

## Internal Medicine In-Training Examination® 2014 Educational Objectives

### Cardiology

- Manage asymptomatic aortic stenosis.
- Recognize the indications for abdominal aortic aneurysm screening.
- Select the appropriate diagnostic test for patients with chest pain who take digoxin.
- Diagnose mitral valve prolapse.
- Preoperatively manage coronary artery disease.
- Diagnose pulmonary valve stenosis.
- Diagnose cardiac tamponade.
- Diagnose myocarditis.
- Prevent recurrent supraventricular tachycardia.
- Treat ventricular arrhythmias in a patient with an implantable cardioverter-defibrillator.
- Manage cardiogenic shock.
- Diagnose torsades de pointes as a complication of long QT syndrome.
- Manage immunizations in a patient with cardiovascular disease.
- Manage ventricular fibrillation in a patient with acute myocardial infarction.
- Diagnose Takotsubo cardiomyopathy.
- Manage acute pericarditis.
- Manage venous ulceration.
- Diagnose pericardial effusion.
- Manage progressive angina.
- Manage anticoagulation therapy in a patient with a mechanical prosthetic valve.
- Diagnose atrial septal defect.
- Diagnose right ventricular infarction.
- Manage chronic stable angina.
- Manage peripheral vascular disease.
- Treat digoxin toxicity.
- Treat aortic dissection.
- Diagnose ischemic cardiomyopathy.
- Diagnose low-risk ventricular arrhythmia.
- Treat hypertension in a woman attempting to conceive.
- Manage multifocal atrial tachycardia.
- Predict the auscultatory findings in mitral stenosis.
- Treat obstructive hypertrophic cardiomyopathy.
- Diagnose ischemia-induced papillary muscle dysfunction.
- Emergently treat hyperkalemia.
- Select the appropriate cardiac stress test for a patient with a permanent pacemaker.
- Treat stage III heart failure in a patient who is black.
- Diagnose an acute ventricular septal defect.
- Assess a patient for cardiovascular risk before noncardiac surgery.
- Treat atrial fibrillation with warfarin.
- Select appropriate endocarditis prophylaxis.

## Endocrinology

Diagnose autoimmune adrenalitis.  
Manage diabetic retinopathy during pregnancy.  
Manage asymptomatic primary hyperparathyroidism.  
Screen for osteoporosis.  
Manage a prolactinoma.  
Diagnose male hypogonadism.  
Diagnose the cause of secondary amenorrhea.  
Treat postmenopausal osteoporosis.  
Adjust insulin dosage in type 1 diabetes mellitus.  
Manage a thyroid nodule.  
Adjust insulin in type 1 diabetes mellitus.  
Diagnose drug-induced hypoglycemia.  
Treat myxedema coma.  
Diagnose primary hyperparathyroidism.  
Diagnose multiple endocrine neoplasia type 1.  
Diagnose a functional pituitary adenoma.  
Manage thyroid function studies in critical illness.  
Manage primary hypothyroidism.  
Diagnose an insulinoma.  
Treat diabetic ketoacidosis.

## Gastroenterology

Manage Helicobacter pylori–associated peptic ulcer disease.  
Manage chronic constipation.  
Manage acute cholecystitis in a high-risk patient.  
Diagnose Crohn disease.  
Diagnose gastroparesis.  
Diagnose gluten ingestion in a patient with recurrent symptoms of celiac disease.  
Diagnose angioedema.  
Diagnose primary biliary cirrhosis.  
Diagnose iron-overload syndromes.  
Diagnose drug-induced cholestasis.  
Manage bile salt–induced diarrhea.  
Manage colorectal cancer screening when the bowel preparation is poor.  
Diagnose autoimmune gastritis.  
Manage acute diverticulitis.  
Diagnose Meckel diverticulum.  
Diagnose microscopic colitis.  
Diagnose malabsorption after gastric bypass surgery.  
Diagnose eosinophilic esophagitis.  
Manage toxic megacolon.  
Diagnose sclerosing cholangitis.  
Treat ascites in end-stage liver disease.  
Diagnose pill-induced esophagitis.  
Diagnose the cause of obscure gastrointestinal bleeding in chronic kidney disease.  
Diagnose oropharyngeal dysphagia.  
Diagnose schistosomiasis.  
Treat spontaneous bacterial peritonitis.  
Treat hepatic encephalopathy.  
Diagnose Gilbert syndrome.

## General Internal Medicine

Order appropriate immunizations in an adolescent.  
Treat contact dermatitis.  
Manage chronic, nonspecific abdominal pain.  
Recognize indications for human papillomavirus immunization in male patients.  
Screen a patient for alcohol misuse.  
Manage viral conjunctivitis.  
Manage pharmacotherapy for depression.  
Diagnose panic disorder.  
Manage low-risk alcohol withdrawal.  
Diagnose lumbar spinal stenosis.  
Screen for cervical cancer.  
Manage benign paroxysmal positional vertigo.  
Diagnose lateral femoral cutaneous nerve entrapment.  
Manage subacute cough.  
Manage chest pain in a patient with elevated serum troponin levels.  
Understand why family members cannot act as interpreters.  
Treat symptoms of restless legs syndrome.  
Diagnose obstructive sleep apnea.  
Diagnose arrhythmogenic syncope.  
Manage lymphadenopathy.  
Screen for domestic abuse.  
Manage tinnitus.  
Manage pityriasis rosea.  
Treat cutaneous psoriasis.  
Manage episcleritis.  
Diagnose Osgood-Schlatter disease.  
Treat allergic rhinitis.  
Manage epistaxis.  
Treat obesity.  
Treat obesity with medical complications.  
Select appropriate preoperative testing for a patient at low risk.  
Manage vasovagal syncope.  
Diagnose plantar fasciitis.  
Manage mechanical low back pain.  
Diagnose at-risk drinking patterns.  
Calculate the number needed to treat.  
Prevent urinary tract infection.  
Manage acute prostatitis.  
Manage a varicocele.  
Manage an uncomplicated urinary tract infection.  
Diagnose malignant melanoma.  
Prevent recurrent lower extremity cellulitis.  
Manage benign prostatic hyperplasia.  
Manage a hyperplastic colonic polyp.  
Diagnose trochanteric bursitis.

## **Geriatric Medicine**

Diagnose dementia with Lewy bodies.  
Manage agitation in a hospitalized patient with dementia.  
Treat urinary incontinence.  
Diagnose mild cognitive impairment.  
Select an appropriate fall risk assessment tool.  
Reduce the risk of motor vehicle collisions in older drivers.  
Manage dysphagia in an older patient.  
Treat atrial fibrillation with anticoagulation.  
Treat insomnia.  
Diagnose medication-related syncope.  
Treat depression and associated weight loss.  
Prevent dementia.  
Identify decisional capacity.  
Diagnose apathetic hyperthyroidism.  
Screen for breast cancer.  
Treat osteoarthritis.  
Diagnose sensory impairment as a cause of dizziness and falls.  
Treat footdrop.

## **Hematology and Oncology**

Treat estrogen receptor–positive breast cancer in postmenopausal women.  
Treat ovarian cancer.  
Treat small cell lung cancer with prophylactic cranial irradiation in patients who enter remission.  
Diagnose primary amyloidosis.  
Diagnose the cause of microcytic anemia.  
Treat acute leukemia with leukapheresis.  
Diagnose hemophilia.  
Diagnose Hodgkin lymphoma.  
Prescribe hospice care appropriately.  
Treat essential thrombocytosis.  
Diagnose secondary erythrocytosis.  
Treat resected stage II-III lung cancer with adjuvant chemotherapy.  
Treat prostate cancer.  
Determine duration of anticoagulation in a patient with a pulmonary embolism.  
Manage familial adenomatous polyposis.  
Treat a patient with a family history of deep venous thrombosis.  
Diagnose iron deficiency anemia.  
Manage fertility in adults receiving chemotherapy.  
Diagnose radiation-induced hypothyroidism.  
Treat colon cancer in a patient with positive lymph nodes.  
Stage non-Hodgkin lymphoma.  
Treat neutropenic fever.  
Screen for heart failure in patients receiving trastuzumab.  
Diagnose myelodysplastic syndrome.  
Diagnose porphyria cutanea tarda.  
Recognize prognostic factors for breast cancer.  
Treat newly diagnosed breast cancer.  
Diagnose myelofibrosis.  
Diagnose the cause of a prolonged activated partial thromboplastin time.  
Treat postchemotherapy cytopenia.  
Treat immune thrombocytopenia.

Treat chronic lymphocytic leukemia.  
Treat acute promyelocytic leukemia.  
Treat cold agglutinin disease in a patient with mononucleosis.  
Manage testicular cancer.

## **Infectious Diseases**

Diagnose nonmenstrual toxic shock syndrome.  
Treat ehrlichiosis.  
Diagnose the cause of thrombotic thrombocytopenic purpura–hemolytic uremic syndrome.  
Give HIV-infected patients the appropriate immunizations.  
Treat pyelonephritis.  
Treat latent tuberculosis.  
Treat an HIV-infected patient with cryptococcal meningitis.  
Treat group A streptococcal pharyngitis.  
Treat *Clostridium difficile*–associated colitis.  
Manage a Jarisch-Herxheimer reaction.  
Follow isolation precautions to prevent transmission of infectious agents in health care settings.  
Treat septic arthritis.  
Diagnose *Plasmodium falciparum* malaria.  
Treat acute bacterial rhinosinusitis.  
Treat cervicofacial actinomycosis.  
Treat *Trichomonas vaginalis* infection.  
Treat urethritis.  
Manage latent tuberculosis.  
Diagnose West Nile virus encephalitis.  
Manage a brain mass in a patient with HIV.  
Diagnose babesiosis.  
Treat *Streptococcus pneumoniae* meningitis.  
Diagnose the cause of malignant external otitis.  
Manage asymptomatic bacteriuria.  
Treat a cat bite.  
Diagnose *Giardia lamblia* infection.  
Treat health care–associated pneumonia.

## **Nephrology**

Recognize indications for ACE inhibitors in patients with type 2 diabetes mellitus.  
Slow progression of chronic kidney disease.  
Diagnose the cause of hypocalcemia.  
Treat hypernatremia.  
Diagnose membranoproliferative glomerulonephritis in hepatitis C.  
Diagnose posthypercapnic metabolic alkalosis.  
Diagnose d-lactic acidosis.  
Diagnose NSAID-induced interstitial nephritis.  
Identify masked hypertension.  
Diagnose a mixed acid-base disorder.  
Diagnose acute tubular necrosis.  
Treat hypertensive urgency.  
Treat stage 2 hypertension.  
Diagnose the cause of nephrolithiasis after bariatric surgery.  
Treat obstructive uropathy.  
Diagnose acute interstitial nephritis.  
Diagnose nephrogenic diabetes insipidus.  
Diagnose the cause of a mixed metabolic acidosis and respiratory alkalosis.

## Neurology

- Manage syncope.
- Select the appropriate method of monitoring the respiratory system in a neuromuscular disorder.
- Provide migraine prophylaxis.
- Diagnose vitamin B<sub>12</sub> deficiency.
- Diagnose normal pressure hydrocephalus.
- Diagnose a subdural hematoma.
- Treat medication overuse headache.
- Diagnose essential tremor.
- Treat myasthenia gravis.
- Diagnose Meniere disease.
- Manage hypertension after an acute ischemic stroke.
- Diagnose carotid artery dissection.

## Pulmonary and Critical Care Medicine

- Treat community-acquired pneumonia.
- Diagnose cystic fibrosis in an adult.
- Manage anticoagulation after a pulmonary embolism.
- Manage delirium in the intensive care unit.
- Diagnose hypersensitivity pneumonitis.
- Evaluate a pulmonary nodule.
- Diagnose a malignant pleural effusion.
- Manage ventilator weaning in a patient with COPD.
- Treat pulmonary edema.
- Use D-dimer measurement to exclude pulmonary embolism.
- Diagnose right main-stem bronchus intubation.
- Treat transfusion-related acute lung injury.
- Treat an overdose of a tricyclic antidepressant.
- Manage exercise-induced asthma.
- Diagnose abdominal compartment syndrome.
- Treat anaphylactic shock.
- Manage fluids in acute respiratory distress syndrome.
- Treat intensive care unit–acquired weakness
- Treat a pleural effusion.
- Treat stable COPD.
- Treat hypothermia-related bradycardia.
- Diagnose asbestos-related pleural plaques.
- Treat moderate persistent asthma.
- Diagnose respiratory failure in the setting of restrictive lung disease.
- Treat respiratory failure due to COPD.
- Treat a patient with COPD.
- Manage *Candida albicans* in the sputum.
- Manage an acute asthma exacerbation.
- Treat hypoxemic respiratory failure.
- Diagnose idiopathic pulmonary fibrosis.

## **Rheumatology**

Diagnose antisynthetase syndrome.

Treat osteoarthritis of the hip.

Diagnose inflammatory back pain.

Diagnose Still disease.

Diagnose diffuse cutaneous systemic sclerosis.

Diagnose olecranon bursitis.

Diagnose Sjögren syndrome.

Treat systemic lupus.

Diagnose anserine bursitis.

Treat temporal arteritis.

Diagnose limited cutaneous systemic sclerosis with the appropriate antibody.

Diagnose hemochromatosis.

Diagnose complications of methotrexate therapy in rheumatoid arthritis.

Treat osteoarthritis of the knee.

Treat acute gout.

Diagnose adhesive capsulitis.

Diagnose statin-induced myopathy.

Diagnose osteoarthritis of the hand.

Diagnose osteoarthritis of the hip.

Diagnose polyarteritis nodosa.

Diagnose systemic lupus erythematosus.

Treat psoriatic arthritis.

Identify the crystals associated with calcium pyrophosphate dihydrate deposition disease.

Diagnose seronegative rheumatoid arthritis.

Diagnose thyroid myopathy.

Treat rheumatoid arthritis with arthroplasty.

Treat polymyalgia rheumatica.