PRIMARY CARE I AND II ROTATION LEARNING OBJECTIVES
(Also see Psychiatric and Geriatric objectives)

Primary Care I and II – Students will be placed in a primary care outpatient and/or inpatient setting, with a family practitioner or internist, to obtain exposure to primary care medicine. This rotation’s examination will focus on Family Practice medicine. The following pages outline the learning objectives for this clinical experience. They are designed to guide students in their clinical activities and supplemental reading. It is not the Program’s intention that students will be exposed to this complete list of objectives during the clinical experience. This section is designed to assist students in their preparation for the Primary Care I and II end-of-rotation exams.

LEARNING OBJECTIVES FOR MEDICAL KNOWLEDGE

Upon completion of this clinical experience, the student will be expected to competently recognize and apply knowledge to compare, differentiate and evaluate the:

- etiology, epidemiology, risk factors and pathophysiology (if appropriate)
- clinical manifestations
- differential diagnosis
- assessment (including recommendation and interpretation of laboratory, diagnostic and radiological studies/findings)
- management (including pharmacological/ non-pharmacological, patient education, procedural and necessary referrals)
- prognosis, complications and prevention

of the following diseases/disorders/symptoms:

General

- Fatigue
- Weakness
- Weight loss
- Falls
- Altered levels of consciousness
- Health promotion/disease prevention (IZ and health screening schedule)

Infectious Disease

- Viral disease - Epstein-Barr infections, herpes simplex, HIV infection, influenza, human papilloma virus, roseola, rubella, measles, varicella-zoster

Cardiovascular System

- Cardiomyopathy - dilated, hypertrophic, restrictive
- Conductive disorders - atrial fibrillation / flutter, atrioventricular blocks, bundle branch block, paroxysmal supraventricular tachycardia, premature beats, ventricular tachycardia, ventricular fibrillation.
- Congestive heart failure
- Hypertension - essential, secondary, urgency and emergency
- Hypotension - orthostatic / postural
Ischemic heart disease - acute myocardial infarction, angina pectoris (stable, unstable, Prinzmetal’s/variant)
Vascular disease - aortic aneurysm / dissection, arterial embolism / thromboembolism, peripheral vascular disease, bruits, thrombophlebitis.
Valvular disease - aortic stenosis, insufficiency/ regurgitation; mitral stenosis, insufficiency/regurgitation; mitral valve prolapse, tricuspid stenosis, insufficiency/regurgitation, pulmonary stenosis, insufficiency/regurgitation
Other forms of Heart Disease - acute and subacute bacterial endocarditis, acute pericarditis

Pulmonary System
Infectious disorders - acute bronchitis, acute bronchiolitis, pneumonia (bacterial, viral, fungal), influenza, tuberculosis
Obstructive pulmonary diseases - asthma, chronic bronchitis
Emphysema
Restrictive pulmonary diseases
Pleural effusion
Other pulmonary diseases - foreign body aspiration, pulmonary emboli, sleep apnea

Eyes, Ears, Nose & Throat
Ear disorders - acute/chronic otitis media, barotrauma, cerumen impaction, hearing impairment, mastoiditis, Meniere’s disease, labrynthitis, otitis externa, tympanic membrane perforation, tinnitus
Nose/sinus disorders - acute/chronic sinusitis, allergic rhinitis, epistaxis, nasal polyps, vasomotor rhinitis
Mouth/throat disorders - acute pharyngitis, acute tonsillitis, aphthous ulcers, dental abscess, epiglottitis, laryngitis, oral candidiasis, oral herpes simplex, oral leukoplakia, peritonsillar abscess, parotitis, sialadenitis, gingivitis and dental caries
Other – upper respiratory infection - viral

Endocrine System
Diseases of the Thyroid gland – hyperthyroidism (Grave’s disease, thyroid storm), hypothyroidism (Hashimoto’s Thyroiditis), thyroiditis, neoplastic disease
Diseases of the Parathyroid gland - hyperparathyroidism, hypoparathyroidism
Diseases of the Adrenal glands – Cushing’s syndrome, corticoadrenal insufficiency
Diseases of the Pituitary gland – acromegaly / gigantism, dwarfism, diabetes insipidus
Lipid disorders - hypercholesterolemia, hypertriglyceridemia
Diabetes mellitus - type 1, type 2, hypoglycemia

The student will be able to recognize and apply knowledge of the following of complications of DM:
- Retinopathy
- Nephropathy
- Neuropathy
- Cardiovascular
- Depressed immunity
- Hypoglycemia reactions
- Ketoacidosis

Other: Metabolic syndrome, obesity, PCOS, hirsutism, gynecomastia, osteoporosis and osteopenia
Musculoskeletal system
Disorders of the forearm / elbow / wrist / hand - tenosynovitis, carpal tunnel syndrome, de Quervain’s tenosynovitis, trigger finger, epicondylitis, Olecranon bursitis
Disorders of the shoulder – bursitis, tendonitis, calcification tendonitis, rotator cuff tear, frozen shoulder
Disorders of the back / spine - ankylosing spondylitis, low back pain, cauda equine, spinal stenosis, herniated disk pulposis, kyphosis / scoliosis
Disorders of the hip - aseptic necrosis, trocanteric bursitis
Disorders of the knee – bursitis, ligament tear, meniscal injury, patelofemoral pain
Disorders of the leg / foot / ankle – sprains, plantar fasciitis, bunions, hammer toes, shin splints
Infectious – osteomyelitis, septic arthritis
Osteoarthritis
Other – ganglion cyst, Baker’s cyst, Morton’s neuroma, TMJ, Costochondritis, over use syndromes

Rheumatologic
Fibromyalgia, gout / pseudogout, rheumatoid arthritis

Genitourinary / Reproductive disorders
Benign conditions of the GU tract - benign prostatic hyperplasia, erectile dysfunction, hydrocele / varicocele, incontinence (female and male)
Infectious / inflammatory conditions – cystitis – acute (simple and complicated)/ interstitial, epididymitis, orchitis, prostatitis, pyelonephritis, urethritis, vaginitis
Renal Diseases - acute / chronic renal failure, glomerulonephritis, nephrotic syndrome, polycystic kidney disease, renal calculi
Other: scrotal mass, scrotal pain, testicular torsion, sexually transmitted diseases, breast mass

Neurologic System
Diseases of peripheral nerves - Bell’s palsy, diabetic peripheral neuropathy
Headache - migraine, tension, cluster, SAH
Movement disorders – essential tremor, Huntington’s disease, Parkinson’s disease
Seizure Disorders – generalized convulsive disorder, generalized nonconvulsive disorder, status epilepticus
Vascular diseases - cerebral aneurysm, stroke, transient ischemic attacks
Acute head injuries in adults and kids
Other: Alzheimer’s disease, multiple sclerosis, nystagmus

Ophthalmological
Vision change – blurred vision, floaters, macular degeneration, retinal detachment, retinal artery occlusion
Infectious – conjunctivitis, dacryocystitis, orbital cellulitis, blepharitis
Other – hordeolum, chalazion, strabismus, foreign body, cataract, glaucoma, corneal abrasion
Dermatologic System
Eczematous eruptions- dermatitis (atopic, contact, diaper, nummular eczematous, perioral, seborrheic, stasis), dyshydrosis, lichen simplex chronicus.
Papulosquamous diseases - dermatophyte infections (tinea versicolor, tinea corporis / cruris/ pedis), candida, drug eruptions, lichen planus, pityriasis rosea, psoriasis.
Acneiform lesions - acne, rosacea, folliculitis
Verruciform lesions - seborrheic keratosis, actinic keratosis
Insects / parasites - lice, scabies, spider bites
Neoplasms - basal cell carcinoma, melanoma, squamous cell carcinoma, nevi
Hair and Nails - alopecia areata, androgenic alopecia, onychomycosis, paronychia
Viral Diseases - condyloma accuminatum, exanthems, herpes simplex, molluscum contagiosum, verrucae, varicella-zoster virus infections
Bacterial infections – cellulitis, erysipelas, impetigo, MRSA
Other - acanthosis nigricans, burns, pressure ulcers / leg ulcers, hidradenitis suppurativa, lipomas, epithelial inclusion cysts, melasma, urticaria, vitiligo, vasculitis

Gastrointestinal System / Nutrition
Stomach - Gastroesophageal reflux, gastritis, peptic ulcer disease
Gallbladder - acute / chronic cholecystitis, choledolithiasis
Liver - acute / chronic hepatitis, cirrhosis
Pancreas - acute / chronic pancreatitis
Small intestine / colon - appendicitis, constipation, diverticular disease, inflammatory bowel disease, irritable bowel syndrome, obstruction, diarrhea - infectious/noninfectious/malabsorption
Rectum - anal fissure, anorectal abscess / fistula, fecal impaction, hemorrhoids, pilonidal disease, polyps
Hernia - hiatal, incisional, inguinal, umbilical, ventral
Other - lactose intolerance, vitamin deficiency

Hematological
Anemias – iron deficiency, B12, folate, hemolytic, chronic disease

Upon completion of this clinical experience, the student will be expected to recognize, compare, differentiate and evaluate the etiology, epidemiology, risk factors, pathophysiology, clinical manifestations, and differential diagnosis of the following diseases/disorders/symptoms. In addition, the student will be expected to recognize strategies for prevention and the most common complications of the following disease/disorders/ symptoms.

Infectious Disease
Spirochetal disease - lyme borreliosis (Lyme disease), Rocky Mountain spotted fever, syphilis

Rheumatologic
Polyarteritis nodosa, polymyositis, reactive arthritis, systemic lupus erythematosus, Scleroderma

Neurological
Infectious disorders - encephalitis, meningitis

Ophthalmological
  Iritis, uveitis

Gastrointestinal System / Nutrition
  Esophagus - esophagitis, motor disorders, strictures, varices

Dermatological
  Desquamation - Stevens-Johnson syndrome, toxic epidermal necrolysis, erythema multiforme
  Vesicular Bullae - bullous pemphigoid

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LEARNING OBJECTIVES FOR PHARMACOTHERAPEUTICS

Students will also be expected to discern the properties of the following drug or drug classes including mechanism of action, interactions, contraindications, and major and common side effects. Students will also be expected to discern the appropriate patient education and necessary follow up required for the following drugs or drug classes.

- Antihypertensives
- Antilipemic drugs
- Antiarrhythmics
- Diuretics
- Thrombolytic therapy
- Pain management – acute, chronic
- Asthma/ COPD medications
- Antipsychotics
- Mood/ Anxiety/ OCD drugs
- Anticonvulsants
- Antiparkinson agents
- Alzheimer’s dementia
- ADHD / narcolepsy drugs
- Antiinfectives – all forms, routes
- Acne medications
- Scabicides & pediculocides
- Corticosteroids
- Antidiarrheals
- Antiemetics
- Acid Controller and ulcer agents
- Laxatives and Bowel evacuants
- Anorectal preparations
- Antispasmodics/anticholinergics
- Ophthalmological anti-inflammatory/ allergy/ antibiotic/ steroid preparations

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LEARNING OBJECTIVES FOR DIAGNOSTICS

Students will be expected to appropriately recommend, interpret the findings, and recognize the indications/clinical significance of the following diagnostic studies. In addition students will be expected to discern appropriate management (including counseling and informed consent) when abnormalities are found in the following routine tests, and recognize the potential complications for each:

- PFT & Peak Flow
- Stool occult blood
- ESR
- Chest X-ray
- CBC & Differential
- BUN
- 12 Lead ECG & Rhythm Strip
- Glucose
- Creatinine
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END OF PRIMARY CARE I AND II LEARNING OBJECTIVES