



UNIVERSITY OF  
LEICESTER

Leicester Medical School

# Medicine Block

Student Handbook  
2026-7



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## Specialty Workbooks and Blackboard Resources

To support your learning in the Medicine Block, there is a range of materials on Blackboard. In addition, you should refer to the student workbooks for sub-specialties during your time in these areas.

## Welcome to the Medicine Block

The hospitals affiliated with Leicester Medical School provide fantastic learning opportunities for you to take advantage of over the next 11 or 12 weeks. The medical specialities within this block encompass most of the common medical conditions as well as acute medical emergencies. In addition, chronic disease associated with these medical specialities accounts for a significant degree of morbidity in the population

The block is focused around attachments within medical specialities. Each hospital will lead a mixture of formal seminars as well as other opportunities, including, bedside teaching, ward rounds, clinical skills training, SIMS, etc. Get to know the junior medical staff - many are willing to teach you depending on their own availability.

The block aims to provide you with:

- Training in history taking and examination skills in medicine – focus on cardiovascular, respiratory, abdominal, endocrine, peripheral nervous system, musculoskeletal (hands)
- Experience in Medicine, based on the activities of the clinical teams
- Experience of acute medical emergencies admitted to the Clinical Decisions Unit / Medical Admissions Unit / Older Persons Admissions and Coronary Care Unit
- Knowledge about common diseases, including a safe and evidence based approach to managing patients within the following sub-specialties:
  - Cardiovascular medicine
  - Diabetes & Endocrinology
  - Gastroenterology & Hepatology
  - Infectious Diseases
  - Older persons medicine
  - Renal medicine
  - Respiratory medicine
  - Rheumatology
- A better understanding of what is expected in your formative and summative exams
- Longitudinal themes related to the medical specialities:
  - Basic Sciences
  - Pathology
  - Microbiology
  - Haematology
  - Imaging
  - Clinical Pharmacology
  - Palliative Care
  - Professionalism / Law and Ethics
  - Communication skills
  - Public Health & Disease Prevention
  - Patient Safety

## Learning Outcomes, Aims and Objectives

Throughout Phase 2, you will work towards the learning outcomes of the Leicester Medical School Phase 2 Curriculum and to attain the core knowledge, skills and behaviours defined in the Medical Licensing Assessment (MLA) Content Map. You should refer to these resources regularly to guide your learning. The block aims and objectives listed below support these outcomes and align with the MLA Content Map.

### Aims

Students should continue to improve their skills in history taking and clinical examination, case presentation, communication and diagnostic reasoning. Students should be able to recognise common medical conditions, and be able to describe their investigation, treatment and prevention. Students should learn about patient safety issues, including safe prescribing, and clinical governance through involvement with clinical teams.

### General Objectives

- Further developing an empathic approach to history taking skills leading to a good understanding of a wide range of common presentations (symptom and speciality based approaches) to secondary care with sound clinical reasoning skills
- Undertake a competent clinical examination and identify common abnormal clinical signs – abdominal, cardiovascular, respiratory, endocrine, diabetic foot / peripheral neuropathy, rheumatology (hands)
- Develop differential diagnoses and patient problem lists
- Understand the basic principles of managing common presentations to a medical team including appropriate investigation interpretation and prescribing
- Be competent in clinical procedural skills as defined by the programme specification
- Have an understanding of multi-disciplinary team working that is required to manage a patient's care, including the use of Information Technology
- Be aware of the importance of, and understand the principles of, monitoring a patient's progress in primary care and hospital-based settings.
- Be aware of the key ethical and legal aspects in practice to ensure patient safety such as the Mental Capacity Act
- Be a competent communicator with patients and other healthcare professionals through written and verbal communication
- Recognise preventative strategies that may reduce the burden of chronic medical disease on society (such as smoking cessation or risk factor modulation, such as alcohol intake and exercise)

## Cross Specialty Objectives

- Recognise, investigate and manage Thromboembolic disease
- Awareness of Thromboembolic disease risk prevention
- Sepsis awareness, investigation and management
- Recognise the critically unwell patient including shock, anaphylaxis and allergy
- Understand which medical patients are best managed in HDU or ITU settings
- Awareness of the principles of Basic Life Support and approach to Cardiac Arrest
- Anaphylaxis recognition and management
- Awareness of the concept of Controlled Oxygen Therapy and management of Respiratory Failure and when high flow versus controlled oxygen is indicated
- Recognise overdose / poisoning
- Recognise the influence of psychosocial factors in patients with chronic disease
- Communicate chronic disease (including terminal illness) diagnosis to patients

## Specific Objectives

These objectives are organised by speciality **but you will have opportunities throughout your clinical placements to achieve these objectives**. Many patients with these problems are supported in general medicine and acute medicine settings.

### Cardiovascular Medicine

- Symptom based approach to patients with chest pain, palpitations, limb pain and swelling and syncope / presyncope
- Recognise, investigate and manage arrhythmias (including peri-arrest), angina, myocardial infarction / acute coronary syndromes, valvular heart disease, heart failure, cardiac tamponade, hypertension (including retinopathy), hyperlipidaemia and peripheral vascular disease
- Understand which patients are best managed on the Coronary Care Unit
- Give patients advice about cardiovascular risk factors and disease prevention

### Diabetes and Endocrinology

- Recognise, investigate and manage Diabetes Mellitus (Type 1 and Type 2)
- Be aware of safe insulin prescribing
- Recognise and manage complications of acute (including Diabetic Ketoacidosis and Hyperosmolar hyperglycaemia syndrome) and chronic (including diabetic foot ulcer, retinopathy, nephropathy, neuropathy) complications of diabetes mellitus
- Recognise, investigate and manage: Hyperglycaemia, hypoglycaemia, Abnormal electrolytes (including sodium and potassium abnormalities), hyper/hypo-calcaemia, hyperparathyroidism, hypoparathyroidism and AVP-deficiency (previously known as Cranial Diabetes Insipidus)
- Recognise, investigate and manage adrenal crisis / Addison's Disease
- Recognise, investigate and manage Cushing's Disease
- Recognise, investigate and manage thyroid dysfunction – hyperthyroidism and hypothyroidism

## Gastroenterology & Hepatology

- Symptom based approach to patients with abdominal pain, haematemesis, melaena, jaundice, diarrhoea, nausea and vomiting
- Recognise, investigate and manage: Upper GI Bleeding and Inflammatory Bowel Disease
- Recognise normal nutritional states versus malnutrition and be aware of malnutrition investigation and management
- Recognise Acute Liver Failure, know the most common causes, investigations (liver screen) and the immediate management (including referral to Critical Care and Regional Liver Services)
- Recognise and manage paracetamol overdose
- Recognise and investigate the cause of Chronic Liver Disease/abnormal liver function tests
- Describe the management of Alcoholic Liver Disease, Non-Alcoholic Fatty Liver Disease, Viral Hepatitis, Haemochromatosis and autoimmune liver disease
- Recognise, investigate and manage complications of Chronic Liver Disease and Portal Hypertension

## Infectious Diseases

- Systematic approach to patients with infection – recognise, investigate and manage infection affecting different systems, including sepsis. In particular:
  - Respiratory (lower respiratory tract infection / pneumonia)
  - Cardio (endocarditis)
  - Central nervous system (meningitis, encephalitis)
  - Gastrointestinal (gastroenteritis, including *C. difficile*; hepato-biliary)
  - Urinary tract (cystitis, pyelonephritis)
  - Skin and soft tissue (cellulitis, necrotising fasciitis, diabetic foot infection)
  - Musculoskeletal (septic arthritis, osteomyelitis, spondylodiscitis)
- Recognise the clinical presentations caused by commonly found micro-organisms – virus, bacteria, fungus, parasite.
- Recognise, investigate and manage the returning traveller with fever and other symptoms, including malaria.
- Differentiate between the presentation and causes of acute vs chronic infections
- Recognise, investigate and manage patients with pyrexia of unknown origin
- Recognise important causes of immunosuppression (including HIV and immunosuppressing drugs), and their impact on infections
- Understand the principles of Infection Control
- Understand the principles of antimicrobial use, including commonly used antibiotics and antimicrobial stewardship.

## Older Persons Medicine

- Define CGA, list its components, and perform CGA
- Describe and understand the concept of frailty and frailty score
- Describe the concept of polypharmacy, safe prescribing in the older adult
- Understand dosing of medications and influence of co-morbidities
- Have awareness of evidence base for treatment in the older person including understanding of safe prescribing (STOP/START tool)
- Define and recognise clinical conditions in the older person and their complex

presentation: blackout/collapse, constipation, urinary incontinence, falls, delirium and dementia

- Understand how to assess capacity (GMC guidance)
- Understand processes involved in end of life decision making (GMC guidance) and palliative care, including DNAR.

## **Renal Medicine**

- Recognise, investigate and manage Acute Kidney Injury, including awareness of common causes (pre-renal, renal and post-renal)
- Recognise Chronic Kidney Disease for long term preventive care
- Recognise, investigate and manage: Diabetic nephropathy and Nephrotic Syndrome
- Recognise patients who need specialist renal care
- Undertake a fluid balance assessment in patients and understand the relevance of normal and impaired fluid balance
- Understand the principles of intravenous fluid replacement
- Recognise common complications in patients on renal replacement therapy

## **Respiratory Medicine**

- Symptom based approach to patients with breathlessness, cough, chest pain, wheeze, sputum, haemoptysis
- Recognise the importance of taking a full occupational history and understanding conditions that cause occupational lung disease including asbestos
- Recognise, investigate and manage: Asthma, COPD, Pneumonia (including knowledge of common as well as atypical organisms), Pulmonary Embolus, Tuberculosis, Bronchiectasis, Cystic Fibrosis, Interstitial Lung Disease, Lung Cancer (presentations – there will be more focus on the treatment and management of Lung Cancer in Year 4), Pleural Effusion, Pleural Infection, Pneumothorax, Obstructive Sleep Apnoea, and Lower Respiratory Tract Viral Infections including Influenza and COVID-19
- Awareness of patient education in chronic disease including adherence, inhaler technique, trigger avoidance, self-management plans
- Recognise, investigate and manage acute and chronic respiratory failure
- Recognise cor pulmonale and pulmonary hypertension relating to chronic respiratory disease
- Recognise the importance of non-pharmacological management, such as pulmonary rehabilitation in certain chronic lung conditions

## **Rheumatology**

- Symptom based approach to patients with joint symptoms, including pain, swelling, stiffness and reduced mobility
- Recognise, investigate and manage: Rheumatoid arthritis (particularly in the hands), Systemic lupus erythematosus, Ankylosing spondylitis, Gout, Fibromyalgia, Osteomalacia, Osteoporosis, Osteoarthritis and Polymyalgia rheumatica

## Clinical (procedural) skills training

The following skills are mandated by the GMC prior to graduation. You should have the opportunity to undertake these and get signed off in the Year 3 Medicine Block:

- Venepuncture
- Managing blood samples correctly
- Arterial Blood Gas Sampling
- Intravenous fluid prescribing
- Use of Infusion Devices
- Making up drugs for parental administration
- Dosage and Administration of insulin and use of sliding scales
- Perform a 12-lead ECG
- Interpret a 12-lead ECG
- Interpret a Cardiac Monitor
- Perform and Interpret Peak Flow
- Interpret Spirometry
- Instruct patients in the use of devices for inhaled medication
- Administer a nebulised medication
- Subcutaneous and intramuscular injections

# **Links to Prior Learning and Longitudinal Themes**

## **Basic Sciences**

- Normal anatomy and physiology

## **Pathology**

- Pathophysiology of common medical diseases

## **Microbiology**

- Microbiology associated with infections

## **Imaging**

- Interpretation of normal X-rays: Chest, Abdominal, Hands
- Interpretation of: Chest X-rays in relation to common cardiac and respiratory disease; Abdominal X-rays in relation to gastrointestinal pathology; Hand X-rays relating to common rheumatological disease
- Awareness of modalities including CT, MRI, PET, Echo and Ultrasound

## **Clinical Pharmacology**

- Knowledge of the common drugs used to treat medical disease, including, indications, contraindications, common interactions, route of metabolism, mechanism of action and common side effects
- Awareness of common inhaler, volumatic and nebuliser devices
- Knowledge of safe (controlled) oxygen prescribing

## **Palliative Care**

- An understanding of palliative care for patients with chronic organ disease, terminal cancer or old age / frailty

## **Professionalism / Law and Ethics**

- Respect patients as individuals and act with honesty and integrity
- Understand the key principles of ethics
- Awareness of how to utilise limited resources within the NHS

## **Communication Skills**

- Patient centred consultations / interactions demonstrating empathy
- Explain lifestyle changes to reduce disease risk
- Knowledge of how to break bad news sensitively
- Communicate well with patients, relatives and colleagues

## **Public Health & Disease Prevention**

- Understand the principles of risk identification, disease prevention, surveillance and screening programmes
- Understand the principles of notifiable diseases

## **Patient Safety**

- Patients safety should always be your first concern – Do no harm
- Informing patients of risks and benefits of investigations and interventions
- Safe drug prescribing

## Timetables

Each hospital site will provide you with timetables for the block.

These include a variety of teaching opportunities:

- Ward Based Teams / Learning
- Seminars / tutorials
- Clinical Examination skills teaching
- Acute admissions experience (including on-call)
- Simulation training
- Multi-professional learning
- Observing specialty-specific procedures
- Ad hoc optional extras

**As a guide, students are expected to at the very least:**

- Attend the complete induction programme
- After induction work during core hours 9 am to 5 pm (there is also opportunity to shadow doctors on-call during evening shifts 5-8pm)
- Engage with and meet your clinical supervisor
- Attend ward base as timetabled
- Attend sub-speciality wards as timetabled
- Attend clinical teaching sessions
- Attend seminars / tutorials
- Shadow ward junior doctors
- Shadow the admissions unit / CCU postgraduate doctors in training
- Clerk as many cases as possible and present prepared cases
- Attend the mandatory SIMS sessions arranged for you
- Attend mandatory clinical skills sessions (e.g. ECG)
- Complete the mid-block self-assessment (SBA and SAQ's with model answers) accessible on Blackboard
- Attend the end of block assessments
- Attend the end of block feedback session

### Acute On Call Experience

During your attachment, you will spend dedicated time on the Clinical Decisions Unit / Medical Assessment Unit and Coronary Care Unit. This will give you the chance to see acute admissions and it is expected that you will shadow the admissions teams, clerk newly admitted patients and present these cases to the medical team on the unit. You should also undertake at least 2 evening shifts (5-8pm) during the block.

## **Absence**

Complete attendance is expected throughout the block. However, if you are absent for any reason, you must follow the medical school's procedures. On the first day of absence you must inform the undergraduate coordinator for your hospital and your consultant's secretary at the start of the working day. You should then inform them again on the day you return. Please see the Year 3 Handbook for more details.

## **Dealing with Problems**

Sometimes things go wrong for no apparent reason. This may be related to issues that arise in the hospital or university. Equally problems that arise at home (e.g. family sickness) can have a detrimental effect on your studies if you are left unsupported. Please discuss any issues with your clinical supervisor / local Block Lead at the earliest opportunity.

Our guidance is to seek early support or advice. There are a number of channels available via the Medical School, including the Pastoral Support Unit. In addition, the undergraduate co-ordinator and education consultant lead may be able to help.

The Academic Support Team can also offer advice if you are having difficulty with assessments and learning.

## **Study Advice: How to get the most from this Block...**

- Practice your history taking and examination skills in End of Block OSCE format from the start of the block (Practice, Practice, Practice)
- Memorable patients are the ones that you have helped your clinical team to manage and you should get to know your ward team well and integrate with them:
  - you should review and present patients
  - you should help the FY doctors with their ward duties
  - you should follow your inpatients for investigations
- Practice writing in patient's notes on ward rounds or in clinics under supervision
- Look at patient observation charts and drug charts at each encounter
- Other professionals (nurses, pharmacists, physiotherapists, technicians etc.) have a lot to offer and if asked in advance, will allow you to learn how their work integrates with medical management of patients
- See as many patients as you can during the block – present your findings (patient history and examination findings) to your clinical teams
- Attend all seminars, bedside teaching and mandatory sessions
- If you have a genuine reason to miss a session be courteous and inform your consultant / team or person leading the teaching session
- Use all available resources on Blackboard, including sub-speciality booklets and Virtual Learning. Also refer to our YouTube channel: <https://www.youtube.com/channel/UCjikdcxpxdi1VcMi7IICnBQ>
- Complete the workbook cases in parallel to your specialty rotations

## **Top Tips from previous Students**

- Stay organised and do workbook cases as you go (these are checked at the end by your supervisor as part of your grade for the block)
- Get involved:
  - put yourself out there & show enthusiasm and clinicians will be more likely to want to teach you
  - try to write up patient notes (no pressure as will always be checked & often will be dictated by someone else anyway)
  - volunteer for procedural skills
  - take histories (I went up to doctors and asked if there were any interesting patients to take history from, present to them after taking history, then afterwards reviewed patient notes)
- See as many patients and practice clinical examinations as much as possible (look for abnormal signs, easier to remember conditions when you've seen it on an actual patient)
- Practice timings in preparation for end of block and end of year OSCE's
- View Medicine Block online videos on Blackboard and YouTube channel
- Check learning outcomes frequently & use to guide your learning

- If ward quiet, don't be afraid to leave for private learning - aim to be in clinical / patient facing areas around 70% of the time and the rest for private (self-directed) study

## Using this Workbook

The workbook is not a textbook but a guide to direct your learning through the block. It is divided into several key sections. There are a number of specified clinical scenarios based on cases that we would like you to work through.

You should work through each of the cases during the attachment. There are over 40, but you have plenty of time to complete these during the block. These scenarios combine a number of key learning outcomes as well as drawing together some of the core knowledge that you learnt in Phase 1. The questions are written in a similar style to formative and summative short answer questions (SAQ) and single best answers (SBA) to help you further in preparations for these assessments.

In addition, there is space in the workbook for you to obtain written feedback from clinical tutors to help with your development. There is an attendance record to keep updated as well.

**All of the workbook must be completed to achieve Block completion**

## Block Assessment

Your block assessment is formative. It will provide you with a guide to your progress during the block and give you an indication of how well you have achieved the learning objectives.

There are several elements:

### **Clinical Supervisor Grading** – based on:

1. Ongoing feedback during the block:
  - Based on your clinical performance and knowledge
  - Clinical Supervisor reviews and ongoing clinician feedback
2. Attendance: this is recorded throughout the block. Poor attendance will be reflected in the block grade and will be referred to the medical school
3. Professionalism
4. Completion of the workbook scenario cases (and quality of completion)
5. Completion of the procedural skills

### **End of Block Assessments Grading:**

1. Written Assessment – SAQ and SBA papers
2. OSCE – a mini OSCE comprising 4 stations usually:
  - i) History Taking
  - ii) Procedural Skill
  - iii) Clinical Examination or Investigation Interpretation
  - iv) Unwell patient Management & Prescribing

Watch: <https://www.youtube.com/watch?v=F4XUN3Y-Zb8&t=3s>

You will be given a grade on your clinical activity (by your consultant supervisor usually in consultation with other members of the team) and a grade based on your end of block assessments. Your overall block grade will be an average of these two.

The grading is based on fail – borderline – pass – good – excellent.

Clearly a high score in the end of block assessments combined with excellence in all aspects of the ward activity and workbook are fundamental to achieving an Excellent Grade.

## **Mid-Block Formative Assessment (self-assessment)**

There is a written self-assessment material (sample SBA and SAQ's) available on Blackboard for you to undertake in the middle of the block (recommended in week 6) with answers provided to give you insight into your own knowledge base and also examples of the style of questions used in formative and summative assessments.

## Scenario Cases

This section is dedicated to furthering your knowledge of key medical conditions. These are common conditions, which you should know about. This knowledge will be invaluable for your formative and summative assessments.

You can use the speciality specific cases as a guide for focusing on the types of patients you see when you rotate through the different specialities. The cases are disease-based and designed to help cover the breadth of the curriculum.

### Cardiology

1. Myocardial Infarction
2. Heart Failure
3. Arrhythmia
4. Valvular Heart Disease
5. Hypertension

### Diabetes Mellitus

6. Hypoglycaemia
7. A patient on insulin
8. Diabetic Ketoacidosis (DKA)
9. Diabetic Foot Ulcer
10. Hyperosmolar hyperglycaemia state (HHS)
11. Suboptimal Diabetic Control

### Endocrinology

12. Adrenal crisis
13. Acute hyponatraemia
14. Acute hypernatraemia and Diabetes Insipidus
15. Acute hypocalcaemia
16. Acute hypercalcaemia
17. Thyroid Disease

### Gastroenterology & Hepatology

18. Upper GI Bleeding
19. Inflammatory Bowel Disease
20. Decompensated Chronic Liver Disease
21. Paracetamol overdose
22. Malnutrition

### Infectious Diseases / Infection

23. Meningitis
24. A returning traveller with fever
25. Tuberculosis

### Older Persons Medicine

26. Constipation or urinary incontinence
27. Dementia/poor swallow/advance care planning
28. Falls / Acute Confusion

### Renal Medicine

29. Acute Kidney Injury
30. Chronic Kidney Disease (CKD)
31. Renal Replacement Therapy

### Respiratory Medicine

32. Asthma
33. COPD
34. Cough / Pneumonia
35. Lung cancer / Pleural Disease
36. Interstitial Lung Disease (ILD)
37. Bronchiectasis / CF

### Rheumatology

38. Rheumatoid arthritis
39. Systemic Lupus Erythematosus (SLE)
40. Ankylosing spondylitis
41. Gout

### General / Acute

42. DVT
43. PE
44. Allergy / Anaphylaxis
45. Sepsis

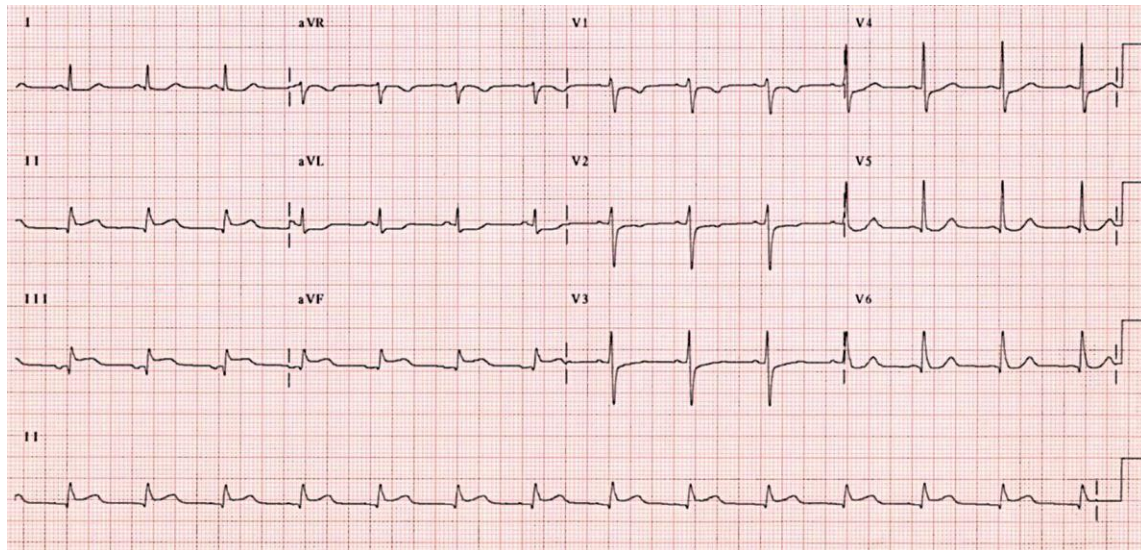
At the end of most of the Scenario Cases, we have given you some suggestions for additional reading. These are usually links to NICE guidance or NICE Clinical Knowledge Summaries.

This is an important element of your studies. It will stimulate further reading and give a framework for the types of patients you should see during your clinical attachments. This will also serve as very useful revision for your formative and summative assessments.

## Scenario Case 1 - Myocardial Infarction

A 57 year old woman presents to the Emergency Department with severe central crushing chest pain which has lasted for 30 minutes. She has a history of hypercholesterolaemia and hypertension. She is on regular Simvastatin and Amlodipine.

Her ECG is shown.



**What is the ECG diagnosis? (one Single Best Answer)**

- A. Anterior STEMI**
- B. Atrial Fibrillation**
- C. Inferior STEMI**
- D. Pericarditis**
- E. Posterior STEMI**

**Which coronary artery is involved? (one mark)**

**List common cardiovascular risks? (2 marks – half a mark for each answer)**

**a. What should be the immediate management of this patient before the cardiologist arrives? (4 marks) b. What management will the cardiology team deliver? (1 mark)**

**What is the pathophysiology of an acute Myocardial Infarction? (2 marks)**

**What does cardiac rehabilitation entail? (2 marks)**

**What is the difference between a ST elevation MI and a non-ST elevation MI? (2 marks)**

**What are the possible complications of acute myocardial infarction? (2 marks, half-mark for each answer)**

**What long-term medications should be prescribed following MI, prior to hospital discharge to improve clinical outcomes? (5 marks)**

<https://www.nice.org.uk/guidance/cg95>

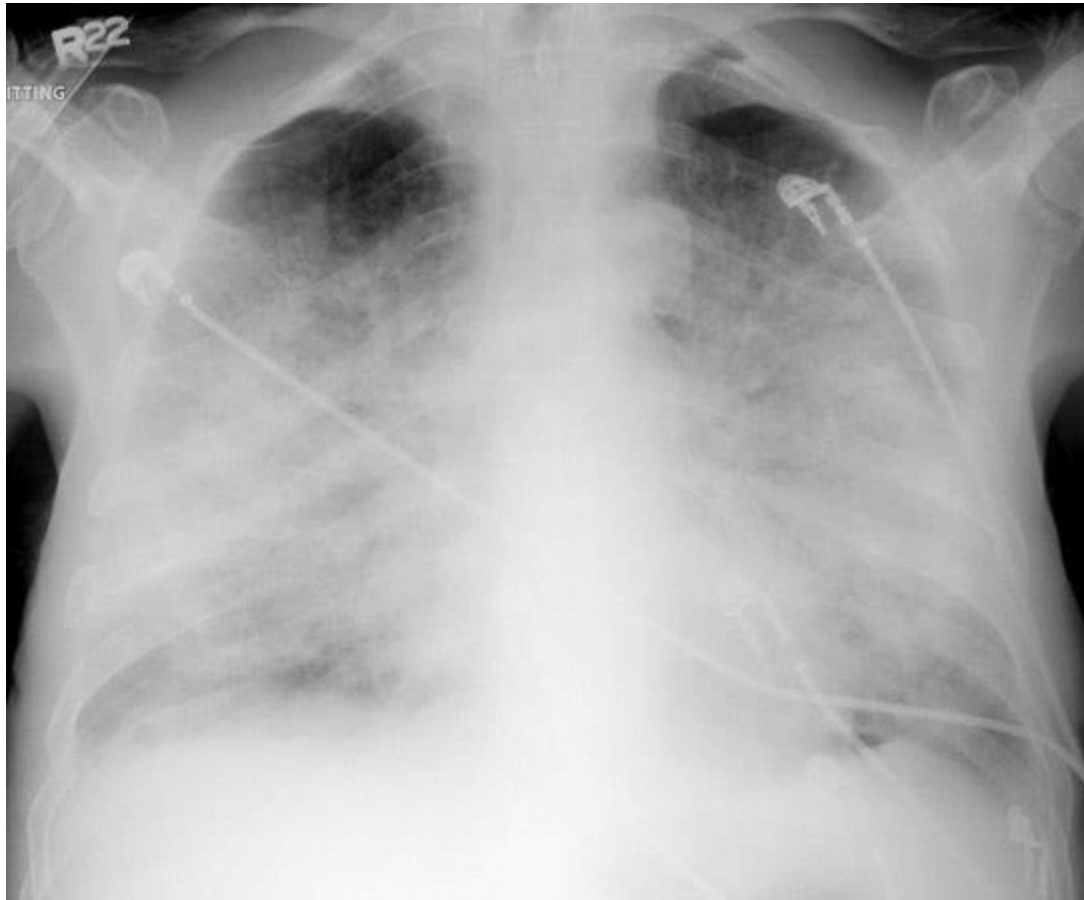
<https://www.nice.org.uk/guidance/ng15>

## Scenario Case 2 – Heart failure

*A 72 year old man presents to the cardiorespiratory admissions unit with a 3 week history of worsening shortness of breath on exertion. He has associated orthopnoea (3 pillows) and ankle swelling.*

*His BP is 155/90, rate 104 / min and Sats 91% on air. On examination of his chest he has bi-basal crackles on auscultation. In addition, he has pitting oedema up to his knees.*

*His CXR is shown below.*



**What features of the patient's presentation (history and examination) support a diagnosis of heart failure? (2 marks – half-mark for each feature)**

**What features of this patient's CXR are suggestive of heart failure? (2 marks)**

**What are the common causes of heart failure? (2 marks – half-mark for each answer)**

**Why do patients with heart failure develop ankle oedema? (2 marks)**

**What is the treatment for a) acute presentations (2 marks) of heart failure and b) chronic heart failure (2 marks)?**

**Reading:**

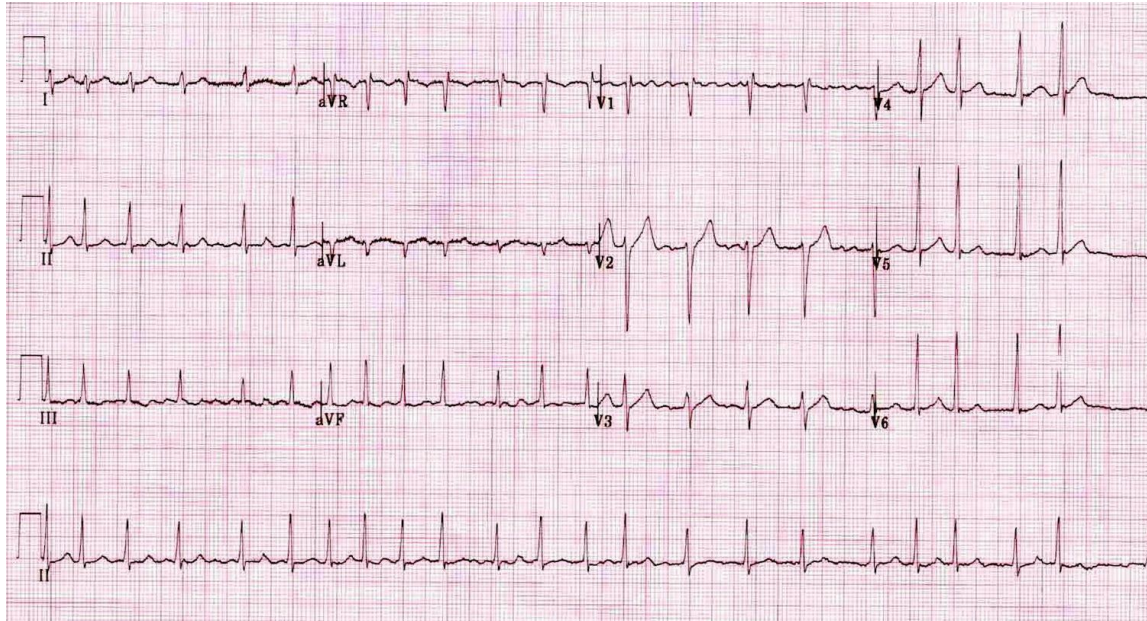
<https://www.nice.org.uk/guidance/cg187>

<https://www.nice.org.uk/guidance/ng106>

## Scenario Case 3 – Arrhythmia

A 49 year old woman presents with a one week history of palpitations and shortness of breath on exertion.

Her resting heart rate was noted to be 130 / minute by her GP who arranged prompt admission to the Medical Assessment Unit. On arrival she has a BP of 130/85 and pulse 130. Her ECG is shown below.



**What does the ECG show and state the rate and rhythm? (2 marks)**

**What is the difference between a supraventricular tachycardia (SVT) and ventricular tachycardia (VT)? (2 marks)**

**What acute treatment should the patient receive? (2 marks)**

**What would be the indications for electrical DC cardioversion? (2 marks)**

**What are the 3 commonest causes of Atrial Fibrillation (AF) and what associated investigations would be useful to identify or exclude these common causes? (3 marks – half-mark for each common cause and half-mark for each associated investigation)**

**What is Wolff-Parkinson-White syndrome? (1 mark)**

**What drugs are used in the long-term treatment of permanent AF? (3 marks)**

**What Scoring systems are helpful in determining whether a patient with AF should be taking long-term anticoagulation? (SBA - 1 mark)**

- A. CHADSVASC and HAS-BLED**
- B. HEART and CHAD2**
- C. MAP and CENTOR**
- D. TIMI and NIHSS**
- E. WELLS and MELD**

## Scenario Case 4 – A patient with a murmur

*An 81-year-old man presents with increasing breathlessness. He now has an exercise tolerance of 50 metres which has been a gradual decline from normal over the last 6 months.*

*On examination, he has a pulse of 60bpm and BP of 120/60. Heart sounds reveal a harsh systolic murmur loudest over the base of the heart, radiating to neck. There are no signs of heart failure.*

*A working diagnosis of aortic stenosis is made.*

**What are the potential clinical features of aortic stenosis i.e. not just this patient - (include abnormalities that might occur in the pulse, BP and heart sounds). (3 marks)**

**What are the common differential diagnoses of a systolic murmur? (3 marks)**

**What investigations are relevant? (2 marks)**

**What are the common complications of severe aortic stenosis? (3 marks)**

**Outline the management for patients with aortic stenosis? (2 marks)**

*More general questions regarding patients with valvular heart disease:*

**What are the common causes of valvular heart disease? (4 marks)**

**What are the clinical signs of aortic regurgitation? (3 marks)**

**What are the clinical signs of mitral stenosis? (3 marks)**

**What are the clinical signs of mitral regurgitation? (3 marks)**

**What clinical signs would you look for if a patient presented with possible infective endocarditis? (3 marks)**

**What are the common pathogens causing infective endocarditis? (3 marks)**

**How is a definitive diagnosis of infective endocarditis made? (2 marks)**

**What initial antibiotic therapy is indicated if infective endocarditis is suspected? (2 marks)**

**Reading:**

**[2023 ESC Guidelines for the management of endocarditis | European Heart Journal | Oxford Academic \(oup.com\)](#) (Guidelines on Infectious Endocarditis)**

## Scenario Case 5 – A patient with high BP

*A 31-year-old woman has repeated high BP readings (usually >170/110 mmHg).*

**What are the key questions to ask her? (4 marks)**

**What clinical signs might she have? (2 marks – half-mark for each)**

**What are the common secondary causes of high BP? (2 marks – half-mark for each answer)**

**What investigations would you request for this woman? (4 marks)**

**What non-pharmacological advice should be considered? (3 marks)**

**List the three common drug classes used to treat hypertension? What are their common side effects? (3 marks, 1 mark for each class with associated side effects)**

**What are the common complications of untreated hypertension? (4 marks)**

**Which of the following is a feature of hypertensive retinopathy? (SBA - 1 mark)**

- A. Drusen**
- B. Flame haemorrhages**
- C. Optic atrophy**
- D. Retinal detachment**
- E. Retinal pigmentation**

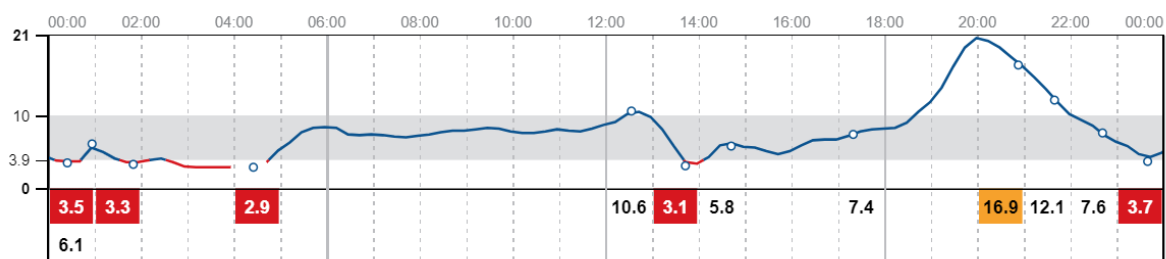
For all of the following Diabetes Cases we recommend the following resource as a reference: <https://www.inpatientdiabetes.org.uk/>

## Scenario Case 6 – A patient with hypoglycaemia

A 42-year-old man living with Type 1 Diabetes experiences an episode of feeling vacant and light headed whilst driving. He manages to stop the car safely but subsequently becomes disorientated and confused. A passerby rings the police who assist his recovery and he is then transferred to the Emergency Department. Whilst waiting to be seen there he deteriorates again. A capillary glucose measurement is recorded at 1.8 mmol/l and he is treated.

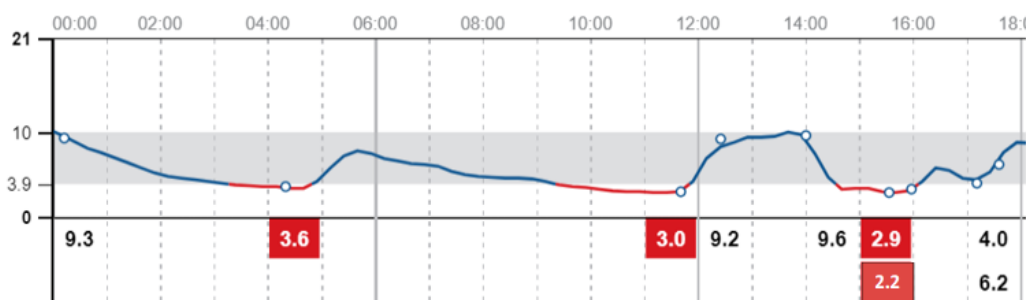
He recently changed his insulin regimen to insulin Degludec 20 units via Flexpen in the evening and insulin Humalog in a 1:10 “unit to carb” ratio via KwikPen. He also uses a Free Style Libre continuous glucose monitor. Daily profiles leading up to this event are illustrated below.

Day preceding event (reports “hypo” symptoms at 13.50 only)



Day of event (arrow indicates time)

No CGM data available in ED



**Describe the likely clinical presentation of this patient's deterioration in ED (1 mark)**

**How would you manage this situation? (3 marks)**

**How does this likely differ from the treatment the police assisted the patient with in the community? (1 mark)**

**After immediate treatment what further steps should be undertaken ? (2 marks)**

**List 3 reasons for recurrent hypoglycaemia in a person living with insulin treated diabetes mellitus ? (3 marks)**

**What is meant by the term: a multiple daily injection basal bolus insulin regimen with a 1:10 quick acting (QA) to carb ratio"? Reference the insulins in this case in your answer (3 marks)**

## Scenario Case 7: Insulin Management

*A 62-year-old man with Type 2 Diabetes comes to clinic for an annual review 4 months after starting the premixed insulin NovoMix 30.*



**With reference to the action profile of this insulin describe how you can check with him that the timing of its administration is correct (2 marks)**

**How does the colour of this pen contrast with a NOVORAPID insulin FlexPen? (1 mark)**

**Apart from injection timings what additional questions would you ask to assess this man's initial experience with insulin ? (3 marks)**



## Scenario Case 8: Diabetes emergency A

*A 37-year-old living with Type 1 Diabetes presents with a three-day history of vomiting and abdominal pain. The patient has had Diabetes since childhood but has not attended clinic for some time. The last recorded glycated haemoglobin HBA1c measurement 12 months ago was 10.5% or 91 mmol/mol. On arrival in the Emergency Department the patient is drowsy and appears to be dehydrated. On examination the pulse is 120/min, respiratory rate 30/ min, Sats 95% and BP 80/50 mmHg.*

*The following results are available:*

*Capillary blood glucose 34 mmol/l*

*Capillary blood ketone 5.8 mmol/l*

*ABGs on air:*

*pH 6.9 (7.35 – 7.45)*

*pO<sub>2</sub> 11 kPA (10.5 – 13.5)*

*pCO<sub>2</sub> 1.8 kPA (4.7 – 6.0)*

*HCO<sub>3</sub> 8 mmol/l (22 -30)*

**Interpret the Arterial Blood Gases and provide an explanation for the raised respiratory rate (2 marks)**

**What clinical (1.5 marks) and biochemical (1.5 marks) features are supportive of a diagnosis of Diabetic Ketoacidosis?**

**What is your immediate management and why? (5 marks)**

**What further investigations would you perform? (3 marks)**

**What is the appropriate clinical environment for this patient? (SBA 1 mark)**

- A. Chair assessment area
- B. High Dependency Unit
- C. Intensive Care Unit
- D. Side Room
- E. Unmonitored medical ward bed

**How would you assess the patient's response to treatment? (2 marks)**

**At what stage would you consider putting this patient back on their regular subcutaneous insulin and how would you do it? (2 marks)**

**What steps could be taken to prevent future similar episodes? (3 marks)**

## Scenario Case 9: A patient with a foot problem

*A 55 year-old patient with Type 2 Diabetes develops a painless ulcer and infection on the plantar aspect of his/her foot after walking barefoot on hot ground whilst on holiday.*



**What are the most likely causes of this presentation? (2 marks)**

**What is the most likely cause of this patient's foot ulceration? (2 marks)**

**You suspect acute osteomyelitis. What are the key clinical features of this condition in the toes? (2 marks)**

**What investigations would you request? (3 marks)**



**This is a plain radiograph of this patient's foot taken a few weeks after his initial presentation. What are the radiographic features suggestive of osteomyelitis? (1 mark)**

**What common organisms are involved in an infected diabetic foot ulcer and what antibiotics are commonly used? (2 marks – half-mark for each answer)**

**Describe the multidisciplinary care of diabetes related foot disease. What are the key steps involved in ulcer healing? (4 marks)**

Reading: <https://www.nice.org.uk/guidance/ng19>

## UHL Antimicrobial guidance

| Intravenous Insulin Infusion Chart                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |                                 |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------------------------------|--|
| <b>NOTES</b> <ul style="list-style-type: none"> <li>• DO NOT GIVE OTHER IV DRUGS VIA INSULIN CANNULA - use alternative access</li> <li>• The printed infusion rate is a guide only: increase or decrease by 0.5 - 1 units/hr, as necessary. However, if blood glucose is less than 3.5 mmol, stop insulin and recheck in 20 mins</li> <li>• Do not routinely prescribe less than 0.5 units/hr as rebound hyperglycaemia may occur</li> <li>• Maintain infusion for 1 hour after starting S/C insulin or oral therapy</li> <li>• Glucose meters need to be calibrated regularly</li> <li>• Please also indicate the prescribed insulin on main drug chart</li> </ul> |                  |                                 |  |
| Recurrent or persistent hyperglycaemia may require treatment change - <b>CONTACT DOCTOR</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                  |                                 |  |
| Insulin infusion should be given as 50 units of Human Actrapid Insulin in 49.5ml of Sodium Chloride 0.9% via infusion pump (1 unit/ml)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                  |                                 |  |
| Blood Glucose Level                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Guide (units/hr) | Infusion Rate (mls/hr required) |  |
| less than 3.5 mmol/l STOP INSULIN (recheck in 20 mins)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 0                |                                 |  |
| 3.6 - 4 mmol/l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0.5              |                                 |  |
| 4.1 - 7 mmol/l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1                |                                 |  |
| 7.1 - 9 mmol/l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2                |                                 |  |
| 9.1 - 11 mmol/l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 3                |                                 |  |
| 11 - 17 mmol/l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 4                |                                 |  |
| >17 mmol/l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 6                |                                 |  |
| If unstable, <b>CONTACT DOCTOR</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |                                 |  |
| Prescriber's Signature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                  |                                 |  |
| Print Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                  |                                 |  |
| Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                  |                                 |  |
| Blood Glucose Monitoring Frequency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |                                 |  |

| DRUG ALLERGIES (MUST BE COMPLETED)          |          |      |      | S No.          |  |
|---------------------------------------------|----------|------|------|----------------|--|
| No known allergies <input type="checkbox"/> |          | Sign | Date | Patient's name |  |
| Medicine                                    | Reaction |      |      | Date of birth  |  |
|                                             |          |      |      |                |  |
|                                             |          |      |      |                |  |
|                                             |          |      |      |                |  |

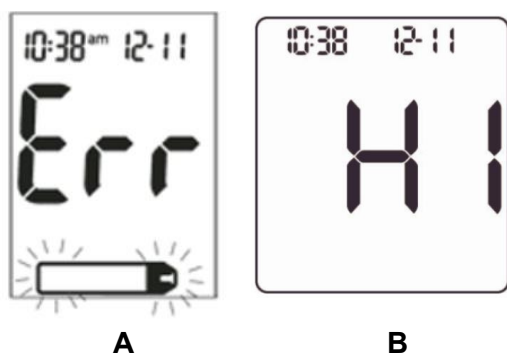
  

| REGULAR MEDICINES                                                                                 |      |       |  |                               |  |  |  |                      |        |            |
|---------------------------------------------------------------------------------------------------|------|-------|--|-------------------------------|--|--|--|----------------------|--------|------------|
| MORNING (AROUND 0800); MIDDAY (BETWEEN 1200 & 1400); TEATIME (AROUND 1800); BEDTIME (AROUND 2200) |      |       |  |                               |  |  |  |                      |        |            |
| ENTER DOSE AGAINST TIME REQUIRED                                                                  |      |       |  | DATE                          |  |  |  |                      |        |            |
|                                                                                                   |      |       |  | YEAR                          |  |  |  |                      |        |            |
| MEDICINE (approved name)                                                                          |      |       |  | INDICATION                    |  |  |  | SPECIAL INSTRUCTIONS |        | PHARMACIST |
| Date                                                                                              |      | Route |  | PRESCRIBER'S SIGNATURE & NAME |  |  |  | Disp No.             | Supply | POD        |
| Enter Dose against Time                                                                           | Time | Dose  |  |                               |  |  |  |                      |        |            |
| Morning                                                                                           |      |       |  |                               |  |  |  |                      |        |            |
| Midday                                                                                            |      |       |  |                               |  |  |  |                      |        |            |
| Teatime                                                                                           |      |       |  |                               |  |  |  |                      |        |            |
| Bedtime                                                                                           |      |       |  |                               |  |  |  |                      |        |            |
| MEDICINE (approved name)                                                                          |      |       |  | INDICATION                    |  |  |  | SPECIAL INSTRUCTIONS |        | PHARMACIST |
| Date                                                                                              |      | Route |  | PRESCRIBER'S SIGNATURE & NAME |  |  |  | Disp No.             | Supply | POD        |
| Enter Dose against Time                                                                           | Time | Dose  |  |                               |  |  |  |                      |        |            |
| Morning                                                                                           |      |       |  |                               |  |  |  |                      |        |            |
| Midday                                                                                            |      |       |  |                               |  |  |  |                      |        |            |
| Teatime                                                                                           |      |       |  |                               |  |  |  |                      |        |            |
| Bedtime                                                                                           |      |       |  |                               |  |  |  |                      |        |            |

## Scenario Case 10: Diabetes Emergency B

A 76-year-old man with a long history of Type 2 Diabetes mellitus is admitted to hospital with drowsiness and confusion. His next of kin report that his GP was treating a chest infection with Co-amoxiclav tablets prior to him becoming more unwell over the last 3 days. They are also concerned about his “sugar diabetes” as he hasn’t taken his insulin since becoming unwell. Normally he takes secondary prevention medication for atherosclerotic cardiovascular disease and metformin, dapagliflozin and twice daily Humulin I insulin for Diabetes. His most recent glycated Haemoglobin (HBA1c) was 8.0% or 63 mmol/mol three months ago. On examination his GCS score is 10 (E3, V3, M4), Respiratory rate is 20 with an SpO2 95% on 2L O2 and BP 78/58 mmHg.

You are also informed about the following admission capillary blood glucose readings from the patients own (A) and hospital (B) meters:



**Provide TWO reasons why measurement A could be producing an “Err” error message (2 marks)**

**Circle which capillary glucose concentration most accurately corresponds to measurement message B (1 mark)**

>10 mmol/l      > 15 mmol/l      >20 mmol/l      >30 mmol/l

**If repeated Error messages were obtained with capillary testing what alternative immediate glucose measurement could be performed? (1 mark)**

**This test confirms profound hyperglycaemia. Which is the next bedside biochemical test that should be undertaken immediately? (1 mark)**

*This test was normal. The results of other admission Biochemistry are as follows:*

**ABG:**

pH 7.40 (7.35 – 7.45)

pO<sub>2</sub> 11 kPa (10.5 – 13.5)

pCO<sub>2</sub> 7 kPa (4.7 – 6.0)

HCO<sub>3</sub> 28 mmol/l (22 -30)

**Bloods:**

Na<sup>+</sup> 156 mmol/l (135 – 145)

K<sup>+</sup> 5.2 mmol/l (3.5 – 5.5)

Urea 15.3 mmol/l (2.1 – 8.5)

Creat 354 µmol/l (70 – 120)

Glucose 43 mmol/l

eGFR 24 AKI Stage 3

**Calculate and comment on the serum osmolarity (normal range 275 – 295 mOsmol/kg (2 marks)**

**Based upon the clinical presentation and findings what is the most likely diagnosis? Provide a clear rationale for your answer (3 marks)**

**Describe the initial (first 24 hours) management of this condition? (3 marks)**

**What are the potential complications and comment on the risks of them occurring in this case? (2 marks)**

## Scenario Case 11: Control, complications and risk in Diabetes

*A 64 year-old patient is living with Type 2 diabetes. Blood tests in the form of glycated haemoglobin HBA1c has consistently measured between 8.9% or 72 mmol/mol and 9.5% or 78 mmol/mol since diagnosis 7 years ago. Glucose lowering medication has been gradually introduced and increased and currently consists of Metformin 1g BD and Gliclazide 160 mg BD. He is prescribed a statin and the ACE inhibitor ramipril. Although entirely asymptomatic and therefore reluctant to take more medication the practice nurse is concerned that the patient will start to develop complications and refers to the Diabetes clinic.*

*Gender: Male Ethnicity: South Asian (Indian)*

*Non-smoker. Strong FH of Ischaemic Heart Disease*

*Weight: 98Kg (Body mass index 35.6Kg/M<sup>2</sup>).*

*BP: 163/88*

*Cholesterol: 5.9mmol/l*

*eGFR 53ml/min (CKD 3a)*

*Urinary albumin: creatinine ratio (UACR) 6.2 mg / mmol creatinine (repeated)*

**Is the practice nurse right to be concerned about the risk of “complications” in this case? Include an estimate of this patient’s Qrisk3 in your answer. (3 marks)**

**What does current NICE guidance (NG28 2026 update) for hyperglycaemia management in Type 2 diabetes recommend about 1) glucose lowering targets and 2) treatment recommendations in this case (4 marks).**

**Include an overview of a “person-centred approach to care” in your answer**

**The patient enquires about a new diet offering “a cure” for Diabetes using meal replacement shakes. What advice would you give? (3 marks)**

**Identify and briefly describe a structured education course for Type 2 Diabetes available to patients in your centre or general practice (2 marks)**

**What are the pharmacotherapeutic options available to improve diabetes control? (3 marks)**

**Describe the mechanisms of action of the agents you have considered above (3 marks)**

**This patient has CKD and persistent microalbuminuria. Describe how this further modifies the risk of complications (1 mark)**

## Scenario Case 12: A patient with an adrenal crisis

*A 56 year-old woman on long-term prednisolone for rheumatoid arthritis has had a recent episode of vomiting due to gastroenteritis. She is feeling weak and unable to get out of bed. She has not been able to keep her oral medication down for the last few days. On examination she appears unwell, with a pulse of 115/min and BP 90/60.*

Na                128 mmol/l  
K                4.6 mmol/l  
Urea             10 mmol/l  
Creatinine     128 umol/l

**What aspects of this scenario point towards an adrenal crisis? (4 marks)**

**What is your immediate management? (2 marks)**

**What advice might help this patient prevent similar future episodes? (2 marks)**

**What evidence can patients keep to let people know they are on long-term steroids? (1 mark)**

## Scenario Case 13: An approach to hyponatraemia

*A 75-year-old with a medical history of Hypertension and Ischaemic Heart Disease presents with new confusion and drowsiness. Collateral history reveals a four day history of vomiting and diarrhoea. The patient's next of kin also reports that the GP started some tablets "for her nerves" about four weeks ago.*

| Medication          | Dose  |
|---------------------|-------|
| Bendroflumethiazide | 2.5mg |
| Bisoprolol          | 5mg   |
| Omeprazole          | 20mg  |
| Atorvastatin        | 20mg  |
| Ramipril            | 5mg   |
| Clopidogrel         | 75mg  |
| Citalopram          | 20mg  |

### **Bloods;**

Na 109mmol/L (133-146)

K 5.2mmol/L (3.5-5.3)

Urea 13.2mmol/L (2.5-7.8)

Creat 151umol/L (60-120)

eGFR 32ml/min

**Using the information provided what is the most likely explanation for this patient's acute confusion? (2 marks)**

**Which clinical assessments would help to guide the management of the electrolyte abnormality? (2 marks)**

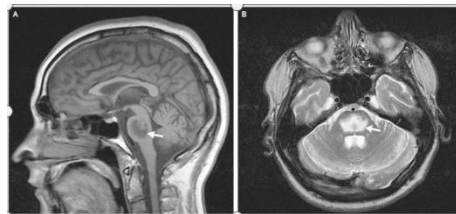
**Which biochemical investigations may additionally be helpful? (2 marks)**

**Which of the patient's medications could be contributing to the electrolyte abnormality? (2 marks)**

**Your clinical assessment suggests this patient is dehydrated, what would your initial management be? (2 marks)**

**How quickly should we aim to correct the serum sodium? (1 mark)**

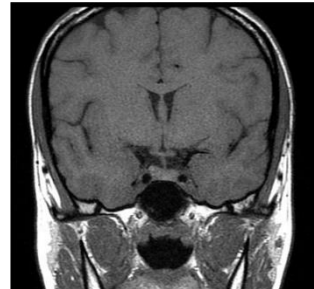
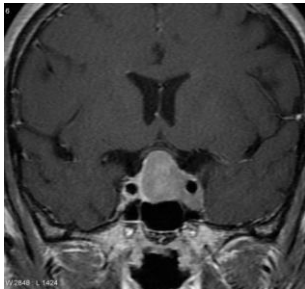
**What potential complication can occur if the sodium is corrected too rapidly? (1 mark)**



## Scenario Case 14: A case of acute hyponatraemia

A 60-year-old male patient has an MRI Pituitary scan performed after an abnormality picked up following a visit to his optician.

Which of the coronal images below are most likely to belong to this patient? Please mark the abnormality with an arrow. (2 marks)



Which abnormality is most likely to have been identified by the optician? (1 mark)

Following transphenoidal surgery he is prescribed the following endocrine hormone replacement therapies;

| Medication        | Dose          | Route      |
|-------------------|---------------|------------|
| Hydrocortisone    | 10/5/5mg      | PO         |
| Levothyroxine     | 100mcg OD     | PO         |
| Desmospray        | 10mcg BD      | Intranasal |
| Testogel 16.2mg/g | 2 pumps daily | TOP        |

What is the name of the condition being treated by Desmopressin? (1 mark)



*He has recently travelled to India and developed a diarrhoeal illness. He has been unwell for the last three days and increasingly confused. On admission he is tachycardic and severely dehydrated.*

**Bloods;**

Na 162mmol/L (133-146)

K 6.1mmol/L (3.5-5.3)

Urea 25mmol/L (2.5-7.8)

Creat 300umol/L (60-120)

**What is the most likely cause of his Hypernatraemia? (1 mark)**

**What is your immediate management of this patient? (3 marks)**

**In addition to Desmopressin treatment what is it essential that all patients with AVP Deficiency must have access to whilst an inpatient? (1 mark)**

**What are the potential complications of acute severe hypernatraemia? (2 marks)**

## Scenario Case 15: A patient with acute hypocalcaemia

*A 30 year-old lady had a thyroidectomy 2 days ago. She is on the ENT ward and you are called to see her as she has become unwell. She has laryngeal spasm and having difficulty breathing. Earlier in the day she had been complaining of numbness and tingling around her mouth and in her hands. Her wrists are in spasm as you come to assess her. Her serum calcium level is now low having been normal pre-op.*

**Why has she developed hypocalcaemia? (2 marks)**

**What is your immediate management of this patient? [Investigations and initial treatment]. (3 marks)**

**What are the most severe potential complications of acute hypocalcaemia? (3 marks)**

**What is the appropriate long-term treatment and follow up of this patient once the acute situation has been dealt with? (2 marks)**

*General question on hypocalcaemia:*

**List the most common causes of hypocalcaemia and ways to investigate those causes (4 marks – one mark for each paired cause / investigation)**

## Scenario Case 16: A patient with acute hypercalcaemia

A 55-year-old patient underwent mastectomy and chemotherapy for Breast Cancer 18 months ago. She is admitted with constipation, nausea, vomiting and generalised abdominal pain. She additionally describes pain in her left upper arm.

### Bloods;

|       |                      |           |                        |
|-------|----------------------|-----------|------------------------|
| Na    | 144mmol/L (133-146)  | Calcium   | 3.45mmol/L (2.12-2.51) |
| K     | 4.4mmol/L (3.5-5.3)  | Phosphate | 2.1mmol/L (0.8-1.5)    |
| Urea  | 10.1mmol/L (2.5-7.8) | ALP       | 1080iu/L (30-130)      |
| Creat | 101umol/L (60-120)   | ALT       | 322iu/L (2-53)         |
| eGFR  | 44ml/min             |           |                        |



**What is the most likely cause of hypercalcaemia in this lady and the mechanism by which this occurs? (2 marks)**

**Which further investigation would be helpful to determine the cause of hypercalcaemia and what would you expect this to show? (2 marks)**

**What would be your acute management of hypercalcaemia in this case? (2 marks)**

**Which medications can help to lower calcium levels and how quickly would you expect this to happen after a dose is given? (2 marks)**

**List two other common causes of hypercalcaemia? (2 marks)**

## Scenario Case 17: Thyroid Disease

*A 49 year-old woman presents to her GP with increased appetite, increased irritability and hair thinning. Her GP checks her thyroid function tests which reveal a diagnosis of hyperthyroidism.*

**What are the common symptoms of hyperthyroidism? (3 marks – half-mark for each answer)**

**What are the common physical signs of hyperthyroidism? (3 marks – half-mark for each answer)**

**What would her blood tests show to be compatible with a diagnosis of hyperthyroidism? (SBA 1 mark)**

- A. Thyroxine decreased, TSH decreased
- B. Thyroxine decreased, TSH increased
- C. Thyroxine normal, TSH increased
- D. Thyroxine increased, TSH decreased
- E. Thyroxine increased, TSH normal

**What are the treatment options for hyperthyroidism? (3 marks)**

*Some general questions about hypothyroidism*

**What are the common symptoms of hypothyroidism? (4 marks – half-mark for each answer)**

**What are the common physical signs of hypothyroidism? (3 marks – half-mark for each answer)**

**What blood test results would be compatible with a diagnosis of hypothyroidism? (SBA 1 mark)**

- A. Thyroxine decreased, TSH decreased**
- B. Thyroxine normal, TSH decreased**
- C. Thyroxine normal, TSH normal**
- D. Thyroxine increased, TSH decreased**
- E. Thyroxine increased, TSH normal**

**What are the treatment options for hypothyroidism? (3 marks)**

## Scenario Case 18: A patient with upper GI bleeding

*A 56 year-old man with a history of angina presents with upper abdominal discomfort associated with passing dark stools. A GI Bleed is suspected.*

**What are the common risk factors for GI bleeding? (2 marks – half-mark for each answer)**

**What are the important clinical examination findings to document? (4 marks)**

**What investigations would you request for this man? (3 marks – half-mark per answer)**

**Explain the GLASGOW BLATCHFORD score and why is this useful in managing these patients? (2 marks)**

**Describe the appropriate immediate management of this patient. How might the history of angina impact on the management? (4 marks)**

**What monitoring of the patient would you advise to the ward nursing staff? (2 marks)**

**What is the longer term management plan for this patient? (3 marks)**

**Describe the pathophysiology of oesophageal varices. (2 marks)**

**Describe the pathophysiology of peptic ulcer disease. (2 marks)**

**Reading:**

<https://www.nice.org.uk/Guidance/cg141>

## Scenario Case 19: A patient with inflammatory bowel disease

*A 19 year-old man presents with diarrhoea and abdominal pain. He is passing motions up to 10 times a day. He has lost 3 kg weight in the last week.*

**What other symptoms would you ask about? (3 marks)**

**What clinical findings would you look for on examination of this man? (3 marks)**

**What investigations would you organise at the time of this man's admission? (3 marks)**

*More general questions on Inflammatory Bowel Disease:*

**What features might help differentiate between Crohn's and ulcerative colitis? (3 marks)**

**What is the wider differential diagnosis of a patient presenting with bloody diarrhoea? (4 marks)**

**Crohn's and Colitis UK - <https://www.crohnsandcolitis.org.uk/>**

**NICE Overview of GI problems:**

**<https://www.nice.org.uk/guidance/conditions-and-diseases/digestive-tract-conditions>**

## **Scenario Case 20: A patient with decompensated chronic liver disease**

*A 49 year old woman presents with jaundice and abdominal bloating.*

**What other symptoms would you ask about? (4 marks)**

**What clinical findings would you look for on examination of this woman? (3 marks)**

**What are the key investigations for a patient presenting with jaundice? (6 marks)**

**What are the common differential diagnoses for an individual presenting with jaundice? (4 marks)**

**How should alcohol withdrawal be managed in patients being admitted to hospital? (2 marks)**

**What services and treatments are available to help patients with alcohol addiction? (2 marks)**

**What long-term complications of cirrhosis should the patient be monitored for? (2 marks)**

**What is MASLD? (2 marks)**

**Reading:**

<https://www.nice.org.uk/guidance/cg100/chapter/Recommendations>

<https://www.nice.org.uk/guidance/ng50> (Cirrhosis - assessment and management)

## Scenario Case 21: A case of paracetamol overdose

*A 29 year-old man presents to the Emergency Department at 9am having stated that he has taken 40 paracetamol tablets along with a half-bottle of vodka at 2am.*

**What are the common symptoms associated with paracetamol poisoning? (4 marks)**

**What investigations would you arrange? (3 marks)**

**What clinical guideline / tool would you use to determine specific treatment for the paracetamol overdose, if indicated? (2 marks)**

**What is the specific treatment for paracetamol overdose and what is its mechanism of action? (3 marks)**

**What would be the criteria for safely discharging this patient? (3 marks)**

**Reading: <https://cks.nice.org.uk/poisoning-or-overdose>**

## Scenario Case 22: A patient with malnutrition

*A 36 year-old man presents with pneumonia. He has a BMI of 17 kg/m<sup>2</sup>.*

**What further information would you wish to know about this man's weight? (2 marks)**

**What is the Malnutrition Universal Score Tool and how is this calculated? (2 marks)**

**What are the possible causes of malnutrition in a 36-year-old man? (4 marks)**

**How is malnutrition best managed? [See resources] (4 marks)**

**What is refeeding syndrome? (1 mark) What factors predispose someone to refeeding syndrome & how can it be prevented? (3 marks)**

**Reading:**

<http://www.bapen.org.uk/e-learning-portal>

<https://www.nice.org.uk/guidance/cg32>

## Scenario Case 23: A patient with meningitis

*A 24-year-old man presents to the Medical Assessment Unit with a 2-day history of feeling unwell, fever, headache and neck stiffness.*

*He also has a non-blanching rash on his legs (see picture).*

*He has no drug allergies.*



**What features of the case support a diagnosis of meningitis? (4 marks)**

**What is the difference between meningitis and encephalitis, and how might the symptoms/signs differ?? (3 marks)**

**What is your immediate management? (3 marks)**

**What other investigations are needed to confirm the diagnosis? (3 marks)**

**Meningitis is a notifiable disease. What is your understanding of the term 'notifiable disease'? (2 marks)**

**Which of the following is NOT a notifiable disease? (SBA 1 mark)**

- A. Botulism**
- B. HIV**
- C. Legionnaire's disease**
- D. Measles**
- E. Tuberculosis**

**What are the different types of meningitis? What is the most likely organism in this case? What might the CSF results look like? (5 marks)**

**What are the complications associated with delayed treatment in a patient with meningitis? (3 marks)**

## Scenario Case 24: A returning traveller with fever

*A 35-year-old UK resident presents with lethargy and a fever of 38.6°C. Seven days before, she had returned from a 2-week holiday to Kenya including going on safari. She has noticed insect bites.*

**What are the key elements of the history that you would ask? (3 marks, half-mark for each answer)**

**What infectious diseases are associated with patients travelling to Sub-Saharan Africa? (4 marks)**

**What investigations would you request? (4 marks)**

**A parasitic infection is diagnosed from blood tests. Which parasite is she most likely to have, how is it diagnosed, and how is it treated? (4 marks)**

**Reading:**

<http://www.nejm.org/doi/full/10.1056/NEJMra1508435>

<https://www.bmj.com/content/360/bmj.j5773>

## Scenario Case 25: A patient with Tuberculosis (TB)

Watch Patient 3: <https://www.youtube.com/watch?v=MIEAMJF56xo&t=11s>

*A 26-year-old man presents to the Medical Admissions Unit with a 2 month history of productive cough, weight loss and haemoptysis. He is a smoker (10 pack years) and drinks 50 units of alcohol per week. A CXR shows right upper zone shadowing.*

**What further history would you want to know? (3 marks)**

**In addition to TB, what are the main differential diagnoses? (2 marks)**

**What further investigations would you do? (3 marks)**

**What is the standard treatment regimen for pulmonary TB and what are the common adverse reactions? (4 marks – 1 mark for each drug with associated adverse reaction)**

*More general questions on TB:*

**Apart from pulmonary TB, what other types of TB can occur (i.e. which parts of the body can be affected)? (4 marks)**

**What are the principles of TB contact tracing? (2 marks)**

**If a patient with TB develops a headache and neck stiffness what might you be concerned about and how would you investigate this further? (3 marks)**

**How is a diagnosis of Latent TB made and, if confirmed, what treatment should be offered? (3 marks)**

**Guideline Resource:**

**<https://www.nice.org.uk/guidance/ng33>**

## Scenario Case 26: A patient with constipation or urinary incontinence

*A 88-year-old man had been admitted with a fractured right neck of the femur. His recovery to mobilise has been slow and he has not opened his bowels for 4 days. He usually passes a bowel motion daily.*

**What might have led to him developing constipation? (2 marks)**

**What examination would you undertake? (2 marks)**

**What common medications might impact adversely on bowel motions? (3 marks)**

**What are the other causes of constipation in an older person? (4 marks)**

**What investigations would you do and why? (3 marks)**

**How would you manage this man with severe constipation? Consider the management of both soft stool faecal impaction and hard stool impaction? (2 marks)**

*Some questions on urinary continence in older persons:*

**What patient factors might influence their continence? (3 marks)**

**What are the common types of urinary incontinence? (3 marks)**

**List medications that may cause or contribute to urinary incontinence and causes of urinary retention? (4 marks)**

**What non pharmacological interventions can be advised to improve urinary incontinence? (2 marks)**

**List common drugs used to treat an overactive bladder? (3 marks)**

**Guideline Resources:**

<https://bnf.nice.org.uk/treatment-summary/constipation.html>

<https://www.nice.org.uk/guidance/conditions-and-diseases/neurological-conditions/urinary-incontinence>

## **Scenario Case 27: A patient with dementia/poor swallow/advance care planning**

*An 88-year-old woman is admitted after choking on her food. She is resident in a nursing home after having increasing care needs at home due to increasing cognitive impairment.*

**How would you establish her baseline and trajectory in function over the last 12 months? (3 marks)**

**What are the likely causes of poor oral intake in this patient? (2 marks)**

**What are the key priorities in managing this patient? (3 marks)**

**What types of fluid and food consistencies can be recommended by the SALT team? (2 marks)**

**Are there alternative feeding methods available and what is the evidence on the use of enteral (NG/PEG) feeding in patients with dementia? (3 marks)**

**What does the term “Feed at risk” mean? What information would be important to give with the family/next of kin when discussing this? (3 marks)**

*More general questions on dementia:*

**What is mental capacity, why is it important to assess for cases like this and how is this determined? (3 marks)**

**What is a best interest decision? When is this made? (3 marks)**

**What is an advance care plan? Who completes this and what is taken in consideration when completing this? (3 marks)**

**What is a RESPECT form and what do you understand about the discussions that should be held about this? (3 marks)**

**Guideline Resource for End of Life Care:**  
<https://www.nice.org.uk/guidance/qs13https://www.goldstandardsframework.org.uk/advance-care-planning>

## Scenario Case 28 – A patient presenting with a fall and acute confusion

### Scenario:

*An 82-year-old man is admitted to hospital after he was found on the floor at home by his grandson who also reported that he is confused (new onset). The patient says he tripped over a rug and is now fine and wishes to go home.*

**What are the common causes of falls? (4 marks)**

**What investigations would be helpful to assess if this patient had another cause for falling other than just an accidental fall? (4 marks)**

**What multidisciplinary interventions can be helpful when planning the discharge of an older patient who is at risk of falling? (4 marks)**

**What are the common consequences of falling? (3 marks)**

**What common prescribed drugs increase the risk of falls in older people? (4 marks)**

**What are the common causes of acute confusion? (4 marks)**

**What examination (3 marks) and investigations (3 marks) would be helpful to assess a patient who is acutely confused?**

**How would you manage a patient with acute confusion? (4 marks)**

**Reading:**

<https://www.nice.org.uk/guidance/cg161>

<https://www.nice.org.uk/guidance/qs63>

<https://www.nhs.uk/social-care-and-support/making-decisions-for-someone-else/mental-capacity-act/>

## Scenario Case 29 – Acute kidney injury (AKI)

Watch: <https://www.youtube.com/watch?v=6YbxRqA2qYU>

*A 56 year old man presents to hospital after returning from a camping trip. He has had symptoms of diarrhoea and vomiting for 3 days. His GP arranges some blood tests which reveal:*

|            |      |
|------------|------|
| Sodium     | 143  |
| Potassium  | 4.8  |
| Urea       | 21.4 |
| Creatinine | 315  |

*Of note his previous blood tests 4 months earlier for a “well man” check revealed normal renal function. His GP arranges urgent hospital admission. On arrival his BP is 95/60 and pulse 106 / minute.*

**What are the common causes of AKI? (4 marks – One mark each answer)**

**How would you investigate this patient? (4 marks)**

**What should the initial treatment for this patient include? (2 marks)**

*Some generic questions on assessing fluid balance:*

**What is meant by the terms dehydration and intravascular volume? (2 marks)**

**How would you carry out a fluid assessment on a patient? (5 marks)**

**Describe how Anti-diuretic Hormone (ADH) regulates fluid balance (3 marks)**

**If you had to prescribe fluids for this patient, what would you give and why? List how much fluid, how quickly and what type. (3 marks)**

**Reading:**

[Overview | Acute kidney injury: prevention, detection and management | Guidance | NICE](#)

## Scenario Case 30: A patient with chronic kidney disease (CKD)

*A 56-year-old Caucasian man is referred to the out-patient clinic by his GP.*

*The patient had sought advice regarding symptoms of headache and was found to have a BP of 160/92 mmHg.*

*His U+Es revealed:*

|            |                               |
|------------|-------------------------------|
| sodium     | 131 mmol/L (133–146)          |
| potassium  | 3.7 mmol/L (3.5–5.3)          |
| urea       | 10.6 mmol/L (2.5–7.5)         |
| creatinine | 143 $\mu$ mol/L (60–120)      |
| eGFR       | 47 mL/min/1.73 m <sup>2</sup> |

**What stage CKD does the patient have? (1 mark), What other investigations should be carried out to clarify CKD staging (1 mark).**

**In this case, how is the patient's renal function likely to be related to the hypertension? (1 mark)**

**List the common causes of CKD (five in total) (2½ marks – half mark for each answer).**

**What clinical examination findings would you seek out? (3 marks)**

**What tests/investigations could you do to confirm the cause of their CKD? (3 marks)**

**How does the patient's CKD affect any medications they need? (1 mark)**

## **Scenario Case 31: A patient with renal replacement therapy (RRT)**

*A 56-year-old woman is attending the pre-dialysis clinic. The progression of her CKD is such that she will need to start dialysis within the next few months.*

**What are the 3 forms of renal replacement therapy (RRT) (3 marks)**

**What are the advantages versus disadvantages of different RRT options? (3 marks)**

**What are the major complications of each of the forms of RRT? (3 marks)**

**How might haemodialysis impact on this lady's quality of life? (3 marks)**

**What are the principles to managing end-stage renal disease patients with high parathyroid hormone levels? (patients with mineral bone disease) (3 marks)**

**What are the principles to managing end-stage renal disease patients with anaemia? (3 marks)**

*The patient ultimately had home peritoneal dialysis for 2 years before receiving a live donor renal transplant.*

**What are the pros and cons of live donor transplant versus a deceased donor transplant? (3 marks)**

**Excluding corticosteroids, name 2 immunosuppressant drugs commonly given to kidney transplant patients for maintenance therapy? What monitoring of the patient is required? (3 marks)**

**Reading:** <https://www.nice.org.uk/guidance/qs72>  
<https://www.nice.org.uk/guidance/ng107>

## Scenario Case 32: Asthma

Watch Case 1: <https://www.youtube.com/watch?v=FcHLbTviurA> & <https://www.youtube.com/watch?v=jVPY-L0vBlw>

*A 28 year old woman presents to MAU with a 3 day history of worsening shortness of breath and wheeze. She has an associated dry cough and was awakened last night with her symptoms.*

*Her BP is 120/75, Heart rate 115 / minute, Sats 94% on air, Respiratory Rate 28 / minute and temperature is normal. On chest auscultation, she has a bilateral expiratory wheeze. Her Peak Expiratory Flow Rate is 140 L / min with a best value previously of 450 L / min. A venous blood gas shows that her pCO<sub>2</sub> is 4.1 kPa. She is diagnosed as having an Asthma attack.*

**How would you classify the severity of her acute asthma? (SBA 1 mark)**

- A. Life Threatening**
- B. Mild**
- C. Moderate**
- D. Near Fatal**
- E. Severe**

**What are the definitions for acute mild, moderate, severe, life threatening and near fatal asthma attacks? (5 marks)**

**What are common triggers of acute asthma? (3 marks, half-mark for each answer)**

**What treatment should be given to this patient in the first instance? (5 marks)**

**What does the term “Controlled Oxygen” refer to? (2 marks)**

**Describe a safe Asthma Discharge Bundle (i.e. what are the criteria for safe discharge)? (4 marks)**

**What are the principles of the British Thoracic Society guidelines for the management of chronic asthma in adults?**

**What is an asthma management plan? (2 marks)**

**Reading:**

**<https://www.brit-thoracic.org.uk/quality-improvement/guidelines/asthma/>**

**Please note: there are different recommendations in the guidelines for chronic asthma management (step-wise approach) published by NICE compared to those published by BTS. We would recommend following the BTS guidelines in this case but for the purposes of written assessments we would accept references to either the BTS or NICE guidelines.**

## Scenario Case 33: Chronic Obstructive Pulmonary Disease (COPD)

Watch Case 3: <https://www.youtube.com/watch?v=FcHLbTviurA&t=551s> &  
Case 1: <https://www.youtube.com/watch?v=VqJgcldLbUs>

*A 64 year old woman presents to her GP with breathlessness on exertion – exercise tolerance 300 yards, gradually worsening over the last 2 years. She also describes a daily cough with a few mls of clear sputum each morning. She is a smoker with a 45 pack year history. Her GP arranges a CXR which shows clear lung fields. Spirometry is then undertaken and a diagnosis of COPD is made.*

**Apart from smoking what are the other causes of COPD? (3 marks)**

**What is COPD? (3 marks)**

**Describe the MRC Dyspnoea Scale? (5 marks)**

**What are possible clinical signs when examining a patient with COPD? (3 marks)**

**Why might patients with COPD develop ankle oedema? (1 mark)**

**What does spirometry demonstrate to be compatible with a diagnosis of COPD? (3 marks)**

**What does the COPD Care Bundle comprise of? (5 marks)**

**What interventions alter prognosis (mortality) for patients with COPD? (3 marks)**

**Why may uncontrolled oxygen be potentially dangerous in someone with COPD? (2 marks)**

**What is the role of pulmonary rehabilitation in patients with COPD? (3 marks)**

**Reading:**

<https://www.nice.org.uk/guidance/ng115>

## Scenario Case 34: A patient with cough / pneumonia

Watch Case 4: <https://www.youtube.com/watch?v=FcHLbTviurA&t=551s> &

Patient 5: <https://www.youtube.com/watch?v=RNdsHFiwkds&t=3s> &

<https://www.youtube.com/watch?v=MIEAMJF56xo&t=11s>

*A 74 year old woman presents to her GP with a 4 week history of cough. She has been trialled on antibiotics which have not improved the cough.*

**What further details are required to get a better history from the patient? (4 marks)**

**What are the common causes of cough that should be investigated further? (4 marks)**

**What drugs can cause cough, directly or indirectly, as a side effect? (3 marks)**

**What investigations are needed and why? (3 marks, 1 for each answer with explanation)**

**What is idiopathic cough and when can this diagnosed be made? (2 marks)**

*The patient has a CXR and bloods and a diagnosis of Pneumonia is made. The patient has BP 101/56, Heart rate 105 / min, Resp Rate 28 / min, Sats 90% on air, and Temp of 37.9°C. She is not confused. Her serum urea is 8.9.*

**What is her CURB-65 Score? (SBA 1 mark)**

- A. 1
- B. 2
- C. 3
- D. 4
- E. 5

**What are the common pathogens associated with community acquired pneumonia? (3 marks)**

**What atypical organisms (3 marks) are associated with pneumonia and when should atypical organisms be considered (2 marks)?**

**What features may help differentiate a case of community acquired pneumonia from pulmonary tuberculosis? (3 marks)**

**What are the common pathogens causing hospital-acquired pneumonia? (2 marks)**

**How do the antibiotic treatments differ for community acquired pneumonia and hospital-acquired pneumonia? (2 marks)**

**What follow up arrangements should be made for a patient with pneumonia? (2 marks)**

**What 3 clinical features do patients requiring hospital admission for COVID-19 often have? (3 marks)**

**What treatments are available for patients requiring hospital admission due to COVID-19? (3 marks)**

**Reading:**

**[Pneumonia Adults | British Thoracic Society | Better lung health for all](#)**

COVID 19 Guidelines

**<https://www.nice.org.uk/guidance/ng191>**

## Scenario Case 35: A patient with lung cancer

Watch Case 2: <https://www.youtube.com/watch?v=VqJqcldLbUs>

*A 56-year-old woman presents to her GP with a chronic cough and weight loss. She is mildly anaemic and a chest X-ray reveals a 4 cm mass in her left lower zone. She is referred to the Chest Clinic.*

**What co-morbid conditions may commonly be associated with lung cancer? (2 marks)**

**What signs associated with lung cancer would you look for on clinical examination? (3 marks)**

**What other investigations would you do at this stage? (3 marks)**

**What sites do lung cancer commonly metastasise to? (3 marks)**

**List some paraneoplastic syndromes associated with lung cancer. Explain the pathology of 2 of these paraneoplastic syndromes? (4 marks)**

**Apart from a mass, what other abnormalities may be seen on CXR when a patient presents with lung cancer? (3 marks)**

**How is the stage of lung cancer determined? (1 mark). What is the prognosis for different stages of lung cancer? (4 marks)**

**What treatment modalities may be available for patients with lung cancer? (4 marks)**

**Why is the prognosis for lung cancer generally so poor? (1 mark)**

*After being diagnosed with stage 4 lung cancer, the patient presents with worsening breathlessness. An up to date CXR is done – see below.*



**What are the CXR features and what is your overall impression? (3 marks)**

**What further imaging would be necessary to confirm the diagnosis of a pleural effusion? (1 mark)**

**What clinical signs might you expect when examining a patient with pleural effusion? (3 marks)**

**How would you investigate the underlying cause of a pleural effusion (5 marks)**

**How do you distinguish if a pleural effusion is an exudate or a transudate? (3 marks)**

**Watch:** *Patient 4, Pleural Effusion:*

<https://www.youtube.com/watch?v=RNdsHFiwkds&t=3s>

**Reading:**

<https://www.nice.org.uk/guidance/ng122>

<https://www.brit-thoracic.org.uk/clinical-resources/guidelines/pleural-disease/>

**Also for Pneumothorax Watch Case 5:**

<https://www.youtube.com/watch?v=FcHLbTviurA&t=551s> &

<https://www.youtube.com/watch?v=k8A2MZBTTk&t=713s>

## Scenario Case 36: A patient with interstitial lung disease (ILD)

Watch Case 4; <https://www.youtube.com/watch?v=VqJqcldLbUs>

*A 76-year-old man with a history of rheumatoid arthritis presents with increasing breathless. On examination he has widespread inspiratory crackles, but no signs of fluid overload. A presumptive diagnosis of interstitial lung disease is made.*

**What other symptoms might this patient report? (2 marks)**

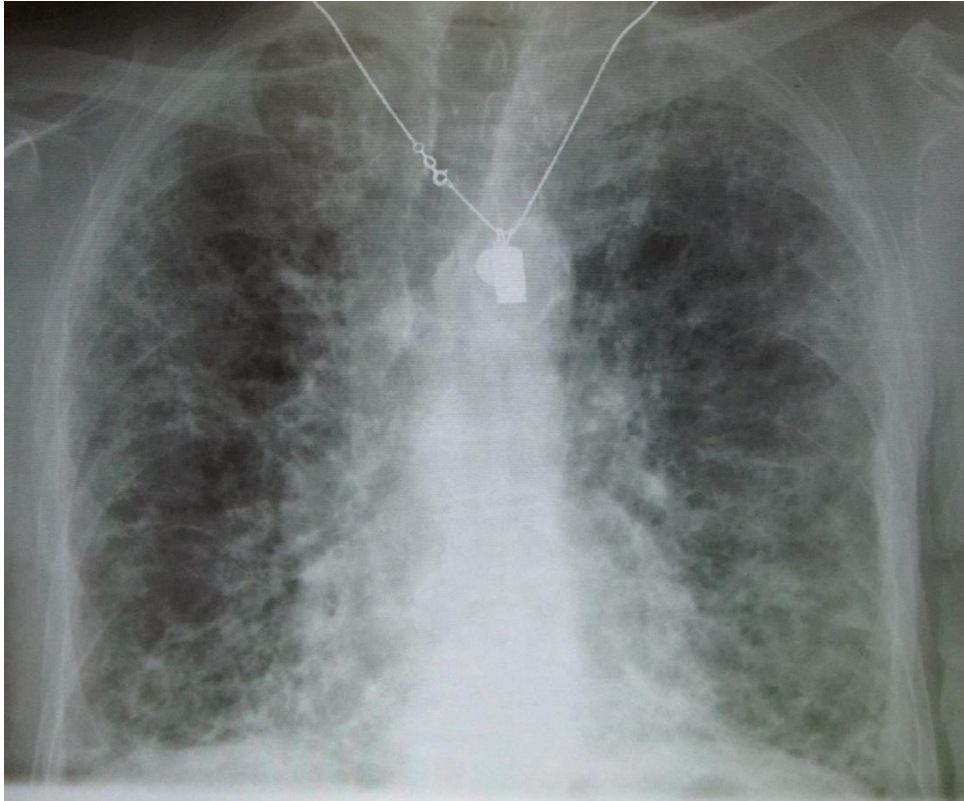
**What are the possible clinical signs when examining a patient with ILD? (3 marks)**

**What are the common types of ILD? (5 marks)**

**Which drug is NOT a commonly recognised cause of ILD? (SBA 1 mark)**

- A. Amiodarone
- B. Bleomycin
- C. Ciprofloxacin
- D. Methotrexate
- E. Nitrofurantoin

*The patient has CXR – see next page*



**Describe the CXR? (2 marks)**

**What are pulmonary function tests likely to show in this patient? (3 marks)**

**Reading:**  
<https://www.nice.org.uk/guidance/cg163>

## Scenario Case 37: A patient with bronchiectasis

Watch Case 3: <https://www.youtube.com/watch?v=VqJqcldLbUs> &

Case 6: <https://www.youtube.com/watch?v=FcHLbTviurA&t=551s>

*A 36-year-old woman has a history of recurrent chest infections since childhood. Over the past few months, she has become increasingly breathless with a daily productive cough. She is a non-smoker.*

**What clinical features does she have to suggest a diagnosis of bronchiectasis? (3 marks)**

**What single test would help to confirm a diagnosis of bronchiectasis? (SBA 1 mark)**

- A. CXR
- B. CTPA
- C. High Resolution CT Thorax (HRCT)
- D. MRI Chest
- E. Staging CT

**What are the common causes of bronchiectasis? (4 marks)**

**What are the common pathogens seen in sputum of patients with bronchiectasis? (3 marks)**

**What are the key principles of managing bronchiectasis? (4 marks)**

**Cystic Fibrosis (CF) is the commonest genetic cause of bronchiectasis. How common is CF? (1 mark)**

**Explain the pathophysiology of CF. (3 marks)**

**What are the common multisystem complications of CF? (4 marks)**

**Reading:**

<https://www.nice.org.uk/guidance/ng78>

<https://www.brit-thoracic.org.uk/quality-improvement/guidelines/bronchiectasis-in-adults/>

## Scenario Case 38: A patient with rheumatoid arthritis (RA)

*A 35 year old investment banker has noticed recurrent pain and swelling in the MCP joints and PIP joints of both his hands over the last 6 months. He is worried about his symptoms. His mother has RA.*

**What features support a diagnosis of RA in this patient? (3 marks)**

**Apart from the hands, what other joints are commonly affected in RA? (3 marks)**

**What are the classical examination findings in the hands of patients with RA? (3 marks)**

**List multisystem problems that can occur in RA. (5 marks)**

**What investigations would further help with the diagnosis of RA? (2 marks)**

**What are the radiological features of RA in hands? (3 marks)**

**What treatment options are available for patients for RA? (4 marks)**

**What monitoring is required when using these treatments long-term? (2 marks)**

**What features distinguish RA from other arthritides? (4 marks)**

**Reading:**

<https://www.nras.org.uk/what-is-ra-article>

[Overview | Rheumatoid arthritis in adults: management | Guidance | NICE](#)

## Scenario Case 39: A patient with Systemic Lupus Erythematosus (SLE)

*A 36 year old woman presents with painful hand joints with no swelling. She has had Raynaud's phenomenon for 3 years. Her hair dresser has commented about her "bald patches" on occasions. She now presents to clinic with pleuritic chest pain.*

**What features support a diagnosis of SLE in this patient? (4 marks)**

**What other symptoms would you ask about? (4 marks)**

**What examination findings would you look for? (4 marks)**

**What investigations would further help with the diagnosis of SLE? (3 marks)**

**What are the diagnostic criteria for SLE? (6 marks)**

**What features might suggest active disease (a flare up)? (3 marks)**

**What treatment options are available for patients for SLE? (3 marks)**

**What monitoring is required when using these treatments long-term? (2 marks)**

**Reading:**

<https://academic.oup.com/rheumatology/article/57/1/e1/4318863>

<https://patient.info/doctor/systemic-lupus-erythematosus-pro>

## Scenario Case 40: A patient with Ankylosing Spondylitis

*A 33 year old man presents to the rheumatology clinic with back stiffness and reduced range of spine movements. On examination he has loss of lumbar lordosis, reduced chest expansion and is positive for Schober's Test.*

**What features support a diagnosis of Ankylosing Spondylitis in this patient? (2 marks) What is Schober's Test? (1 mark)**

**What other symptoms would you ask about? (3 marks)**

**What other examination findings might you elicit? (2 marks)**

**What investigations would further help with the diagnosis of Ankylosing Spondylitis? (2 marks)**

**What do you know about the genetics associated with Ankylosing Spondylitis? (2 marks)**

**What are the complications of Ankylosing Spondylitis? (4 marks)**

**What treatment options are available for patients for Ankylosing Spondylitis? (3 marks)**

**Reading:**  
<https://www.nice.org.uk/guidance/ta383>

## Scenario Case 41: A patient with gout

*A 53 year old man presents to ED with a painful red and swollen right big toe.*

**What features support a diagnosis of gout in this patient? (1 mark)**

**What other clinical findings might you elicit? (2 marks)**

**What are the common causes and associations of gout? (4 marks)**

**What investigations help with making a diagnosis of gout? (2 marks)**

**What treatment options (acute and chronic) are available for patients for gout? (3 marks)**

## Scenario Case 42: A patient with a Deep Vein Thrombosis



*The above patient is a 60 year old man who has been in hospital for 4 weeks on a medical ward with a severe chest infection. This is now getting better but on a ward round he complains of a sore leg.*

**What questions would you like to ask? (3 marks)**

**Describe what you see in the picture? (2 marks) Which of the Well's Criteria does he fulfil? (3 marks)**

**What further examination would you like to perform? (3 marks)**

**What tests would you order? (2 marks)**

**What treatments are available for this patient? (2 marks)  
How soon should it be started? (1 mark)**

**What preventative measures are you aware of to try to prevent this problem? (3 marks)**

## Scenario Case 43: A patient with Pulmonary Embolus (PE)

Watch Case 7: <https://www.youtube.com/watch?v=FcHLbTviurA&t=551s>

*A 63 year old man presents to hospital with shortness of breath and left pleuritic chest pain.*

**Apart from PE, what are the differential diagnoses? (3 marks)**

**How would you decide if the patient has low, medium or high probability of PE? (3 marks)**

**What single test would you order to confirm or exclude PE? (1 mark) Are there are any contraindications to this test? (2 marks)**

**If PE is confirmed what could be possible underlying causes? (3 marks)**

**How would you treat a confirmed PE? (1 mark)**

**What is a massive PE? (1 mark) How would you treat this? (2 marks)**

**Reading:**

<https://www.brit-thoracic.org.uk/quality-improvement/guidelines/pulmonary-embolism/>

Anticoagulation guidance:

[NG158 Venous thromboembolic diseases: diagnosis, management and thrombophilia testing: Visual summary 02/08/2023](#)

## Scenario Case 44: A patient with anaphylaxis

[Guidance: Anaphylaxis | Resuscitation Council UK](#)

*A 23-year-old woman presents to the Emergency Department with lip and tongue swelling following a bee sting. She is feeling breathless.*

**What initial assessments should be made? (4 marks)**

**What treatment should she be given? (4 marks)**

**What are the common causes of anaphylaxis? (4 marks)**

**Explain the pathophysiology of anaphylaxis. (2 marks)**

**What are the potential consequences of anaphylaxis? (2 marks)**

**Assuming the patient makes a full recovery, what advice should be given on discharge? (2 marks)**

**Reading:**  
<https://www.nice.org.uk/guidance/cg134>  
[Anaphylaxis algorithm 2021.pdf](#)

## Scenario Case 45: A patient with sepsis

*A 66 year old woman presents to the Emergency Department feeling generally unwell. She has bowel cancer and last received chemotherapy 2 weeks ago. On arrival she is drowsy. Her BP is 80/50, heart rate 110 / min, Resp Rate 24 / min, O2 Sats 94% on air and Temp 38.1°C. On examination she is short of breath at rest, and her abdomen and back are tender.*

**What should be the immediate management for this patient with suspected sepsis? (3 marks – half-mark for each answer)**

**What are the common causes of sepsis? (2 marks – half-mark for each)**

**What further investigations would you arrange after those done in the immediate management (3 marks)**

**A microbiologist calls to tell you that her blood culture is growing gram negative rods. What is a possible organism (1 mark) and source of infection (1 mark)? What would be an appropriate narrow-spectrum antibiotic, and what route would you give it? (2 marks)**

**Reading:**

<https://www.nice.org.uk/guidance/ng51>

## Writing a Management Plan

One of the key roles of any qualified doctor is to make concise, informative and factual records of patients' medical presentation, investigations, management and follow-up etc. These are legal documents and can/will be scrutinised by colleagues and potentially others (e.g. lawyers and coroners). In the hospital setting, the majority of records are hand-written; but letters and discharge summaries are typed. The use of ward-based electronic records is steadily increasing.

Writing a management plan in a clear and concise fashion will ensure that you have a good grasp of the clinical problem and have thought through the issues in a logical manner.

In the hospital setting we suggest you aim to use the following headings. Avoid abbreviations. For all entries the patient's name and hospital number must be at the top of each separate piece of paper / proforma / drug chart, etc.

| HEADING                        | COMMENTS                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purpose of Notes Entry         | e.g. Ward Round Dr x (Consultant), Ward Round Dr Y (FY1), Discussion with patient and spouse                                                                                                                                                                                                                                                                                                          |
| Date and time                  | Put the date and time against each new entry                                                                                                                                                                                                                                                                                                                                                          |
| Subjective                     | Patients current symptoms and brief recount of previous symptoms ?better / same / worse                                                                                                                                                                                                                                                                                                               |
| Objective                      | Observation Chart, BM Chart, PEFR Chart, etc & Examination / Investigation findings                                                                                                                                                                                                                                                                                                                   |
| Assessment / Impression        | For example you might write the following:<br>1. Angina<br>2. Cardiovascular risk factors:<br>a. Cigarette smoker – 20 pack years<br>b. Hypercholesterolaemia – TC=6.8 mmol/L<br>3. Recent right total hip replacement<br>4. Lives alones - need support                                                                                                                                              |
| Plan                           | <ul style="list-style-type: none"><li>• Changes to drugs / IV Fluids</li><li>• Investigations (and why they are needed)</li><li>• Monitoring required, e.g. urine output</li><li>• Any referrals</li><li>• MDT reviews required e.g. physio / OT</li><li>• Potential discharge plans and dates and follow up</li><li>• Clear handover instructions e.g. for on-call or even GP on discharge</li></ul> |
| Signature and name in capitals | At the bottom of the page write your name in capitals and sign. You should also add in if you are a 'medical student'                                                                                                                                                                                                                                                                                 |

An example is given on the next page.....

**Hospital: Glenfield**

**Ward: 21**

**Consultant: Morris**

**JOE BLOGGS D.o.B. 14/3/37**

**S1111111**

**23rd August 2023  
1025 hrs**

**Ward round Dr Morris (Consultant)**

**S:** Presented with cough and green sputum. Started 3 days ago. Associated fever and dyspnoea on exertion, normal exercise tolerance 1 mile, reduced to 30 yards last 2 days. No haemoptysis, wheeze. No weight loss although reduced appetite last 2 days. Normal bowel habit. No urinary symptoms.

**Risk factors** – no previous antibiotics for chest infections, no recent foreign travel.

**Given treatment for Pneumonia on CDU yesterday (admitted at 1400) – antibiotics and IV fluids**

**O:** O/E Looks Comfortable at rest, not confused

**HR 96 bpm BP 124/80, Temp 37.1 °C, Sats 95% on 2 litre O2, Resp Rate 18/min**  
**JVP not raised**  
**HS Normal**  
**Chest – right base crackles**  
**No ankle oedema**

**Urine output 1.5 L last 24 hours**  
**Input 2.3L last 24 hours**

**ECG: normal sinus rhythm 88 bpm**  
**CXR: Right Lower Zone Consolidation**

**Raised White cell count 17.3, raised CRP 197, urea 9.2 (previously normal)**  
**ABG on admission – type 1 respiratory failure, normal pH**

**A: Impression: Pneumonia (CURB-65 = 3 on admission)**  
**Penicillin allergy (rash)**

**Plan: Pneumonia Care Bundle**  
**Continue IV Meropenem and PO Doxycycline**  
**Repeat U&E today – if better, then stop IV fluids, encourage oral intake**  
**Wean off O2 when possible – Target Sats 94-98%**  
**Repeat bloods in 48 hours**  
**Estimated discharge date: 5 days**  
**Discharge criteria: symptoms improving, Weaned off O2, urea and CRP significantly improving, follow-up CXR in 6 weeks**

**Signed**  
**Print Name**  
**Grade / Medical Student**  
**Countersigned by Doctor**

## Activities – Simulations (SIMS)

To get the most out of these sessions, please read about the management of acute medical presentations and be prepared to assess simulated patients using an ABCDE approach. You will also get the opportunity to practise clinical skills, including taking bloods, cannula insertion, doing an ECG, as well as X-ray and cardiac monitor interpretation. You will get to prescribe medications, look at patient Early Warning Score charts and practice oxygen and nebuliser set up.

*You may wish to record a reflection of learning after SIMS sessions here or on MyKnowledgeMap including key take-home learning points:*

## Teaching Log

Teaching sessions attended (including seminars, clinical skills and SIMS) - You can also record all teaching attended during the block for your own record.

[illegible]

## **FEEDBACK – Bedside Teaching History & Communication Skills Focus**

Ask clinicians to observe you taking a history and communicating with a patient – 3 separate encounters during the block. Use this page, or obtain feedback by email. If clinicians are too busy to give you written feedback, then you can document the verbal feedback they have given you. This is critical for your end of block clinical supervisor grading as well as your own development.

|                            | Date | Name /<br>Signed | What went well | Areas for<br>improvement |
|----------------------------|------|------------------|----------------|--------------------------|
| History &<br>Communication |      |                  |                |                          |

|                            | Date | Name /<br>Signed | What went well | Areas for<br>improvement |
|----------------------------|------|------------------|----------------|--------------------------|
| History &<br>Communication |      |                  |                |                          |

|                            | Date | Name /<br>Signed | What went well | Areas for<br>improvement |
|----------------------------|------|------------------|----------------|--------------------------|
| History &<br>Communication |      |                  |                |                          |

### **Also Watch:**

<https://www.youtube.com/watch?v=Q1cbm8d79jE&t=104s>  
<https://www.youtube.com/watch?v=-wGLDub6FSo>

## **FEEDBACK – Bedside Teaching Examination Skills Focus**

There will be multiple opportunities for bedside teaching, including clinical skills development, during the block. You should ask your supervising medical team to observe you and give feedback. Use this page, or obtain feedback by email. If clinicians are too busy to give you written feedback, then you can document the verbal feedback they have given you. This is critical for your end of block clinical supervisor grading as well as your own development.

|                               | Date | Name /<br>Signed | What went well | Areas for<br>improvement |
|-------------------------------|------|------------------|----------------|--------------------------|
| Cardiovascular<br>Examination |      |                  |                |                          |

|                            | Date | Name /<br>Signed | What went well | Areas for<br>improvement |
|----------------------------|------|------------------|----------------|--------------------------|
| Respiratory<br>Examination |      |                  |                |                          |

|                          | Date | Name /<br>Signed | What went well | Areas for<br>improvement |
|--------------------------|------|------------------|----------------|--------------------------|
| Abdominal<br>Examination |      |                  |                |                          |

|                                        | Date | Name /<br>Signed | What went well | Areas for<br>improvement |
|----------------------------------------|------|------------------|----------------|--------------------------|
| Hands<br>(Rheumatology)<br>Examination |      |                  |                |                          |

|                            | Date | Name / Signed | What went well | Areas for improvement |
|----------------------------|------|---------------|----------------|-----------------------|
| Diabetic Foot / Lower Limb |      |               |                |                       |

|                  | Date | Name / Signed | What went well | Areas for improvement |
|------------------|------|---------------|----------------|-----------------------|
| Endocrine System |      |               |                |                       |

## Clinical Examination Skills

You may wish to refer to the teaching videos as a guide:

Cardiovascular Examination:

<https://www.youtube.com/watch?v=dXeDMTW4Fk0&t=10s>

Respiratory Examination:

<http://www.youtube.com/watch?v=EEjIThphoig>

Explanation: <https://www.youtube.com/watch?v=RyJpnCWy-W8&list=PLN2BPFpnQm5lw5TIRCn8zHXnapiLrH-vV&index=2>

Abdominal Examination:

[Abdominal Examination - Leicester Medical School](#)

[Clinical Skills - YouTube](#)

<https://www.youtube.com/watch?v=nKYlcshakf4&t=6s>

Diabetic Foot Examination:

[Diabetic foot examination - OSCE guide \(Old Version 2\) - YouTube](#)

Endocrine Examination: [Thyroid Status Examination - OSCE Guide - YouTube](#)

Neurological Examination of Limbs:

<https://www.youtube.com/watch?v=vZBpNsFPJVQ>

Rheumatological Hands Examination: [https://www.youtube.com/watch?v=\\_2b1YL28 IE](https://www.youtube.com/watch?v=_2b1YL28 IE)

## **GUIDANCE FOR YEAR 3 MEDICAL STUDENT CLINICAL SUPERVISION**

### **MEDICINE BLOCK**

Clinical Supervisors will provide longitudinal support and supervision for students during the Block. This should entail:

An Introductory meeting near the start of the block which includes:

- an assessment of the student's current level of clinical skills; feedback and recommendations given to develop these skills – this could be any clinical encounter such as bedside teaching or clerking a patient in clinic, on a ward or acute admissions setting
- further re-iteration of how the Block runs and learning resources
- how to use the Block Workbook – Direction from Learning Objectives and Cases
- advising students how to make best use of self-directed learning opportunities in the clinical environment and study advice
- advising students to undertake the mid-block self-assessment (on Blackboard) prior to the Mid-Block meeting
- Scheduling dates in your diary for Mid-Block and End of Block meetings

A Mid-Block meeting:

- an assessment of the student's current level of clinical skills; feedback and recommendations given to develop these skills – this could be any clinical encounter such as bedside teaching or clerking a patient in clinic, on a ward or acute admissions setting
- discussion regarding student's performance in mid-block self-assessment and identify significant knowledge gaps
- a review of Workbook progress / Learning Objectives progression
- discuss any concerns regarding educational opportunities or missed teaching sessions during specialty rotations

End of Block meeting:

- an assessment of the student's current level of clinical skills; feedback and recommendations given to develop these skills – this could be any clinical encounter such as bedside teaching or clerking a patient in clinic, on a ward or acute admissions setting
- discuss any concerns regarding educational opportunities or missed teaching sessions during specialty rotations
- Sign off regarding student progression with clinical skills, learning objectives completion (including procedural skills) and also standard of workbook completion – give feedback on progression and also advise on key areas for future development

What happens next?

- Students will complete End of Block written assessment papers and an OSCE
- An End of Block exit appraisal meeting with each student should take place with a Block Lead to discuss assessment / OSCE results, overall block progression, feedback and future recommendations
- End of Block outcomes will be completed by the Block Lead

## Introductory Clinical Supervisor Meeting

Date \_\_\_\_\_ Student \_\_\_\_\_ Supervisor \_\_\_\_\_

|                                                                                                                                                                                                             | What went well | Areas for improvement |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------|
| <b>Clinical Skills Assessment:</b> <ul style="list-style-type: none"> <li>- Patient Interaction</li> <li>- History Taking</li> <li>- Examination</li> <li>- Problem Solving</li> <li>- Knowledge</li> </ul> |                |                       |

| <b>Block Structure &amp; Learning Resources, including Workbook &amp; Booklets</b> | <input type="checkbox"/> No concerns <input type="checkbox"/> Concerns (specify):<br><br>Any specific advice given: |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|

**To confirm:**

- ☐ Advise completion of mid-block self-assessment on Blackboard prior to Mid-Block Supervisor meeting
- ☐ Date of Mid-Block Supervisor Meeting \_\_\_\_\_
- ☐ Date of End of Block Supervisor Meeting \_\_\_\_\_

**Student Signature** \_\_\_\_\_

**Supervisor Signature** \_\_\_\_\_

## Mid-Block Clinical Supervisor Meeting

**Date** \_\_\_\_\_ **Student** \_\_\_\_\_ **Supervisor** \_\_\_\_\_

|                                                                                                                                                                                                             | What went well | Areas for improvement |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------|
| <b>Clinical Skills Assessment:</b> <ul style="list-style-type: none"> <li>- Patient Interaction</li> <li>- History Taking</li> <li>- Examination</li> <li>- Problem Solving</li> <li>- Knowledge</li> </ul> |                |                       |

|                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Mid-Block Self-assessment performance, overall progress and workbook review</b> | <div style="display: flex; justify-content: space-between;"> <span><input type="checkbox"/> No concerns</span> <span><input type="checkbox"/> Concerns (specify):</span> </div><br><br><p>Key areas to focus on:</p><br><br><br><div style="margin-top: 20px;"> <b>Attendance:</b><br/> <div style="display: flex; justify-content: space-between;"> <span><input type="checkbox"/> No concerns</span> <span><input type="checkbox"/> Concerns (specify):</span> </div> </div> |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Student Signature** \_\_\_\_\_

**Supervisor Signature** \_\_\_\_\_

## Weekly Specialty Rotation Feedback

Feedback from clinical team (can be verbal which you document), please consider:

- attendance & professionalism
- knowledge
- clinical skills
- problem solving
- presentation skills (in discussion)
- engagement in clinical interactions
- Specialty objectives and cases complete (outlined in workbook)

| <u>Time within Block</u>                                      | <u>Weekly Student Log</u>                                                                                                                           |
|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Before end of week 2</b><br><br><b>Specialty:</b><br><hr/> | <div style="height: 150px; border: 1px solid black;"></div> <div> <input type="checkbox"/> Specialty Objectives Completed      Date:         </div> |
| <b>Before end of week 3</b><br><br><b>Specialty:</b><br><hr/> | <div style="height: 150px; border: 1px solid black;"></div> <div> <input type="checkbox"/> Specialty Objectives Completed      Date:         </div> |
| <b>Before end of week 4</b><br><br><b>Specialty:</b><br><hr/> | <div style="height: 150px; border: 1px solid black;"></div> <div> <input type="checkbox"/> Specialty Objectives Completed      Date:         </div> |
| <b>Before end of week 5</b><br><br><b>Specialty:</b><br><hr/> | <div style="height: 150px; border: 1px solid black;"></div> <div> <input type="checkbox"/> Specialty Objectives Completed      Date:         </div> |

|                                                                    |                                                                                          |
|--------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| <p><b>Before end of week 6</b></p> <p><b>Specialty:</b></p> <hr/>  | <div> <input type="checkbox"/> Specialty Objectives Completed         Date:       </div> |
| <p><b>Before end of week 7</b></p> <p><b>Specialty:</b></p> <hr/>  | <div> <input type="checkbox"/> Specialty Objectives Completed         Date:       </div> |
| <p><b>Before end of week 8</b></p> <p><b>Specialty:</b></p> <hr/>  | <div> <input type="checkbox"/> Specialty Objectives Completed         Date:       </div> |
| <p><b>Before end of week 9</b></p> <p><b>Specialty:</b></p> <hr/>  | <div> <input type="checkbox"/> Specialty Objectives Completed         Date:       </div> |
| <p><b>Before end of week 10</b></p> <p><b>Specialty:</b></p> <hr/> | <div> <input type="checkbox"/> Specialty Objectives Completed         Date:       </div> |
| <p><b>Before end of week 11</b></p> <p><b>Specialty:</b></p> <hr/> | <div> <input type="checkbox"/> Specialty Objectives Completed         Date:       </div> |

## Year 3 Medicine End of Block Consultant Supervisor Report

The following is shown an illustrative example. Please use MyKnowledgeMap forms where available.

|                      |  |              |  |
|----------------------|--|--------------|--|
| <b>Student Name:</b> |  | <b>Site:</b> |  |
| <b>Block Dates:</b>  |  |              |  |

|                                                        |                |                       |              |                       |           |                       |
|--------------------------------------------------------|----------------|-----------------------|--------------|-----------------------|-----------|-----------------------|
| <b>What was the level of the student's attendance?</b> | Below Expected | <input type="radio"/> | Satisfactory | <input type="radio"/> | Excellent | <input type="radio"/> |
| <b>Did the student behaviour professionally?</b>       | Yes            | <input type="radio"/> | No           | <input type="radio"/> |           |                       |
| <b>Has the workbook been completed satisfactorily?</b> | Yes            | <input type="radio"/> | No           | <input type="radio"/> |           |                       |
| <b>Procedural skills training completed?</b>           | Yes            | <input type="radio"/> | No           | <input type="radio"/> |           |                       |

|                                                                                 |                       |            |                       |      |                       |      |                       |           |                       |
|---------------------------------------------------------------------------------|-----------------------|------------|-----------------------|------|-----------------------|------|-----------------------|-----------|-----------------------|
| <b>What is your (+/- your team's) assessment of their clinical performance?</b> |                       |            |                       |      |                       |      |                       |           |                       |
| Fail                                                                            | <input type="radio"/> | Borderline | <input type="radio"/> | Pass | <input type="radio"/> | Good | <input type="radio"/> | Excellent | <input type="radio"/> |

***Please provide detailed comments (to support the grading above) - consider:***

- |                                                                                                                                                                                                          |                                                                                                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>- attendance &amp; professionalism</li> <li>- clinical skills</li> <li>- presentation skills (in discussion)</li> <li>- Speciality objectives complete</li> </ul> | <ul style="list-style-type: none"> <li>- knowledge</li> <li>- problem solving</li> <li>- engagement in clinical interactions</li> <li>- quality of workbook cases completion</li> </ul> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                               |  |
|-------------------------------|--|
| <b>Consultant Supervisor:</b> |  |
| <b>Supervisor signature:</b>  |  |
| <b>Date:</b>                  |  |

## Clinical Procedural Skills

You should complete the following skills during the Year 3 Medicine Block and have a member of staff sign you off for each (MyKnowledgeMap DOPS).

We also encourage you to practice these skills and complete some supervised learning events.

You must show evidence of having undertaken the training to your Consultant Supervisor prior to the End of Block.

|                                                  | Tick box                 |
|--------------------------------------------------|--------------------------|
| <b>Perform an ECG</b>                            | <input type="checkbox"/> |
| <b>Interpret an ECG</b>                          | <input type="checkbox"/> |
| <b>Interpret a cardiac monitor</b>               | <input type="checkbox"/> |
| <b>Assess Peak Flow</b>                          | <input type="checkbox"/> |
| <b>Administer a nebulised medication</b>         | <input type="checkbox"/> |
| <b>Interpret Spirometry Results</b>              | <input type="checkbox"/> |
| <b>Arterial Blood Gas Sampling</b>               | <input type="checkbox"/> |
| <b>Venepuncture</b>                              | <input type="checkbox"/> |
| <b>Manage blood samples correctly</b>            | <input type="checkbox"/> |
| <b>Use of infusion devices</b>                   | <input type="checkbox"/> |
| <b>Intravenous fluid prescription</b>            | <input type="checkbox"/> |
| <b>Make up drugs for parental administration</b> | <input type="checkbox"/> |
| <b>Subcutaneous and intramuscular injections</b> | <input type="checkbox"/> |
| <b>Dosage and administration of insulin</b>      | <input type="checkbox"/> |
| <b>Manage an insulin sliding scale</b>           | <input type="checkbox"/> |

Signed by Supervisor: \_\_\_\_\_

Print Name: \_\_\_\_\_

Date: \_\_\_\_\_

***Please highlight any skills not achieved.***

***PLEASE MONITOR YOUR CLINICAL PROCEDURAL SKILLS PROGRESS  
THROUGHOUT YEAR 3 AND YEAR 4. SPECIFIC CLINICAL SKILLS MUST BE  
UNDERTAKEN IN YEAR 3 IN ORDER TO PROGRESS FROM YEAR 3 TO YEAR 4.***