

APPENDIX A

CARDINAL MANIFESTATIONS OF ILLNESS

• Abdominal pain	• Haematemesis, and/or melaena	• Pallor
• Abdominal swelling	• Haematuria	• Palpitations
• Alopecia	• Haemoptysis	• Parasthesia
• Alteration in bowel habits	• Headache	• Pigmentary changes of skin
• Anorexia	• Hearing disturbances	• Polydipsia
• Ataxia	• Hepatomegaly	• Polyuria
• Back pain	• Hirsutism	• Proptosis
• Bone pain	• Hoarseness	• Proteinuria
• Bradycardia	• Hypertension	• Pruritus
• Bruising and easy bleeding	• Jaundice	• Rectal bleeding
• Chest pain	• Joint pain and/or swelling	• Seizures
• Clubbing	• Lymphadenopathy	• Shock
• Confusion	• Memory impairment	• Skin lesions
• Co-ordination impairment	• Meningism	• Speech disturbances
• Cough	• Menstrual disturbances	• Splenomegaly
• Cyanosis	• Mono-, hemi-, para-, quadraparesis	• Syncope
• Depressed level of consciousness	• Movement disorders	• Tachycardia
• Dyspepsia	• Muscle cramps	• Tachypnoea
• Dysphagia	• Muscle weakness	• Thrombosis
• Dyspnoea	• Musculoskeletal aches and pains	• Tremor
• Fatigue	• Nausea and vomiting	• Urinary incontinence
• Fever and rigors	• Night sweats	• Urinary retention
• Flushing	• Obesity	• Vertigo and dizziness
• Gait disturbances	• Odynophagia	• Visual disturbances
• Galactorrhoea	• Oedema	• Weight loss
• Gaze disturbances	• Oral manifestations of illness	• Wheezing
• Gynaecomastia	• Pain	

EMERGENCY CARE AND CRITICAL CARE

Must know

• Acute coronary syndrome	• Respiratory arrest	• Coma
• Cardiac arrest	• Acute respiratory distress	• Status epilepticus
• Shock	• Massive haemoptysis	• Acute psychosis
• Tachyarrhythmias	• Near drowning	• Diabetic emergencies
• Bradyarrhythmias	• Acute severe asthma	• Heat exhaustion and heat stroke
• Cardiac tamponade	• Stridor	• Hypothermia
• Hypertensive emergencies	• Anaphylaxis	• Lightning strike or electrocution
• Pulmonary oedema	• Angio-oedema	• Suspected poisoning or drug overdose
• Acute envenomation: snake bites, spider bites, scorpion stings, bee and wasp stings		• Alcohol-related toxicity

Must recognise

• Addisonian crisis	• Thyroid storm	• Myxoedema coma
• Malignant hyperthermia	• Tetany	• Myasthenic crisis
• Severe electrolyte disturbances		

Diagnostic or therapeutic procedures relevant to the disciplines

Indications for use and have observed, where possible	Indications for use and have performed under supervision	Indications for use and can perform independently
• Emergency cricothyroidotomy		• Cardioversion
• Arterial line insertion		• Defibrillation
• Swan Ganz catheter insertion		• Central venous line insertion
• Swan Ganz catheter insertion		• Cardiopulmonary resuscitation
		• Endotracheal intubation
		• Mechanical ventilation

Interpretation of diagnostic test results

• Central venous pressure monitoring	
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DISORDERS OF THE CARDIOVASCULAR SYSTEM**Must know**

• Valvular heart disease	• Cor pulmonale	• Hypertension
• Infective endocarditis	• Dilated cardiomyopathy	• Chronic atrial fibrillation
• Rheumatic fever	• Beri-beri	• Ischaemic heart disease
• Heart failure	• Pericardial disease	• Peripheral vascular disease

Must recognise

• Aortic dissection	• Other arrhythmias	• Drug-induced cardiac injury
• Acute peripheral arterial occlusion	• Other cardiomyopathies	• Myocarditis
• Conduction disturbances	• Atrial myxoma	• Congenital heart disease in adults

Diagnostic or therapeutic procedures relevant to the discipline

Indications for use and have observed, where possible	Indications for use and have performed under supervision	Indications for use and can perform independently
• Chest X-ray	• Pericardiocentesis	• Electrocardiography
• Echocardiography		• Exercise stress test
• Cardiac catheterisation		
• Radionuclide studies		
• Pacemaker insertion		
• Aortic angiogram		
• Venous Doppler studies		
• Arterial Doppler studies		

Interpretation of diagnostic test results

• Chest X-ray	• Electrocardiography	• Exercise stress test
• Laboratory markers of cardiac muscle injury		

DISORDERS OF THE RESPIRATORY SYSTEM**Must know**

• Acute respiratory failure	• Chronic obstructive pulmonary disease	• Pulmonary thromboembolic disease
• Chronic respiratory failure	• Asthma	• Primary lung cancer
• Pneumonia	• Atopy	• Mass lesion(s) on chest X-ray
• Pulmonary tuberculosis	• Pleural effusion	• Cavitating pulmonary lesion(s)
• Bronchiectasis	• Pneumothorax	• Pulmonary manifestations of HIV infection / AIDS
• Lung abscess	• Empyema	
• Atelectasis	• Pulmonary hypertension	

Must recognise

• Adult Respiratory Distress Syndrome	• Pulmonary vasculitic / haemorrhage syndromes	• Mediastinal mass lesion(s)
• Occupational lung disease	• Cystic fibrosis	• Sleep apnoea
• Sarcoidosis	• Acute mediastinitis	• Drug-induced lung injury
• Pulmonary eosinophilia	• Metastatic lung cancer	• Restrictive chest wall disease
• Diffuse parenchymal lung disease	• Mesothelioma	

Diagnostic or therapeutic procedures relevant to the discipline

Indications for use and have observed, where possible	Indications for use and have performed under supervision	Indications for use and can perform independently
• Bronchoscopy	• Spirometry and flow volume loop	• Peak flow measurement
• Tracheostomy		• Arterial blood gas
• Sleep study		• Thoracocentesis
• Chest X-ray		• Closed pleural biopsy
• High-resolution CT of lungs		• Insertion of intercostal drain
• Spiral CT of lungs		• Administration of nebulised medication
• Ventilation-perfusion scan		• Demonstration of correct inhaler technique
• Lung biopsy		• Pulse oximetry
• Closed thorascopy		• Mechanical ventilation
		• Induced sputum sample collection

DISORDERS OF THE RESPIRATORY SYSTEM cont ...**Interpretation of diagnostic test results**

• Spirometry and flow volume loop	• Arterial blood gas	• Thoracocentesis
• Peak flow measurement	• Pulse oximetry	• Chest X-ray
• Ventilation-perfusion scan		

DISORDERS OF THE RENAL SYSTEM**Must know**

• Acute renal failure	• Autosomal dominant polycystic kidney disease	• Nephrotic syndrome
• Acute tubular necrosis	• Interstitial nephritis	• Urinary tract infections
• Chronic kidney disease	• Diabetic renal disease	• Drug handling in renal disease
• End stage renal disease	• Glomerulonephritis	• Drug-induced renal injury
• Fluid and electrolyte disturbances	• Renal manifestations of HIV infection / AIDS	• Hypertensive renal disease
• Acid-base disturbances		

Must recognise

• Renal tubular acidosis	• Renal and bladder cancer	• Obstructive uropathy
• Renal artery stenosis	• Athero-embolic renal disease	• Kidney stones
• Patients on renal replacement therapy		

Diagnostic or therapeutic procedures relevant to the discipline

Indications for use and have observed, where possible	Indications for use and have performed under supervision	Indications for use and can perform independently
• Renal biopsy	• Peritoneal dialysis	• Urine dipstick examination
• Renal angiogram		• Microscopy of urine sediment
• Renal ultrasound		• Glomerular filtration rate calculation
• Intravenous pyelogram		
• Haemodialysis and peritoneal dialysis		
• Captopril renogram		

Interpretation of diagnostic test results

• Urine dipstick examination	• Urine protein estimation (24-hour collection)
• Microscopy of urine sediment	• Urine protein estimation (spot sample)
• Electrolytes, urea, creatinine and osmolality of blood and urine	• Glomerular filtration rate calculation
• Captopril renogram	

DISORDERS OF THE ENDOCRINE SYSTEM AND METABOLISM**Must know**

• Hyperthyroidism	• Diabetes mellitus	• Osteoporosis
• Hypothyroidism	• Dyslipidaemia	• Syndrome of inappropriate ADH
• Thyroid nodule	• Metabolic syndrome	• Vitamin deficiencies
• Goitre	• Chronic corticosteroid use	

Must recognise

• Pituitary disorders	• Hypogonadism	• Adrenocortical disorders
• Diabetes insipidus	• Parathyroid disorders	• Adrenomedullary disorders
• Delayed puberty	• Disorders of calcium metabolism	• Porphyrria
• Short stature	• Metabolic bone disease	• Iron overload
• Precocious puberty	• Paget's disease	• Syndromes of multiple endocrine dysfunction
• Sexual differentiation disorders	• Spontaneous hypoglycaemia	• Lipodystrophies
• Virilisation		

Diagnostic or therapeutic procedures relevant to the discipline

Indications for use and have observed, where possible	Indications for use and have performed under supervision	Indications for use and can perform independently
• Thyroid isotope scan		• Glucose tolerance test
• Thyroid ultrasound		
• Bone mass measurement (DEXA)		
• CT / MRI of pituitary fossa, adrenal glands		
• Dynamic endocrine tests		
• FNAB of thyroid		

Interpretation of diagnostic test results

• Fasting lipid profile	• Thyroid isotope scan	• Glucose tolerance test
• Bone mass measurement (DEXA)	• Microalbuminuria	• Glycated haemoglobin

DISORDERS OF THE GASTROINTESTINAL AND HEPATOBILIARY SYSTEM**Must know**

• Acute liver failure	• Drug-induced liver injury	• Dysentery
• Viral hepatitis	• Drug handling in liver disease	• Chronic diarrhoea
• Chronic liver disease	• Primary liver cancer	• Pseudomembranous colitis
• Alcohol-related liver disease	• Peptic ulcer disease	• Diverticular disease
• Portal hypertension	• Gastro-oesophageal reflux disease	• Gastrointestinal tuberculosis
• Non-alcoholic steatohepatitis	• Acute cholecystitis	• Functional bowel syndrome
• Liver abscess	• Gastrointestinal manifestations of HIV infection / AIDS	

Must recognise

• Other chronic hepatitis	• Pancreatitis	• Coeliac disease
• Metastatic liver cancer	• Malabsorption syndromes	• Cancer of the colon
• Vascular abnormalities of liver	• Gall stones	• Ano-rectal disorders
• Sclerosing cholangitis	• Inflammatory bowel disease	• Stomach cancer
• Oesophageal dysmotility	• Whipple's disease	• Vascular abnormalities of GIT
• Cancer of the oesophagus		

Diagnostic or therapeutic procedures relevant to the discipline

Indications for use and have observed, where possible	Indications for use and have performed under supervision	Indications for use and can perform independently
• Upper GIT endoscopy		• Percutaneous liver biopsy
• Lower GIT endoscopy		
• Barium contrast studies		
• 24-hour oesophageal pH monitoring		
• Ultrasound of the abdomen		
• CT of the abdomen		
• X-ray of the abdomen		

Diagnostic therapeutic procedures relevant to the discipline cont ... /

Diagnostic therapeutic procedures relevant to the discipline cont ...

• Evaluation of oesophageal reflux		
• Evaluation of malabsorption		
• Evaluation of H. pylori infection		
• ERCP / MRCP		

Interpretation of diagnostic test results

• Evaluation of malabsorption	• Evaluation of H. pylori infection	• Stool occult blood test
• 72-hour stool collection for faecal fat	• Viral hepatitis serology	• Liver enzymes and synthetic function
• Autoimmune serology		

DISORDERS OF THE HAEMOPOEITIC SYSTEM, INCLUDING ONCOLOGY**Must know**

• Anaemia	• Thrombotic microangiopathies	• Care of the neutropenic patient
• Polycythaemia	• Thrombophilia	• Use of blood products
• Thrombocytopenia	• Haematological manifestations of HIV infection / AIDS	

Must recognise

• Lymphomas	• Myelodysplastic syndromes	• Clotting factor disorders
• Leukaemias	• Myeloma	• Haemoglobinopathies
• Myeloproliferative disorders	• Disorders of platelets	• Drug-induced haemopoietic injury

Diagnostic or therapeutic procedures relevant to the discipline

Indications for use and have observed, where possible	Indications for use and have performed under supervision	Indications for use and can perform independently
• Plasmapheresis	• Bone marrow aspirate and trephine	
• Excision lymph node biopsy		

Interpretation of diagnostic test results

• Coagulation profile	• Haemoglobin electrophoresis	• Haematinic markers
• Full blood count and smear	• Protein electrophoresis	

DISORDERS OF THE NERVOUS SYSTEM**Must know**

• Peripheral neuropathy	• Delirium	• Spinal cord syndromes
• Acute polyneuropathy	• Meningitis	• Epilepsy
• Proximal myopathy	• Meningo-encephalitis	• Parkinson's disease
• Dementia	• Cerebrovascular disease	• Chronic headache syndromes
• Acute and chronic alcohol-induced nervous system injury /toxicity		
• Neurological manifestations of HIV infection / AIDS		

Must recognise

• Myasthenia gravis	• Cranial nerve palsies	• Optic neuritis
• Other muscle disorders	• Mononeuropathy	• Benign intracranial hypertension
• Multiple sclerosis	• Cerebellar disorders	• Motor neurone disease
• Movement disorders	• Depression	

Diagnostic or therapeutic procedures relevant to the discipline

Indications for use and have observed, where possible	Indications for use and have performed under supervision	Indications for use and can perform independently
• Nerve conduction study		• Lumbar puncture
• EMG study		• Bedside autonomic function testing
• EEG study		
• CT of the brain / spinal cord		
• MRI of the brain /spinal cord		
• Cerebral angiography		

Interpretation of diagnostic test results

• Lumbar puncture	• Bedside autonomic function testing	• CT of the brain
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DISORDERS OF CONNECTIVE TISSUE, SOFT TISSUE AND JOINTS**Must know**

• Osteoarthritis	• Mechanical back pain	• Systemic lupus erythematosus
• Gout	• Rheumatoid arthritis	• Raynaud's phenomenon
• Soft tissue rheumatism		

Must recognize ... /

Must recognize

• Polymyalgia rheumatica	• Undifferentiated / mixed connective tissue disorders	• Osteonecrosis
• Giant cell arteritis	• Sicca syndrome	• Neuropathic arthritis
• Systemic vasculitis	• Hereditary connective tissue disorders	• Pseudogout
• Inflammatory myositis	• Spondyloarthropathies	• Rheumatic manifestations of systemic disease
• Scleroderma	• Bone and joint sepsis	• Rheumatic manifestations of HIV infection / AIDS

Diagnostic or therapeutic procedures relevant to the discipline

Indications for use and have observed, where possible	Indications for use and have performed under supervision	Indications for use and can perform independently
• X-ray of peripheral joints, sacroiliac joints and spine		Injection and / or aspiration of knee
• Injection and/or aspiration of wrist, ankle, elbow, shoulder		
• MRI of musculoskeletal system		

Interpretation of diagnostic test results

• Autoimmune serology	• Synovial fluid analysis	
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DISORDERS OF THE SKIN**Must know**

• Scabies	• Impetigo	• Vitiligo
• Tinea	• Cellulitis	• Erythema nodosum
• Candidiasis	• Acne	• Toxic epidermal necrolysis
• Herpes simplex	• Eczema	• Stevens-Johnson syndrome
• Herpes zoster	• Mucocutaneous manifestations of HIV infection / AIDS	

Must recognise

• Skin cancer	• Viral warts	• Psoriasis
• Leprosy	• Drug eruptions	• Cutaneous phakomatoses
• Mucocutaneous manifestations of systemic disease	• Discoid lupus erythematosus	

Diagnostic or therapeutic procedures relevant to the discipline ... /

Diagnostic or therapeutic procedures relevant to the discipline

Indications for use and have observed, where possible	Indications for use and have performed under supervision, where possible	Indications for use and can perform independently
<ul style="list-style-type: none"> • Skin scraping for fungal infections 		
<ul style="list-style-type: none"> • Skin biopsy 		

INFECTIOUS DISEASES

This is a broad category encompassing many conditions. A few, particularly relevant to South Africa, are highlighted

Must know

<ul style="list-style-type: none"> • HIV infection / AIDS 	<ul style="list-style-type: none"> • Schistosomiasis 	<ul style="list-style-type: none"> • Sepsis
<ul style="list-style-type: none"> • Tuberculosis 	<ul style="list-style-type: none"> • Hydatid disease 	<ul style="list-style-type: none"> • Fever of unknown origin
<ul style="list-style-type: none"> • Malaria 	<ul style="list-style-type: none"> • Cysticercosis 	<ul style="list-style-type: none"> • Immunisation and vaccines
<ul style="list-style-type: none"> • Typhoid 	<ul style="list-style-type: none"> • Tick bite fever 	<ul style="list-style-type: none"> • Opportunistic infections
<ul style="list-style-type: none"> • Cholera 	<ul style="list-style-type: none"> • Worm infestations 	<ul style="list-style-type: none"> • Sexually transmitted infections
<ul style="list-style-type: none"> • Tetanus 	<ul style="list-style-type: none"> • Congo fever 	<ul style="list-style-type: none"> • Other common infections in adults
<ul style="list-style-type: none"> • Amoebiasis 	<ul style="list-style-type: none"> • Rabies 	

Must recognise

<ul style="list-style-type: none"> • Travel medicine 	<ul style="list-style-type: none"> • Primary immune deficiency syndromes 	
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Diagnostic or therapeutic procedures relevant to the discipline

Indications for use and have observed, where possible	Indications for use and have performed under supervision	Indications for use and can perform independently
		<ul style="list-style-type: none"> • Fine needle aspiration biopsy

Interpretation of diagnostic test results

<ul style="list-style-type: none"> • Immunoglobulin and complement assays 	<ul style="list-style-type: none"> • CD 4 count 	<ul style="list-style-type: none"> • HIV viral load
<ul style="list-style-type: none"> • Microscopy and culture of body fluids and tissue samples 	<ul style="list-style-type: none"> • Serological tests 	

WOMEN'S HEALTH AND MEN'S HEALTH**Must know**

<ul style="list-style-type: none"> • Medical issues relevant to use of oral contraception 	<ul style="list-style-type: none"> • Medical complications of pregnancy 	<ul style="list-style-type: none"> • Medical issues relevant to use of hormone replacement therapy
<ul style="list-style-type: none"> • Medical diseases in pregnancy 	<ul style="list-style-type: none"> • Menopause 	<ul style="list-style-type: none"> • Erectile dysfunction

Must recognise

<ul style="list-style-type: none"> • Breast lump 	<ul style="list-style-type: none"> • Ovarian cancer 	<ul style="list-style-type: none"> • Prostatism
<ul style="list-style-type: none"> • Breast cancer 	<ul style="list-style-type: none"> • Scrotal mass 	<ul style="list-style-type: none"> • Prostate cancer

Diagnostic or therapeutic procedures relevant to the discipline

Indications for use and have observed where possible	Indications for use and have performed under supervision	Indications for use and can perform independently
<ul style="list-style-type: none"> • Mammography 		

Interpretation of diagnostic test results

<ul style="list-style-type: none"> • PSA levels 		
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CARE OF THE ELDERLY**Must know**

<ul style="list-style-type: none"> • Functional assessment 	<ul style="list-style-type: none"> • Confusional states 	<ul style="list-style-type: none"> • Principles of drug prescription
<ul style="list-style-type: none"> • Anaemia 	<ul style="list-style-type: none"> • Nutritional deficiencies 	<ul style="list-style-type: none"> • Sleep hygiene
<ul style="list-style-type: none"> • Falls 	<ul style="list-style-type: none"> • Pre-operative assessment 	<ul style="list-style-type: none"> • Chronic constipation
<ul style="list-style-type: none"> • Dizzy spells and syncope 	<ul style="list-style-type: none"> • Post-operative care 	<ul style="list-style-type: none"> • Urinary incontinence

Must recognise

<ul style="list-style-type: none"> • Alzheimer's disease 	<ul style="list-style-type: none"> • Faecal incontinence 	<ul style="list-style-type: none"> • Abuse of the elderly
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Diagnostic or therapeutic procedures relevant to the discipline

Indications for use and have observed, where possible	Indications for use and have performed under supervision	Indications for use and can perform independently
<ul style="list-style-type: none"> • Tilt table testing 		

ETHICAL AND LEGAL ASPECTS OF MEDICAL PRACTISE

• Assessment of brain death	• Patient confidentiality
• Unnatural causes of death	• Informed consent
• Euthanasia	• Basic human rights
• End-of-life decisions, including “living will”	• Principles of ethics
• Religious customs relevant to end-of-life context	• Professional conflict of interest
• Organ and tissue donation	• Perverse incentives
• Religious customs relevant to tissue/blood product use	• Research on human subjects
• Patient autonomy	• Allocation of scarce resources
	• The impaired practitioner

Diagnostic or therapeutic procedures relevant to the discipline

Indications for use and have observed, where possible	Indications for use and have performed under supervision	Indications for use and can perform independently
• Emergency certification (psychiatric)	• Brain death assessment	• Death certificate completion
	• Medico-legal reporting	• Post-mortem request form
	• Medical insurance form completion	• Consent form completion
	• Assault form completion	• Cremation certificate completion