

**Internal Medicine Rotation Information (including Rotation Learning Outcomes,
Instructional Objectives, the Preceptor Evaluation of Student Form, and the rotation-
specific curriculum integration table)**

Instructor of Record for Internal Medicine Rotation

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Internal Medicine Clinical Rotation Topics

Cardiovascular System

Cardiomyopathy: Dilated, Hypertrophic, Restrictive, Stress

Conduction disorders/dysrhythmias: Atrial fibrillation, Atrial flutter, Atrial tachycardia, Atrioventricular block, Bradycardia, Bundle branch block, Idioventricular rhythm, Junctional, Premature contractions, QT prolongation, Sick sinus syndrome, Sinus arrhythmia, Torsades de pointes, Ventricular fibrillation, Ventricular tachycardia

Congenital heart disease: Atrial septal defect, Coarctation of aorta, Patent ductus arteriosus, Tetralogy of Fallot, Transposition of the great vessels, Ventricular septal defect

Coronary artery disease: Acute myocardial infarction, Angina pectoris, Non–ST-segment elevation myocardial infarction, ST-segment elevation myocardial infarction, Unstable angina, Atherosclerosis

Heart failure

Hypertension: Primary hypertension, Secondary hypertension, Hypertensive emergencies,

Hypotension: Orthostatic hypotension, Vasovagal hypotension

Lipid disorder

Shock: Cardiogenic, Distributive, Hypovolemic, Obstructive

Traumatic, infectious, and inflammatory heart conditions: Cardiac tamponade, Infective endocarditis, Myocarditis, Pericardial effusion, Pericarditis

Valvular disorders: Aortic, Mitral, Pulmonary, Tricuspid

Vascular disease: Aortic aneurysm/dissection, Arterial embolism/thrombosis, Arteriovenous malformation, Deep vein thrombosis, Giant cell arteritis, Peripheral artery disease,

Phlebitis/thrombophlebitis, Varicose veins, Venous insufficiency

Dermatologic System

Acneiform eruptions: Acne vulgaris, Folliculitis, Perioral dermatitis, Rosacea

Desquamation: Erythema multiforme, Stevens-Johnson syndrome, Toxic epidermal necrolysis

Diseases/disorders of the hair and nails: Alopecia, Onychomycosis, Paronychia/felon

Envenomations and arthropod bite reactions

Exanthems: Erythema infectiosum (fifth disease), Hand-foot-and-mouth disease, Measles

Infectious diseases

Bacterial: Cellulitis, Erysipelas, Impetigo

Fungal: Candidiasis, Dermatophyte infections

Parasitic: Lice, Scabies

Viral: Condyloma acuminatum, Exanthems, Hand-foot-and-mouth disease, Herpes simplex, Molluscum contagiosum, Varicella-zoster virus infections, Verrucae
Keratotic disorders: Actinic keratosis, Seborrheic keratosis
Neoplasms: Benign, Malignant, Premalignant
Papulosquamous disorders: Atopic dermatitis, Contact dermatitis, Drug eruptions, Eczema, Lichen planus, Pityriasis rosea, Psoriasis, Seborrheic dermatitis
Pigment disorders: Melasma, Vitiligo
Skin integrity: Burns, Lacerations, Pressure ulcers
Vascular abnormalities: Cherry angioma, Hemangiomas, Purpura, Stasis dermatitis, Telangiectasia
Vesiculobullous disease: Pemphigoid, Pemphigus
Other dermatologic disorders: Acanthosis nigricans, Hidradenitis suppurativa, Lipomas/epidermal inclusion cysts, Photosensitivity reactions, Pilonidal disease, Urticaria

Endocrine System

Adrenal disorders: Cushing syndrome, Pheochromocytoma, Primary adrenal insufficiency
Diabetes mellitus: Type 1, Type 2
Hypogonadism
Neoplasms: Multiple endocrine neoplasia, Neoplastic syndrome, Primary endocrine malignancy
Parathyroid disorders: Hyperparathyroidism, Hypoparathyroidism
Pituitary disorders: Acromegaly/gigantism, Cushing disease, Diabetes insipidus, Dwarfism, Pituitary adenoma, Prolactinoma, SIADH
Thyroid disorders: Goiter, Hyperthyroidism, Hypothyroidism, Thyroid nodules, Thyroiditis

Eyes, Ears, Nose, and Throat

Eye disorders

Conjunctivitis
Corneal disorders, Cataract, Corneal ulcer, Infectious, Keratitis, Pterygium
Inflammatory disorders: Iritis, Scleritis, Uveitis
Lacrimal disorders: Dacryoadenitis, Dacryocystitis, Dacryostenosis, Keratoconjunctivitis sicca
Lid disorders: Blepharitis, Chalazion, Ectropion, Entropion, Hordeolum
Neuro-ophthalmologic disorders: Nystagmus, Optic neuritis, Papilledema
Orbital disorders: Orbital cellulitis, Periorbital cellulitis
Retinal disorders: Macular degeneration, Retinal detachment, Retinopathy
Retinal vascular occlusion
Vision abnormalities: Amaurosis fugax, Amblyopia, Glaucoma, Strabismus, Presbyopia

Ear disorders

External ear: Cerumen impaction, Otitis externa
Inner ear: Acoustic neuroma, Dysfunction of eustachian tube, Labyrinthitis, Vertigo
Middle ear: Cholesteatoma, Otitis media, Otosclerosis, Tympanic membrane perforation
Hearing impairment: Conductive, Sensorineural
Other abnormalities of the ear: Mastoiditis, Meniere disease, Tinnitus
Foreign bodies of the eyes, ears, nose, and throat: Barotrauma of the ear, Blowout fracture, Corneal abrasion, Globe rupture, Hyphema
Neoplasms: Benign, Malignant

Nose/sinus disorders: Epistaxis, Nasal polyps, Rhinitis, Sinusitis

Oropharyngeal disorders

Infectious/inflammatory disorders: Angioedema, Aphthous ulcers, Candidiasis, Deep neck infection, Dental abscess, Dental caries, Epiglottitis, Gingivitis, Laryngitis, Peritonsillar abscess, Pharyngitis

Salivary disorders: Parotitis, Sialadenitis

Other oropharyngeal disorders: Leukoplakia

Gastrointestinal System/Nutrition

Biliary disorders: Acute cholecystitis, Chronic cholecystitis, Cholangitis, Cholelithiasis

Colorectal disorders: Abscess/fistula, Anal fissure, Constipation, Diverticular disease, Fecal impaction/incontinence, Hemorrhoids, Ileus, Inflammatory bowel disease, Irritable bowel syndrome, Ischemic bowel disease, Obstruction, Polyp, Rectal prolapse, Toxic megacolon
Diarrhea

Esophageal disorders: Esophagitis, Gastroesophageal reflux disease, Mallory-Weiss tear,

Motility disorders, Strictures, Varices, Zenker diverticulum

Gastric disorders: Gastritis, Gastroparesis, Peptic ulcer disease, Pyloric stenosis

Gastrointestinal bleeding

Hepatic disorders: Acute hepatitis, Chronic hepatitis, Cirrhosis, Fatty liver, Portal hypertension

Hernias

Hyperemesis

Ingestion of toxic substances and foreign bodies

Metabolic disorders: Phenylketonuria, Rickets

Neoplasms: Benign, Malignant

Nutritional and vitamin disorders: Food allergies and food sensitivities,

Hypervitaminosis/hypovitaminosis, Malabsorption, Refeeding syndrome

Obesity

Pancreatic disorders: Acute pancreatitis, Chronic pancreatitis

Small intestine disorders: Appendicitis, Celiac disease, Intussusception, Obstruction, Polyps

Genitourinary System

Benign prostatic hypertrophy

Bladder disorders: Incontinence, Overactive bladder, Prolapse

Congenital and acquired abnormalities: Cryptorchidism, Peyronie disease, Trauma,

Vesicoureteral reflux

Infectious disorders: Cystitis, Epididymitis, Fournier gangrene, Orchitis, Prostatitis,

Pyelonephritis, Urethritis

Neoplasms: Bladder, Penile, Prostate, Testicular

Nephrolithiasis/urolithiasis

Penile disorders: Erectile dysfunction, Hypospadias/epispadias, Paraphimosis/phimosis, Priapism

Testicular disorders: Hydrocele/varicocele, Testicular torsion

Urethral disorders: Prolapse, Stricture

Hematologic System

Autoimmune disorders

Coagulation disorder: Clotting factor disorders, Thrombocytopenias

Cytopenias: Anemia, Leukopenia

Cytoses: Polycythemia, Thrombocytosis

Hemoglobinopathies: G6PD deficiency, Hemochromatosis, Sickle cell disease, Thalassemia

Immunologic disorders: Transfusion reaction

Neoplasms, premalignancies, and malignancies: Acute/chronic lymphocytic leukemia, Acute/chronic myelogenous leukemia, Lymphoma, Multiple myeloma, Myelodysplasia

Transfusion Reaction

Infectious Diseases

Bacterial diseases: Bartonella, Botulism, Campylobacter jejuni infection, Chancroid, Chlamydia, Cholera, Clostridioides difficile infection, Diphtheria, Gonococcal infections, Methicillin-resistant Staphylococcus aureus infection, Rheumatic fever, Rocky Mountain spotted fever, Salmonellosis, Shigellosis, Tetanus

Fungal diseases: Blastomycosis, Candidiasis, Coccidiomycosis, Cryptococcosis, Histoplasmosis, Pneumocystis

Mycobacterial diseases: Atypical mycobacterial disease, Tuberculosis

Parasitic diseases: Amebiasis, Giardiasis, Helminth infestations, Malaria, Pinworms, Toxoplasmosis, Trichomoniasis

Perinatal transmission of disorders: Congenital varicella, Herpes simplex virus, Human papillomavirus, Zika virus, Group B streptococcus

Prion diseases

Sepsis/systemic inflammatory response syndrome

Spirochetal diseases: Lyme disease, Syphilis

Viral diseases: Coronavirus infections, Cytomegalovirus infections, Epstein-Barr virus infection, Erythema infectiosum, Herpes simplex virus infections, HIV/AIDS, Human papillomavirus infections, Influenza, Measles, Mumps, Polio, Rabies, Roseola, Rubella, Varicella-zoster virus infections

Musculoskeletal System

Chest/rib disorders: Deformities, Fractures

Compartment syndrome

Degenerative diseases: Osteoarthritis

Infectious diseases: Osteomyelitis, Septic arthritis

Lower extremity disorders: Avascular necrosis, Developmental dysplasia, Extensor mechanism injuries, Fractures/dislocations, Osgood-Schlatter disease, Slipped capital femoral epiphysis, Soft-tissue injuries

Neoplasms: Benign, Malignant, Paget disease of bone

Rheumatologic disorders: Connective tissue diseases, Fibromyalgia, Gout/pseudogout, Juvenile rheumatoid arthritis, Osteoporosis, Polyarteritis nodosa, Polymyalgia rheumatica, Polymyositis, Reactive arthritis, Rheumatoid arthritis, Sjögren syndrome, Systemic lupus erythematosus, Systemic sclerosis (Scleroderma)

Spinal disorders: Ankylosing spondylitis, Herniated nucleus pulposus, Kyphosis, Scoliosis,

Spinal stenosis, Spondylolistheses, Spondylolysis, Sprain/strain, Torticollis, Trauma

Thoracic outlet syndrome

Upper extremity disorders: Fractures/dislocations, Soft-tissue injuries

Neurologic System

Cerebrovascular disorders: Arteriovenous malformation, Cerebral aneurysm, Coma, Hydrocephalus, Intracranial hemorrhage, Stroke, Syncope, Transient ischemic attack
Closed head injuries: Concussion, Post-concussion syndrome, Traumatic brain injury
Cranial nerve palsies
Encephalopathic disorders
Headaches: Cluster headache, Migraine, Tension headache
Infectious disorders: Encephalitis, Meningitis
Movement disorders: Essential tremor, Huntington disease, Parkinson disease, Restless leg syndrome, Tourette disorder, Tardive dyskinesia
Neoplasms: Benign, Malignant
Nerve disorders: Complex regional pain syndrome, Guillain-Barre syndrome, mononeuropathies, peripheral neuropathies
Neurocognitive disorders: Cognitive impairment, Delirium
Neuromuscular disorders: Cerebral palsy, Multiple sclerosis, Myasthenia gravis
Seizure disorders: Focal seizure, Generalized seizures, Status epilepticus
Spinal cord syndromes: Cauda equina syndrome, Epidural abscess, Spinal cord injuries

Psychiatry/Behavioral Science

Abuse and neglect: Child abuse, Elder abuse, Intimate partner violence, Physical abuse, Psychological abuse, Sexual abuse
Anxiety disorders: Generalized anxiety disorder, Panic disorder, Phobias
Bipolar and related disorders
Depressive disorders: Major depressive disorder, Persistent depressive disorder (dysthymia), Premenstrual dysphoric disorder, Suicidal/homicidal behaviors
Disruptive, impulse-control, and conduct disorders
Dissociative disorders
Feeding and eating disorders
Human sexuality and gender dysphoria
Neurodevelopmental disorders: Attention-deficit/hyperactivity disorder, Autism spectrum disorder
Obsessive-compulsive and related disorders
Personality disorders
Psychogenic nonepileptic seizure
Schizophrenia spectrum and other psychotic disorders
Sleep-wake disorders
Somatic symptom and related disorders
Substance-related and addictive disorders
Trauma- and stressor-related disorders: Adjustment disorders, Bereavement, Post-traumatic stress disorder

Pulmonary System

Acute respiratory distress syndrome
Foreign body aspiration
Hyaline membrane disease
Infectious disorders:

Acute bronchiolitis
Acute bronchitis
Acute epiglottitis
Croup
Empyema
Influenza
Pertussis
Pneumonias: Bacterial, Fungal, HIV-related, Viral
Respiratory syncytial virus infection
Tuberculosis
Neoplasms: Benign, Malignant, Carcinoid tumors
Obesity hypoventilation syndrome
Obstructive pulmonary diseases: Asthma, Chronic obstructive pulmonary disease, Cystic fibrosis
Pleural diseases
Pulmonary circulation: Cor pulmonale, Pulmonary edema, Pulmonary embolism, Pulmonary hypertension
Restrictive pulmonary diseases: Idiopathic pulmonary fibrosis, Pneumoconiosis, Sarcoidosis
Sleep apnea

Renal System

Acid base disorders
Acute kidney injury and acute renal failure: Intrinsic, Prerenal, Postrenal
Chronic kidney disease/end-stage renal disease
Congenital or structural renal disorders: Horseshoe kidney, Hydronephrosis, Polycystic kidney disease
Electrolyte disorders
Fluid imbalances
Neoplasms: Renal cell carcinoma, Wilms tumor
Renal vascular disease
Rhabdomyolysis

Reproductive System

Breast disorders: Abscess, Fibroadenoma, Fibrocystic changes, Galactorrhea, Gynecomastia, Mastitis
Cervical disorders: Cervicitis, Dysplasia
Contraceptive methods
Human sexuality and gender identity
Infertility
Menopause
Menstrual disorders
Neoplasms of the breast and reproductive tract: Benign, Malignant
Ovarian disorders: Cysts, Polycystic ovarian syndrome, Torsion
Pelvic inflammatory disease
Pregnancy: Abruptio placentae, Breech presentation, Cervical insufficiency, Cesarean and operative delivery, Classifications of abortion, Ectopic pregnancy, Gestational diabetes, Gestational trophoblastic disease, Hypertensive disorders of pregnancy, Labor/delivery, Multiple

gestation, Placenta previa, Postnatal/postpartum care, Postpartum hemorrhage, Postpartum pituitary disorders, Postpartum psychiatry disorders, Preconception/prenatal care, Prelabor rupture of membranes, Rh incompatibility, Shoulder dystocia, Umbilical cord prolapse
Trauma in pregnancy: Physical, Psychological, Sexual
Uterine disorders: Endometriosis, Leiomyoma, Prolapse
Vaginal/vulvar disorders: Bartholin gland cysts, Cystocele, Prolapse, Rectocele, Vaginitis

Internal Medicine Rotation Learning Outcomes

Upon completion of the internal medicine clinical rotation,

1. Students will demonstrate medical knowledge of the pathophysiology, etiology, epidemiology, patient presentation, differential diagnosis, diagnostic work-up, patient management, health promotion, and disease prevention for common conditions (listed in Internal Medicine Clinical Rotation Topics above) encountered in internal medicine for patients seeking medical care for the following age populations: adults and elderly.
2. Students will elicit a detailed and accurate patient history, perform an appropriate physical examination, appropriately use and interpret diagnostic testing and laboratory studies, and formulate differential diagnoses and assessment plans for symptoms/conditions (listed in Internal Medicine Clinical Rotation Topics above) commonly encountered in patients seeking acute and chronic care.
3. Students will demonstrate technical skills common to internal medicine.
4. Students will obtain and document information clearly and appropriately for the following types of patient encounters: (a) acute problem-focused encounters, and/or (b) chronic disease follow-up encounters.
5. Students will listen empathetically and effectively, communicate clearly, and utilize shared decision-making for patients seeking care in internal medicine.
6. Students will facilitate difficult health care conversations in internal medicine.
7. Students will demonstrate compassion, integrity, respect, patient responsiveness, and accountability while providing care to patients in an internal medicine setting.
8. Students will (a) seek, implement, and accept feedback, (b) reflect on performance and develop plans for self-improvement, and (c) locate, appraise, and integrate evidence-based studies related to internal medicine.
9. Students will (a) promote a safe environment for patients seeking care in an internal medicine setting, (b) demonstrate knowledge of quality improvement methodologies and metrics, (c) recognize the unique role of PAs and other health professions in internal medicine, (d) work effectively with other health professionals to provide collaborative, patient-centered internal medicine care, (e) work effectively in an outpatient and/or inpatient health delivery setting, (f) incorporate considerations of cost awareness and funding into patients seeking care in an internal medicine setting, and (g) describe basic health payment systems and practice models for internal medicine.

Internal Medicine Instructional Objectives

Upon completion of the internal medicine clinical rotation,

1. **Internal Medicine Rotation Learning Outcome #1:** Students will demonstrate medical knowledge of the pathophysiology, etiology, epidemiology, patient presentation, differential diagnosis, diagnostic work-up, patient management, health promotion, and disease prevention for common conditions (listed in Internal Medicine Clinical Rotation Topics above) encountered in internal medicine for patients seeking medical care for the following age populations: adults, and elderly.
 - **Internal medicine instructional objective:** Explain the pathophysiology of the emergent, acute, and chronic clinical presentations of conditions listed in the Internal Medicine Clinical Rotation Topics (above) in adult and elderly patients (MK-PLO3)
 - **Internal medicine instructional objective:** Discuss the etiology of the acute and chronic clinical conditions listed in the Internal Medicine Clinical Rotation Topics (above) in adult and elderly patients (MK-PLO3)
 - **Internal medicine instructional objective:** Describe the epidemiology of the acute and chronic clinical conditions listed in the Internal Medicine Clinical Rotation Topics (above) in adult and elderly patients. (MK-PLO2)
 - **Internal medicine instructional objective:** Identify the acute and chronic patient presentation of conditions listed in the Internal Medicine Clinical Rotation Topics (above) in adult and elderly patients. (MK-PLO3)
 - **Internal medicine instructional objective:** Differentiate how acute and chronic disease processes of conditions listed in the Internal Medicine Clinical Rotation Topics (above) may present in the infant, child, adolescent, adult, and elderly populations. (MK-PLO3)
 - **Internal medicine instructional objective:** Formulate a differential diagnosis for the acute and chronic patient presentation of conditions listed in the Internal Medicine Clinical Rotation Topics (above) in adult and elderly patients. (MK-PLO3)
 - **Internal medicine instructional objective:** Describe the presentation, diagnosis, and management (medical and surgical) of conditions listed in the Internal Medicine Clinical Rotation Topics (above) that require surgical management, including pre-operative, intra-operative, and postoperative care for adult and elderly patients. (MK-PLO2)
 - **Internal medicine instructional objective:** Describe the presentation, diagnosis, and management of conditions listed in the Internal Medicine Clinical Rotation Topics (above) that require inpatient management for adult and elderly patients. (MK-PLO2)
 - **Internal medicine instructional objective:** Explain the appropriate diagnostic work up of the acute and chronic clinical conditions listed in the Internal Medicine Clinical Rotation Topics (above) in adult and elderly patients in outpatient and inpatient settings. (MK-PLO3)
 - **Internal medicine instructional objective:** Compare and contrast the risks and benefits of diagnostic studies and treatment plans for acute and chronic conditions listed in the Internal Medicine Clinical Rotation Topics (above) in adult and elderly populations. (MK-PLO3)

- **Internal medicine instructional objective:** Summarize the indications and contraindications of procedures commonly used in the outpatient and inpatient treatment of conditions listed in the Internal Medicine Clinical Rotation Topics (above). (MK PLO-2)
- **Internal medicine instructional objective:** Compare and contrast the risks and benefits of procedures indicated for acute and chronic conditions listed in the Internal Medicine Clinical Rotation Topics (above) for adult and elderly patients. (MK PLO-3)
- **Internal medicine instructional objective:** Outline the appropriate outpatient and inpatient management of the acute and chronic clinical conditions listed in the Internal Medicine Clinical Rotation Topics (above) in adult and elderly patients. (MK-PLO3)
- **Internal medicine instructional objective:** Identify the common medication problems specific to the adult and elderly populations, including polypharmacy, potential toxic interactions of drugs, compliance issues, and the complexity of new medication prescribing. (MK-PLO3)
- **Internal medicine instructional objective:** Describe health promotion in relation to the management of the acute and chronic clinical conditions listed in the Internal Medicine Clinical Rotation Topics (above) in adult and elderly patients. (MK-PLO3)
- **Internal medicine instructional objective:** Describe disease prevention for the acute and chronic clinical conditions listed in the Internal Medicine Clinical Rotation Topics (above) in adult and elderly patients. (MK-PLO3)
- **Internal medicine instructional objective:** Identify national screening guidelines for adult and elderly patients for the applicable clinical conditions listed in the Internal Medicine Clinical Rotation Topics (above). (MK-PLO2)
- **Internal medicine instructional objective:** Describe major age-related changes in body composition and function that affect the pharmacokinetic process in adult and elderly patients. (MK-PLO2)
- **Internal medicine instructional objective:** Distinguish normal aging from pathologic process. (MK-PLO3)
- **Internal medicine instructional objective:** Identify signs of abuse and how to report suspected abuse in adult and elderly patients. (MK PLO-3)
- **Internal medicine instructional objective:** Interpret and apply healthcare guidelines for asthma, COPD, Diabetes, Hypertension, Hyperlipidemia, Heart Failure, Stable Angina, and Pneumonia in adult and elderly patients. (MK PLO-3)
- **Internal medicine instructional objective:** Select appropriate prescription medication(s) and dosing for the treatment of acute and chronic conditions in adult and elderly patients. (MK PLO-3)
- **Internal medicine instructional objective:** Recognize when it is appropriate to obtain informed consent for adult and elderly patients in an inpatient and/or outpatient setting.
- **Internal medicine instructional objective:** Discuss medications commonly used in the outpatient treatment of conditions listed in the Internal Medicine Clinical Rotation Topics (above), including indications, contraindications, possible drug

interactions, mechanism of action, most common side effects, need for laboratory monitoring, and appropriate dosage for adult and elderly patients. (MK PLO-3)

- **Internal medicine instructional objective:** Discuss medications commonly used in the inpatient treatment of conditions listed in the Internal Medicine Clinical Rotation Topics (above), including indications, contraindications, possible drug interactions, mechanism of action, most common side effects, need for laboratory monitoring, and appropriate dosage for adult and elderly patients. (MK PLO-3)
- **Internal medicine instructional objective:** Actively participate in the management of acute and chronic care of adult and elderly patients. (MK- PLO3)

2. **Internal Medicine Rotation Learning Outcome #2:** Students will elicit a detailed and accurate patient history, perform an appropriate physical examination, appropriately use and interpret diagnostic testing and laboratory studies, and formulate differential diagnoses and assessment plans for symptoms/conditions (listed in Internal Medicine Clinical Rotation Topics above) commonly encountered in patients seeking acute, chronic, and preventive care.

- **Internal medicine instructional objective:** Demonstrate an age-appropriate preventive history and physical exam for an adult patient 18-64 years of age. (PC-PLO1, PC-PLO2)
- **Internal medicine instructional objective:** Demonstrate an age-appropriate problem-focused history and physical exam for acute and chronic conditions in an adult patient 18-64 years of age. (PC-PLO2)
- **Internal medicine instructional objective:** Demonstrate an age-appropriate preventive history and physical exam for an elderly patient >65 years of age. (PC-PLO1, PC-PLO2)
- **Internal medicine instructional objective:** Demonstrate an age-appropriate problem-focused history and physical exam for acute and chronic conditions in an elderly patient >65 years of age. (PC-PLO2)
- **Internal medicine instructional objective:** Select appropriate preventative exams and screening tests for adults and the elderly. (PC-PLO4)
- **Internal medicine instructional objective:** Choose and interpret appropriate diagnostic and laboratory studies related to preventive, acute, and chronic care for conditions listed in the Family Medicine Clinical Rotation Topics (above) in adult and elderly patients. (PC-PLO3)
- **Internal medicine instructional objective:** Formulate an appropriate differential diagnosis for acute and chronic conditions based on history, physical examination, and diagnostic data for adult and elderly patients. (PC-PLO4)
- **Internal medicine instructional objective:** Determine an appropriate medical decision regarding work-up, treatment, and disposition of adult and elderly patients, given all pertinent medical data, including history, physical exam, laboratory, and diagnostic data. (PC-PLO4)
- **Internal medicine instructional objective:** Construct an appropriate assessment plan for acute and chronic conditions listed in the Internal Medicine Clinical Rotation Topics (above) based on history, physical exam, and diagnostic data for adult and elderly patients. (PC-PLO4)

- **Internal medicine instructional objective:** Actively participate in the management of adult and elderly patients with acute and chronic conditions listed in the Internal Medicine Clinical Rotation Topics (above). (PC- PLO4)
 - **Internal medicine instructional objective:** Appraise a patient's health with preventive screening exams that follow appropriate medical guidelines for adult and elderly patients related to conditions listed in the Internal Medicine Clinical Rotation Topics (above). (PC PLO-4)
 - **Internal medicine instructional objective:** Recommend diagnostic testing and treatment plan for conditions listed in Internal Medicine Clinical Rotation Topics (above) for adult and elderly patients. (PC PLO-4)
3. **Internal Medicine Rotation Learning Outcome #3:** Students will demonstrate technical skills common to internal medicine.
- **Internal medicine instructional objective:** Interpret laboratory and diagnostic tests commonly encountered in the outpatient setting for the management and diagnosis of acute and chronic conditions listed in the Internal Medicine Clinical Rotation Topics (above) for adult and elderly patients. (PC-PLO3)
4. **Internal Medicine Rotation Learning Outcome #4:** Students will obtain and document information clearly and appropriately for the following types of patient encounters: (a) adult wellness and preventive encounters, (b) acute problem-focused encounters, and/or (c) chronic disease follow-up encounters.
- **Internal medicine instructional objective:** Prepare a wellness preventive care note for an adult and/or elderly patients. (ICS-PLO2)
 - **Internal medicine instructional objective:** Prepare an acute problem-focused medical note for an adult, and/or elderly patients. (ICS-PLO2)
 - **Internal medicine instructional objective:** Prepare a chronic problem-focused medical note for an adult and/or elderly patients. (ICS-PLO2)
 - **Internal medicine instructional objective:** Document information clearly and accurately at an appropriate level for patients, colleagues, and teachers. (ICS-PLO2)
5. **Internal Medicine Rotation Learning Outcome #5:** Students will listen empathetically and effectively, communicate clearly, and utilize shared decision-making for patients seeking care in internal medicine.
- **Internal medicine instructional objective:** Utilize open-ended questions to encourage adult and elderly patients to express their thoughts and feelings more fully. (ICS-PLO1)
 - **Internal medicine instructional objective:** Demonstrate patience and attentiveness by allowing adult and elderly patients to speak without interruption, giving them the opportunity to fully articulate their concerns. (ICS-PLO1)
 - **Internal medicine instructional objective:** Exhibit nonverbal cues of empathy such as facial expressions and body language that convey understanding and support. (ICS-PLO1)
 - **Internal medicine instructional objective:** Communicate complex medical information clearly and comprehensively, using plain language and avoiding

medical jargon or technical terms that may confuse or intimidate adult and elderly patients. (ICS-PLO3)

- Internal medicine instructional objective: Deliver clear and concise oral case presentations for adult and elderly patients, effectively conveying relevant information to your preceptor. (ICS-PLO3)
- Internal medicine instructional objective: Select written patient education handouts to address a health promotion issue using the most up-to-date, evidence-based medical data for adult and elderly patients. (ICS PLO-3)
- Internal medicine instructional objective: Explain possible risks and benefits of diagnostic studies and treatment plans to adult and elderly patients as approved by the supervising provider. (ICS-PLO3)
- Internal medicine instructional objective: Describe health promotion and disease prevention for acute and chronic clinical conditions listed in the Internal Medicine Clinical Rotation Topics (above) at the appropriate level for adult and elderly patients. (ICS-PLO3)
- Internal medicine instructional objective: Identify communication barriers with different patient populations. (ICS PLO-3)
- Internal medicine instructional objective: Adapt communication style and information context to the individual patient interaction. (ICS PLO-3)
- Internal medicine instructional objective: Collaborate with the patient and/or family members to identify realistic goals and develop a shared understanding of the diagnosis, prognosis, and available treatment options. (ICS PLO-5)
- Internal medicine instructional objective: Explore patients' understanding of their health conditions and treatment options, clarify misconceptions, and address concerns or fears. (ICS PLO-5)
- Internal medicine instructional objective: Elicit patient preferences, values, and goals regarding treatment outcomes and healthcare decisions through open-ended questioning and active listening. (ICS PLO-5)

6. **Internal Medicine Rotation Learning Outcome #6:** Students will facilitate difficult health care conversations in internal medicine.

- **Internal medicine instructional objective:** Establish rapport and trust with the patient and their family members by demonstrating empathy, active listening, and respect for their perspectives and concerns. (ICS PLO-4)
- **Internal medicine instructional objective:** Create a supportive environment conducive to open and honest dialogue, ensuring that the patient and their family feels comfortable expressing their thoughts, emotions, and preferences. (ICS PLO-4)
- **Internal medicine instructional objective:** Acknowledge and validate the patient's emotions and concerns, expressing empathy and understanding while maintaining professionalism and objectivity. (ICS PLO-4)
- **Internal medicine instructional objective:** Demonstrate sensitivity and cultural competence in addressing sensitive topics, such as end-of-life care, advance directives, or difficult treatment decisions. (ICS PLO-4)
- **Internal medicine instructional objective:** Provide emotional support and resources to help the patient and their family cope with difficult emotions and navigate the healthcare system effectively. (ICS PLO-4)

7. **Internal Medicine Rotation Learning Outcome #7:** Students will demonstrate compassion, integrity, respect, patient responsiveness, and accountability while providing care to patients in an internal medicine setting.
- **Internal medicine instructional objective:** Demonstrate empathy and understanding towards patients' emotions, concerns, and experiences. (P-PLO1)
 - **Internal medicine instructional objective:** Respect patient confidentiality and privacy, ensuring that sensitive information is handled appropriately. (P-PLO1)
 - **Internal medicine instructional objective:** Use inclusive language and cultural sensitivity when interacting with patients and their families. (P-PLO1)
 - **Internal medicine instructional objective:** Demonstrate sensitivity and responsiveness to patients' culture, gender, age, and disabilities. (P-PLO1)
 - **Internal medicine instructional objective:** Practice professionally in a working situation with other healthcare team members, including appropriate dress, punctual attendance, and professional attitude. (P-PLO1)
 - **Internal medicine instructional objective:** Show sensitivity to the emotional, social, developmental, and ethnic background of patients and their families. (P-PLO1)
 - **Internal medicine instructional objective:** Apply a professional attitude in such areas as attendance, dress code, and performance in the medical setting. (P-PLO1)
 - **Internal medicine instructional objective:** Prioritize patient care over personal comfort or preferences, demonstrating a willingness to adjust schedules or extend work hours to accommodate patient needs. (P-PLO2)
 - **Internal medicine instructional objective:** Demonstrate flexibility and adaptability in responding to unexpected changes in an internal medicine setting. (P-PLO2)
 - **Internal medicine instructional objective:** Evaluate community resources for adult and elderly patients. (P PLO-3)
 - **Internal medicine instructional objective:** Demonstrate motivation and desire to learn. (P PLO-3)
 - **Internal medicine instructional objective:** Demonstrate knowledge of the legal and regulatory requirements of the role of a physician assistant. (P-PLO4)
8. **Internal Medicine Rotation Learning Outcome #9:** Students will (a) seek, implement, and accept feedback, (b) reflect on performance and develop plans for self-improvement, and (c) locate, appraise, and integrate evidence-based studies related to internal medicine.
- **Internal medicine instructional objective:** Proactively seek feedback from their preceptor on clinical performance, communication skills, and professional behavior. (PBL PI-PLO1)
 - **Internal medicine instructional objective:** Demonstrate an openness to receive constructive criticism. (PBL PI-PLO1)
 - **Internal medicine instructional objective:** Develop action plans based on feedback including specific goals and timelines for implementation. (PBL PI-PLO1)

- **Internal medicine instructional objective:** Recognize limitations and locate assistance from supervising preceptors and appropriate reference material to address areas identified for improvement. (PBL PI-PLO1)
 - **Internal medicine instructional objective:** Monitor progress towards goals over time, adjusting action plans as necessary based on ongoing reflection and feedback. (PBL PI PLO-2)
 - **Internal instructional objective:** Develop the ability to learn from practice. (PBL PI PLO-2)
 - **Internal medicine instructional objective:** Recognize personal limitations and where to access help personally and professionally. (PBL PI PLO-2)
 - **Internal medicine instructional objective:** Interpret independent outside readings concerning preventive, acute, and chronic care for adults and elderly patients. (PBL PI-PLO3)
 - **Internal medicine instructional objective:** Show ability to understand and apply decision-making tools used in inpatient and/or outpatient care. (PBL PI PLO-3)
 - **Internal medicine instructional objective:** Recognize the importance of lifelong learning in the medical field. (PBL PI PLO-3)
 - **Internal medicine instructional objective:** Assess medical evidence related to outpatient medicine and communicate it to patients and colleagues. (PBL PI PLO-3)
 - **Internal medicine instructional objective:** Apply information technology to access online medical information and continue personal education. (PBL PI PLO-3)
 - **Internal medicine instructional objective:** Use medical information technology in decision-making, patient care, and patient education. (PBL PI PLO-3)
9. **Internal Medicine Rotation Learning Outcome #10:** Students will (a) promote a safe environment for patients seeking care in an internal medicine setting, (b) demonstrate knowledge of quality improvement methodologies and metrics, (c) recognize the unique role of PAs and other health professions in internal medicine, (d) work effectively with other health professionals to provide collaborative, patient-centered internal medicine care, © work effectively in an outpatient and/or inpatient health delivery setting, (f) incorporate considerations of cost awareness and funding into patients seeking care in an internal medicine setting, and (g) describe basic health payment systems and practice models for internal medicine.
- **Internal medicine instructional objective:** Encourage a culture of safety within the healthcare team, promoting open communication, error reporting, and continuous improvement initiatives. (SBP PLO-1)
 - **Internal medicine instructional objective:** Operate under the rules of HIPAA to preserve adult and elderly patient confidentiality. (SBP PLO-1)
 - **Internal medicine instructional objective:** Practice according to policy and procedures set forth by the health care facility. (SBP PLO-1)
 - **Internal medicine instructional objective:** Identify barriers and challenges to implementing quality improvement initiatives in an internal medicine health care setting. (SBP PLO-2)

- **Internal medicine instructional objective:** Discuss appropriate use of controlled substances and statewide tracking systems. (SBP PLO-2)
- **Internal medicine instructional objective:** Demonstrate understanding of the scope of practice and responsibilities of PAs and other healthcare professionals working in outpatient settings. (SBP-PLO3)
- **Internal medicine instructional objective:** Communicate openly and transparently with PAs and other healthcare professionals, fostering a culture of mutual respect and collaboration within an internal medicine healthcare team. (SBP-PLO3)
- **Internal medicine instructional objective:** Identify steps of the referral process for adult and elderly patients and roles of other professions in the participation of your patient's care. (SBP-PLO3)
- **Internal medicine instructional objective:** Employ a professional relationship with the preceptors and other health care team members. (SBP-PLO4)
- **Internal medicine instructional objective:** Efficiently manage patient flow and clinic scheduling to optimize access to care and minimize wait times for patients seeking care. (SBP-PLO5)
- **Internal medicine instructional objective:** Communicate effectively with administrative staff, medical assistants, and other members of the healthcare team to coordinate patient care activities and ensure smooth health care operations. (SBP-PLO4, SBP-PLO5)
- **Internal medicine instructional objective:** Evaluate cost-effective healthcare for outpatient care resources that do not compromise the quality of care for adult and elderly patients. (SBP PLO-6)
- **Internal medicine instructional objective:** Assess the impact poverty or location may have on your treatment plan. (SBP-PLO6)
- **Internal medicine instructional objective:** Discuss treatment options with patients in an unbiased manner, considering both clinical effectiveness and cost implications, and involving patients in shared decision-making. (SBP PLO-6)
- **Internal medicine instructional objective:** Educate patients about potential out-of-pocket expenses, insurance coverage limitations, and available resources for financial assistance or cost savings programs. (SBP PLO-6)
- **Internal medicine instructional objective:** Describe common practice models in internal medicine, such as solo practice, group practice, community health centers, and accountable care organizations. (SBP PLO-6)
- **Internal medicine instructional objective:** Discuss the role of primary care PAs in managing population health, coordinating care across the continuum, and reducing healthcare costs through preventive services and chronic disease management. (SBP PLO-6)
- **Internal medicine instructional objective:** Choose the appropriate code for billing the responsible payment service under the direct supervision of the preceptor. (SBP-PLO7)
- **Internal medicine instructional objective:** Identify the funding sources and payment systems that provide coverage for patient care. (SBP-PLO7)

- **Internal Medicine instructional objective:** Identify eligible patient populations for Medicare coverage. (SBP-PLO7)

Internal Medicine Rotation Curriculum Integration Table

Internal Medicine Rotation Learning Outcome	Assessment Method (Benchmark Requirements)	PAS Program Goal	PAS Program Learning Outcome (ARC-PA)/Student Learning Outcomes (GVSU)
Students will demonstrate medical knowledge of the pathophysiology, etiology, epidemiology, patient presentation, differential diagnosis, diagnostic work-up, patient management, health promotion, and disease prevention for common conditions (listed in Internal Medicine Clinical Rotation Topics above) encountered in internal medicine for patients seeking medical care for the following age populations: adults, and elderly.	Preceptor Evaluation (80% average score on Medical Knowledge competency section)	Medical Knowledge and Competence in Patient Care	MK #2 MK #3
	End of rotation examination ($\geq 70\%$)		
Students will elicit a detailed and accurate patient history, perform an appropriate physical examination, appropriately use and interpret diagnostic testing and laboratory studies, and formulate differential diagnoses and assessment plans for symptoms/conditions (listed in Internal Medicine Clinical Rotation Topics above) commonly encountered in patients seeking acute, chronic, and preventive care.	Preceptor Evaluation (80% average score on Patient Care competency section)	Medical Knowledge and Competence in Patient Care	PC #1 PC #2 PC #3 PC #4

Students will demonstrate technical skills common to internal medicine.	Preceptor Evaluation (80% average score on Patient Care competency section)	Medical Knowledge and Competence in Patient Care	PC #5
	Clinical Skills Checklist (Pass/Fail)		
Students will obtain and document information clearly and appropriately for the following types of patient encounters: (a) adult wellness and preventive encounters, (b) acute problem-focused encounters, and/or (c) chronic disease follow-up encounters.	Preceptor Evaluation (80% average score on Interpersonal and Communication Skills competency section)	Medical Knowledge and Patient Care	ICS#2
Students will listen empathetically and effectively, communicate clearly, and utilize shared decision-making for patients seeking care in internal medicine.	Preceptor Evaluation (80% average score on Interpersonal and Communication Skills competency section)	Medical Knowledge and Patient Care	ICS #1
		Collaborative Practice	ICS #3 ICS #5
Students will facilitate difficult health care conversations in internal medicine.	Preceptor Evaluation (80% average score on Interpersonal and Communication Skills competency section)	Collaborative Practice	ICS #4
Students will demonstrate compassion, integrity, respect, patient responsiveness, and accountability while providing care to patients in an internal medicine setting.	Preceptor Evaluation (80% average score on Professionalism competency section)	Professionalism	P #1 P #2 P #3
Students will (a) seek, implement, and accept feedback, (b) reflect on performance and develop plans for self-improvement, and (c) locate, appraise, and integrate evidence-based studies related to internal	Preceptor Evaluation (80% average score on Practice-Based Learning and Proficiency	Lifelong Learning	PBLPI #1 PBLP #2 PBLP #3

medicine.	Improvement competency section)		
Students will (a) promote a safe environment for patients seeking care in an internal medicine setting, (b) demonstrate knowledge of quality improvement methodologies and metrics, (c) recognize the unique role of PAs and other health professions in internal medicine, (d) work effectively with other health professionals to provide collaborative, patient-centered internal medicine care (e) work effectively in an outpatient and/or inpatient health delivery setting, (f) incorporate considerations of cost awareness and funding into patients seeking care in an internal medicine setting, and (g) describe basic health payment systems and practice models for internal medicine.	Preceptor Evaluation (80% average score on Systems-Based Practice competency section)	Medical Knowledge and Patient Care	SBP #1 SBP #6
		Lifelong Learning	SBP #2
		Collaborative Practice	SBP #3 SBP #4 SBP #5 SBP #7

Internal Medicine Preceptor Evaluation of the Student

1. What is your group and/or site name (i.e., Corewell Health Internal Medicine-Greenville)
2. Medical Knowledge: This section evaluates the student's ability to demonstrate medical knowledge, clinical reasoning, and problem-solving ability of sufficient breadth and depth to practice medicine as an entry-level physician assistant

	60% (Failing)	70% (D+/ C-)	80% (C+/ B)	90% (B+/ A-)	100% (A)
Student demonstrates medical knowledge in pathophysiology, etiology, and epidemiology for patients seeking medical care for common conditions encountered in internal medicine in the following age populations (MK#2, 3):					
Adults					
Elderly					
Student demonstrates medical knowledge of patient presentations for common conditions encountered in internal medicine for the following age populations (MK#2,3):					
Adults					
Elderly					
Student demonstrates medical knowledge of differential diagnosis and diagnostic work-up for patients seeking medical care for common conditions encountered in internal medicine in the following age populations (MK#2,3)					
Adults					
Elderly					
Student demonstrates medical knowledge of patient management strategies for patients					

seeking medical care for common conditions encountered in internal medicine in the following age populations (MK#2,3):					
Adults					
Elderly					
Student demonstrates medical knowledge of health promotion and disease prevention for patients seeking medical care for common conditions encountered in internal medicine in the following age populations (MK#2, 3)					
Adults					
Elderly					
Additional Comments:					

3. Patient Care: This section evaluates the student's ability to provide person-centered care that includes patient- and setting-specific assessment, evaluation, management, and health promotion.

	60% (Failing)	70% (D+/ C-)	80% (C+/ B)	90% (B+/ A-)	100% (A)	N/A
Elicit a detailed and accurate history and perform an appropriate physical examination for the following populations encountered in internal medicine (PC#1):						
Adults						
Elderly						
Elicit a detailed and accurate history and perform an appropriate physical examination for patients encountered in internal medicine seeking (PC#1):						

Acute care						
Chronic care						
Preventive care						
Student demonstrates knowledge of the appropriate use and interpretation of diagnostic testing and laboratory studies commonly used for patients seeking (PC#3):						
Acute care						
Chronic care						
Preventive care						
Student organizes information from the interview, diagnostic testing, and physical examination to formulate differential diagnoses for patients seeking (PC#4):						
Acute care						
Chronic care						
Preventive care						
Student organizes information from the interview, diagnostic testing, and physical examination to formulate assessment plans for symptoms/conditions commonly encountered in patients seeking (PC#4):						
Acute care						
Chronic care						

Preventive care						
Demonstrate basic technical skills common to internal medicine. (PC#5):						
Additional Comments:						

4. Interpersonal and Communication Skills: This section evaluates the student's ability to demonstrate verbal and non-verbal communication skills needed to have respectful, compassionate, and effective conversations with patients, patients' families, and health professionals to exchange information and make medical decisions.

	60% (Failing)	70% (D+/ C-)	80% (C+/ B)	90% (B+/ A-)	100% (A)	N/A
Listen empathetically and effectively to patients seeking care in internal medicine (ICS#1)						
Obtain and document information clearly and accurately at an appropriate level the following types of patient encounters (ICS#2):						
Acute problem-focused encounters						
Chronic disease follow-up encounters						
Wellness and preventive encounters						
Communicate information clearly to patients, families, colleagues, and teams as appropriate across a broad range of socioeconomic and cultural backgrounds to provide care in internal medicine (ICS#3)						
Facilitate difficult health care conversations in internal medicine (ICS#4):						

Utilize shared-decision making to promote patient-centered communication by eliciting and incorporating patient preferences (ICS#5)						
Additional Comments:						

5. Professionalism: This section evaluates the student's ability to demonstrate commitment to carrying out professional responsibilities and adhering to ethical principles and practices.

	60% (Failing)	70% (D+/ C-)	80% (C+/ B)	90% (B+/ A-)	100% (A)
Demonstrate compassion, integrity, and respect for patients seeking care in an internal medicine setting (P#1)					
Demonstrate responsiveness to patient needs that supersede self-interest while providing care in an internal medicine setting (P#2)					
Show accountability to patients, society, and the profession while providing care in an internal medicine setting (P#3)					
Demonstrate leadership and advocacy for the PA profession (P#4)					
Additional Comments:					

6. Practice-Based Learning and Proficiency Improvement: This section evaluates the student's ability to acquire, appraise, and apply evidence-based medicine to patient care, and accurately assess and improve clinical performance based on constant self-evaluation and lifelong learning.

	60% (Failing)	70% (D+/ C-)	80% (C+/ B)	90% (B+/ A-)	100% (A)

Seek, implement, and accept feedback (PBLPI#1)					
Reflect on performance to identify strengths and deficiencies in one's knowledge and expertise and develop a plan for self-improvement (PBLPI#2)					
Locate, appraise, and integrate evidence-based studies related to internal medicine (PBLPI#3)					
Additional Comments:					

7. Systems-Based Practice: This section evaluates the student's ability to engage with other healthcare professionals in a manner that optimizes patient care within the context of the larger healthcare system.

	60% (Failing)	70% (D+/ C-)	80% (C+/ B)	90% (B+/ A-)	100% (A)	NA
Promote a safe environment for patients seeking care in an internal medicine setting (SBP#1)						
Demonstrate knowledge of quality improvement methodologies and metrics in internal medicine (SBP#2)						
Recognize the unique roles of PAs and those of other healthcare professions in internal medicine (SBP#3)						
Work effectively with other health professionals to provide collaborative, patient-centered internal medicine care (SBP#4)						
Work effectively in an outpatient health delivery setting (SBP#5)						
Work effectively in an inpatient health delivery setting (SBP#5)						
Incorporate considerations of cost awareness and funding sources into patients seeking care in an internal medicine setting (SBP#6)						

Describe basic health payment systems and practice models for internal medicine (SBP#7)						
Additional Comments:						

8. Did the student have any absences during the rotation?
 - a. Yes
 - b. No
 - c. If yes, please indicate dates and reason for absence:
9. Please write a short note commenting on this student's particular strengths.
10. Please write a short note commenting on this student's particular areas for improvement.
11. Was this evaluation discussed with the student?
 - a. Yes
 - b. No
 - c. Additional comments:
12. Preceptor Signature: