep your hands inside the sleeves.
 - c. Ask an assistant to help pull it up over your shoulders and fasten it up at the back.
 - d. Take the right hand glove and place it, palm down, fingers facing your body.
 - e. Grasp the bottom of the cuff with the thumb and index finger of your right hand, still inside the sleeve; grasp the top of the cuff with your left hand (also inside the sleeve) and pull the glove around and over your right hand.
 - f. Pull gently on the sleeve of the gown to help move your hands into the gloves and straighten out the fingers; the sleeves of the gown should remain over most of your palm.
 - g. Repeat this technique for the left hand.
 - h. It is advised to rest your hands on your front as you move around to ensure you remain sterile.

- i. Make sure you do not touch any non-sterile equipment as you move to the operating area.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

42. SPINE CERVICAL EXAMINATION

Instructions

1. Introduce self, gain consent, co-operation and confirm ID of patient.
2. Perform hand hygiene, roll up sleeves, and remove watch.
3. Explain procedure to patient.
4. Examine the patient standing in the anatomical position.
5. Patient needs to be stripped to underwear wearing gown that opens at back.
6. Look
 - a. From the back for muscle wasting, scars, rashes, asymmetry or scoliosis.
 - b. From the side for cervical and lumbar lordosis and thoracic kyphosis.
7. Feel
 - a. Assess tenderness and from which anatomical structure it arises
 - b. Assess any intra- or extra-articular swellings
 - c. Palpate spinous processes and sacroiliac joints
 - d. Palpate spinal muscles for tenderness
 - e. Assess dermatomes for sensation
8. Move
 - a. Tilt head to each side (ear to shoulder) for lateral flexion
 - b. Turn head to look over either shoulder for rotation
 - c. Chin to chest and tilt head back for flexion and extension
 - d. Ask patient to sit on couch side with arms crossed
 - e. Ask patient to lie down on the couch
 - f. Straight leg raising test
 - g. This stretches the sciatic nerve and is abnormal with lumbar disc disease
 - h. Dorsiflex the foot and passively raise patient's leg straight
 - i. Watch for pain and assess the degree of hip flexion
9. Function and special tests
 - a. Neurological system and vascular system examination if indicated by history:
 - b. Assess tone, power and limb reflexes bilaterally and Babinski response.
 - c. Assess pedal pulses
10. Thank your patient.
11. Consider your findings and how to present them in a logical and fluent order.
12. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

43. SPINE LUMBAR EXAMINATION

Instructions

1. Introduce self, gain consent, co-operation and conform ID of patient.
2. Perform hand hygiene, roll up sleeves, and remove watch.
3. Explain procedure to patient.
4. Examine the patient standing in the anatomical position.
5. Patient needs to be stripped to underwear wearing gown that opens at back.
6. Look
 - a. From the back for muscle wasting, scars, rashes, asymmetry or scoliosis
 - b. From the side for cervical and lumbar lordosis and thoracic kyphosis
7. Feel
 - a. Assess tenderness and from which anatomical structure it arises
 - b. Assess any intra- or extra-articular swellings
 - c. Palpate spinous processes and sacroiliac joints
 - d. Palpate spinal muscles for tenderness
 - e. Assess dermatomes for sensation
8. Move
 - a. Flexion and extension.
 - b. Place two fingers on spinal process, ask patient to bend over and watch fingers move apart and together when patient stands up again
 - c. Lateral flexion.
 - d. Ask patient to run hand down side of the leg to the knee to assess lateral flexion
 - e. Ask patient to lie down on the couch
 - f. Straight leg raising test
 - g. This stretches the sciatic nerve and is abnormal with lumbar disc disease
 - h. Dorsiflex the foot and passively raise patient's leg straight
 - i. Watch for pain and assess the degree of hip flexion
9. Function and special tests
 - a. Neurological system and vascular system examination if indicated by history:
 - b. Assess tone, power and limb reflexes bilaterally and Babinski response.
 - c. Assess pedal pulses
10. Thank your patient.
11. Consider your findings and how to present them in a logical and fluent order.
12. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

44. SPIROMETRY

Instructions

1. Ensure referral appropriate, i.e. no absolute contraindications.
2. Prepare machine for measurement and ensure necessary consumables available, including bronchodilator rescue medication.
3. Introduce self, gain consent, co-operation and confirm ID of patient.
4. Confirm with patient no contraindications to testing.
5. Explain procedure and check patient understanding.
6. Perform manoeuvre in seated position wearing nose clips.
7. Perform minimum of three slow/relaxed vital capacity manoeuvres to determine lung volume.
8. Perform forced manoeuvres.
9. Recognise poor effort if appropriate, i.e. cough, delayed start, reduced effort, early termination of expiration.
10. Repeat manoeuvre, minimum of three efforts.
11. Test completed when variability between all.
12. FEV₁, FVC and PEF from best three manoeuvres 5% or less.
13. Perform interpretation, recognising obstructive, restrictive and mixed patterns.
14. Recognise need for additional testing and/or perform reversibility assessment if obstruction suggested.
15. Inform patient of procedure for reporting results or need for further investigations.
16. Dispose of all consumables appropriately, sterilise equipment where necessary.
17. Perform hand hygiene.
18. Thank your patient.
19. Consider your findings and how to present them in a logical and fluent order.
20. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

45. STERILE FIELDS AND BLOOD CULTURES

Instructions

1. Blood cultures are used to detect the presence of bacteria in the blood (bacteraemia). Vital signs need recording and blood should ideally be drawn when a pyrexia is present.
2. Note any antibiotic therapy being administered. Blood cultures ideally are drawn before antibiotic therapy is started as the antibiotic may inhibit the organism growth in the laboratory.
3. Explain the procedure to the patient. Gain consent and cooperation.
4. Assemble the appropriate equipment: 1) Blood culture set (Aerobic and Anaerobic bottles, adaptor, Vacutainer butterfly needle and label 2) Gloves (non-sterile) 3) Gauze 4) Sharps bin (within arm's reach) 5) Chlorhexidine swab x 2.
5. Roll up sleeves, remove watch, wash hands and put on gloves.
6. Identify patient verbally and using ID bracelet, check identification on request form and against patient ID bracelet.
7. Ensure patient is comfortable and assess venous access on both arms.
8. Flip cap off both bottles. Clean each bottle cap with a Chlorhexidine swab and allow to air dry for 30 seconds.
9. Using a no-touch technique (ANTT), attach the blood culture adaptor to the Vacutainer butterfly needle.
10. Apply tourniquet, palpate vein to distinguish structures, massage vein and lightly tap. Clean area using a chlorhexidine swab and allow to air dry for 30 seconds.
11. Pull back the safety mechanism of the needle, hold the wings up and ensure the bevel is also facing up. Hold the blood culture adaptor and Vacutainer needle in your preferred hand.
12. Warn patient of sharp scratch, anchor the vein and observe for flash back.
13. Insert the aerobic bottle to the blood culture adaptor first and observe for blood passing into the bottle. Remove bottle and repeat process with the anaerobic bottle.
14. Remove both bottles and place in kidney tray.
15. Release tourniquet.
16. Dispose of sharps safely into a sharps bin.
17. Apply pressure to site for up to two minutes.
18. Remove the perforated section of the barcode from the bottle and attach to the front of the patients request card.
19. Stick an addressograph label on each bottle.
20. Document in patient notes using label provided in pack.
21. Return the inoculated set to the microbiology laboratory as soon as possible.
22. Thank your patient.
23. Consider your findings and how to present them in a logical and fluent order.
24. Then consider the possible clinical significance of these findings.
25. Leave clinical area clean and tidy, wash hands.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

46. SHOULDER EXAMINATION

Instructions

1. Introduce self, gain consent, co-operation and conform ID of patient.
2. Perform hand hygiene, roll up sleeves, and remove watch.
3. Explain procedure to patient.
4. Examine the patient standing in the anatomical position.
5. Expose both shoulders and arms. In a female patient there should be no straps over the shoulder. A gown should be provided that is applied and tied underneath the axillae.
6. Look
 - a. Look round the shoulder and shoulder blades for muscle wasting, deformity/ asymmetry, swellings, rashes and scars
7. Feel
 - a. Palpate any tender area to establish from which anatomical structure it is arising
 - b. Assess any intra- or extra-articular swellings
 - c. Assess temperature anteriorly over gleno-humoral joint.
 - d. Palpate bony landmarks – sterno-clavicular joints, clavicles, acromioclavicular joint and scapula.
 - e. Palpate the joint line of the gleno-humoral joint and anteriorly to the acromions in the subacromial bursa area
 - f. Palpate muscle bulk of supraspinatus, infraspinatus and deltoids
8. Move
 - a. Test each shoulder movement separately and compare with the other side.
 - b. Observe abduction from behind – to assess scapulothoracic movement
 - c. Observe internal rotation from behind – measure internal rotation by anatomical point at which raised tip of thumb can reach e.g. trochanter, SI joint, T8 vertebra etc)
 - d. Observe forward flexion and extension from the side
 - e. Observe external rotation from the front
 - f. Particularly important to compare passive and active movements to pick up cuff tears and frozen shoulder
 - g. Feel for crepitus
9. Function and special tests
 - a. Assess hands behind head and back – important for washing and dressing
 - b. Impingement sign – painful arc between 60 and 120 degrees of forward flexion or abduction
 - c. Rotator cuff strength tests – for muscle weakness or tears of supraspinatus, subscapularis, infraspinatus and teres minor
10. Leave clinical area tidy and perform hand hygiene.
11. Thank your patient.

12. Consider your findings and how to present them in a logical and fluent order.
13. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

**47. UNDERTAKING APPROPRIATE SPLINTING FOR COMMON
MUSCULOSKELETAL INJURIES**

Instructions

1. Introduce self, gain consent, co-operation and conform ID of patient.
2. Perform hand hygiene, roll up sleeves, and remove watch.
3. Explain procedure to patient.
4. Apply personal protective equipment.
5. Explain procedure to patient.
6. Expose and examine injury. Perform manual stabilization and control any bleeding.
7. Assess distal pulse and motor and sensory function.
8. Measure splint appropriately.
9. Apply splint to immobilize limb above and below injury.
10. Pad splint as necessary.
11. Secure splint in place.
12. Reassess circulation and motor and sensory function.
13. Loosen splint and/or bandages if necessary.
14. Elevate splinted part, if possible.
15. Leave clinical area tidy and perform hand hygiene.
16. Thank your patient.
17. Consider your findings and how to present them in a logical and fluent order.
18. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

48. UNDERTAKING NUTRITIONAL ASSESSMENT

Instructions

1. Introduce self, gain consent, co-operation and conform ID of patient.
2. Perform hand hygiene, roll up sleeves, and remove watch.
3. Explain procedure to patient.
4. Ask the patient to undress to their underwear.
5. For inspection: position the patient supine on an examining table or bed.
6. Begin general inspection with checking around the patient for nutritional supplements and 'Nil by mouth' signs.
7. Inspect the patient as a whole:
 - a. Comfortable?
 - b. General body habitus/body mass index (BMI)
 - c. Is there food at the bedside? Are meals unfinished?
 - d. Do they have nutrition supplements on their table?
 - e. Do they have a naso-gastric (NG) tube in situ
 - f. Do they have 'Total Parenteral Nutrition' (TPN) running - usually a covered plastic bag on a drip stand, running through a long line (PICC line/Hickman line/central line)
 - g. Do they have intravenous fluids running?
8. Begin specific inspection.
9. Check nails for clubbing, koilonychia, leukonychia, xanthomata.
10. Check arms for:
 - a. loose skin over upper arms suggestive of rapid weight loss,
 - b. an erythematous rash (patches, blisters, excoriation marks) over extensor aspects (elbows, knees, buttocks) in keeping with 'dermatitis herpetiformis'
11. Check hair if they are rough and wiry.
12. Check eyes for:
 - a. Corneal arcus
 - b. Xanthelasma
 - c. Xerophthalmia – reduced tear formation.
 - d. Conjunctival pallor
 - e. Icterus/jaundice
13. Check mouth for:
 - a. Angular stomatitis
 - b. Glossitis
 - c. Aphthous ulcers
 - d. Gums (Gingivitis)
14. Check neck for goitre.
15. Check the abdomen – palpate for ascites.
16. Check legs:
 - a. Bowing of the legs
 - b. Pitting leg oedema
17. Calculate the patient's Body Mass Index = (mass in kg)/(height in metres)²

18. Check the patient's food chart and fluid balance chart.
19. Examine the patient's hydration state.
20. Thank the patient and offer to help them get dressed.
21. If there is evidence of a specific nutritional deficiency, then you could offer to further investigate as appropriate:
 - a. Iron deficiency (depending on other factors): oesophagogastroduodenoscopy (OGD) and colonoscopy
 - b. Vitamin B12 deficiency: Schilling test
 - c. Mixed deficiency: Coeliac serology
22. If there is evidence of a specific nutritional deficiency then investigate for consequences of this, e.g.:
 - a. Full blood count and haematinic blood tests (Iron, Vitamin B12, Folate)
 - b. Bone radiographs or DEXA scan for osteomalacia
23. Thank your patient.
24. Consider your findings and how to present them in a logical and fluent order.
25. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

49. UNDERTAKING FEMALE URINARY CATHETERISATION

Instructions

1. Introduce self, gain consent and co-operation and confirm ID of patient.
2. Ensure privacy. Consider a chaperone.
3. Perform hand hygiene, roll up sleeves, remove wrist watch, put on apron.
4. Assist the patient to adopt a supine position. (Bladder scanning must be performed if patient presents with urinary retention prior to catheterisation)
5. Collect correct equipment and using aseptic non touch technique (ANTT), prepare the catheterisation pack and the additional equipment. Check expiry date on catheter.
6. Perform hand hygiene again and put on sterile gloves.
7. Place sterile dressing towel between the patient's legs and thighs.
8. Using your non-dominant hand, retract the labia minora to expose the urethra meatus.
9. Clean the perineal area with 0.9% sodium chloride, using a new swab for each stroke. Draw from the front towards the anus.
10. Insert local anaesthetic gel (lidocaine) into the urethral orifice and gently squeeze the gel into the urethra, wait 2-3 minutes.
11. Remove first pair of the sterile gloves once you have finished cleaning the area, use alcohol hand gel/wash hands and replace with new sterile gloves.
12. Place catheter already connected to catheter bag and sterile container between patient's legs. (Note: to do this remove catheter from the clear plastic casing and connect onto the catheter bag then transfer across to the patient.) (Research has shown the catheter and catheter bag should be joined prior to insertion as this reduces infection.)
13. Advance the catheter until urine flows then push it a further 5cm to ensure it is in the bladder.
14. Inflate the balloon with the correct amount of water.
15. Help to clean the patient up and ask if they are comfortable.
16. Maintain principles of asepsis throughout.
17. Document details of the procedure in the notes and inform other members of staff of this procedure and any follow up that may be required.
18. Thank your patient.
19. Consider your findings and how to present them in a logical and fluent order.
20. Then consider the possible clinical significance of these findings.
21. Leave clinical area tidy and perform hand hygiene.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

50. UNDERTAKING MALE URINARY CATHETERISATION

Instructions

1. Introduce self, gain consent and co-operation and confirm ID of patient.
2. Ensure patient privacy. (Bladder scanning must be performed if patient presents with urinary retention prior to catheterisation.)
3. Perform hand hygiene, roll up sleeves, remove wrist watch, put on apron.
4. Collect correct equipment and using aseptic non touch technique (ANTT) prepare the catheterisation pack and the additional equipment. Check expiry date on catheter.
5. Help the patient to get into the supine position. Put an absorbent pad underneath the patient's buttocks.
6. Perform hand hygiene again then put on sterile gloves.
7. Arrange towels so that only the penis is visible.
8. Pick up the penis using gauze. Clean the penis and perineum using a new swab for each wipe, wipe away from the meatus, retracting the foreskin if necessary. Explain to the patient what is being done as you go along.
9. Insert local anaesthetic gel (lidocaine) into the urethral orifice and gently squeeze the gel into the urethra and wait 2-3 minutes.
10. Remove first pair of the sterile gloves once you have finished cleaning the area, use alcohol hand gel/wash hands and replace with new sterile gloves.
11. Place catheter already connected to catheter bag and sterile container between patient's legs. (Note: to do this remove catheter from the clear plastic casing and connect onto the catheter bag then transfer across to the patient)
12. Negotiate narrowing at the prostate bend by lifting up the penis towards the pubis while keeping it slightly stretched.
13. Advance the catheter until urine flows, then push it a further 5cm to ensure it is in the bladder.
14. Inflate the balloon to catheter requirements using water then gently pull the catheter back until resistance is felt at the base of the bladder. Reposition the foreskin.
15. Help to clean the patient up and ask if they are comfortable.
16. Take urine sample if necessary.
17. Inform other members of staff of this procedure and any follow up that may be required, document details of procedures in notes.
18. Thank your patient.
19. Consider your findings and how to present them in a logical and fluent order.
20. Then consider the possible clinical significance of these findings.
21. Leave clinical area tidy and perform hand hygiene.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

51. UNDERTAKING SIMPLE SKIN SUTURING

Instructions

1. Perform hand hygiene, roll up sleeves, and remove watch.
2. Take a clear history of the incident i.e. how long since the incident and what happened?
3. Arrange and check equipment before starting. (Check lidocaine for drug name, dose, route and expiry).
4. Check for drug/latex/dressing allergies and patient's tetanus status.
5. Ensure patient is comfortable in an appropriate position.
6. Perform hand hygiene and apply (sterile) gloves correctly.
7. Examine the wound for: evidence of infection, neurovascular state, and tendon function, depth of wound, length, site and contamination.
 - Use lidocaine 1% (LA) to anaesthetise wound edges.
 - Warm LA causes less discomfort on injection.
 - Ensure that the LA is not injected intravenously by pulling back the syringe plunger before injecting the LA and looking for blood being pulled into the syringe.
 - Ensure all areas in need of suturing are anaesthetised.
 - Leave enough time for the LA to work and check with the patient that they cannot feel anything before starting the procedure. Onset is between 5 and 30 minutes depending on the type of LA used.
8. Dispose of sharp into a sharps bin.
9. Place needle correctly into needle holder approximately 1/3 of the length of the needle from the thread.
10. This allows good control of the needle.
11. Support the wound edge using tooth forceps.
12. Pass the needle individually through each side of the wound ensuring the needle enters the skin at right angles and pull through an appropriate length of thread.
13. Cut the knot leaving a trail to an appropriate length.
14. Maintain aseptic technique throughout.
15. Dispose of sharps safely.
16. Leave clinical area tidy and perform hand hygiene.
17. Thank your patient.
18. Consider your findings and how to present them in a logical and fluent order.
19. Then consider the possible clinical significance of these findings.

NOTE:

Lidocaine: The most common local anaesthetic used in A&E is Lidocaine which is manufactured in 0.5, 1% and 2% strengths (1% = 1 gram in 100mls of solution). The maximum safe dose of lidocaine is 3mgs per kilogram, i.e. 21mls of 1% for a person weighing 70kgs.

Suitable suture gauges for anatomical site: 3/0;4/0 – Lower limb and torso 4/0;5/0 – Upper limb 5/0;6/0 – Face Up to 10/0 – Microsurgery (nerve repairs)*

Other ways of closing a wound: Metal staples Adhesive tape (e.g. steri strips) Histoacryl glue

Remember: Antibiotics may need to be used if contaminated or longer than 6 hours since wound occurred, bites, diabetic etc.

Tetanus status of patient – Patients who have had a total of five doses of tetanus vaccine at the appropriate intervals are considered to have lifelong immunity against tetanus.

Dressing the wound afterwards – What function does the dressing need to fulfil: to limit movement or simple occlusion?

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Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

52. URINE DIPSTICK, ANALYSIS AND INTERPRETATION

Instructions

1. Introduce self, gain consent and co-operation, conform ID of patient.
2. Perform hand hygiene, roll up sleeves and remove watch.
3. Explain the procedure to the patient.
4. Assembly equipment – clean trolley, gloves, apron, chlorhexidine wipe, urine test strip, universal container and ICE form.
5. Check the test strip to ensure they are contaminated and all facing down, that the desiccant is in the bottle and that they are all within date.
6. Apply gloves and apron, accept specimen from patient.
7. Take urine to sluice area, dip test strip into urine ensuring the reagent pad is fully submerged, wipe excess urine off, whilst ensuring the stick remains horizontal.
8. Read value at appropriate time intervals (according to manufacturer's recommendations – see bottle), ensure the test strip and container do not touch, make a note of results.
9. Dispose of sample or send for further analysis, clean up and dispose of equipment and leave area tidy.
10. Perform hand hygiene.
11. Record results in patient notes.
12. Thank your patient.
13. Consider your findings and how to present them in a logical and fluent order.
14. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

53. USE OF TUNING FORKS

Instructions

16. Introduce self, gain consent, co-operation and conform ID of patient.
17. Perform hand hygiene, roll up sleeves, and remove watch.
18. Explain procedure to patient.
19. Start with the Weber test to establish where a tone is perceived.
20. Strike the tuning fork and place it on the midline, typically on the patient's forehead, (but it can also go on the vertex, bridge of the nose or chin).
21. Place your other hand gently, but firmly on the back of the patients head to ensure enough counter-pressure is applied.
22. Hold the tuning fork in place for up to 4 seconds.
23. Ask the patient where the tone is heard: is it in both ears / centrally / in the head or towards the left or right:
 - a. With symmetrical hearing or a symmetrical hearing loss the sound should be central.
 - b. With an asymmetrical sensorineural loss, the sound should be heard in the better ear.
 - c. With an asymmetrical conductive hearing loss, the sound should be heard in the poorer ear.
24. Proceed to the Rinne test – comparison of loudness of perceived air conduction to bone conduction in one ear at a time.
25. Start with the ear where the Weber has lateralised to (if appropriate).
26. Strike the tuning fork and hold the tines of the tuning fork approximately 25mm from the ear canal entrance. The vibrating fork should be held parallel to the acoustic axis.
27. The orientation of the tuning fork is critical so ensure the acoustic axis is pointing towards the ear canal.
28. Hold the tuning fork there for about 2 seconds.
29. Without any interruption and without touching the tines press the footplate firmly against the mastoid (without any hair getting between the footplate and the mastoid).
30. Place your other hand gently, but firmly on the opposite side of the patients head to ensure enough counter-pressure is applied.
31. Hold the tuning fork in place for another 2 seconds.
32. Ask the patient whether the tone is louder next to the ear or behind the ear. The patient should respond verbally:
 - a. If air conduction (next to the ear canal) is louder, this is a Rinne positive result, indicating either normal hearing or a sensorineural hearing loss.
 - b. If bone conduction (held on mastoid) is louder, this is a Rinne negative result, indicating a significant conductive element to the hearing loss.
33. Thank your patient.
34. Consider your findings and how to present them in a logical and fluent order.
35. Consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

54. VITAL SIGNS

Temperature

Instructions

Axilla:

1. Introduce self, gain consent, co-operation and confirm ID of patient.
2. Perform hand hygiene, roll up sleeves, and remove watch.
3. Explain procedure to patient.
4. Dry skin at the axilla by wiping with a tissue.
5. Shake the thermometer to return the mercury column to 35°C.
6. Clean thermometer by wiping it with an alcohol wipe and allow 30 seconds to dry.
7. Place the bulb of the thermometer under the patient's axilla.
8. Ask patient to hold arm across their chest to hold thermometer in position.
9. Leave thermometer in position for a minimum of 4 minutes.
10. Remove thermometer.
11. Clean thermometer with alcohol wipe in a twisting motion.
12. Perform hand hygiene.
13. Record and document temperature. Report abnormalities.
14. Thank your patient.
15. Consider your findings and how to present them in a logical and fluent order.
16. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

Rectum:

1. Introduce self, gain consent, co-operation and confirm ID of patient.
2. Perform hand hygiene, roll up sleeves, and remove watch.
3. Maintain patient's privacy.
4. Lie patient on side with knees bent.
5. Prepare thermometer as for axillary temperature.
6. Apply a disposable sleeve.
7. Lubricate the protected end of the thermometer.
8. Insert the thermometer into the patient's anus for 2 – 4 cm.
9. Leave thermometer in position for at least 4 minutes.
10. Remove thermometer.
11. Dispose of protective sleeve.
12. Clean thermometer using an alcohol wipe in a twisting motion.
13. Perform hand hygiene.
14. Record and document temperature. Report abnormalities.
15. Thank your patient.
16. Consider your findings and how to present them in a logical and fluent order.
17. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

Pulse

Instructions

1. Introduce self, gain consent, co-operation and confirm ID of patient.
2. Perform hand hygiene, roll up sleeves, and remove watch.
3. Explain the procedure to the patient.
4. Locate radial artery, place second and third fingers along it and press gently.
5. Count pulse for 60 seconds.
6. Perform hand hygiene.
7. Document pulse recording, comparing past recordings and report any irregularities or abnormalities.
8. Thank your patient.
9. Consider your findings and how to present them in a logical and fluent order.
10. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

Respiratory rate

Instructions

1. Introduce self, gain consent, co-operation and confirm ID of patient.
2. Perform hand hygiene, roll up sleeves, and remove watch.
3. Be aware that if assessing respiration and the patient is aware of this, their breathing may change. If possible, record respirations whilst the patient is unaware.
4. Palpate radial artery as if taking the pulse to prevent patient knowing respiratory rate is being assessed.
5. Respiration should be observed for rate, depth and pattern of breathing.
6. Rate: the normal rate for an adult at rest is normally 14–18 breaths per minute.
7. Depth: the depth of respiration is the volume of air moving in and out with each respiration. The normal tidal volume for an adult is about 500ml and should be constant with each breath.
8. A spirometer can be used to measure the precise amount.
9. Pattern: changes in the pattern of respiration are often found in disorders of the respiratory control centre. Some causes for a change in pattern are anxiety, ketoacidosis, extreme exertion, fear, fever and midbrain lesions etc.
10. Count for one minute, observing rate, quality/depth and pattern then record on the observation chart and onto the MEWS scoring if required.
11. Check your local trust MEWS page as some of the ranges may vary from trust to trust.
12. Record the respiratory rate on to the observation chart and report any abnormal results to the doctor/nurse in charge.
13. Thank your patient.
14. Consider your findings and how to present them in a logical and fluent order.
15. Then consider the possible clinical significance of these findings.
16. Leave clinical area tidy and perform hand hygiene.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

Saturation monitoring

Instructions

1. Introduce self, gain consent, co-operation and confirm ID of patient.
2. Explain procedure to the client and ensure informed consent is sought if possible.
3. Position client appropriately for eating and drinking.
4. Perform hand hygiene, roll up sleeves, and remove watch, apply appropriate gloves (gloves need only be worn where the client requires barrier nursing).
5. Place sensor on client's finger or toe so that the light shines through the nail bed. Nail varnish, poor circulation and limb movements prevent accurate results.
6. Switch on machine and take a baseline reading of 2 minutes duration.
7. Client then eats or drinks as appropriate to assessment.
8. Monitor oxygen saturation throughout meal and note down any change in readings during meal or drink.
9. Readings 3 points or more variation below the bottom of the baseline range are considered potentially significant.
10. On completion of assessment remove sensor.
11. Dispose of gloves according to Trust policy if used, wash hands.
12. Document assessment findings in notes following departmental record keeping standards.
13. Clean sensor with an alcohol wipe.
14. Thank your patient.
15. Consider your findings and how to present them in a logical and fluent order.
16. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

Blood pressure

Instructions

1. Introduce self, gain consent, co-operation and confirm ID of patient.
2. Perform hand hygiene, roll up sleeves, and remove watch.
3. Ask patient if they have had any tea, coffee, been smoking or exercised in the last half an hour.
4. Assess which arm would be the most suitable (i.e. presence of dialysis fistula, PICC line, and residual arm paraesthesia or lymph oedema.)
5. Choose correct sized cuff and place it on correctly ensuring the cuff is placed 2–3cm above the antecubital fossa.
6. Correct position of arm (antecubital fossa in line with heart, arm slightly flexed and well supported on table or pillow). Feel radial pulse.
7. Inflate cuff and note when pulse can no longer be felt then release cuff.
8. Place stethoscope over the brachial artery on the medial aspect of the antecubital fossa using diaphragm side.
9. Inflate cuff to 20–30mmHg above level noted previously and drop the dial/pressure gauge slowly no faster than 2–3mmHg per second.
10. Listen and record correctly Korotkoff sounds. The appearance of audible sounds is called the 1st Korotkoff sound and the pressure at which it appears on the sphygmomanometer is called the systolic pressure.
11. Listen then for the disappearance of sounds. This is the 5th Korotkoff sound. The pressure at which they disappear on the sphygmomanometer is the diastolic pressure.
12. Record blood pressure as the systolic value over the diastolic value to the nearest 2mmHg.
13. Record the blood pressure on to the observation chart and report any abnormal results to the doctor/nurse in charge.
14. Thank your patient.
15. Consider your findings and how to present them in a logical and fluent order.
16. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

55. VENEPUNCTURE

Instructions

1. Introduce self, gain consent, co-operation and confirm ID of patient.
2. Perform hand hygiene, roll up sleeves, and remove watch.
3. Assemble the appropriate equipment including sharps bin.
4. Apply disposable tourniquet correctly above chosen area.
5. Inspect and palpate appropriate vein, whilst considering surrounding structures.
6. Clean skin with chlorhexidine swab/wipe and allows to air dry completely in accordance with manufactures and hospital guidelines.
7. Use appropriate device correctly and ensures bevel is facing up (monovette/vacutainer).
8. Warn patient of needle insertion.
9. Insert needle into patient at 45 degrees or less, obtains blood sample.
10. Release tourniquet.
11. Apply sterile swab to insertion site and prepares to remove the needle.
12. Dispose of needle directly into sharps bin.
13. Maintain pressure over insertion site for 2 minutes or until bleeding stops.
14. Label bottles by the bedside.
15. Ensure safe delivery of samples for analysis.
16. Tidy clinical area and performs hand hygiene at the end of the skill.
17. Thank your patient.
18. Consider your findings and how to present them in a logical and fluent order.
19. Then consider the possible clinical significance of these findings.

Teaching	Peer to peer	Clinical
Date:	Date:	Date:
Name:	Name:	Name:
Signature:	Signature:	Signature:
Email:	Email:	Email:
Feedback:	Feedback:	Feedback:

Appendix One

List of Common Medical Presentations

The Physician Assistant should be familiar with the following patient presentations and should be able to manage and diagnose / refer appropriately.

Addiction
Altered sensation (including loss of feeling in lower limbs)
Anxiety: abnormal
Appetite/weight: alteration
Back pain
Blood loss
Breast problems (lump, pain, discharge, surface changes)
Children: Failure to thrive
Children: Developmental problems
Children: Short stature
Children: Unexplained injury
Circulatory abnormalities of the limbs
Collapse/reduced level of consciousness (including fits)
Cough
Cutaneous/subcutaneous swellings
Disordered mood
Disordered thinking

Distension: abdominal
ENT problems
ENT Emergencies
Eye problems
Eye Emergencies
Falls/faints (syncope)/dizzy turns
Fertility / Infertility
Fever
GI disturbances including vomiting/altered bowel habit
Head and neck lumps
Headache
Hypothermia
Injury: Head & Neck
Injury: Extremities
Injury: Abdominal & Pelvic
Injury: Thoracic
Joint pain/swelling
Mass: abdominal
Memory loss
Menstrual changes / problems
Micturition abnormalities (including frequency, volume, colour and incontinence)

Movement: loss of/abnormal (inc. inability to walk, shaking hands)
Oedema
Pain: abdominal
Pain: chest (including heartburn)
Pregnancy: problems in
Prolapse
Sciatic leg pain
Scrotal and groin swellings / pain
Sexual dysfunction
Sexually transmitted infection: concerns about
Shortness of breath
Skin changes: colour, ulceration, pruritis, rashes
Sleep disorder
Speech disturbances
Swallowing difficulties (dysphagia)
Tiredness
Visual disturbances
Voice changes
Weakness (both focal and general)

Appendix Two

List of Emergency Presentations

Cardio-Respiratory Arrest

The physician associate will have full competence in the assessment and resuscitation of the patient who has suffered a cardio-respiratory arrest, as defined by the UK Resuscitation Council		
Knowledge	Skills	Attitudes and Behaviour
<p>Causes of cardio- respiratory arrest</p> <p>Recall the ALS algorithm for adult cardiac arrest</p> <p>Outline indication and safe delivery of drugs used in cardiac arrest scenarios: adrenaline, atropine, amiodarone, buffers</p>	<p>Rapidly assess the collapsed patient in terms of ABC, airway, breathing and circulation</p> <p>Perform Basic Life Support competently as defined by Resuscitation Council (UK): effective chest compressions, airway manoeuvres, bag and mask ventilation</p> <p>Competently perform further steps in advanced life support: IV drugs; safe DC shocks when indicated; identification and rectification of reversible causes of cardiac arrest</p>	<p>Recognise and intervene in critical illness promptly to prevent cardiac arrest such as peri-arrest arrhythmias, hypoxia</p> <p>Maintain safety of environment for patient and health workers</p> <p>Participate in UK Resuscitation Council approved ILS and ALS course (MANDATORY REQUIREMENT)</p> <p>Succinctly present clinical details of situation to senior doctor</p> <p>Consult senior and seek anaesthetic team support</p>

Shocked Patient

The physician associate will be able to identify a shocked patient, assess their clinical state, produce a list of appropriate differential diagnoses and initiate immediate management		
Knowledge	Skills	Attitudes and Behaviour
<p>Identify physiological perturbations that define shock</p> <p>Identify principle categories of shock (i.e. cardiogenic, circulatory)</p> <p>Elucidate main causes of shock in each category (e.g. MI, heart failure, PE, blood loss, sepsis)</p> <p>Define sepsis syndromes</p>	<p>Recognise significance of major physiological perturbations</p> <p>Perform immediate (physical) assessment (A,B,C)</p> <p>Institute immediate, simple resuscitation (oxygen, iv access, fluid resuscitation)</p> <p>Arrange simple monitoring of relevant indices (oximetry, arterial gas analysis) and vital signs (BP, pulse & respiratory rate, temp, urine output)</p> <p>Order, interpret and act on initial investigations appropriately: ECG, blood cultures, blood count, electrolytes</p>	<p>Exhibit calm and methodical approach to assessing critically ill patient</p> <p>Adopt leadership role where appropriate</p> <p>Involve senior and specialist (e.g. critical care outreach) services promptly</p>

Unconscious Patient

The physician associate will be able to promptly assess the unconscious patient to produce a differential diagnosis, establish safe monitoring, investigate appropriately and formulate an initial management plan, including recognising situations in which emergency specialist investigation or referral is required

Knowledge	Skills	Attitudes and Behaviour
Identify the principal causes of unconsciousness (metabolic, neurological)	Make a rapid and immediate assessment including examination of coverings of nervous system (head, neck, spine) and Glasgow Coma Scale	Recognise need for immediate assessment and resuscitation
Recognise the principal sub causes (drugs, hypoglycaemia, hypoxia, trauma, infection, vascular, epilepsy, raised intra-cranial pressure, reduced cerebral blood flow, endocrine)	Initiate appropriate immediate management (A,B,C, cervical collar, administer glucose)	Assume leadership role where appropriate
List appropriate investigations for each	Take simple history from witnesses when patient has stabilised	Involve senior staff promptly
Outline immediate management options	Prioritise, order, interpret and act on simple investigations appropriately	Involve appropriate specialists to facilitate immediate assessment and management (e.g. imaging, intensive care, neurosurgeons)
	Initiate early (critical) management (e.g. control fits, manage poisoning) including requesting safe monitoring	

Anaphylaxis

The physician associate will be able to identify patients with anaphylactic shock, assess their clinical state, produce a list of appropriate differential diagnoses, initiate immediate resuscitation and management and organise further investigations		
Knowledge	Skills	Attitudes and Behaviour
Identify physiological perturbations causing anaphylactic shock	Recognise clinical consequences of acute anaphylaxis	Exhibit a calm and methodical approach
Elucidate causes of anaphylactic shock	Perform immediate physical assessment (laryngeal oedema, bronchospasm, hypotension)	Adopt leadership role where appropriate
Define follow-up pathways after acute resuscitation	Institute resuscitation (adrenaline, oxygen, IV access, fluids)	Involve senior and specialist allergy services promptly
	Arrange to monitor of relevant indices	
	Order, interpret and act on initial investigations (tryptase, C1 esterase inhibitor etc.)	

Other emergency conditions

- BLS
- BLS in childhood/ choking
- Intermediate life support (airway management and simple arrhythmia recognition and management)
- Apply oxygen and nebulisers
- SIMMAN scenarios
- ABCDE approach to sick patient
- Initial seizure management
- Recognition and reversal poisoning e.g. opiates
- Manages electrolyte disturbance e.g. hyperkalaemia, hypoglycaemia
- Fluid resuscitation in shock e.g. blood loss
- Sepsis management
- First aid e.g. nose bleeds

MSc Physician Associate Learning Objectives

Learning Outcomes for Each Clinical Placement

The learning outcomes to be achieved as a result of the experience from all of the clinical placements fall into three categories: Core Professional and Practice Competences, Core Clinical Conditions and Core Procedural Competences.

Core Professional & Practice Competences Learning Outcomes

The following are the six Professional and Practice Competences that are learning outcomes relevant to the clinical placement experience. These have been taken from Section 2.3 of the Core Competence and Curriculum Framework for the Physician Assistant (DoH, 2006). The numbering system is retained for reference to this document. Students are expected to achieve competence in these areas by the end of the programme. These will be evaluated by the Clinical Supervisor at the end of each placement, in term reviews by the PA programme and annually as part of the Multi- Source Feedback.

Professional and Practice Competences

(Section 2.3 of-Competence and Curriculum Framework for the Physician Assistant, DoH 2006)

History taking and consultation skills

- Structure interviews so that the patient's (or carer's) concerns, expectations and understanding can be identified and addressed.
- Elicit a patient history appropriate to the clinical situation, which may include presenting problem, history of the present illness, past medical history, social history, family

history, medications, allergies, review of systems, risk factors and appropriate targeted history.

- Identify relevant psychological and social factors, integrating these perspectives with the biomedical evidence to elucidate current problems.

Examination (general)

- Perform a physical examination (including screening examinations) appropriate to the clinical situation. This will include: neurological examination; musculoskeletal examination; blood pressure (BP) measurement and control; male and female genitourinary examination; breast examination; ophthalmic examination; oropharyngeal examination; cardiovascular examination; respiratory examination; abdominal examination; and dermatological examination (including pressure area risk management).
- Perform a comprehensive mental state examination. This will include: assessment of appearance and behaviour; levels of consciousness; posture and motor behaviour; thoughts and perceptions; affect; speech and language; orientation; memory; and higher cognitive function.
- Interpreting evidence and determining the requirement for additional evidence
- Interpret the findings from the consultation (history, physical examination and mental state examination) in order to determine the need for further investigation and/or the appropriate direction of patient management.
- Understand the indication for initial and follow-up investigations.
 - Select, interpret and act upon appropriate investigations.

- Determine the relevance of screening tests for a given condition.

Clinical judgment in diagnosis and management

- Formulate a differential diagnosis that is based on objective and subjective data.
- Use clinical judgment to select the most likely diagnosis in relation to all information obtained.
- Recognise when information/data is incomplete and work safely within these limitations.
- Recognise when a clinical situation is beyond their competence and seek appropriate support.

Therapeutics and prescribing

- Determine appropriate therapeutic interventions from the full range of available prescription medications.
- Write accurate and legible prescriptions in out-patient, in-patient and primary care settings.
- Prescribe appropriate fluid regimes on commencing intravenous infusion.
- Use the British National Formulary (BNF) and local formularies appropriately and be familiar with the yellow card system for reporting side-effects and drug interactions.
- Recognise their responsibility for gaining the patient's compliance for the drug regime they are prescribing.

Clinical planning and procedures

- Formulate and implement a management plan in collaboration with the patient, the carers and healthcare professionals.

- Perform clinical procedures using knowledge of the indications, contraindications, complications and techniques.
- Monitor and follow up changes in the patient's condition and response to treatment, recognising indicators of the patient's response.
- The remaining twelve Professional and Practice Competence elements are assessed throughout the programme in other ways.

Core Clinical Conditions Learning Outcomes

The graduate PA is expected to have developed a foundation of clinical experience for the range of core conditions recommended in the Matrix Specification of Core Clinical Conditions for the Physician Assistant by category of level of competence (DoH 2006). The various levels of competence for these conditions are outlined in the Matrix document. The conditions are broadly divided by the extent to which the PA plays a role in diagnosis and the level of responsibility the PA has in management of the process. Hence each condition falls into one of four categories:

1A – The PA plays a significant role in the diagnosis and takes significant responsibility in management.

1B – The PA plays a significant role in the diagnosis but does not take significant responsibility in management.

2A – The PA does not play a significant role in the diagnosis but does take a significant responsibility in management.

2B – The PA does not play a significant role in the diagnosis and does not take a significant responsibility in management.

By the end of the programme the student is expected to be able to demonstrate evidence of clinical experience in all conditions in category 1A, 1B and 2A and at a minimum a familiarity and a

theoretical understanding of all conditions in category 2B. Opportunities for clinical experience with core conditions will be expected to vary by clinical placement.

Core Clinical Procedures Learning Outcomes

These procedures are common to many areas of medicine. Achieving competence with these skills need not be assigned to specific clinical placements. The learning outcomes for core clinical procedures for each clinical placement are the same: obtain experience for any procedure for which competence has not yet been achieved. Students should seek opportunities for experience as they become available within each clinical placement.

Teaching on Prescribing

Currently, the PA student will not be able to prescribe independently once they complete their course. However, there are plans to change this in the near future. As a result, PA students will complete a prescribing module and should be taught prescribing skills at every opportunity.

Students should be involved in the management of patients as much as possible.

PA students should be taught how to interpret test results and make informed treatment decisions. For example, they should be taught about when to start a patient on a statin and when to start antihypertensive treatment and learn about the different types of medications.

Therefore, students are encouraged to:

- To use the BNF
- To learn about the treatment choice/alternatives when seeing patients in clinics
- To learn about side-effects – and how to manage them

Evaluation

At the end of each placement block, students and educational supervisors will be invited to take part in an evaluation of placement process which we would encourage everyone to participate in so that we can continue to review and improve the placement process and content.

Additional support and useful information

- If you have any regarding placement administration, please contact:

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