

Underserved Medicine Rotation Information (including Rotation Learning Outcomes, Instructional Objectives, the Preceptor Evaluation of Student Form, and the 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 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 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: Abruption 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

Pediatrics

Dermatology: Acne vulgaris, Androgenetic alopecia, Atopic dermatitis, Burns, Contact Dermatitis, Dermatitis (diaper, perioral), Drug eruptions, Erythema multiforme, Exanthems, Impetigo, Lice, Lichen planus, Pityriasis rosea, Scabies, Stevens-Johnson syndrome, Tinea, Toxic epidermal necrolysis, Urticaria, Verrucae

ENOT/Ophthalmology: Acute otitis media, Acute pharyngotonsillitis, Allergic rhinitis, Conjunctivitis, Epiglottitis, Epistaxis, Hearing impairment, Mastoiditis, Oral candidiasis, Orbital cellulitis, Otitis externa, Peritonsillar abscess, Strabismus, Tympanic membrane perforation

Infectious Disease: Atypical mycobacterial disease, Epstein-Barr disease, Erythema infectiosum, Hand-foot-and-mouth disease, Herpes simplex, Influenza, Measles, Mumps, Pertussis, Pinworms, Roseola, Rubella, Varicella infection

Pulmonology: Acute bronchiolitis, Asthma, Croup, Cystic fibrosis, Foreign body, Hyaline membrane disease, Pneumonia (bacterial, viral), Respiratory syncytial virus

Cardiovascular: Acute rheumatic fever, Atrial septal defect, Coarctation of the aorta, Hypertrophic cardiomyopathy, Kawasaki disease, Patent ductus arteriosus, Syncope, Tetralogy of Fallot, Ventricular septal defect

Gastrointestinal/Nutritional System: Appendicitis, Colic, Constipation, Dehydration, Duodenal atresia, Encopresis, Foreign body, Gastroenteritis, Gastroesophageal reflux disease, Hepatitis, Hirschsprung disease, Inguinal hernia, Intussusception, Jaundice, Lactose intolerance, Niacin deficiencies, Pyloric stenosis, Umbilical hernia, Vitamin A deficiency, Vitamin C deficiency, Vitamin D deficiency

Neurology/Developmental: Anticipatory guidance, Down syndrome, Febrile seizure, Immunization guidelines, Meningitis, Normal growth and development, Seizure disorders, Teething, Turner syndrome

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 Rotation Learning Outcomes

Upon completion of the underserved 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 Underserved Medicine Clinical Rotation Topics above) encountered in underserved medicine for patients seeking outpatient medical care for the following age populations: infants, children, adolescents, adults, and elderly.
2. Students will elicit a detailed and accurate patient history, perform an appropriate physical, appropriately use and interpret diagnostic testing and laboratory studies, and formulate differential diagnoses and assessment plans for symptoms/conditions (listed in Underserved Medicine Clinical Rotation Topics above) commonly encountered in infant, children, adolescent, adult, and elderly patients seeking acute and/or chronic care.
3. Students will demonstrate technical skills common to underserved medicine.
4. Students will obtain and document information clearly and appropriately for the following types of outpatient 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 outpatient care in underserved medicine.
6. Students will facilitate difficult health care conversations in an outpatient setting.
7. Students will demonstrate compassion, integrity, respect, patient responsiveness, and accountability while providing care to patients in an outpatient underserved medicine setting.
8. In an outpatient setting, 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.
9. In an outpatient setting students will, (a) promote a safe environment for patients seeking care in an underserved medicine setting, (b) demonstrate knowledge of quality improvement methodologies and metrics, (c) recognize the unique role of PAs and other health professions in an underserved medicine, (d) work effectively with other health professionals to provide collaborative, patient-centered underserved medicine care € work effectively in an outpatient health delivery settings, (f) incorporate considerations of cost awareness and funding into patients seeking care in an underserved medicine setting, and (g) describe basic health payment systems and practice models for underserved medicine.

Underserved Medicine Instructional Objectives

1. **Underserved 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 Underserved Medicine Clinical Rotation Topics above) encountered in underserved medicine for patients seeking outpatient medical care for the following age populations: infants, children, adolescents, adults, and elderly.
 - **Underserved medicine instructional objective:** Explain the pathophysiology of the acute and chronic clinical presentations of conditions listed in the Underserved

Medicine Clinical Rotation Topics (above) in adult and elderly patients (MK-PLO3)

- **Pediatric instructional objective:** Explain the pathophysiology of the acute and chronic clinical presentations of conditions listed in the Underserved Medicine Clinical Rotation Topics (above) in infant, child, and adolescent patients (MK-PLO3)
- **Underserved medicine instructional objective:** Discuss the etiology of the acute and chronic clinical conditions listed in the Underserved Medicine Clinical Rotation Topics (above) in adult and elderly patients (MK-PLO3)
- **Pediatric instructional objective:** Discuss the etiology of the acute and chronic clinical conditions listed in the Underserved Medicine Clinical Rotation Topics (above) in infant, child, and adolescent patients. (MK-PLO3)
- **Underserved medicine instructional objective:** Describe the epidemiology of the acute and chronic clinical conditions listed in the Underserved Medicine Clinical Rotation Topics (above) in adult and elderly patients. (MK-PLO2)
- **Pediatric instructional objective:** Describe the epidemiology of the acute and chronic clinical conditions listed in the Underserved Medicine Clinical Rotation Topics (above) in infant, child, and adolescent patients. (MK-PLO2)
- **Underserved medicine instructional objective:** Identify the acute and chronic patient presentation of conditions listed in the Underserved Medicine Clinical Rotation Topics (above) in adult and elderly patients. (MK-PLO3)
- **Pediatric instructional objective:** Identify the acute and chronic patient presentation of conditions listed in the Underserved Medicine Clinical Rotation Topics (above) in infant, child, and adolescent patients. (MK-PLO3)
- **Underserved medicine instructional objective:** Differentiate how acute and chronic disease processes listed in the Underserved Medicine Clinical Rotation Topics (above) may present in the infant, child, adolescent, adult, and elderly populations. (MK-PLO3)
- **Underserved medicine instructional objective:** Formulate a differential diagnosis for the acute and chronic patient presentation of conditions listed in the Underserved Medicine Clinical Rotation Topics (above) in adult and elderly patients. (MK-PLO3)
- **Pediatric instructional objective:** Formulate a differential diagnosis for the acute and chronic patient presentation of conditions listed in the Underserved Medicine Clinical Rotation Topics (above) in infant, child, and adolescent patients. (MK-PLO3)
- **Underserved medicine instructional objective:** Describe the presentation, diagnosis, and management (medical and surgical) of conditions listed in the Underserved Medicine Clinical Rotation Topics (above) that require surgical management, including pre-operative, intra-operative, and postoperative care for adult and elderly patients. (MK-PLO2)
- **Pediatric instructional objective:** Describe the presentation, diagnosis, and management (medical and surgical) of conditions listed in the Underserved Medicine Clinical Rotation Topics (above) that require surgical management, including pre-operative, intra-operative, and postoperative care for infant, child, and adolescent patients. (MK-PLO2)

- **Underserved medicine instructional objective:** Describe the presentation, diagnosis, and management of conditions listed in the Underserved Medicine Clinical Rotation Topics (above) that require inpatient management for adult and elderly patients. (MK-PLO2)
- **Pediatric instructional objective:** Describe the presentation, diagnosis, and management of conditions listed in the Underserved Medicine Clinical Rotation Topics (above) that require inpatient management for infant, child, and adolescent patients. (MK-PLO2)
- **Underserved medicine instructional objective:** Explain the appropriate diagnostic work up of the acute and chronic clinical conditions listed in the Underserved Medicine Clinical Rotation Topics (above) in adult and elderly patients. (MK-PLO3)
- **Pediatric instructional objective:** Explain the appropriate diagnostic work up of the acute and chronic clinical conditions listed in the Underserved Medicine Clinical Rotation Topics (above) in infant, child, and adolescent patients. (MK-PLO3)
- **Underserved medicine instructional objective:** Compare and contrast the risks and benefits of diagnostic studies and treatment plans for acute and chronic conditions listed in the Underserved Medicine Clinical Rotation Topics (above) in adult and elderly populations. (MK-PLO3)
- **Pediatric instructional objective:** Compare and contrast the risks and benefits of diagnostic studies and treatment plans for acute and chronic conditions listed in the Underserved Medicine Clinical Rotation Topics (above) in infant, child, and adolescent populations. (MK-PLO3)
- **Underserved medicine instructional objective:** Summarize the indications and contraindications of procedures commonly used in the outpatient 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 acute and chronic conditions listed in the Underserved Medicine Clinical Rotation Topics (above) for adult and elderly patients. (MK PLO-3)
- **Pediatric instructional objective:** Compare and contrast the risks and benefits of procedures indicated for acute and chronic conditions listed in the Underserved Medicine Clinical Rotation Topics (above) for infant, child, and adolescent patients. (MK PLO-3)
- **Underserved medicine instructional objective:** Outline the appropriate outpatient management of the acute and chronic clinical conditions listed in the Underserved Medicine Clinical Rotation Topics (above) in adult and elderly patients. (MK-PLO3)
- **Pediatric instructional objective:** Outline the appropriate outpatient management of the acute and chronic clinical conditions listed in the Underserved Medicine Clinical Rotation Topics (above) in infant, child, and adolescent patients. (MK-PLO3)
- **Underserved 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)

- **Pediatric instructional objective:** Identify the common medication problems specific to infant, child, and adolescent populations, including dosing, potential toxic effects 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 acute and chronic clinical conditions listed in the Underserved Medicine Clinical Rotation Topics (above) in adult and elderly patients. (MK-PLO3)
- **Pediatric instructional objective:** Describe health promotion in relation to the management of the acute and chronic clinical conditions listed in the Underserved Medicine Clinical Rotation Topics (above) in infant, child, and adolescent patients. (MK-PLO3)
- **Underserved medicine instructional objective:** Describe disease prevention for the acute and chronic clinical conditions listed in the Underserved Medicine Clinical Rotation Topics (above) in adult and elderly patients. (MK-PLO3)
- **Pediatric instructional objective:** Describe disease prevention for the acute and chronic clinical conditions listed in the Underserved Medicine Clinical Rotation Topics (above) in infant, child, and adolescent patients. (MK-PLO3)
- **Underserved medicine instructional objective:** Identify national screening guidelines for adult and elderly patients for the applicable clinical conditions listed in the Underserved Medicine Clinical Rotation Topics (above). (MK-PLO2)
- **Pediatric instructional objective:** Identify national screening guidelines for infant, child, and adolescent patients for the applicable clinical conditions listed in the Underserved Medicine Clinical Rotation Topics (above). (MK-PLO2)
- **Underserved medicine instructional objective:** Recognize when it is appropriate to obtain informed consent for adult and elderly patients in an outpatient setting.
- **Pediatric instructional objective:** Recognize when it is appropriate to obtain informed consent for infant, child, and adolescent patients in an outpatient setting. (MK-PLO3)
- **Underserved 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)
- **Pediatric instructional objective:** Describe major age-related changes in body composition and function that affect the pharmacokinetic process in infants, children, and adolescents. (MK-PLO2)
- **Underserved medicine instructional objective:** Interpret and apply immunization guidelines for adult and elderly patients. (MK PLO-3)
- **Pediatric instructional objective:** Interpret and apply immunization guidelines for infant, child, and adolescent patients. (MK PLO-3)
- **Underserved medicine instructional objective:** Identify signs of abuse and how to report suspected abuse in adult and elderly patients. (MK PLO-3)
- **Pediatric instructional objective:** Identify signs of abuse and how to report suspected abuse in infant, child, and adolescent patients. (MK PLO-3)

- **Underserved 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)
 - **Pediatric instructional objective:** Interpret and apply healthcare guidelines for asthma, Diabetes, and Pneumonia, in infant, child, and adolescent patients. (MK PLO-3)
 - **Underserved medicine instructional objective:** Define underserved. (MK-PLO1)
 - **Underserved medicine instructional objective:** Actively participate in the management of adult and elderly patients with acute and chronic conditions listed in the Underserved Medicine Clinical Rotation Topics (above). (PC- PLO4)
 - **Pediatric instructional objective:** Actively participate in the management of infant, child, and adolescent patients with acute and chronic conditions listed in the Family Medicine Clinical Rotation Topics (above). (PC- PLO4)
 - **Underserved medicine instructional objective:** Select appropriate prescription medication(s) and dosing for the treatment of acute and chronic conditions in adult and elderly patients in an outpatient setting. (MK PLO-3)
 - **Pediatric instructional objective:** Select appropriate prescription medication(s) and dosing for the treatment of acute and chronic conditions in infant, child, and adolescent patients in an outpatient setting. (MK PLO-3)
 - **Underserved medicine instructional objective:** Discuss medications commonly used in the outpatient 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 for adult and elderly patients. (MK PLO-3)
 - **Pediatric instructional objective:** Discuss medications commonly used in the outpatient 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 for infant, child, and adolescent patients. (MK PLO-3)
 - **Underserved medicine instructional objective:** Actively participate in the management of acute, chronic, and preventive care of adult and elderly patients. (MK- PLO3)
 - **Pediatric instructional objective:** Actively participate in the management of acute and chronic care of adult and elderly patients. (MK- PLO3)
2. **Underserved Medicine Rotation Learning Outcome #2:** Students will elicit a detailed and accurate patient history, perform an appropriate physical, appropriately use and interpret diagnostic testing and laboratory studies, and formulate differential diagnoses and assessment plans for symptoms/conditions (listed in Underserved Medicine Clinical Rotation Topics above) commonly encountered in infant, children, adolescent, adult, and elderly patients seeking acute and/or chronic care.
- **Pediatric instructional objective:** Demonstrate an age-appropriate history and physical exam for acute and chronic conditions on an infant less than 1 year of age. (PC-PLO1, PC-PLO2)

- **Pediatric instructional objective:** Demonstrate an age-appropriate history and physical exam for acute and chronic conditions on children 1-10 years of age. (PC-PLO1, PC-PLO2)
- **Pediatric instructional objective:** Demonstrate an age-appropriate history and physical exam for acute and chronic conditions on an adolescent 11-17 years of age. (PC-PLO1, PC-PLO2)
- **Pediatric instructional objective:** Demonstrate an age-appropriate preventive well-child history and physical on an infant, child, and adolescent. (PC-PLO1, PC-PLO2)
- **Underserved 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)
- **Underserved 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)
- **Underserved medicine instructional objective:** Demonstrate an age-appropriate preventive history and physical exam for an elderly patient >65 years of age. (PC-PLO1, PC-PLO2)
- **Underserved 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)
- **Underserved medicine instructional objective:** Select appropriate preventative exams and screening tests for adults and the elderly. (PC-PLO4)
- **Pediatrics instructional objective:** Select appropriate preventative exams and screening tests for infants, children, adolescents. (PC-PLO4)
- **Underserved medicine instructional objective:** Choose and interpret appropriate diagnostic and laboratory studies related to preventive, acute, and chronic care for conditions listed in the Underserved Medicine Clinical Rotation Topics (above) in adult and elderly patients. (PC-PLO3)
- **Pediatric instructional objective:** Choose and interpret appropriate diagnostic and laboratory studies related to preventive, acute, and chronic care for conditions listed in the Underserved Medicine Clinical Rotation Topics (above) in infant, child, and adolescent patients. (PC-PLO3)
- **Underserved 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)
- **Pediatric instructional objective:** Formulate an appropriate differential diagnosis for acute and chronic conditions based on history, physical examination, and diagnostic data for infant, child, and adolescent patients. (PC-PLO4)
- **Underserved 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)
- **Pediatric instructional objective:** Determine an appropriate medical decision regarding work-up, treatment, and disposition of infant, child, and adolescent

patients, given all pertinent medical data, including history, physical exam, laboratory, and diagnostic data. (PC-PLO4)

- **Underserved medicine instructional objective:** Construct an appropriate assessment plan for acute and chronic conditions listed in the Underserved Medicine Clinical Rotation Topics (above) based on history, physical exam, and diagnostic data for adult and elderly patients. (PC-PLO4)
 - **Pediatric instructional objective:** Construct an appropriate assessment plan for acute and chronic conditions listed in the Underserved Medicine Clinical Rotation Topics (above) based on history, physical exam, and diagnostic data for infant, child, and adolescent patients. (PC-PLO4)
 - **Underserved medicine instructional objective:** Actively participate in the management of adult and elderly patients with acute and chronic conditions listed in the Underserved Medicine Clinical Rotation Topics (above). (PC- PLO4)
 - **Pediatric instructional objective:** Actively participate in the management of infant, child, and adolescent patients with acute and chronic conditions listed in the Underserved Medicine Clinical Rotation Topics (above). (PC- PLO4)
 - **Underserved 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 Underserved Medicine Clinical Rotation Topics (above). (PC PLO-4)
 - **Pediatric instructional objective:** Appraise a patient's health with preventive screening exams that follow appropriate medical guidelines for infant, child and adolescent patients related to conditions listed in the Underserved Medicine Clinical Rotation Topics (above). (PC PLO-4)
 - **Underserved medicine instructional objective:** Recommend diagnostic testing and treatment plan for conditions listed in the Underserved Medicine Clinical Rotation Topics (above) for adult and elderly patients. (PC PLO-4)
 - **Pediatric instructional objective:** Recommend diagnostic testing and treatment plan for pediatric conditions listed in the Underserved Medicine Clinical Rotation Topics (above) for infant, child, and adolescent patients. (PC PLO-4)
 - **Underserved medicine instructional objective:** Analyze results of Michigan Automated Provider (MAPS). (PC-PLO3)
3. **Underserved Medicine Rotation Learning Outcome #3:** Students will demonstrate technical skills common to underserved medicine.
- **Underserved 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 Underserved Medicine Clinical Rotation Topics (above) for adult and elderly patients. (PC-PLO3)
 - **Pediatric 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 Underserved Medicine Clinical Rotation Topics (above) for infant, child, and adolescent patients. (PC-PLO3)
4. **Underserved Medicine Rotation Learning Outcome #4:** Students will obtain and document information clearly and appropriately for the following types of outpatient

encounters: (a) acute problem-focused encounters, and/or (b) chronic disease follow-up encounters.

- **Underserved medicine instructional objective:** Prepare an acute problem-focused medical note for infant, child, adolescent, adult, and/or elderly patients. (ICS-PLO2)
- **Underserved medicine instructional objective:** Prepare a chronic problem-focused medical note for infant, child, adolescent, adult, and/or elderly patients. (ICS-PLO2)
- **Underserved medicine instructional objective:** Document information clearly and accurately at an appropriate level for patients, colleagues, and teachers. (ICS-PLO2)

5. **Underserved Medicine Rotation Learning Outcome #5:** Students will listen empathetically and effectively, communicate clearly, and utilize shared decision-making for patients seeking outpatient care in underserved medicine.

- **Underserved medicine instructional objective:** Utilize open-ended questions to encourage adult and elderly patients to express their thoughts and feelings more fully. (ICS-PLO1)
- **Pediatric instructional objective:** Utilize open-ended questions to encourage child and adolescent patients to express their thoughts and feelings more fully. (ICS-PLO1)
- **Underserved 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)
- **Pediatric instructional objective:** Demonstrate patience and attentiveness by allowing child and adolescent patients to speak without interruption, giving them the opportunity to fully articulate their concerns. (ICS-PLO1)
- **Underserved medicine instructional objective:** Exhibit nonverbal cues of empathy such as facial expressions and body language that convey understanding and support. (ICS-PLO1)
- **Underserved 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)
- **Pediatrics instructional objective:** Communicate complex medical information clearly and comprehensively, using plain language and avoiding medical jargon or technical terms that may confuse or intimidate the child and adolescent patients. (ICS-PLO3)
- **Underserved medicine instructional objective:** Deliver clear and concise oral case presentations for adult and elderly patients, effectively conveying relevant information to your preceptor. (ICS-PLO3)
- **Pediatric instructional objective:** Deliver a clear and concise oral case presentation for infant, child, and adolescent patients, effectively conveying relevant information to your preceptor. (ICS-PLO3)
- **Underserved 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)

- **Pediatric instructional objective:** Select written patient (family) education handouts to address a health promotion issue using the most up-to-date, evidence-based medical data for infant, child, and adolescent patients. (ICS PLO-3)
 - **Underserved 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)
 - **Pediatric instructional objective:** Explain possible risks and benefits of diagnostic studies and treatment plans to infant, child, and adolescent patients and their caregivers as approved by the supervising provider. (ICS-PLO3)
 - **Underserved medicine instructional objective:** Describe health promotion and disease prevention for acute and chronic clinical conditions listed in the Underserved Clinical Rotation Topics (above) at the appropriate level for adult and elderly patients. (ICS-PLO3)
 - **Pediatric instructional objective:** Describe health promotion and disease prevention for acute and chronic clinical conditions listed in the Family Medicine Clinical Rotation Topics (above) at the appropriate level for infant, child, and adolescent patients and their caregivers. (ICS-PLO3)
 - **Underserved medicine instructional objective:** Identify communication barriers with different patient populations. (ICS PLO-3)
 - **Pediatric instructional objective:** Identify communication barriers with different patient populations. (ICS PLO-3)
 - **Underserved medicine instructional objective:** Adapt communication style and information context to the individual patient interaction. (ICS PLO-3)
 - **Pediatric instructional objective:** Adapt communication style and information context to the individual patient interaction. (ICS PLO-3)
 - **Underserved 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)
 - **Underserved medicine instructional objective:** Explore patients' understanding of their health conditions and treatment options, clarify misconceptions, and address concerns or fears. (ICS PLO-5)
 - **Underserved 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. **Underserved Medicine Rotation Learning Outcome #6:** Students will facilitate difficult health care conversations in an outpatient setting.
- **Underserved 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)
 - **Underserved 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)

- **Underserved medicine instructional objective:** Acknowledge and validate the patient's emotions and concerns, expressing empathy and understanding while maintaining professionalism and objectivity. (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. (ICS PLO-4)
- **Underserved 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. **Underserved Medicine Rotation Learning Outcome #7:** Students will demonstrate compassion, integrity, respect, patient responsiveness, and accountability while providing care to patients in an outpatient underserved medicine setting.

- **Underserved medicine instructional objective:** Demonstrate empathy and understanding towards patients' emotions, concerns, and experiences. (P-PLO1)
- **Underserved medicine instructional objective:** Respect patient confidentiality and privacy, ensuring that sensitive information is handled appropriately. (P-PLO1)
- **Underserved medicine instructional objective:** Use inclusive language and cultural sensitivity when interacting with patients and their families. (P-PLO1)
- **Underserved medicine instructional objective:** Demonstrate sensitivity and responsiveness to patients' culture, gender, age, and disabilities. (P-PLO1)
- **Pediatric instructional objective:** Demonstrate sensitivity and responsiveness to patients' culture, gender, age, and disabilities. (P-PLO1)
- **Underserved medicine instructional objective:** Practice professionally in a working situation with other healthcare team members, including appropriate dress, punctual attendance, and professional attitude. (P-PLO1)
- **Underserved medicine instructional objective:** Show sensitivity to the emotional, social, developmental, and ethnic background of patients and their families. (P-PLO1)
- **Pediatric instructional objective:** Show sensitivity to the emotional, social, developmental, and ethnic background of patients and their families. (P-PLO1)
- **Underserved medicine instructional objective:** Apply a professional attitude in such areas as attendance, dress code, and performance in the outpatient medical setting. (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 and adaptability in responding to unexpected changes in an outpatient care setting. (P-PLO2)
- **Underserved medicine instructional objective:** Evaluate community resources for adult and elderly patients to implement in outpatient care. (P PLO-3)
- **Pediatric instructional objective:** Evaluate community resources for infant, child, and adolescent patients to implement in outpatient care. (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:** Recognize barriers to medical care for individuals with disabilities. (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:** Recognize the barriers that prevent underserved patients from obtaining treatment. (P-PLO2)
- **Underserved medicine instructional objective:** Identify the ethical dilemmas that commonly occur in the medical care of underserved patients. (P PLO3)

8. **Underserved Medicine Rotation Learning Outcome #8:** In an outpatient setting, 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. (PBL PI-PLO1)
- **Underserved medicine instructional objective:** Demonstrate an openness to receive constructive criticism. (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 limitations and locate assistance from supervising preceptors and appropriate reference material to address areas identified for 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:** Recognize personal limitations and where to access help personally and professionally. (PBL PI PLO-2)
- **Underserved medicine instructional objective:** Interpret independent outside readings concerning preventive, acute, and chronic outpatient care for adults and elderly patients. (PBL PI-PLO3)
- **Pediatric instructional objective:** Interpret independent outside readings concerning preventive, acute, and chronic outpatient care for infant, child, and adolescent patients. (PBL PI-PLO3)
- **Underserved medicine instructional objective:** Show ability to understand and apply decision-making tools used in outpatient care. (PBL PI PLO-3)

- **Underserved medicine instructional objective:** Recognize the importance of lifelong learning in the medical field. (PBL PI PLO-3)
 - **Underserved medicine instructional objective:** Assess medical evidence related to outpatient medicine and communicate it to patients and colleagues. (PBL PI PLO-3)
 - **Underserved medicine instructional objective:** Apply information technology to access online medical information and continue personal education. (PBL PI PLO-3)
 - **Underserved medicine instructional objective:** Use medical information technology in decision-making, patient care, and patient education. (PBL PI PLO-3)
9. **Underserved Medicine Rotation Learning Outcome #9:** In an outpatient setting students will (a) promote a safe environment for patients seeking care in an underserved medicine setting, (b) demonstrate knowledge of quality improvement methodologies and metrics, (c) recognize the unique role of PAs and other health professions in an underserved medicine, (d) work effectively with other health professionals to provide collaborative, patient-centered underserved medicine care, (e) work effectively in an outpatient health delivery settings, (f) incorporate considerations of cost awareness and funding into patients seeking care in an underserved medicine setting, and (g) describe basic health payment systems and practice models for underserved medicine.
- **Underserved medicine instructional objective:** Encourage a culture of safety within the healthcare team, promoting open communication, error reporting, and continuous improvement initiatives. (SBP PLO-1)
 - **Underserved medicine instructional objective:** Operate under the rules of HIPAA to preserve adult and elderly patient confidentiality. (SBP PLO-1)
 - **Pediatric instructional objective:** Operate under the rules of HIPAA to preserve infant, child, and adolescent patient confidentiality. (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 health care setting. (SBP PLO-2)
 - **Underserved medicine instructional objective:** Discuss appropriate use of controlled substances and statewide tracking systems. (SBP PLO-2)
 - **Underserved medicine instructional objective:** Demonstrate understanding of the scope of practice and responsibilities of PAs and other healthcare professionals working in outpatient settings. (SBP-PLO3)
 - **Underserved medicine instructional objective:** Communicate openly and transparently with PAs and other healthcare professionals, fostering a culture of mutual respect and collaboration within an outpatient healthcare team. (SBP-PLO3)
 - **Underserved medicine instructional objective:** Identify steps of the outpatient referral process for adult an elderly patients and roles of other professions in the participation of your patient's care. (SBP-PLO3)
 - **Pediatric instructional objective:** Identify steps of the outpatient referral process for infant, child, and adolescent patients and roles of other professions in the participation of your patient's care. (SBP-PLO3)

- **Underserved medicine instructional objective:** Employ a professional relationship with the preceptors and other health care team members. (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. (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. (SBP-PLO4, SBP-PLO5)
- **Underserved 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)
- **Pediatric instructional objective:** Evaluate cost-effective healthcare resources for outpatient care that do not compromise the quality care for infants, child, and adolescent patients. (SBP PLO-6)
- **Underserved medicine instructional objective:** Assess the impact poverty or location may have on your treatment plan. (SBP-PLO6)
- **Underserved medicine instructional objective:** Discuss treatment options for outpatient care with patients in an unbiased manner, considering both clinical effectiveness and cost implications, and involving patients in shared decision-making. (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. (SBP PLO-6)
- **Underserved medicine instructional objective:** Describe common practice models in outpatient medicine, such as solo practice, group practice, community health centers, and accountable care organizations. (SBP PLO-6)
- **Underserved 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)
- **Underserved medicine instructional objective:** Choose the appropriate code for billing the responsible payment service under the direct supervision of the preceptor. (SBP-PLO7)
- **Pediatric instructional objective:** Choose the appropriate code for billing the responsible payment service under the direct supervision of the preceptor. (SBP-PLO7)
- **Underserved medicine instructional objective:** Identify the funding sources and payment systems that provide coverage for patient care. (SBP-PLO7)
- **Pediatric instructional objective:** Identify the funding sources and payment systems that provide coverage for patient care. (SBP-PLO7)
- **Underserved Medicine instructional objective:** Identify eligible patient populations for Medicare coverage. (SBP-PLO7)
- **Pediatric instructional objective:** Identify eligible patient populations for Medicaid coverage. (SBP-PLO7)

Underserved Medicine Rotation Curriculum Integration Table

Underserved 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 Underserved Medicine Clinical Rotation Topics above) encountered in underserved medicine for patients seeking outpatient medical care for the following age populations: infants, children, adolescents, 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 (≥70%)		
Students will elicit a detailed and accurate patient history, perform an appropriate physical, appropriately use and interpret diagnostic testing and laboratory studies, and formulate differential diagnoses and assessment plans for symptoms/conditions (listed in Underserved Medicine Clinical Rotation Topics above) commonly encountered in infant, children, adolescent, adult, and elderly patients seeking acute and/or	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

chronic care.			
Students will demonstrate technical skills common to underserved 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 outpatient encounters: (a) acute problem-focused encounters, and/or (b) 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 outpatient 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 an outpatient setting.	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 outpatient underserved medicine setting.	Preceptor Evaluation (80% average score on Professionalism competency section)	Professionalism	P #1 P #2 P #3
In an outpatient setting, 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-	Preceptor Evaluation (80% average score on Practice-Based Learning and Proficiency	Lifelong Learning	PBLPI #1 PBLP #2 PBLP #3

based studies related to underserved medicine.	Improvement competency section)		
In an outpatient setting students will, (a) promote a safe environment for patients seeking care in an underserved medicine setting, (b) demonstrate knowledge of quality improvement methodologies and metrics, (c) recognize the unique role of PAs and other health professions in an underserved medicine, (d) work effectively with other health professionals to provide collaborative, patient-centered underserved medicine care, (e) work effectively in an outpatient health delivery settings, (f) incorporate considerations of cost awareness and funding into patients seeking care in an underserved medicine setting, and (g) describe basic health payment systems and practice models for underserved 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

Underserved Medicine Preceptor Evaluation of the Student

1. What is your group and/or site name (i.e., Trinity Health Medical Group, Clinica Santa Maria)
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 outpatient medical care for common conditions encountered in underserved medicine in the following age populations (MK#2, 3):					
Infants					
Children					
Adolescents					
Adults					
Elderly					
Student demonstrates medical knowledge of patient presentations for common conditions encountered in an outpatient underserved medicine setting for the following age populations (MK#2,3):					
Infants					
Children					
Adolescents					

Adults					
Elderly					
Student demonstrates medical knowledge of differential diagnosis and diagnostic work-up for patients seeking outpatient medical care for common conditions encountered in underserved medicine in the following age populations (MK#2,3)					
Infants					
Children					
Adolescents					
Adults					
Elderly					
Student demonstrates medical knowledge of patient management strategies for patients seeking outpatient medical care for common conditions encountered in underserved medicine in the following age populations (MK#2,3):					
Infants					
Children					
Adolescents					
Adults					
Elderly					

Student demonstrates medical knowledge of health promotion and disease prevention for patients seeking outpatient medical care for common conditions encountered in underserved medicine in the following age populations (MK#2, 3)					
Infants					
Children					
Adolescents					
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 patient history and perform an appropriate physical examination for the following patient populations encountered in underserved medicine (PC#1):						
Infant						
Children						
Adolescent						

Adult						
Elderly						
Elicit a detailed and accurate patient history and perform an appropriate physical examination for patients encountered in underserved 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 underserved 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 in an outpatient setting.

	60% (Failing)	70% (D+/ C-)	80% (C+/ B)	90% (B+/ A-)	100% (A)	N/A
Listen empathetically and effectively to patients seeking outpatient care in underserved medicine (ICS#1)						
Obtain and document information clearly and accurately at an appropriate level the following types of outpatient encounters (ICS#2):						
Well-infant and preventive care encounters						
Well-child and preventive care encounters						

Well-adolescent and preventive care encounters						
Adult wellness and preventive encounters						
Elderly wellness and preventive encounters						
Acute problem-focused encounters						
Well-woman and preventive care encounters						
Chronic disease follow-up encounters						
Communicate information clearly to patients, families, colleagues, and teams as appropriate across a broad range of socioeconomic and cultural backgrounds to provide outpatient care in underserved medicine (ICS#3)						
Facilitate difficult health care conversations in an outpatient setting (ICS#4):						
Utilize shared-decision making to promote patient-centered communication by eliciting and incorporating patient preferences in an outpatient setting (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)
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Demonstrate compassion, integrity, and respect for patients seeking outpatient care in an underserved medicine setting (P#1)					
Demonstrate responsiveness to patient needs that supersede self-interest while providing care in an underserved medicine setting (P#2)					
Show accountability to patients, society, and the profession while providing care in an underserved 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 outpatient 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 underserved 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 outpatient care within the context of the larger healthcare system.

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