Emergency Medicine Rotation Information (including Rotation Learning Outcomes, Instructional Objectives, the Preceptor Evaluation of Student Form, and the rotationspecific curriculum integration table)

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Emergency 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, 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

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

Psychiatry/Behavioral Science

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

Pulmonary System

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

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

Renal System

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

Reproductive System

Breast disorders: Abscess, Fibroadenoma, Fibrocystic changes, Galactorrhea, Gynecomastia, Mastitis Cervical disorders: Cervicitis, Dysplasia Contraceptive methods Human sexuality and gender identity Infertility Menopause Menstrual disorders Neoplasms of the breast and reproductive tract: Benign, Malignant Ovarian disorders: Cysts, Polycystic ovarian syndrome, Torsion Pelvic inflammatory disease Pregnancy: Abruptio placentae, Breech presentation, Cervical insufficiency, Cesarean and operative delivery, Classifications of abortion, Ectopic pregnancy, Gestational diabetes, Gestational trophoblastic disease, Hypertensive disorders of pregnancy, Labor/delivery, Multiple gestation, Placenta previa, Postnatal/postpartum care, Postpartum hemorrhage, Postpartum pituitary disorders, Postpartum psychiatry disorders, Preconception/prenatal care, Prelabor rupture of membranes, Rh incompatibility, Shoulder dystocia, Umbilical cord prolapse Trauma in pregnancy: Physical, Psychological, Sexual

Uterine disorders: Endometriosis, Leiomyoma, Prolapse

Vaginal/vulvar disorders: Bartholin gland cysts, Cystocele, Prolapse, Rectocele, Vaginitis

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

Emergency Medicine Rotation Learning Outcomes

Upon completion of the emergency 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 Emergency Medicine Clinical Rotation Topics above) encountered in an emergency department for patients seeking emergent 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 examination, appropriately use and interpret diagnostic testing and laboratory studies, and formulate differential diagnoses and assessment plans for symptoms/conditions (listed in Emergency Medicine Clinical Rotation Topics above) commonly encountered in infant, children, adolescent, adult, and elderly patients seeking acute and emergent care in an emergency department setting.
- 3. Students will demonstrate technical skills common to the emergency department, including (a) EKG interpretation, (b) Chest x-ray interpretation, (c) administering local anesthetic injection, (d) performing incision and drainage, (e) performing sterile technique, (f) performing simple interrupted suture, (g) performing staple insertion, (h) observing an inpatient admission.
- 4. Students will obtain and document information clearly and appropriately for the following types of patient encounters: (a) acute problem-focused encounters, (b) emergent problem-focused encounters in the emergency department setting.
- 5. Students will listen empathetically and effectively, communicate clearly, and utilize shared decision-making for patients seeking care in the emergency department setting.
- 6. Students will facilitate difficult health care conversations in the emergency department.
- 7. Students will demonstrate compassion, integrity, respect, patient responsiveness, and accountability while providing care to patients in an emergency department setting.
- 8. In an emergency department 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 emergency medicine.
- 9. In an emergency department setting, students will (a) promote a safe environment for patients seeking care in an emergency department setting, (b) demonstrate knowledge of quality improvement methodologies and metrics, (c) recognize the unique role of PAs and other health professions in an emergency department, (d) work effectively with other health professionals to provide collaborative, patient centered emergency medicine care, (e) work effectively in an emergency department health delivery settings, (f) incorporate considerations of cost awareness and funding into patients seeking care in an emergency department setting, and (g) describe basic health payment systems and practice models for an emergency department.

Emergency Medicine Instructional Objectives

- 1. **Emergency 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 Emergency Medicine Clinical Rotation Topics above) encountered in an emergency department for patients seeking medical care for the following age populations: infants, children, adolescents, adults, and elderly.
 - Emergency medicine instructional objective: Explain the pathophysiology of the emergent and acute clinical presentations of conditions listed in the Emergency Medicine Clinical Rotation Topics (above) in adult and elderly patients (MK-PLO3)
 - **Pediatric instructional objective:** Explain the pathophysiology of the emergent and acute clinical presentations of conditions listed in the Emergency Medicine Clinical Rotation Topics (above) in infant, child, and adolescent patients (MK-PLO3)
 - Emergency medicine instructional objective: Discuss the etiology of the emergent and acute clinical conditions listed in the Emergency Medicine Clinical Rotation Topics (above) in adult and elderly patients (MK-PLO3)
 - **Pediatric instructional objective:** Discuss the etiology of the emergent and acute clinical conditions listed in the Emergency Medicine Clinical Rotation Topics (above) in infant, child, and adolescent patients. (MK-PLO3)
 - **Emergency medicine instructional objective:** Describe the epidemiology of the emergent and acute clinical conditions listed in the Emergency Medicine Clinical Rotation Topics (above) in adult and elderly patients. (MK-PLO2)
 - **Pediatric instructional objective:** Describe the epidemiology of the emergent and acute clinical conditions listed in the Emergency Medicine Clinical Rotation Topics (above) in infant, child, and adolescent patients. (MK-PLO2)
 - **Emergency medicine instructional objective:** Identify the emergent and acute patient presentation of conditions listed in the Emergency Medicine Clinical Rotation Topics (above) in adult and elderly patients. (MK-PLO3)
 - **Pediatric instructional objective:** Identify the emergent and acute patient presentation of conditions listed in the Emergency Medicine Clinical Rotation Topics (above) in infant, child, and adolescent patients. (MK-PLO3)
 - Emergency medicine instructional objective: Differentiate how emergent and acute disease processes of conditions listed in the Emergency Medicine Clinical Rotation Topics (above) may present in the infant, child, adolescent, adult, and elderly populations. (MK-PLO3)
 - Emergency medicine instructional objective: Formulate a differential diagnosis for the emergent and acute patient presentation of conditions listed in the Emergency Medicine Clinical Rotation Topics (above) in adult and elderly patients. (MK-PLO3)
 - **Pediatric instructional objective:** Formulate a differential diagnosis for the emergent and acute patient presentation of conditions listed in the Emergency Medicine Clinical Rotation Topics (above) in infant, child, and adolescent patients. (MK-PLO3)

- Emergency medicine instructional objective: Describe the presentation, diagnosis, and management (medical and surgical) of conditions listed in the Emergency 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 Emergency 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)
- Emergency medicine instructional objective: Describe the presentation, diagnosis, and management of conditions listed in the Emergency 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 Emergency Medicine Clinical Rotation Topics (above) that require inpatient management for infant, child, and adolescent patients. (MK-PLO2)
- **Emergency medicine instructional objective:** Explain the appropriate diagnostic work up of the emergent and acute clinical conditions listed in the Emergency Medicine Clinical Rotation Topics (above) in adult and elderly patients in an emergency department setting. (MK-PLO3)
- **Pediatric instructional objective:** Explain the appropriate diagnostic work up of the emergent and acute clinical conditions listed in the Emergency Medicine Clinical Rotation Topics (above) in infant, child, and adolescent patients in an emergency department setting. (MK-PLO3)
- **Emergency medicine instructional objective:** Compare and contrast the risks and benefits of diagnostic studies and treatment plans for emergent and acute conditions listed in the Emergency 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 emergent and acute conditions listed in the Emergency Medicine Clinical Rotation Topics (above) in infant, child, and adolescent populations. (MK-PLO3)
- Emergency medicine instructional objective: Summarize the indications and contraindications of procedures commonly used in the Emergency department for the treatment of conditions listed in the Emergency Medicine Clinical Rotation Topics (above). (MK PLO-2)
- Emergency medicine instructional objective: Compare and contrast the risks and benefits of procedures indicated for emergent and acute conditions listed in the Emergency 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 emergent and acute conditions listed in the Emergency Medicine Clinical Rotation Topics (above) for infant, child, and adolescent patients. (MK PLO-3)

- **Emergency medicine instructional objective:** Outline the appropriate patient management of the emergent and acute clinical conditions listed in the Emergency Medicine Clinical Rotation Topics (above) for adult and elderly patients in an emergency department setting. (MK-PLO3)
- **Pediatric instructional objective:** Outline the appropriate patient management of the emergent and acute clinical conditions listed in the Emergency Medicine Clinical Rotation Topics (above) for infant, child, and adolescent patients in an emergency department setting. (MK-PLO3)
- **Emergency 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)
- **Emergency medicine instructional objective:** Describe health promotion in relation to the management of the emergent and acute clinical conditions listed in the Emergency 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 emergent and acute clinical conditions listed in the Emergency Medicine Clinical Rotation Topics (above) in infant, child, and adolescent patients. (MK-PLO3)
- **Emergency medicine instructional objective:** Describe disease prevention for the emergent and acute clinical conditions listed in the Emergency Medicine Clinical Rotation Topics (above) in adult and elderly patients. (MK-PLO3)
- **Pediatric instructional objective:** Describe disease prevention for the emergent and acute clinical conditions listed in the Emergency Medicine Clinical Rotation Topics (above) in infant, child, and adolescent patients. (MK-PLO3)
- **Emergency medicine instructional objective:** Recognize when it is appropriate to obtain informed consent for adult and elderly patients in an emergency department setting.
- **Pediatric instructional objective:** Recognize when it is appropriate to obtain informed consent for infant, child, and adolescent patients in an emergency department setting. (MK-PLO3)
- **Emergency 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)
- **Emergency 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)

- **Emergency 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)
- **Emergency 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)
- Emergency medicine instructional objective: Discuss medications commonly used in the emergency department for the treatment of conditions listed in the Emergency 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 emergency department for the treatment of conditions listed in the Emergency 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)
- Emergency medicine instructional objective: Actively participate in the management of emergent and acute conditions for adult and elderly patients in the emergency department. (MK- PLO3)
- **Pediatric instructional objective:** Actively participate in the management of emergent and acute conditions for infant, child, and adolescent patients in the emergency department. (MK- PLO3)
- **Emergency medicine instructional objective:** Select appropriate prescription medication(s) and dosing for the treatment of emergent and acute conditions in adult and elderly patients in an emergency department. (MK PLO-3)
- **Pediatric instructional objective:** Select appropriate prescription medication(s) and dosing for the treatment of emergent and acute conditions in infant, child, and adolescent patients in an emergency department. (MK PLO-3)
- 2. Emergency Medicine Rotation Learning Outcome #2: Students will elicit a detailed and accurate patient history, perform an appropriate physical examination, appropriately use and interpret diagnostic testing and laboratory studies, and formulate differential diagnoses and assessment plans for symptoms/conditions (listed in Emergency Medicine Clinical Rotation Topics above) commonly encountered in infant, children, adolescent, adult, and elderly patients seeking acute and emergent care in an emergency department setting.
 - **Pediatric instructional objective:** Demonstrate an age-appropriate history and physical exam for emergent and acute 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 a emergent and acute conditions on children 1-10 years of age. (PC-PLO1, PC-PLO2)
- **Pediatric instructional objective:** Demonstrate an age-appropriate history and physical exam for emergent and acute conditions on an adolescent 11-17 years of age. (PC-PLO1, PC-PLO2)
- Emergency medicine instructional objective:
- Demonstrate an age-appropriate problem-focused history and physical exam in an emergency department setting for emergent and acute conditions in an adult patient 18-64 years of age. (PC-PLO2)
- Emergency medicine instructional objective: Demonstrate an age-appropriate problem-focused history and physical exam in an emergency department setting for emergent and acute conditions in an adult patient >65 years of age or older. (PC-PLO2)
- **Emergency medicine instructional objective:** Choose and interpret appropriate diagnostic and laboratory studies related to emergent and acute care for conditions listed in the Emergency Medicine Clinical Rotation Topics (above) in adult and elderly patients in an emergency department. (PC-PLO3)
- **Pediatric instructional objective:** Choose and interpret appropriate diagnostic and laboratory studies related to emergent and acute care for conditions listed in the Emergency Medicine Clinical Rotation Topics (above) in infant, child, and adolescent patients in an emergency department. (PC-PLO3)
- **Emergency medicine instructional objective:** Formulate an appropriate differential diagnosis for emergent and acute conditions based on history, physical examination, and diagnostic data for adult and elderly patients in an emergency department setting. (PC-PLO4)
- **Pediatric instructional objective:** Formulate an appropriate differential diagnosis for emergent and acute conditions based on history, physical examination, and diagnostic data for infant, child, and adolescent patients in an emergency department setting. (PC-PLO4)
- **Emergency 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 in an emergency department setting. (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 in an emergency department setting. (PC-PLO4)
- Emergency medicine instructional objective: Construct an appropriate assessment plan for emergent and acute conditions listed in the Emergency Medicine Clinical Rotation Topics (above) based on history, physical exam, and diagnostic data for adult and elderly patients in an emergency department setting. (PC-PLO4)
- **Pediatric instructional objective:** Construct an appropriate assessment plan for emergent and acute conditions listed in the Emergency Medicine Clinical Rotation Topics (above) based on history, physical exam, and diagnostic data for

infant, child, and adolescent patients in an emergency department setting. (PC-PLO4)

- Emergency medicine instructional objective: Actively participate in the management of adult and elderly patients in an emergency department with emergent and acute conditions listed in the Emergency Medicine Clinical Rotation Topics (above). (PC- PLO4)
- **Pediatric instructional objective:** Actively participate in the management of infant, child, and adolescent patients in an emergency department with emergent and acute conditions listed in the Emergency Medicine Clinical Rotation Topics (above). (PC- PLO4)
- Emergency medicine instructional objective: Recommend diagnostic testing and treatment plan for conditions listed in the Emergency Medicine Clinical Rotation Topics (above) for adult and elderly patients in an emergency department. (PC PLO-4)
- **Pediatric instructional objective:** Recommend diagnostic testing and treatment plan for pediatric conditions listed in the Emergency Medicine Clinical Rotation Topics (above) for infant, child, and adolescent patients in an emergency department. (PC PLO-4)
- **Emergency medicine instructional objective**: Contrast possible risks and benefits of diagnostic studies and treatment plans. (PC-PLO3)
- Emergency Medicine Rotation Learning Outcome #3: Students will demonstrate technical skills common to the emergency department, including (a) EKG interpretation, (b) Chest x-ray interpretation, (c) administer local anesthetic injection, (d) perform incision and drainage, (e) perform sterile technique, (f) perform simple interrupted suture, (g) perform staple insertion, (h) observer inpatient admission.
 - EKG
 - **Emergency medicine instructional objective**: Interpret EKG findings accurately, including rate, rhythm, intervals, and waveforms. (PC-PLO5)
 - Correlate EKG findings with clinical history and physical examination findings to guide appropriate patient management.
 - **Emergency medicine instructional objective**: Demonstrate ability to interpret chest Xray (PC-PLO5)
 - **Emergency medicine instructional objective**: Identify normal anatomical structures and common abnormalities on chest X-ray images, including lung fields, heart silhouette, diaphragm, and bony structures. (PC-PLO5)
 - **Emergency medicine instructional objective**: Correlate chest X-ray findings with clinical presentation and other diagnostic modalities to formulate a differential diagnosis and guide management decisions. (PC-PLO5)
 - Emergency medicine instructional objective: Select appropriate anesthetic agents and techniques for specific procedures, considering patient factors and anatomical considerations. (PC-PLO5)
 - **Emergency medicine instructional objective**: Perform local anesthetic infiltration accurately and safely, ensuring adequate anesthesia for minor procedures. (PC-PLO5)
 - **Emergency medicine instructional objective**: Recognize indications for incision and drainage (I&D) procedures. (PC-PLO5)

- **Emergency medicine instructional objective**: Prepare and position the patient for the incision and drainage (I&D) procedure, ensuring proper exposure and aseptic technique. (PC-PLO5)
- Emergency medicine instructional objective: Perform incision and drainage (I&D) procedure using appropriate instruments and techniques, including incision, drainage, and wound packing. (PC-PLO5)
- **Emergency medicine instructional objective**: Set up and maintain a sterile field, including proper draping, gloving, and instrument handling. (PC-PLO5)
- **Emergency medicine instructional objective**: Prevent contamination of sterile fields and instruments, maintaining sterility throughout procedures. (PC-PLO5)
- **Emergency medicine instructional objective**: Demonstrate ability to perform simple interrupted sutures (PC-PLO5)
- **Emergency medicine instructional objective**: Select appropriate suture material, needle size, and technique based on wound characteristics and location. (PC-PLO5)
- **Emergency medicine instructional objective**: Demonstrate proficiency in suturing techniques, including needle insertion, tissue approximation, and knot tying. (PC-PLO5)
- **Emergency medicine instructional objective**: Ensure proper wound edge eversion and tension for optimal wound healing and cosmetic outcomes. (PC-PLO5)
- staple insertion
- **Emergency medicine instructional objective**: Prepare the wound and surrounding skin for staple insertion, ensuring cleanliness and adequate exposure. (PC-PLO5)
- **Emergency medicine instructional objective**: Insert staples accurately and evenly across the wound, maintaining appropriate wound edge apposition.
- **Emergency medicine instructional objective**: Observe inpatient admission (PC-PLO5, PC-PLO1, PC-PLO2, PC-PLO4)
- **Emergency medicine instructional objective**: Understand the indications for hospital admission and the process of inpatient admission. (PC-PLO5)
- **Emergency medicine instructional objective**: Observe and assist with the admission process, including obtaining patient history, performing physical examination, and ordering diagnostic tests. (PC-PLO1, PC-PLO2, PC-PLO4, PC-PLO5)
- **Emergency medicine instructional objective**: Communicate effectively with the healthcare team and the patient during the admission process, ensuring clear documentation and patient understanding. (PC-PLO5, ICS-PLO3)
- 4. **Emergency Medicine Rotation Learning Outcome #4**: Students will obtain and document information clearly and appropriately for the following types of patient encounters: (a) acute problem-focused encounters, (b) emergent problem-focused encounters in the emergency department setting.
 - **Emergency medicine instructional objective:** Prepare an acute problem-focused medical note for infant, child, adolescent, adult, and/or elderly patient in an emergency department setting. (ICS-PLO2)

- **Emergency medicine instructional objective:** Prepare an emergent problemfocused medical note for infant, child, adolescent, adult, and/or elderly patient in an emergency department setting. (ICS-PLO2)
- **Emergency medicine instructional objective:** Document information clearly and accurately at an appropriate level for patients, colleagues, and teachers. (ICS-PLO2)
- 5. **Emergency Medicine Rotation Learning Outcome #5**: Students will listen empathetically and effectively, communicate clearly, and utilize shared decision-making for patients seeking care in the emergency department setting.
 - **Emergency 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)
 - **Emergency 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)
 - **Emergency medicine instructional objective**: Exhibit nonverbal cues of empathy such as facial expressions and body language that convey understanding and support. (ICS-PLO1)
 - Emergency 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)
 - **Emergency 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)
 - **Emergency 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)

- **Emergency 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)
- Emergency medicine instructional objective: Describe health promotion and disease prevention for acute and chronic clinical conditions listed in the Emergency 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 Emergency Medicine Clinical Rotation Topics (above) at the appropriate level for infant, child, and adolescent patients and their caregivers. (ICS-PLO3)
- **Emergency 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)
- **Emergency 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)
- Emergency 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)
- **Emergency medicine instructional objective:** Explore patients' understanding of their health conditions and treatment options, clarify misconceptions, and address concerns or fears. (ICS PLO-5)
- **Emergency medicine instructional objective:** Elicit patient preferences, values, and goals regarding treatment outcomes and healthcare decisions through openended questioning and active listening. (ICS PLO-5)
- 6. **Emergency Medicine Rotation Learning Outcome #6**: Students will facilitate difficult health care conversations in the emergency department.
 - **Emergency 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)
 - Emergency 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)
 - **Emergency medicine instructional objective:** Acknowledge and validate the patient's emotions and concerns, expressing empathy and understanding while maintaining professionalism and objectivity. (ICS PLO-4)

- **Emergency medicine instructional objective:** Demonstrate sensitivity and cultural competence in addressing sensitive topics, such as end-of-life care, or difficult treatment decisions. (ICS PLO-4)
- **Emergency 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. **Emergency Medicine Rotation Learning Outcome #7**: Students will demonstrate compassion, integrity, respect, patient responsiveness, and accountability while providing care to patients in an emergency department setting.
 - **Emergency medicine instructional objective:** Demonstrate empathy and understanding towards patients' emotions, concerns, and experiences. (P-PLO1)
 - **Emergency medicine instructional objective:** Respect patient confidentiality and privacy, ensuring that sensitive information is handled appropriately. (P-PLO1)
 - **Emergency medicine instructional objective:** Use inclusive language and cultural sensitivity when interacting with patients and their families. (P-PLO1)
 - **Emergency medicine instructional objective:** Demonstrate sensitivity and responsiveness to patients' culture, gender, age, and disabilities. (P-PLO1)
 - **Emergency medicine instructional objective:** Practice professionally in a working situation with other healthcare team members, including appropriate dress, punctual attendance, and professional attitude. (P-PLO1)
 - **Emergency 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)
 - Emergency medicine instructional objective: Apply a professional attitude in such areas as attendance, dress code, and performance in the emergency department setting. (P-PLO1)
 - **Emergency 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)
 - **Emergency medicine instructional objective:** Demonstrate flexibility and adaptability in responding to unexpected changes in an emergency department setting. (P-PLO2)
 - **Emergency medicine instructional objective:** Evaluate community resources for adult and elderly patients to implement in the emergency department setting. (P PLO-3)
 - **Pediatric instructional objective:** Evaluate community resources for infant, child, and adolescent patients to implement in the emergency department setting. (P PLO-3)
 - **Emergency medicine instructional objective:** Demonstrate motivation and desire to learn. (P PLO-3)

- **Emergency medicine instructional objective:** Demonstrate knowledge of the legal and regulatory requirements of the role of a physician assistant. (P-PLO4)
- 8. Emergency Medicine Rotation Learning Outcome #8: In an emergency department 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 emergency medicine.
 - **Emergency medicine instructional objective:** Proactively seek feedback from their preceptor on clinical performance, communication skills, and professional behavior. (PBL PI-PLO1)
 - **Emergency medicine instructional objective:** Demonstrate an openness to receive constructive criticism. (PBL PI-PLO1)
 - **Emergency medicine instructional objective:** Develop action plans based on feedback including specific goals and timelines for implementation. (PBL PI-PLO1)
 - **Emergency medicine instructional objective:** Recognize limitations and locate assistance from supervising preceptors and appropriate reference material to address areas identified for improvement. (PBL PI-PLO1)
 - **Emergency medicine instructional objective:** Monitor progress towards goals over time, adjusting action plans as necessary based on ongoing reflection and feedback. (PBL PI PLO-2)
 - **Emergency instructional objective:** Develop the ability to learn from practice. (PBL PI PLO-2)
 - **Emergency medicine instructional objective:** Recognize personal limitations and where to access help personally and professionally. (PBL PI PLO-2)
 - **Emergency medicine instructional objective:** Interpret independent outside readings concerning acute and emergent care in an emergency department setting for adults and elderly patients. (PBL PI-PLO3)
 - **Pediatric instructional objective:** Interpret independent outside readings concerning acute and emergent care in an emergency department setting for infant, child, and adolescent patients. (PBL PI-PLO3)
 - **Emergency medicine instructional objective:** Show ability to understand and apply decision-making tools used in the emergency department. (PBL PI PLO-3)
 - **Emergency medicine instructional objective:** Recognize the importance of lifelong learning in the medical field. (PBL PI PLO-3)
 - Emergency medicine instructional objective: Assess medical evidence related to outpatient medicine and communicate it to patients and colleagues. (PBL PI PLO-3)
 - **Emergency medicine instructional objective:** Apply information technology to access online medical information and continue personal education. (PBL PI PLO-3)
 - Emergency medicine instructional objective: Use medical information technology in decision-making, patient care, and patient education. (PBL PI PLO-3)
- 9. Emergency Medicine Rotation Learning Outcome #9: In an emergency department setting, students will (a) promote a safe environment for patients seeking care in an

emergency department setting, (b) demonstrate knowledge of quality improvement methodologies and metrics, (c) recognize the unique role of PAs and other health professions in an emergency department, (d) work effectively with other health professionals to provide collaborative, patient centered emergency medicine car \in (e) work effectively in an emergency department health delivery settings, (f) incorporate considerations of cost awareness and funding into patients seeking care in an emergency department setting, and (g) describe basic health payment systems and practice models for an emergency department.

- **Emergency medicine instructional objective:** Encourage a culture of safety within the healthcare team, promoting open communication, error reporting, and continuous improvement initiatives. (SBP PLO-1)
- Emergency medicine instructional objective: Operate under the rules of HIPAA to preserve adult and elderly patient confidentiality in the emergency department. (SBP PLO-1)
- **Pediatric instructional objective:** Operate under the rules of HIPAA to preserve infant, child, and adolescent patient confidentiality. (SBP PLO-1)
- **Emergency medicine instructional objective:** Practice according to policy and procedures set forth by the health care facility. (SBP PLO-1)
- **Emergency medicine instructional objective**: Identify barriers and challenges to implementing quality improvement initiatives in an emergency department. (SBP PLO-2)
- **Emergency medicine instructional objective:** Discuss appropriate use of controlled substances and statewide tracking systems. (SBP PLO-2)
- **Emergency medicine instructional objective:** Demonstrate understanding of the scope of practice and responsibilities of PAs and other healthcare professionals working in outpatient settings. (SBP-PLO3)
- Emergency 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)
- **Emergency medicine instructional objective:** Identify steps of the referral process from the emergency department 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 referral process from the emergency department for infant, child, and adolescent patients and roles of other professions in the participation of your patient's care. (SBP-PLO3)
- **Emergency medicine instructional objective:** Employ a professional relationship with the preceptors and other health care team members. (SBP-PLO4)
- Emergency medicine instructional objective: Efficiently manage patient flow and patient schedule to optimize access to care and minimize wait times for patients seeking emergency department care. (SBP-PLO5)
- Emergency 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)

- **Emergency medicine instructional objective:** Evaluate cost-effective healthcare for 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 care that do not compromise the quality care for infants, child, and adolescent patients. (SBP PLO-6)
- **Emergency medicine instructional objective:** Assess the impact poverty or location may have on your treatment plan. (SBP-PLO6)
- Emergency medicine instructional objective: Discuss treatment options for emergent and acute care with patients in an unbiased manner, considering both clinical effectiveness and cost implications, and involving patients in shared decision-making. (SBP PLO-6)
- **Emergency 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)
- **Emergency medicine instructional objective:** Describe common practice models for emergency departments. (SBP PLO-6)
- Emergency 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)
- **Emergency 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)
- **Emergency 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)
- **Emergency Medicine instructional objective:** Identify eligible patient populations for Medicare coverage. (SBP-PLO7)
- **Pediatric instructional objective:** Identify eligible patient populations for Medicaid coverage. (SBP-PLO7)

Emergency 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 Emergency Medicine Clinical Rotation Topics above) encountered in an emergency department for patients seeking medical care for the following age populations: infants, children, adolescents, adults, and elderly.	Preceptor Evaluation (80% average score on Medical Knowledge competency section) End of rotation examination (≥70%)	Medical Knowledge and Competence in Patient Care	MK #2 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 and assessment plans for symptoms/conditions (listed in Emergency Medicine Clinical Rotation Topics above) commonly encountered in infant, children, adolescent, adult, and elderly patients seeking acute and emergent care in an emergency department setting.	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

Emergency Medicine Rotation Curriculum Integration Table

Students will demonstrate technical skills common to emergency medicine, including (a) EKG interpretation, (b) Chest x- ray interpretation, (c) administer local anesthetic injection, (d) perform incision and drainage, (e) perform sterile technique, (f) perform simple interrupted suture, (g) perform staple insertion, (h) observer inpatient admission.	Preceptor Evaluation (80% average score on Patient Care Competency section) <u>Clinical Skills</u> <u>Checklist</u> (Pass/Fail)	Medical Knowledge and Competence in Patient Care	PC #5
Students will obtain and document information clearly and appropriately for the following types of patient encounters: (a) acute problem-focused encounters, (b) Emergent problem-focused encounters in the emergency department setting.	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	Preceptor Evaluation (80% average score on Interpersonal and	Medical Knowledge and Patient Care	ICS #1
seeking care in the emergency department setting.	Communication Skills competency section)	Collaborative Practice	ICS #3 ICS #5
Students will facilitate difficult health care conversations in the emergency department.	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 emergency department setting.	Preceptor Evaluation (80% average score on Professionalism competency section)	Professionalism	P #1 P #2 P #3
In an emergency department setting, students will (a) seek, implement, and accept feedback,	Preceptor Evaluation (80% average score on	Lifelong Learning	PBLPI #1 PBLP #2 PBLP #3

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

Emergency Medicine Preceptor Evaluation of the Student

- 1. What is your group and/or site name (i.e., Corewell Health Blodgett Emergency Department- ECS)
- 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)
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Student demonstrates medical knowledge in pathophysiology, etiology, and epidemiology for patients seeking medical care for common conditions encountered in an emergency department 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 emergency department 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 medical care for common conditions encountered in an emergency department in the following age populations (MK#2,3)									
Infants									
Children									
Adolescents									
Adults									
Elderly									
Student demonstrates seeking medical care the following age po	s medical knowle for common con pulations (MK#2	edge of patien nditions encou 2,3):	at manageme untered in en	nt strategies f nergency med	or patients licine in				
Infants									
Children									
Adolescents									
Adults									
Elderly									

Student demonstrates medical knowledge of health promotion and disease prevention for patients seeking medical care for common conditions encountered in an emergency department 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 an emergency department (PC#1):							
Infants							
Children							

Adolescents			
Adults			
Elderly			

Elicit a detailed and accurate patient history and perform an appropriate physical examination for patients encountered in an emergency department seeking (PC#1):

Acute care			
Emergent care			

Student demonstrates knowledge of the appropriate use and interpretation of diagnostic testing and laboratory studies commonly used in an emergency department for patients seeking (PC#3):

Acute care			
Emergent care			

Student organizes information from the interview, diagnostic testing, and physical examination to formulate differential diagnoses for patients in an emergency department seeking (PC#4):

Acute care			
Emergent care			

Student organizes information from the interview, diagnostic testing, and physical examination to formulate assessment plans for symptoms/conditions commonly encountered in an emergency department for patients seeking (PC#4):

Acute care						
Emergent care						
Demonstrate basic technical s (PC#5):	kills commor	n to an em	ergency c	lepartmen	t includin	g
EKG interpretation						
Chest x-ray interpretation						
Administer local anesthetic injection						
Perform incision and drainage						
Perform sterile technique						
Perform simple interrupted suture						
Perform staple insertion						
Observe an inpatient admission						
Additional Comments:	·					

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

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

		C-)	B)	A-)	
Listen empathetically and effectively to patients seeking care in the emergency department setting (ICS#1)					
Obtain and document information clearly an following types of patient encounters in the	d accurately emergency	y at an a departm	ppropria ent setti	te level ng (ICS	the #2):
Acute problem-focused encounters					
Emergent problem-focused encounters					
Communicate information clearly to patients, families, colleagues, and teams as appropriate across a broad range of socioeconomic and cultural backgrounds to provide care in an emergency department (ICS#3)					
Facilitate difficult health care conversations in the emergency department (ICS#4):					
Utilize shared-decision making to promote patient-centered communication by eliciting and incorporating patient preferences (ICS#5)					
Additional Comments:					

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

	60% (Failing)	70% (D+/ C-)	80% (C+/ B)	90% (B+/ A-)	100% (A)
Demonstrate compassion, integrity, and					
respect for patients seeking care in an					
emergency department(P#1)					

Demonstrate responsiveness to patient needs that supersede self-interest while			
providing care in an emergency department (P#2)			
Show accountability to patients, society, and the profession while providing care in an emergency department (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 emergency department patient care, and accurately assess and improve clinical performance based on constant self-evaluation and lifelong learning.

	60% (Failing)	70% (D+/ C-)	80% (C+/ B)	90% (B+/ A-)	100% (A)
Seek, implement, and accept feedback (PBLPI#1)					
Reflect on performance to identify strengths and deficiencies in one's knowledge and expertise and develop a plan for self-improvement (PBLPI#2)					
Locate, appraise, and integrate evidence-based studies related to emergency department care (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 emergency department patient care within the context of the larger healthcare system.

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