Oxford University Final Exam Syllabus 2015-2016. Reproduced here with kind permission from Dr Tim Lancaster, Director of Clinical Studies at the University of Oxford.

Topics represented in the flashfinals library are highlighted in green.
**Integrated curriculum in medicine and surgery 2015-16**

*Contents of the curriculum*

The curriculum encompasses teaching relevant to medicine and surgery in years 4, 5 and 6 of the course and is organised into eleven content areas. For each content area the curriculum specifies learning objectives and a description of the core topics in which you are expected to demonstrate knowledge and skills. The eleven content areas are:

1. Emergency care
2. Acute and in-patient care
3. Chronic and continuing care
4. Prevention
5. Therapeutics
6. Rehabilitation
7. Palliative Care
8. Procedures and investigation
9. Communication skills
10. Referral skills
11. Ethics, law and professionalism

Under each heading, the curriculum contains a description of the learning objectives and the areas in which you should aim to acquire skills and knowledge. Assessments will be based on this curriculum.

**What depth of knowledge is required?**

The aim of the curriculum is for you to attain the skills and knowledge to function as a competent Foundation Year One (FY1) doctor in medicine, surgery or general practice. This is the standard against which you will be measured in the 2nd BM examination in year six.

The depth of knowledge required is broadly equivalent to that provided in the following textbooks of medicine and surgery:

- Kumar P.J. and Clark M.L. *Clinical Medicine*
- Browse N. *An Introduction to the symptoms and signs of surgical disease.*
- Ellis H., Calne R., Watson C. *Lecture notes on general surgery.*

However, no single textbook encompasses all the knowledge you will need as a FY1. The best way to judge what you should be aiming for is to participate in clinical care, noting the common conditions and the responsibilities of the FY1 in managing them. In addition, information in textbooks (especially about treatment) rapidly becomes out of date. Material in texts should be augmented by ward experience, clinical teaching and reading of medical journals.
**Is there a difference in expectations in years 4 and 6?**

There is no clear distinction between the knowledge and skills required in each year of the course and you should use this curriculum as a guide to learning in medicine and surgery throughout years 4-6. However, there are different expectations of the standard you should achieve in each year. These expectations are reflected in the content and structure of assessments.

By the end of year 4 you are expected:

- To demonstrate clinical skills of history, examination, communication, and practical procedures
- To demonstrate knowledge of the patho-physiology and presentation of illness of common or important conditions in medicine and surgery. The year 4 logbook will give you guidance about which core topics you should prioritise during the year
- To describe the indications for common clinical investigations and their interpretation

In year 6 the main aims are:

- To demonstrate application of the clinical skills learnt in year 4 to the standard of a FY1 doctor.
- To demonstrate knowledge and skills in clinical care, diagnosis, management and therapeutics to the level required of a competent FY1 doctor.
- To interpret and apply evidence in clinical practice.

In the 2nd BM examination, you may be asked to demonstrate and apply any of the knowledge and skills specified in this curriculum.

**Where will I acquire core knowledge and skills?**

You will have the opportunity to learn about the topics in the curriculum on different attachments and at different points during the three years of the course. However, most of the learning will take place on medical and surgical attachments in Oxford and in District General Hospitals in years 4 and 6. To help you plan your learning, the curriculum indicates the attachments where you will have the greatest opportunities to learn about particular topics. In addition, you will receive specialised teaching on practical skills in the skills laboratory and in communication in the communication skills course. You will learn about the patho-physiology of disease in The Laboratory Medicine Course in year 4, and about law and ethics during the year 4 thread course.

**Content area 1: Emergency care**

**Learning objectives**

- To demonstrate recognition and assessment of core emergency presentations
- To demonstrate first contact care including resuscitation, practical procedures and prescription of initial drug treatments
- To describe the initial investigation of patients presenting with core conditions.
- To describe the principles of further management requiring senior staff or specialists.
Core topics in emergency care

Mainly learnt on Medical rotations

Approach to the acutely breathless patient:
Respiratory failure types 1 and 2, acute asthma, pulmonary embolism, tension pneumothorax, acute left ventricular failure, pneumonia, exacerbation of COPD

Approach to the hypotensive patient:
Shock including sepsis, hypovolaemia, gastrointestinal bleeding, acute myocardial infarction, dysrhythmias, cardiac tamponade, anaphylaxis

Approach to the patient with disordered consciousness:
Delirium, meningitis, coma, severe headache, intracranial haemorrhage and infarction, status epilepticus, raised intracranial pressure

Approach to endocrine and metabolic emergencies:
Diabetic ketoacidosis, hyperosmolar non-ketotic state, hypoglycaemia, hyperkalaemia, Addisonian crisis, hypothermia

Approach to acute poisoning and self-poisoning:
Paracetamol, opiates, aspirin, carbon monoxide, tricyclic antidepressants, psychological care of the patient with deliberate self-harm

Approach to the patient with oliguria:
Pre-renal failure, obstruction, acute tubular necrosis, fluid management, recognition of hyperkalaemia

Approach to the patient with acute chest pain:
Acute coronary syndrome, myocardial infarction, pulmonary embolism, aortic dissection

Approach to the patient with sickle cell crisis:
Recognition and management of painful crisis and sickle chest syndrome

Approach to the patient with accelerated hypertension:
Cardiac arrest

Mainly learnt on surgical rotations

Approach to the patient with an acute abdomen:
Appendicitis, pancreatitis, peptic ulcer, perforated viscus, abdominal aortic aneurysm, complications of gallstones, intestinal obstruction, renal colic, pyelonephritis, diverticulitis, ectopic pregnancy, salpingitis, ruptured ovarian cyst

Approach to the patient with a vascular emergency:
Ruptured aortic aneurysm and aortic dissection

Approach to the patient with acute testicular pain:
Torsion of the testis, epidydimo-orchitis

Approach to the patient with burns:
Resuscitation, assessment of size of burn, complications

Approach to the patient with major trauma:
Content area 2: Acute and in-patient care

Learning objectives

- To demonstrate diagnosis, assessment and initial treatment for common and/or serious conditions that the FY1 doctor is likely to encounter in a hospital or primary care setting.
- To demonstrate assessment and management of pre-operative care of conditions leading to elective surgery.
- To describe diagnosis and management of common peri and post-operative complications.

Core medical and surgical topics in acute and in-patient care

cardiovascular disease

Mainly learnt on medical rotations:
Approach to the patient with chest pain
Approach to the patient with palpitations and cardiac arrhythmias
Approach to the patient with syncope
Approach to the patient with shortness of breath
Approach to the patient with a heart murmur
Approach to the patient with a swollen leg
Approach to the patient with a painful limb

Interpretation of the 12-lead ECG

Hypertension: essential vs secondary hypertension, investigation and management of the hypertensive patient, indications for and adverse effects of diuretics, calcium channel blockers, ACE inhibitors and angiotension receptor blockers, beta blockers, alpha blockers.

Angina pectoris: investigation and management of stable angina: role of stress testing, risk factor modification, symptom control.


Arrhythmias: Atrial fibrillation: clinical and ECG recognition, causes, complications, rate vs rhythm control, indications for anticoagulation. Differentiation of narrow and broad complex tachycardias on ECG. Recognition of re-entrant tachycardia, atrial flutter and ventricular tachycardia.


Pericarditis and pericardial effusion: symptoms, signs, ECG and chest xray findings.

Mainly learnt on surgical rotations

Respiratory
Approach to the patient with pleuritic chest pain
Approach to the patient with chronic shortness of breath
Approach to the patient with cough
Approach to the patient with haemoptysis
Approach to the patient with wheeze
Approach to the patient with stridor

Interpretation of the chest x-ray

Gastroenterology
Learnt on both medical and surgical rotations
Approach to the patient with constipation or diarrhoea
Approach to the patient with change in bowel habit
Approach to the patient with jaundice
Approach to the patient with vomiting
Approach to the patient with haematemesis and malaena
Approach to the patient with dysphagia
Approach to the patient with dyspepsia
Approach to the patient with rectal bleeding
Approach to the patient with malabsorption
Approach to the patient with an abdominal mass
Approach to the patient with abdominal distension
Approach to the patient with weight loss
Evaluation of iron deficiency anaemia

Upper gastrointestinal haemorrhage: common causes: peptic ulcer, gastritis, oesophageal varices, carcinoma of stomach, Mallory-Weiss tear. Clinical features and assessment (Rockall score). Treatment and further investigation.

Dysphagia: Carcinoma of oesophagus and stomach, benign strictures, achalasia, neurological problems. Investigation: endoscopy, barium swallow, manometry.


Inflammatory bowel disease: Clinical features of Crohn’s disease and ulcerative colitis. Recognition and management of acute colitis.

Irritable bowel syndrome: Diagnostic criteria and clinical features.

Coeliac disease: Clinical presentations of malabsorption, diagnosis by antibody tests and biopsy, principles of dietary treatment.


Chronic pancreatitis: Clinical features of malabsorption and pain. Investigation: faecal elastase, imaging.

Gallstones: Biliary colic, cholecystitis, ascending cholangitis, gall-stone ileus.

Pancreatic cancer: Clinical presentations including obstructive jaundice.

Diverticular disease: Presentations with bleeding, infection, obstruction, abscess, fistula formation. Initial management of uncomplicated diverticulitis with fluids, analgesia and antibiotics.

Appendicitis: Clinical features, investigation and management.


Haemorrhoids and anal fissures: Classification of haemorrhoids. Diagnostic evaluation of the patient with rectal bleeding.


Acute and chronic liver disease: Causes: alcoholic, auto-immune, viral, metabolic. Complications including ascites, gastrointestinal haemorrhage, ascites, encephalopathy.

Nephrology/Urology

Mainly learnt on medical rotations


Hyponatraemia and hypomotraemia: Differential diagnosis of hyponatraemia: euvolaemic, hypervolaemic and hypovolaemic causes.

Hyperkalaemia and hypokalaemia: ECG changes. Treatment of hyperkalaemia with calcium gluconate, glucose and insulin, ion exchange resins, dialysis. Treatment of hypokalaemia, oral and intravenous approaches.

Proteinuria, nephritic and nephrotic syndromes: differential diagnosis, complications, investigation. Note: knowledge of different histological types of glomerulonephritis not required.

Chronic renal failure: symptoms, complications, principal causes, investigation, management.

Indications for dialysis: pulmonary oedema/fluid overload, hyperkalaemia, uraemia.

Polycystic kidney disease: inheritance, clinical presentations.

Drug dosing in renal failure

Mainly learnt on surgical rotations

Approach to the patient with difficulty in passing urine

Approach to the patient with urinary retention

Approach to the patient with pain on passing urine

Approach to the patient with haematuria

Benign prostatic hypertrophy: investigation, medical management with alpha blockers/finasteride, surgical management, complications of TURP.

Cancer of prostate, kidney, bladder and testis: symptoms, investigation, principles of management.

Renal tract stones: aetiology, symptoms, investigation with spiral CT, management.

Scrotal masses: Differential diagnosis of scrotal masses: hernia, carcinoma, hydrocoele, epididymal cyst, varicocele, torsion, epididymoorchitis.

Urinary tract infection: causative organisms, clinical features, principles of treatment.

Haematuria: upper and lower tract causes, medical causes. Investigation: urinalysis, blood tests, imaging, cystoscopy.

Retention of urine: acute and chronic, causes: bladder outflow obstruction, neurological, drugs, constipation. Urinary catheterisation

Infectious disease

Mainly learnt on medical rotations

Approach to the patient with fever of unknown origin.

Approach to fever in the returning traveller: common causes of fever in the returning traveller: malaria, dengue fever, typhoid, diarrhoeal illness. Initial plan of investigation.


Tuberculosis: clinical features, drug treatment including adverse effects of rifampicin, isoniazid, pyrazinamide and ethambutol, public health measures.

HIV infection and AIDS-related infections: pneumocystis pneumonia, Kaposi’s sarcoma, toxoplasma gondii, tuberculosis, principles of HAART.

Cellulitis: Assessment and indications for in-patient treatment, microbiology, choice of antibiotics, skin care.


Mainly learnt on surgical rotations

Approach to the patient with fever following surgery: urinary tract infection, pneumonia, wound infection, line infection, DVT, anastomotic leak, abscess.

Endocrine/metabolic/breast

Mainly learnt on medical rotations

Diabetes mellitus types 1 and 2: Diagnostic criteria, dietary and drug treatment of hyperglycaemia, management of blood pressure and serum lipids, monitoring and treatment of macro-vascular and micro-vascular complications.

Hyperthyroidism: Differential diagnosis and causes (Grave’s disease, multinodular goitre, toxic adenoma, drug induced). Management according to cause, medical, ablative and surgical treatment. Adverse effects of carhimazole.

Hypothyroidism: Clinical features, diagnosis, prescription of thyroid hormone replacement.

Cushing’s syndrome: Clinical features, diagnosis, adverse effects of exogenous corticosteroids.

Addison’s: causes, clinical features, diagnostic criteria, treatment.

Hypopituitarism: Clinical features.

Hypercalcaemia: Differential diagnosis especially hyperparathyroidism and malignancy. Emergency management with fluids and bisphosphonates.

Hyperparathyroidism: diagnosis, complications of parathyroidectomy.

Hypocalcaemia: differential diagnosis including renal failure, osteomalacia, hypoparathyroidism.

Hormone replacement therapy: indications for oestrogen replacement, adverse effects of oestrogen.

Mainly learnt on surgical rotations


Thyroid nodules and thyroid cancer: Differential diagnosis including benign adenoma, multinodular goiter, cyst and carcinoma. Investigation of thyroid nodules to exclude malignancy.

Haematology

Mainly learnt on medical rotations and in Laboratory medicine
Approach to the patient with anaemia, including investigation of macrocytic, microcytic and normocytic blood counts
Approach to the patient with abnormal bleeding or bruising
Approach to the patient with a raised red cell or white cell count
Approach to the patient with splenomegaly
Approach to the patient with lymphadenopathy

Iron deficiency anaemia: haematological features, iron studies, further investigation. Prescription of iron therapy
Thalassaemia trait: differential diagnosis of microcytic anaemia
Sickle cell anaemia: Complications, management of painful crises and acute chest syndrome
B12 and folate deficiencies: Differential diagnosis of macrocytic anaemia, autoantibodies to diagnose B12 deficiency
Anaemia of chronic disease: association with malignancy, renal disease and endocrine disease
Haemolytic anaemia: recognition of immune haemolytic anaemia, hereditary red cell defects
Myeloma: Clinical presentations, laboratory diagnosis: protein electrophoresis, skeletal survey, bone marrow findings
Myelo-proliferative disorders: Recognition from blood count, clinical features of polycythaemia rubra vera
Chronic lymphocytic leukaemia: prognosis, features on blood film, complications including haemolytic anaemia
Thrombophilia: congenital and acquired factors predisposing to thrombosis
Anticoagulation: Indications for and principles of monitoring of low molecular weight heparin and warfarin, including recognition of important drug interactions

Rheumatology

Mainly learnt in year 5 musculo-skeletal medicine course
Approach to the patient with acute monoarthritis
Approach to the patient with oligoarthritis
Approach to the patient with polyarthritis
Approach to the patient with low back pain

Rheumatoid arthritis: ACR diagnostic criteria, articular and extra-articular manifestations, principles of disease-modifying treatment, risks and benefits of NSAID’s, adverse effects and monitoring of methotrexate
Osteoarthritis: clinical and radiological features, treatment with analgesics
Gout and pseudogout: diagnosis of joint aspirates, acute treatment with NSAID’s, colchicine, corticosteroids. Indications for and use of allopurinol for prevention
Septic arthritis: recognition, infecting organisms, treatment
Temporal arteritis and polymyalgia rheumatica; Diagnostic criteria, complications, treatment with corticosteroids.

Metabolic bone disease: Clinical, biochemical and radiological features of osteomalacia.

Osteoporosis: diagnostic criteria, use of DEXA scan, lifestyle advice, role of bisphosphonates.

Sero-negative spondyloarthropathies: Clinical features of anklyosing spondylitis and psoriatic arthropathy.

Systemic lupus erythematosus: Clinical features, ACR criteria for diagnosis.


Principles of conservative therapy, indications for neurosurgical referral.

Oncology

Learned in both medical and surgical rotations

Oncological emergencies: spinal cord compression, obstruction of superior vena cava, acute hypercalcaemia: Clinical features and further investigation

Principles of cancer management including staging

Principles of chemotherapy and radiotherapy and symptomatic management of their complications

Breast cancer: primary management, lumpectomy vs mastectomy, principles of adjuvant treatment

Prostate cancer: principles of management of metastatic disease

Lung cancer: symptoms and signs, radiological findings

Neurology

Mainly learnt in year 5 rotation in neurology and neurosurgery and in medical rotations

Approach to the patient with headache

Approach to the patient with falls

Approach to the patient with focal weakness: differentiation of lesions of the upper and lower motor neurons, neuromuscular junction and muscle


Cranial nerves: examination of all cranial nerves with particular attention to evaluation of Diplopia: Recognition of clinical features of lesions of 3rd, 4th and 6th nerves. Causes of oculomotor palsy: compression by tumour or aneurysm, medical third nerve palsies associated with atherosclerosis and diabetes


Stroke and cerebrovascular disease: Classification of haemorrhagic and ischaemic stroke. Clinical features including clinical localization. Investigation including carotid imaging, ECG and echocardiograph.


Multiple sclerosis: Clinical features: optic neuritis, eye movement disorders, spinal cord lesions, brainstem and cerebellum. Diagnostic studies: MRI, visual evoked potentials, lumbar puncture: findings supporting diagnosis.


Investigation for reversible causes: hydrocephalus, thyroid disease, B12 deficiency, viral infection, alcohol. Examination of speech: dysphasias, dysarthria, dysphonia.


Dermatology

Mainly learnt in year 5 dermatology rotation
Approach to the patient with itching (pruritus)
Approach to the patient with skin failure (toxic epidermal necrolysis, erythroderma): differential diagnosis, complications, treatment

Common skin infections (bacterial, viral, fungal, scabies): clinical features, diagnostic tests, treatment
Acne vulgaris: clinical features, treatment with topical/oral antibiotics, benzoyl peroxide, dianette
Urticaria: clinical features, use of antihistamines
Important skin signs of systemic disease (purpura, nail changes, erythema nodosum)

Learned in surgery rotations and the year 5 dermatology rotation
Approach to the patient with a changing cutaneous lesion (nodule, papule, ulcer)

Malignant melanoma: clinical features including ABCD rules, risk factors, prognostic indicators
Basal cell and squamous cell carcinoma: clinical features, risk factors, prevention of skin cancer and sun damage
Differential diagnosis and management of leg ulcers: venous, arterial, neuropathic, vasculitic, neoplastic, infectious, pyoderma gangrenous. Investigation including ABPI. Treatment of venous ulcers by local measures and compression bandaging. Role of surgery in patients with patent deep venous system.

Ophthalmology

Examination techniques: Visual acuity (with or without a pinhole), pupil reactions, eye movements, visual fields, examination of the optic disc and fundus.
Approach to the patient with red eye: recognition of iritis, conjunctivitis, keratitis, acute glaucoma
Approach to the patient with painless loss of vision, acute and chronic: retinal detachment, ischaemic neuropathy, optic neuritis, retinal vein thrombosis, embolism, cataract, macular degeneration
Diabetic retinopathy: Clinical features of background and proliferative retinopathy, and maculopathy
Visual field abnormalities: scotomata, homonymous hemianopia, bitemporal hemianopia, altitudinal defects, tunnel vision

Ear, Nose and Throat

Examination techniques: Auroscope, tuning fork tests
Approach to the patient with hearing loss: conductive and sensori-neural causes, differentiation using tuning fork tests
Approach to the patient with a hoarse voice

Epistaxis: causes, management

Stridor

Ear pain and discharge: features of otitis media and otitis externa


Rhinitis and nasal polyps

Presentation of head and neck cancer

Management of the airway in patients with a tracheostomy
Content area 3: Chronic and continuing care

Learning objectives

· To describe and demonstrate the assessment and management in an outpatient clinic or primary care setting of patients followed up after discharge for the acute and emergency presentations encountered in hospital.

· To describe how to organise and provide care on a continuing basis for conditions listed in the core curriculum

Core Topics in chronic and continuing care

You should be able to describe the continuing care of core conditions listed in content area 2. In particular, you should be able to describe chronic and continuing care in the following areas:

Mainly learnt in medical and primary care rotations:
Management of cardiovascular risk including hypertension and hyperlipidaemia
Prevention of complications in patients with diabetes mellitus
Monitoring and education of the patient with asthma
Investigation and treatment of osteoporosis

Content area 4: Prevention

Learning objectives

· To describe the principles of primary, secondary and tertiary prevention
· To describe and demonstrate specific methods of preventive care for core topics.

Core topics in prevention

Mainly learnt through public health thread teaching through years 4-6

Screening and early detection with particular reference to breast cancer and hypertension Health benefits of, and techniques for, smoking cessation including simple advice, indications for nicotine replacement therapy and bupropion, resources for referral Principles of dietary counselling for heart disease and diabetes Adult immunisation with particular reference to asplenic patients

Content area 5: Therapeutics

Learning objectives

Clinical Pharmacology:
To describe methods for selecting drugs, method of delivery, dosage calculation, consideration of interactions and adverse effects for drugs listed in the core pharmacology curriculum.

To describe management plans for the core conditions in content areas 1, 2 and 3.

To demonstrate the ability to write a drug chart and document discharge medication in a discharge summary.

Radiotherapy:
- **To describe the principles and adverse effects of radiotherapy**

Nutrition:
- To assess nutritional status in the hospitalised patient and to describe principles and hazards of enteral and parenteral nutrition.

Fluids:
- To write a fluid chart for a medical or surgical patient.
- To prescribe appropriate intravenous fluids to administer for the conditions outlined in the core curriculum for emergency and acute problems.
- To describe procedures for safe transfusion of blood products.

Physical, occupational and speech therapies
- Describe indications for referral for core conditions listed in content areas 1, 2 and 3

**Clinical pharmacology topics**
You should be able to describe the indications, administration, common adverse reactions and important interactions of the drugs listed in the Oxford student formulary as *Emergency* or *Core*. The student formulary can be found on the Clinical Pharmacology site within Weblearn.
Content area 6: Rehabilitation

Learning objectives
- To describe the role of rehabilitation in recovery after major illness, significant trauma or surgery
- To describe the principles of physical, social and psychological rehabilitation with specific reference to core topics
- To describe the role of other health professionals in rehabilitation for the core topics.

Core topics

Mainly learnt in medicine and geratology rotations:
- Myocardial infarction
- Stroke

Mainly learnt in musculo-skeletal medicine rotation
- Rheumatoid arthritis

Content area 7: Palliative care

Learning objectives
- To demonstrate prescription of pain control for patients with pain associated with terminal illness
- To demonstrate prescription of palliative treatment for other terminal symptoms including dyspnoea, nausea and constipation
- To describe and demonstrate communication strategies for breaking bad news

Core topics in palliative care

Mainly taught in palliative medicine and in medical and surgical rotations
- Chronic pain: WHO pain ladder, prescription of opiate analgesia including conversion from oral to subcutaneous dosing, bone pain
- Nausea and vomiting: diagnosis of cause and treatment by cause: Haloperidol or metoclopramide for opiate induced, Prokinetic for gastric stasis; metoclopramide/domperidone, dexamethasone for raised intracranial pressure, cyclazine and mechanical approaches
- Constipation: Choice and prescription of bulk (fybogel), stimulant (senna), osmotic (lactulose) laxatives and faecal softeners (docusate)
- Talking about bad news
- Psychological and social support of the dying patient and family

Content area 8: Procedures and investigations

Learning objectives
To demonstrate competence in conducting the common practical procedures performed by the FY1 doctor.

To describe to a patient specified procedures including indications, risks and expected discomfort.

To demonstrate interpretation of common laboratory and radiological investigations ordered by the FY1 doctor.

**Core practical procedures**

Based on recommendations from the General Medical Council and feedback from graduates, the following skills are designated as essential competencies for all medical graduates. From 2012, there will be a dedicated assessment of Practical Skills in the final year of the course. The ability to perform these skills will not be tested in the 2nd BM examination in February, 2012, but knowledge of the procedures may be tested in written papers. Some of these skills are assessed at different points in the course, for example, in the year 4 OSCE and/or the year 6 Practical Skills’ Assessment. The table below indicates where these skills are assessed in the course, and which ones will be sampled in the year 6 Practical Skills’ Assessment.

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<thead>
<tr>
<th>Skill Description</th>
<th>Assessment Points</th>
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<tr>
<td>Hand washing</td>
<td>All clinical examinations</td>
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<tr>
<td>Infection control in relation to procedures, including use of personal protective equipment</td>
<td>All clinical examinations</td>
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<tr>
<td>Safe disposal of clinical waste, needles and sharps</td>
<td>All clinical examinations</td>
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<tr>
<td>Giving information about the procedure, obtaining and recording consent, and ensuring appropriate aftercare</td>
<td>All clinical examinations</td>
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<tr>
<td>Measuring body temperature</td>
<td>Year 4 OSCE</td>
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<td>Measuring pulse rate and blood pressure using manual and automated techniques</td>
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<td>Transcutaneous monitoring of oxygen saturation</td>
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<td>Venepuncture</td>
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<td>Inserting a cannula into a peripheral vein</td>
<td>Year 4 OSCE and Year 6 Practical Skills Assessment</td>
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<td>Setting up an intravenous infusion</td>
<td>Year 6 Practical Skills Assessment</td>
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<tr>
<td>Taking an arterial blood gas sample, including technique for intradermal local anaesthetic</td>
<td>Year 4 OSCE and Year 6 Practical Skills Assessment</td>
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<td>Management of blood samples</td>
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<td>Taking blood cultures</td>
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<td>Blood transfusion</td>
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<td>Measuring blood glucose</td>
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<td>Performing a 12-lead electrocardiograph</td>
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<td>Spirometry and peak flow measurement</td>
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<td>Instructing patients in the use of devices for inhaled medication</td>
<td>Year 5 primary care examination</td>
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<td>Nebuliser use</td>
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<td>Procedure</td>
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<td>Urinanalysis using multistix</td>
<td>Year 4 OSCE</td>
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<tr>
<td>Advising patients on how to collect a mid-stream urine specimen</td>
<td>Year 4 OSCE</td>
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<tr>
<td>Taking nose, throat and skin swabs</td>
<td>Year 5 dermatology logbooks</td>
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<tr>
<td>Administering oxygen in appropriate concentrations via a face mask or</td>
<td>Year 6 Practical Skills Assessment</td>
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<td>nasal prongs</td>
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<tr>
<td>Airway care including use of guedel airway</td>
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<tr>
<td>Establishing peripheral intravenous access and setting up an infusion</td>
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<td>Subcutaneous and intramuscular injections</td>
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<td>Male and female urinary catheterisation</td>
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<tr>
<td>Naso-gastric tube placement</td>
<td>Year 4 OSCE and Year 6 Practical Skills Assessment</td>
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<tr>
<td>Write safe prescriptions for different types of drugs</td>
<td>Year 6 Practical Skills Assessment</td>
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**Observed Procedures:**

By the time of the 2nd BM examination, you should be able to able to describe to a patient the aims, expected discomforts and possible complications of the procedures listed below. Where possible, you should aim to observe the procedure being carried out at least once.

- Life support systems including mechanical ventilation
- Exercise ECG
- Echocardiogram
- Bone marrow aspiration and trephine
- Chest drain insertion
- Suprapubic catheterisation
- Duplex scanning of carotid artery
- Angiography and Angioplasty (coronary and peripheral)
- Doppler ultrasound of leg for venous thrombosis
- Bronchoscopy
- Aspiration of fluid from pleura or peritoneum
- Total parenteral nutrition
- Stoma-care
- Flexible endoscopy of the upper and lower gastrointestinal tract
- Sigmoidoscopy
- ERCP
- Barium enema and barium meal
- Local procedures for haemorrhoids
- Cystoscopy
- Shock-wave lithotripsy
- Liver biopsy
- Renal biopsy
- Peritoneal dialysis and haemodialysis
- Injection of varicose veins
- Fine needle aspiration for cytology
- Mammography
- Thyroid nuclear medicine scan
- Abdominal ultrasound
- CT and Magnetic resonance imaging
- Autopsy and referral to the Coroner
**Content area 9: Communication skills**

Please refer to the core curriculum for the communication skills course.

**Content area 10: referral skills**

**Learning objectives**

- To make a referral either in writing or by telephone to doctors and other health professionals or agencies.
- To describe the reasons for referral, describe the information that should be included in a referral, and describe the level of urgency.

*Learnt during medical and surgical attachments*

**Content area 11: Law, ethics and professionalism**

You should have a knowledge of ethics and law relevant to practical situations and dilemmas you may face as a FY1 doctor with specific regard to the Duties of a doctor as defined by the General Medical Council, confidentiality, consent and end of life decisions. This is mainly learnt in year 4 thread courses. The recommended textbook is *Medical Ethics and Law: the core curriculum*. Tony Hope, Julian Savulescu, Judith Hendrick. Published by Churchill Livingstone.

**Learning objectives**

You should be able to:

- Describe the Duties of a Doctor as defined by the General Medical Council in the document [http://www.gmc-uk.org/guidance/good_medical_practice/index.as](http://www.gmc-uk.org/guidance/good_medical_practice/index.as)
- Describe and apply legal and ethical considerations and GMC guidelines relevant to deciding when it is justified to breach medical confidentiality.
- Describe examples of when it is legally required to breach confidentiality.
- Describe and apply common law on consent to treatment for adults and minors, including those who have capacity to consent and those who lack such capacity.
- Describe the concept of valid consent as being informed, competent, and voluntary. Describe how the Mental Health Act relates to common law with regard to giving treatment without a patient's consent.
- Describe the components of legal capacity to consent and how it might be assessed.
- Describe legal considerations and GMC guidelines with regard to withholding and withdrawing treatment including do not attempt resuscitation orders.
- Describe the conceptual distinctions between different types of euthanasia.
• Describe and illustrate the how the distinctions between acts/omissions and intending/foreseeing a result, relate to different views on end of life issues in medicine.