### 2018 Internal Medicine In-Training Examination®

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<thead>
<tr>
<th>Content Area</th>
<th>Number of Items</th>
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<td>Cardiology</td>
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<tr>
<td>Endocrinology</td>
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<td>Gastroenterology</td>
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<td>General Internal Medicine*</td>
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<tr>
<td>Geriatric Medicine</td>
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<td>Hematology and Oncology</td>
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<td>Infectious Diseases</td>
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<tr>
<td>Pulmonary and Critical Care Medicine</td>
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<td>Rheumatology</td>
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<tr>
<td>High Value Care (HVC)**</td>
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<td><strong>TOTAL</strong></td>
<td><strong>260</strong></td>
<td><strong>100</strong></td>
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*This content area includes, but is not limited to, adolescent medicine, allergy and immunology, complementary and alternative medicine, dermatology, ethics, genetics, literature interpretation, nutrition, ophthalmology, preventive care, psychiatry, sports medicine, statistics, and women’s health. Items associated with the content area High Value Care (HVC)** may appear in other content areas. These items are identified with a double asterisk.

The following pages list examination educational objectives grouped by content area. One educational objective is provided for each item.
Cardiology
Diagnose an acute ventricular septal defect.
Diagnose aortic dissection.
Diagnose atrial septal defect.
Diagnose cardiac tamponade.
Diagnose chronic venous insufficiency.
**Diagnose coronary artery disease.
Diagnose hypertrophic cardiomyopathy.
Diagnose mitral valve prolapse.
Diagnose pericardial effusion.
Diagnose peripheral vascular disease.
Diagnose right ventricular infarction.
Diagnose sinus tachycardia.
Diagnose the cause of drug-induced torsades de pointes.
Diagnose Wolff-Parkinson-White pre-excitation.

**Evaluate noncardiac causes of chest pain.
Identify the indications for cardiac resynchronization therapy and implantable cardioverter-defibrillator placement.
Manage anticoagulation therapy in a patient with a mechanical prosthetic valve.

**Manage asymptomatic sinus bradycardia.
Manage bleeding risk before colonoscopy in a patient taking antiplatelet therapy.
Manage multifocal atrial tachycardia.

**Manage patent foramen ovale in an asymptomatic patient.

**Manage ventricular fibrillation in a patient with acute myocardial infarction.
Predict the auscultatory findings in mitral stenosis.
Prevent sudden death in a patient with a low ejection fraction after a myocardial infarction.
Provide initial treatment of acute aortic dissection.
Treat a patient with cardiac arrest and ventricular fibrillation.
Treat a patient with heart failure and a reduced ejection fraction.
Treat aortic dissection.
Treat atrial myxoma.
Treat cardiogenic shock.
Treat digoxin toxicity.
Treat ischemic cardiomyopathy with an implantable cardioverter-defibrillator.
Treat isolated symptomatic premature ventricular contractions.
Treat peripheral vascular disease.
Treat unstable angina.
**Endocrinology**

Diagnose acromegaly.

Diagnose autoimmune adrenalitis.

Diagnose central diabetes insipidus.

Diagnose Cushing syndrome.

Diagnose multiple endocrine neoplasia type 1.

Diagnose multiple endocrine neoplasia type 2.

Diagnose surreptitious use of thyroid hormone.

Diagnose Turner syndrome.

Diagnose vitamin D deficiency in a patient with osteomalacia.

Evaluate an adrenal incidentaloma.

Interpret test results in the evaluation of hypoglycemia.

**Manage primary hypothyroidism.**

* Manage thyroid storm in the setting of Graves disease.
* Recognize the adverse effects of diabetes medications.
* Treat diabetic ketoacidosis.

**Treat hyperlipidemia.**

* Treat inpatient hyperglycemia in type 1 diabetes mellitus.
* Treat osteoporosis after a vertebral compression fracture.
Gastroenterology
Diagnose acute mesenteric vein thrombosis.
Diagnose autoimmune gastritis.
Diagnose autoimmune hepatitis.
Diagnose celiac disease.
Diagnose drug-induced cholestasis.
Diagnose gastroparesis.
**Diagnose Gilbert syndrome.
Diagnose gluten ingestion in a patient with recurrent symptoms of celiac disease.
Diagnose hepatocellular carcinoma.
Diagnose ischemic colitis.
Diagnose Meckel diverticulum.
Diagnose Meckel diverticulum.
Diagnose microscopic colitis.
Diagnose oropharyngeal dysphagia.
**Evaluate for Gilbert syndrome.
Identify prognostic factors in acute pancreatitis.
**Manage a hyperplastic colonic polyp.
Manage a second episode of acute upper gastrointestinal bleeding.
**Manage abdominal wall pain.
Manage acute cholecystitis in a high-risk patient.
**Manage gallstones in a pregnant patient.
Manage hepatic encephalopathy.
Manage unsuccessful Helicobacter pylori eradication.
**Treat constipation-predominant irritable bowel syndrome.
General Internal Medicine
Detect lead-time bias in cancer screening.
Diagnose a cataract.
Diagnose acromioclavicular joint degeneration.
Diagnose asteatotic dermatitis.
Diagnose benign positional paroxysmal vertigo.
Diagnose bicipital tendonitis.
Diagnose bipolar disorder.
Diagnose discoid lupus.
Diagnose glaucoma.
Diagnose hereditary angioedema.
Diagnose hereditary angioedema.
Diagnose iritis.
Diagnose long-QT syndrome.
Diagnose spinal stenosis with lumbar radiculopathy.
Diagnose testicular torsion.
Diagnose the cause of restless legs syndrome.
Diagnose vestibular neuritis.
Manage a Jarisch-Herxheimer reaction.
Manage a life-threatening condition in an impaired patient.
**Manage hip fracture in an elderly patient with cardiac disease.
   Manage lymphadenopathy.
**Manage olecranon bursitis.
**Manage pubertal gynecomastia.
   Manage refusal of recommended care.
   Perform appropriate preoperative laboratory testing.
   Perform cardiac risk assessment in asymptomatic adults.
**Perform cardiovascular evaluation in a patient scheduled for low-risk surgery.
**Perform preoperative assessment of a patient with aortic stenosis.
   Prevent pregnancy with an intrauterine device.
   Recognize the limitations of the BMI.
   Safely discontinue an antidepressant medication.
   Treat bacterial vaginosis.
   Treat benign paroxysmal positional vertigo.
   Treat contact dermatitis.
Treat herpes labialis.
Treat medication-induced urinary retention.
Treat obstructive sleep apnea.
Treat prepatellar bursitis in a patient with chronic kidney disease.
Understand the concept of positive predictive value.
Geriatric Medicine

Diagnose adverse effects of neuroleptic medications.
Diagnose age-related functional decline in a hospitalized patient.
Diagnose hypogonadism with aging.
Diagnose Lewy Body dementia in an older patient.
Diagnose osteoporosis in an older man.
Diagnose peripheral neuropathy as a cause of dizziness and falls.
Diagnose vaginal atrophy as the cause of dysuria.
Identify a vulnerable adult.

** Manage an abdominal aortic aneurysm in a frail older adult.
** Manage low testosterone levels in an older man.

Manage suspected elder abuse.
Recommend a driving test for patient with mild dementia.
Recommend age-appropriate health screening.
Select an appropriate fall risk assessment tool.
Treat atrial fibrillation with anticoagulant medication in older adults.
Treat mixed urinary incontinence in an older patient with moderate dementia.
Hematology and Oncology
Counsel a patient with hereditary breast cancer.
Diagnose acute myelocytic leukemia in a patient with Auer rods.
Diagnose acute promyelocytic leukemia.
Diagnose adverse effects of tyrosine kinase inhibitors.
Diagnose antiphospholipid syndrome.
Diagnose hemochromatosis.
Diagnose heparin-induced thrombocytopenia.
Diagnose myelodysplastic syndrome.
Diagnose myelodysplastic syndrome.
Diagnose polycythemia vera and its associated genetic abnormality.
Diagnose polycythemia vera.
Diagnose pure red cell aplasia.
Diagnose thalassemia.
Diagnose thalassemia.
Diagnose the presence of a factor inhibitor.
Diagnose the presence of factor VIII Inhibitor.
Diagnose vitamin B12 deficiency in an older adult.
Screen for heart failure in patients receiving trastuzumab.
Test for epidermal growth factor receptor-mutated lung cancers.
Treat a massive pulmonary embolism.
Treat dyspnea in a patient at the end of life.
Treat early stage II-III non–small cell lung cancer with surgery.
Treat heparin-induced thrombocytopenia occurring after stopping heparin.
Treat high-risk prostate cancer.
Treat liver recurrence of colorectal cancer.
Treat mucosa-associated lymphoid tissue (MALT) lymphoma of the stomach.
Treat mucosa-associated lymphoid tissue (MALT) lymphoma of the stomach.
Treat neutropenic fever.
Treat transfusion-related acute lung injury.
Treat warm autoimmune hemolytic anemia.
**Infectious Diseases**

Deescalate antibiotic therapy for acute pyelonephritis.

Diagnose an epidural abscess.

Diagnose coccidioidomycosis.

Diagnose immune inflammatory reconstitution syndrome.

Diagnose malaria.

Diagnose parvovirus B19 infection.

Diagnose sepsis due to Vibrion vulnificus infection.

Diagnose staphylococcal food poisoning.

Diagnose typhoid fever.

Follow isolation precautions for preventing transmission of infectious agents in health care settings.

**Manage tick bites in Lyme-endemic areas.**

**Manage vancomycin-resistant enterococci colonization of the stool.**

Prevent urinary tract infection in a patient with an indwelling urinary catheter.

Treat latent tuberculosis in a patient with HIV.

Treat Listeria meningitis.

Treat mild nonpurulent cellulitis.

Treat nonpurulent cellulitis.

Treat otitis media.

Treat severe Clostridium difficile–associated colitis.

Treat streptococcal toxic shock syndrome accompanied by necrotizing fasciitis.

Treat Streptococcus pneumoniae meningitis.

Treat suspected community-acquired methicillin-resistant Staphylococcus aureus soft-tissue infection.

Treat urethritis.
Nephrology
Diagnose acute tubular necrosis.
Diagnose alcoholic ketolactic acidosis.
Diagnose atheroembolic acute kidney injury.
Diagnose beer potomania.
Diagnose chronic tubulointerstitial disease.
Diagnose lithium-related chronic tubulointerstitial disease.
Diagnose nephrogenic systemic fibrosis.
Diagnose postinfectious glomerulonephritis.
Diagnose primary hyperaldosteronism.
Diagnose struvite kidney stones.
Diagnose the cause of hypocalcemia in a patient with chronic alcoholism.
Diagnose type 1 renal tubular acidosis.
**Evaluate a kidney cyst.
   Treat hyperkalemia.
   Treat hypertension associated with proteinuria.
   Treat methanol ingestion.
Neurology
Avoid drugs that can exacerbate Parkinson disease.
Diagnose delirium.
Diagnose frontotemporal dementia.
Diagnose subarachnoid hemorrhage.
Manage antiepileptic drug therapy.
Manage drug-induced encephalopathy.
Prevent migraine.
Provide initial treatment for an ischemic stroke.
Treat multiple sclerosis.
Treat myasthenia gravis.
Diagnose a pleural effusion on the basis of history and clinical evaluation.
Diagnose allergic bronchopulmonary aspergillosis.
Diagnose bronchiectasis.
Diagnose cystic fibrosis in an adult with the appropriate diagnostic studies.
Diagnose interstitial lung disease on the basis of spirometry results.
Diagnose intrapulmonary shunt as a cause of hypoxemia in a patient with pneumonia.
Diagnose Löfgren syndrome.
Diagnose lymphangioleiomyomatosis.
Diagnose pulmonary hypertension.
Diagnose reversible posterior leukoencephalopathy syndrome.
Evaluate a solitary pulmonary nodule.
Predict the effects of pulmonary rehabilitation in a patient with COPD.
Provide fluid management for a patient with acute respiratory distress syndrome.
Rule out the diagnosis of pulmonary embolism in a patient with pleuritic chest pain.
Select the appropriate tidal volume for initial management of acute respiratory distress syndrome.
Treat an aspirin overdose.
Treat an overdose of a tricyclic antidepressant.
Treat anaphylaxis.
Treat cardiac arrest due to β-blocker overdose.
Treat exercise-induced bronchospasm in a patient with asthma.
Treat hypoxemia associated with acute respiratory distress syndrome.
Treat ICU-acquired weakness.
Treat moderate persistent asthma.
Treat persistent asthma.
Treat propofol-related infusion syndrome.
Treat serotonin syndrome.
Rheumatology
Diagnose adult-onset Still disease.
Diagnose antisynthetase syndrome.
Diagnose Behçet disease.
Diagnose cervical compressive myelopathy in rheumatoid arthritis.
Diagnose chikungunya-related arthritis.
Diagnose limited cutaneous systemic sclerosis with the appropriate antibody.
Diagnose limited cutaneous systemic sclerosis with the appropriate antibody.
Diagnose mixed connective tissue disease.
Diagnose osteoarthritis of the hand.
Diagnose polymyositis.
Diagnose relapsing polychondritis.
Diagnose rheumatoid arthritis in a patient with carpal tunnel syndrome.
Diagnose Sjögren syndrome–associated lymphoma.
Diagnose statin-induced myopathy.
Diagnose systemic lupus erythematosus.
Diagnose Takayasu arteritis.
Diagnose thyroid myopathy.
Evaluate a patient for giant cell arteritis.
Prevent recurrent gout.
Treat fibromyalgia.
Treat giant cell arteritis.
Treat knee osteoarthritis with arthroplasty.
Treat polymyalgia rheumatica.