



Underserved Medicine Rotation Information (including Rotation Learning Outcomes, Instructional Objectives, Preceptor Evaluation of Student Form, and Rotation-Specific Curriculum Integration Table)

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Underserved 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 the 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, Dacrostenosis, 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, Clostridiooides 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 rheumatic, 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 placenta, 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

Psychiatry/Behavioral Medicine: Anxiety disorders, Attention-deficit/hyperactivity disorder, Autism spectrum disorder, Child abuse and neglect, Disruptive/impulse-control/and conduct disorders, Feeding or eating disorders, Suicide, Depressive disorders

Orthopedics/Rheumatology: Avascular necrosis of the proximal femur, Congenital hip dysplasia, Juvenile rheumatoid arthritis, Neoplasia of the musculoskeletal system, Nursemaid elbow, Osgood-Schlatter disease, Scoliosis, Slipped capital femoral epiphysis

Endocrinology: Diabetes mellitus, Hypercalcemia, Hyperthyroidism, Hypothyroidism, Obesity, Short stature

Hematology: Anemia, Bleeding disorders, Brain tumors, Hemophilia, Lead poisoning, Leukemia, Lymphoma, Neutropenia

Urology/Renal: Cryptorchidism, Cystitis, Enuresis, Glomerulonephritis, Hydrocele, Hypospadias, Paraphimosis, Phimosis, Testicular torsion, Vesicourethral reflux

Underserved Medicine Clinical and Technical Skills	
Clinical Skills	
	Elicit a detailed and accurate patient history (RLO2)
	Perform an appropriate physical examination (RLO2)
	Document problem-focused encounters (RLO4)
	Select appropriate medications (RLO3)
	Select appropriate dose for medications (RLO3)
	Prescribe medications (RLO3)
Technical Skills	
	Demonstrate a preprocedural checklist (RLO3, Clinical and Technical Skills Checklist)

Underserved Medicine Rotation Learning Outcomes and Instructional Objectives

Upon completion of the underserved medicine clinical rotation,

Rotation Learning Outcomes	Instructional Objectives
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, assessments, and management plans for symptoms/conditions (listed in Underserved Medicine Clinical Rotation Topics above) commonly encountered in patients seeking care in underserved medicine.	
	Underserved medicine instructional objective: Explain the pathophysiology of the clinical presentations of conditions listed in the Underserved Medicine Clinical Rotation Topics (above) (MK-PLO3)
	Underserved medicine instructional objective: Describe the etiology and epidemiology of the clinical conditions listed in the Underserved Medicine Clinical Rotation Topics (above) (MK-PLO3)
	Underserved medicine instructional objective: Identify the patient presentation of conditions listed in the Underserved Medicine Clinical Rotation Topics (above). (MK-PLO3)
	Underserved medicine instructional objective: Differentiate how acute and chronic disease processes listed in the Underserved Medicine Clinical Rotation Topics (above) may present. (MK-PLO3)
	Underserved Medicine instructional objective: Explain the appropriate diagnostic workup of the clinical conditions listed in the Underserved Medicine Clinical Rotation Topics (above). (MK-PLO3)
	Underserved medicine instructional objective: Formulate a differential diagnosis for patient presentations of conditions listed in the Underserved Medicine Clinical Rotation Topics (above). (MK-PLO3)
	Underserved medicine instructional objective: Compare and contrast the risks and benefits of diagnostic studies and treatment plans for

	conditions listed in the Underserved Medicine Clinical Rotation Topics (above). (MK-PLO3)
	Underserved medicine instructional objective: Summarize the indications and contraindications of procedures commonly used in the treatment of conditions listed in the Underserved Medicine Clinical Rotation Topics (above). (MK PLO-2)
	Underserved medicine instructional objective: Compare and contrast the risks and benefits of procedures indicated for conditions listed in the Underserved Medicine Clinical Rotation Topics (above). (MK PLO-3)
	Underserved medicine instructional objective: Outline the appropriate management of the clinical conditions listed in the Underserved Medicine Clinical Rotation Topics (above). (MK-PLO3)
	Underserved medicine instructional objective: Identify common medication problems, including polypharmacy, potential toxic interactions of drugs, compliance issues, and the complexity of new medication prescribing. (MK-PLO3)
	Underserved medicine instructional objective: Describe health promotion in relation to the management of the clinical conditions listed in the Underserved Medicine Clinical Rotation Topics (above). (MK-PLO3)
	Underserved medicine instructional objective: Recognize when it is appropriate to obtain informed consent.
	Underserved medicine instructional objective: Identify signs of abuse and how to report suspected abuse. (MK PLO-3)
	Underserved medicine instructional objective: Describe major age-related changes in body composition and function that affect the pharmacokinetic process. (MK-PLO2)

	Underserved medicine instructional objective: Discuss medications commonly used in the treatment of conditions listed in the Underserved 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. (MK PLO-3)
	Underserved medicine instructional objective: Interpret and apply healthcare guidelines for patients in underserved medicine. (MK PLO-3)
	Underserved medicine instructional objective: Select appropriate prescription medication(s) and dosing for the treatment of conditions listed in the Underserved Medicine Clinical Rotation Topics (above). (MK PLO-3)
	Underserved medicine instructional objective: Actively participate in the management of patients. (MK- PLO3)
	Underserved medicine instructional objective: Define underserved. (MK-PLO1)
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, assessments, and management plans for symptoms/conditions (listed in Underserved Medicine Clinical Rotation Topics above) commonly encountered in patients seeking care in underserved medicine.	
	Underserved medicine instructional objective: Demonstrate an age-appropriate problem-focused history and physical exam for conditions in patients in an underserved setting. (PC PLO-1, PC-PLO-2)
	Underserved medicine instructional objective: Select and interpret appropriate diagnostic and laboratory studies related to conditions listed in the Underserved Medicine Clinical Rotation Topics (above) in patients in an underserved setting. (PC-PLO3)
	Underserved medicine instructional objective: Formulate an appropriate differential diagnosis based on history, physical examination, diagnostic data, and clinical reasoning for patients in an underserved setting. (PC-PLO4)

	Underserved medicine instructional objective: Develop an appropriate assessment, management care plan, and disposition patients, given all pertinent medical data, including history, physical exam, laboratory, and diagnostic data in an underserved setting. (PC-PLO4)
	Underserved medicine instructional objective: Integrate care needs into comprehensive, patient-centered management plans for patients in an underserved setting. (PC-PLO4)
	Underserved medicine instructional objective: Actively participate in the management of patients with conditions listed in the Underserved Medicine Clinical Rotation Topics (above) in an underserved setting. (PC-PLO4)
	Underserved medicine instructional objective: Analyze results of Michigan Automated Provider (MAPS). (PC-PLO3)
Students will proficiently demonstrate the clinical and technical skills essential for underserved medicine practice, as outlined in the Underserved Medicine Clinical and Technical Skills lists.	
	Underserved medicine instructional objective: Demonstrate the use of preprocedural checklists, including verifying patient identity, confirming the procedure, reviewing informed consent, and ensuring safety protocols are followed. (PC-PLO5)
	Underserved medicine instructional objective: Prescribe medications. (MK PLO-3)
	Underserved medicine instructional objective: Assess the patient's clinical condition, select appropriate medication based on diagnosis and guidelines, and adjust medication selection and dosage based on age, weight, comorbidities, and contraindications. (PC-PLO5)
Students will document information clearly and appropriately in underserved medicine.	
	Underserved instructional objective: Document a problem-focused medical note. (ICS-PLO2)
	Underserved instructional objective: Document information clearly and accurately at an appropriate level for patients, colleagues, and teachers. (ICS-PLO2)

	Underserved medicine instructional objective: Adapt documentation to reflect the social, cultural, and resource-limited contexts of underserved medicine, ensuring clear communication of barriers to care and resource constraints. (ICS-PLO2)
	Underserved medicine instructional objective: Document information that ensures continuity of care for underserved populations, with a focus on care transitions, follow-up needs, and resource coordination. (ICS-PLO2)
Students will listen empathetically and effectively, communicate clearly, utilize shared decision-making, and provide patient education and patient counseling for patients seeking care in internal medicine.	
	Underserved medicine instructional objective: Utilize open-ended questions, active listening, and empathetic communication to elicit patient preferences, values, goals, and concerns while providing space for patients to fully articulate their thoughts without interruption. (ICS-PLO1)
	Underserved medicine instructional objective: Communicate complex medical information clearly and comprehensively, using plain language and avoiding medical jargon, while tailoring the content and delivery to the patient's level of understanding and health literacy. (ICS-PLO3)
	Underserved medicine instructional objective: Deliver clear, concise, and well-organized oral case presentations using a structured format, ensuring the inclusion of pertinent patient information to effectively communicate with preceptors and the healthcare team, fostering collaboration and continuity of care. (ICS-PLO3)
	Underserved medicine instructional objective: Identify and address communication barriers with diverse patient populations and adapt communication style and information context to ensure understanding, effective interaction, and culturally sensitive care. (ICS PLO-3)

	Underserved medicine instructional objective: Collaborate with the patient and family to identify realistic goals, develop a shared understanding of diagnoses and treatment options, and explain the risks and benefits of diagnostic studies and treatments, while demonstrating empathetic listening to clarify misconceptions and address concerns or fears. (ICS PLO-5)
	Underserved medicine instructional objective: Deliver age-appropriate patient-centered education and counseling, including health promotion, disease prevention, and evidence-based written materials tailored to the patient's needs and health literacy, to patients seeking care in underserved medicine. (ICS-PLO5)
	Underserved medicine instructional objective: Provide patient-centered counseling that addresses emotional, psychological, and social concerns (ICS-PLO5)
	Underserved medicine instructional objective: Assess patient understanding of medical information and treatment plans and address any gaps in comprehension (ICS-PLO3)
Students will facilitate difficult health care conversations in underserved medicine.	
	Underserved medicine instructional objective: Establish rapport and trust with patients and their family members by demonstrating empathy, active listening, and respect for their emotions, perspectives, and concerns while maintaining professionalism and objectivity. (ICS PLO-4)
	Underserved medicine instructional objective: Create a supportive environment conducive to open and honest dialogue, ensuring that the patient and their family feel comfortable expressing their thoughts, emotions, and preferences. (ICS PLO-4)
	Underserved medicine instructional objective: Demonstrate sensitivity and cultural competence in addressing sensitive topics, such as end-of-life care, advance directives, or difficult treatment decisions, while respecting diverse perspectives and values. (ICS PLO-4)

	Underserved medicine instructional objective: Provide emotional support and connect patients and their families with appropriate resources to help them cope with difficult emotions and navigate the healthcare system effectively. (ICS PLO-4)
Students will demonstrate compassion, integrity, respect, patient responsiveness, and accountability while providing care to patients in underserved medicine.	
	Underserved medicine instructional objective: Demonstrate empathy, understanding, compassion, and sensitivity to the emotional, social, developmental, cultural, and diverse backgrounds of patients and their families, including age, gender, and disabilities. (P-PLO1)
	Underserved medicine instructional objective: Respect patient confidentiality and privacy, ensuring that sensitive information is handled appropriately and securely. (P-PLO1)
	Underserved medicine instructional objective: Use inclusive language and cultural sensitivity when interacting with patients and their families to foster trust and respect. (P-PLO1)
	Underserved medicine instructional objective: Exhibit professionalism in interactions with patients, families, and healthcare team members, including maintaining appropriate dress, punctual attendance, and a professional attitude in all clinical settings. (P-PLO1)
	Underserved 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)
	Underserved medicine instructional objective: Demonstrate flexibility, attentiveness, and responsiveness in addressing patient concerns and unexpected changes. (P-PLO2)
	Underserved medicine instructional objective: Take accountability for actions, decisions, and the quality of care provided, ensuring continuous evaluation and improvement. (P-PLO3)
	Underserved medicine instructional objective: Evaluate and integrate community resources to support patient care in underserved medicine. (P PLO-3)

	Underserved medicine instructional objective: Demonstrate motivation and desire to learn. (P PLO-3)
	Underserved medicine instructional objective: Demonstrate knowledge of the legal and regulatory requirements of the role of a physician assistant. (P-PLO4)
	Underserved medicine instructional objective: Exhibit integrity by adhering to ethical standards, acting with honesty, and maintaining professional accountability in all interactions and decisions." (P-PLO1)
	Underserved medicine instructional objective: Advocate for equitable care and implement strategies to overcome systemic barriers in underserved medicine. (P-PLO1)
	Underserved medicine instructional objective: Summarize steps to the referral process and identify barriers that prevent underserved patients from attending specialist appointments. (P-PLO1)
	Underserved medicine instructional objective: Demonstrate compassion by providing patient-centered care and support in resource-limited and challenging situations, addressing the unique needs of underserved patients. (P PLO3)
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 underserved medicine.	
	Underserved medicine instructional objective: Proactively seek feedback from their preceptor on clinical performance, communication skills, and professional behavior, demonstrating openness to constructive criticism and willingness to apply it to improve. (PBL PI-PLO1)
	Underserved medicine instructional objective: Develop action plans based on feedback including specific goals and timelines for implementation. (PBL PI-PLO1)
	Underserved medicine instructional objective: Recognize personal and professional limitations, and locate assistance from preceptors, colleagues, and reference materials

	to address areas needing improvement. (PBL PI-PLO1)
	Underserved medicine instructional objective: Monitor progress towards goals over time, adjusting action plans as necessary based on ongoing reflection and feedback. (PBL PI PLO-2)
	Underserved instructional objective: Develop the ability to learn from practice. (PBL PI PLO-2)
	Underserved medicine instructional objective: Demonstrate lifelong learning by interpreting independent readings, assessing medical evidence, and applying decision-making tools to provide evidence-based patient care in underserved medicine. (PBL PI-PLO3)
	Underserved medicine instructional objective: Recognize the importance of lifelong learning in the medical field. (PBL PI PLO-3)
	Underserved medicine instructional objective: Assess and effectively communicate medical evidence to patients, colleagues, and healthcare teams to support shared decision-making and patient care. (PBL PI PLO-3)
	Underserved medicine instructional objective: Utilize medical information technology to access and appraise online medical resources, enhance personal education, support clinical decision-making, and educate patients. (PBL PI PLO-3)
In an underserved setting, students will (a) promote a safe environment, (b) demonstrate knowledge of quality improvement methodologies and metrics, (c) recognize the unique role of PAs and other health professions, (d) work effectively with other health professionals to provide collaborative, patient-centered care, (e) incorporate considerations of cost awareness and funding, and (g) describe basic health payment systems and practice models.	
	Underserved medicine instructional objective: Operate under the rules of HIPAA to preserve patient confidentiality in an outpatient underserved medicine setting. (SBP PLO-1)

	Underserved medicine instructional objective: Practice according to policy and procedures set forth by the health care facility. (SBP PLO-1)
	Underserved medicine instructional objective: Identify barriers and challenges to implementing quality improvement initiatives in an outpatient underserved medicine setting and propose strategies to overcome them. (SBP PLO-2)
	Underserved medicine instructional objective: Discuss the appropriate use of controlled substances and statewide tracking systems to ensure ethical and legal patient care in an outpatient underserved setting. (SBP PLO-2)
	Underserved medicine instructional objective: Encourage a culture of safety and collaboration within the healthcare team by promoting open communication, error reporting, mutual respect, and teamwork while providing patient-centered care in an outpatient underserved setting. (SBP-PLO3)
	Underserved medicine instructional objective: Identify the steps of the referral process for patients and the roles of other healthcare professionals in the participation of your patient's care in an outpatient underserved setting. (SBP-PLO3)
	Underserved medicine instructional objective: Employ a professional relationship with the preceptors and other healthcare team members in an outpatient underserved setting. (SBP-PLO4)
	Underserved medicine instructional objective: Efficiently manage patient flow and clinic scheduling to optimize access to care and minimize wait times for patients seeking care in an outpatient underserved setting. (SBP-PLO5)
	Underserved 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 in an outpatient underserved setting. (SBP-PLO4, SBP-PLO5)
	Underserved medicine instructional objective: Evaluate cost-effective healthcare resources that do not compromise the quality of care for patients in an outpatient underserved setting. (SBP PLO-6)

	Underserved medicine instructional objective: Assess the impact poverty or access to services may have on your treatment plan. (SBP-PLO6)
	Underserved medicine instructional objective: Discuss treatment options for patient care in an unbiased manner, considering both clinical effectiveness and cost implications and involving patients in shared decision-making, in an outpatient underserved setting. (SBP PLO-6)
	Underserved medicine instructional objective: Educate patients about potential out-of-pocket expenses, insurance coverage limitations, and available resources for financial assistance or cost savings programs in an outpatient underserved medicine setting. (SBP PLO-6)
	Underserved medicine instructional objective: Describe common practice models in an outpatient underserved setting. (SBP PLO-6)
	Underserved medicine instructional objective: Demonstrate an understanding of the roles and responsibilities of PAs and other healthcare professionals in an outpatient underserved setting, including their contributions to population health, care coordination, and cost reduction through preventive services and chronic disease management. (SBP PLO-6)
	Underserved medicine instructional objective: Choose appropriate billing codes for payment services under the direct supervision of the preceptor in an outpatient underserved setting (SBP-PLO7)
	Underserved medicine instructional objective: Identify funding sources and payment systems, including eligible patient populations for Medicaid and Medicare, in an outpatient underserved setting. (SBP-PLO7)

Underserved Medicine Rotation Curriculum Integration Table

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 Underserved Medicine Clinical Rotation Topics above) encountered in underserved medicine for patients seeking medical care.	Preceptor Evaluation (80% average score on Medical Knowledge competency section)	Medical Knowledge and Competence in Patient Care	MK #2
	End-of-rotation examination ($\geq 70\%$)		MK#3
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, assessments, and management plans for symptoms/conditions (listed in Underserved Medicine Clinical Rotation Topics above) commonly encountered in patients seeking care in underserved medicine.	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 proficiently demonstrate the clinical and technical skills essential for underserved medicine practice, as outlined in the Underserved Medicine Clinical and Technical Skills lists.	Preceptor Evaluation (80% average score on Patient Care competency section)	Medical Knowledge and Competence in Patient Care	PC #5
	Clinical and Technical Skills Checklist (Pass/Fail)		
Students will document information clearly and appropriately in underserved medicine.	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, utilize shared decision-making, and provide patient education and patient counseling for patients seeking care in underserved 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 underserved 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 underserved medicine.	Preceptor Evaluation (80% average score on Professionalism competency section)	Professionalism	P #1
			P #2
			P #3
Students will, (a) seek, implement, and accept	Preceptor Evaluation (80% average score on	Lifelong Learning	PBLPI #1
			PBLPI #2

<p>feedback, (b) reflect on performance and develop plans for self-improvement, and (c) locate, appraise, and integrate evidence-based studies related to underserved medicine.</p>	<p>Practice-Based Learning and Proficiency Improvement competency section)</p>		<p>PBLPI #3</p>
<p>In an underserved setting, students will (a) promote a safe environment, (b) demonstrate knowledge of quality improvement methodologies and metrics, (c) recognize the unique role of PAs and other health professions, (d) work effectively with other health professionals to provide collaborative, patient-centered care, (e) incorporate considerations of cost awareness and funding, and (g) describe basic health payment systems and practice models.</p>	<p>Preceptor Evaluation (80% average score on Systems-Based Practice competency section)</p>	<p>Medical Knowledge and Patient Care Lifelong Learning Collaborative Practice</p>	<p>SBP #1 SBP #6 SBP #2 SBP #3 SBP #4 SBP #5 SBP #7</p>

Underserved Medicine Preceptor Evaluation of the Student

Underserved Medicine Preceptor Evaluation of the Student						
	60%	70%	80%	90%	100%	N/A
	(Failing)	(D+/ C-)	(C+/ B)	(B+/ A-)	(A)	
What is your group and/or site name (i.e., Corewell Health Greenville Hospital Multispecialty Center - Oak St, Family Medicine)						
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						
Student demonstrated medical knowledge in pathophysiology, etiology, and epidemiology for patients seeking medical care for common conditions encountered in underserved medicine (MK#2, 3):						
Student demonstrated medical knowledge of patient presentations for common conditions encountered in underserved medicine (MK#2,3):						
Student demonstrated medical knowledge of differential diagnosis for patients seeking medical care for common conditions encountered in underserved medicine (MK#2,3)						
Student demonstrated medical knowledge of the diagnostic work-up for patients seeking medical care for common conditions encountered in underserved medicine (MK#2,3)						
Student demonstrated medical knowledge of patient management strategies for patients seeking medical care for common conditions encountered in underserved medicine (MK#2,3):						
Student demonstrated medical knowledge of health promotion and disease prevention for patients seeking medical care for common conditions encountered in underserved medicine (MK#2, 3)						
Additional Comments:						
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%	70%	80%	90%	100%	N/A
	(Failing)	(D+/ C-)	(C+/ B)	(B+/ A-)	(A)	

Student elicited a detailed and accurate history for populations encountered in underserved medicine (PC#1).						
Student elicited a detailed and accurate history for patients encountered in underserved medicine (PC#1).						
Student performed an appropriate physical examination for populations encountered in underserved medicine (PC#1).						
Student performed an appropriate physical examination for patients seeking care in underserved medicine (PC#1).						
Student demonstrated knowledge of the appropriate use and interpretation of diagnostic testing for populations encountered in underserved medicine (PC#3).						
Student demonstrated knowledge of the appropriate use and interpretation of diagnostic testing for patients seeking care in underserved medicine (PC#3).						
Student demonstrated knowledge of the appropriate use and interpretation of laboratory studies for populations encountered in underserved medicine (PC#3).						
Student demonstrated knowledge of the appropriate use and interpretation laboratory studies for patients seeking care in underserved medicine (PC#3).						
Student organized information from the interview, diagnostic testing, and physical examination to formulate differential diagnoses for populations encountered in underserved medicine (PC#4).						
Student organized information from the interview, diagnostic testing, and physical examination to formulate differential diagnoses for patients seeking care in underserved medicine (PC#4).						

Student organized information from the interview, diagnostic testing, and physical examination to formulate assessments for symptoms/conditions commonly encountered for populations encountered in underserved medicine (PC#4):						
Student organized information from the interview, diagnostic testing, and physical examination to formulate assessments for symptoms/conditions commonly encountered for patients seeking care in underserved medicine (PC#4).						
Student organized information from the interview, diagnostic testing, and physical examination to formulate management plans for symptoms/conditions commonly encountered for populations encountered in underserved medicine (PC#4).						
Student organized information from the interview, diagnostic testing, and physical examination to formulate management plans for symptoms/conditions commonly encountered for patients seeking care in underserved medicine (PC#4).						
Student demonstrated basic clinical and technical skills common to underserved medicine including (PC#5):						
Demonstrating a preprocedural checklist						
Selecting appropriate medications						
Selecting appropriate medication dosages						
Prescribe medications.						
Additional Comments:						
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%	70%	80%	90%	100%	N/A
	(Failing)	(D+/ C-)	(C+/ B)	(B+/ A-)	(A)	
Student documented information clearly and appropriately for patient encounters (ICS#2).						
Student listened empathetically and effectively to patients seeking care in underserved medicine (ICS#1)						
Student communicated information clearly in underserved medicine (ICS#3)						

Student utilized shared decision making for patients seeking care in underserved medicine (ICS#5)						
Student provided patient education and counseling for patients seeking care in underserved medicine (ICS#5)						
Student facilitated difficult health care conversations in underserved medicine (ICS#4):						
Additional Comments:						
Professionalism: This section evaluates the student's ability to demonstrate commitment to carrying out professional responsibilities and adhering to ethical principles and practices in underserved medicine.						
	60%	70%	80%	90%	100%	N/A
	(Failing)	(D+/ C-)	(C+/ B)	(B+/ A-)	(A)	
Student demonstrated compassion, integrity, and respect to patients seeking care in underserved medicine (P#1)						
Student demonstrated patient responsiveness while providing care to patients in underserved medicine (P#2)						
Student showed accountability while providing care to patients in underserved medicine (P#3)						
Additional Comments:						
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%	70%	80%	90%	100%	N/A
	(Failing)	(D+/ C-)	(C+/ B)	(B+/ A-)	(A)	
Student sought, implemented, and accepted feedback related to undeserved medicine (PBLPI#1)						
Student reflected on their performance to identify strengths and deficiencies in their knowledge and expertise and develop a plan for self-improvement related to underserved medicine (PBLPI#2)						
Student located, appraised, and integrated evidence-based studies related to underserved medicine (PBLPI#3)						
Additional Comments:						
Systems-Based Practice: This section evaluates the student's ability to engage with other healthcare professionals in a manner that optimizes care within the context of the larger healthcare system.						

	60%	70%	80%	90%	100%	N/A
	(Failing)	(D+/ C-)	(C+/ B)	(B+/ A-)	(A)	
Student promoted a safe environment for patients seeking care in an underserved medicine setting (SBP#1)						
Student demonstrated knowledge of quality improvement methodologies and metrics in an underserved medicine setting (SBP#2)						
Student recognized the unique roles of PAs and those of other healthcare professions in an underserved medicine setting (SBP#3)						
Student worked effectively with other health professionals to provide collaborative, patient-centered care in an underserved medicine setting (SBP#4)						
Student worked effectively in an underserved medicine setting (SBP#5)						
Student incorporated considerations of cost awareness and funding sources into patients seeking care in an underserved medicine setting (SBP#6)						
Student described basic health payment systems and practice models for an underserved medicine setting (SBP#7)						
Additional Comments:						

Did the student have any absences during the rotation?

Yes

No

If yes, please indicate dates and reason for absence:

Please write a short note commenting on this student's particular strengths.

Please write a short note commenting on this student's particular areas for improvement.

Was this evaluation discussed with the student?

Yes

No

Additional comments

Preceptor Signature: