Appendix A: Didactic Themes/Objectives Internal Medicine, Psychiatry, Family Medicine, Neurology, & Emergency Medicine

Cardiovascular Pathologies

Chest Pain

- Define Angina Pectoris (1.1, 1.2)
- List the general symptoms of angina Pectoris 1.1, 2.1)
- Categorize the types of angina based on symptomatology (2.2, 2.3)
- Construct appropriate management plan for patient that presents with angina (1.3, 1.5)

COPD/Asthma

- State the Epidemiology and risk factors of Chronic obstructive pulmonary disease (COPD) (2.1, 2.4)
- Discuss the Evaluation and Diagnosis of a patient presenting with COPD (1.1, 1.2,2.3)
- Discuss the management of a patient with COPD using the GOLD guide lines (1.6,2.4)
- Recognize the presentation of an acute exacerbation of COPD (1.6)
- Define Asthma (2.1)
- Describe the epidemiology and risk factors for developing Asthma (2.1, 2.4)
- Discuss the diagnosis and classification of Asthma severity (1.1, 1.2, 1.3)
- Summarize the stepwise approach to Asthma treatment/management (1.3,1.6)

CHF-AF

- Describe the pathophysiology of right-sided and left-sided heart failure (2.1, 2.2, 1.1)
- Determine presence of decompensation (2.1, 2.4)
- Assess for risk factors and predisposing conditions (1.1, 2.4)
- Determine severity and underlying etiology (1.3)
- Describe a rational and evidence-based approach to treatment (2.3, 2.4)
- Describe initial treatment modalities (2.3)
- Describe indications for hospitalization based on history or exam (2.5. 1.5, 1.4)
- Describe possible complications (2.4, 2.3)
- Describe factors that affect prognosis (1.6, 1.7)

Atrial fibrillation

- Students will learn to gather essential information from patients through history taking, physical exam and use of laboratory data, imaging studies and other tests. (1.1)
- Students will learn to apply the relevant clinical data to categorize the disease process and generate a focused differential diagnosis (1.3)
- Students will learn the treatment appropriate for the patient's condition(1.6)
- Student will learn to apply established and emerging basic science principles to health care (2.2)

• Students will apply principles of epidemiological sciences to identification and management of patients' health problems (2.4)

Stroke

- Students will learn to gather essential information from patients through history taking, physical exam and use of laboratory data, imaging studies and other tests. (1.1)
- Students will learn to apply the relevant clinical data to categorize the disease process and generate a focused differential diagnosis (1.3)
- Students will learn the treatment appropriate for the patient's condition(1.6)
- Student will learn to apply established and emerging basic science principles to health care (2.2)
- Students will apply principles of epidemiological sciences to identification and management of patients' health problems (2.4)

Syncope

- Students will learn to gather essential information from patients through history taking, physical exam and use of laboratory data, imaging studies and other tests. (1.1)
- Students will learn to apply the relevant clinical data to categorize the disease process and generate a focused differential diagnosis (1.3)
- Students will learn the treatment appropriate for the patient's condition(1.6)
- Student will learn to apply established and emerging basic science principles to health care (2.2)
- Students will apply principles of epidemiological sciences to identification and management of patients' health problems (2.4)

Panic Disorder- GAD Anxiety

- Discuss the use of screening tools to evaluate for presence of Depression and GAD (1.2, 2.3)
- Indications for treatment and urgent referral for GAD and depression (1.5, 1.6, 6.4)
- Discuss non-pharmacological management (2.5)
- Describe pharmacologic management of depression and anxiety (1.6, 2.3)

♣ ACS

- Describe the prevalence, etiology, and pathophysiology of ACS (2.1, 2.2, and 1.1)
- Assess for risk factors, predisposing conditions and severity of disease (2.4, 2.5)
- Differentiate unstable angina, non-ST-elevation myocardial infarction and ST-elevation myocardial infarction (2.3, 2.5)
- Describe a rational and evidence-based approach to treating a patient with acute coronary syndrome (1.3, 1.4)
- Describe use of reperfusion therapy, e.g., primary PCI, thrombolytic therapy (1.4, 1.5)
- Describe use of medical therapy, **e.g.**, anti-platelet therapy, beta- blockers, anticoagulation, lipid therapy, ACE inhibitors (1.5, 2.3)
- Describe possible complications (1.8)
- Describe the pharmacology of antiplatelet agents, thrombolytic, and heparins (2.6, 2.3)

♣ Pulmonary Hypertension – Mapping pending

- Outline the definition of pulmonary hypertension
- Describe the triad of pulmonary hypertension

- Outline the WHO classification of pulmonary hypertension
- Discuss the primary management of pulmonary hypertension

PFT interpretation

- Students will learn to gather essential information from patients through history taking, physical exam and use of laboratory data, imaging studies and other tests. (1.1)
- Students will learn to apply the relevant clinical data to categorize the disease process and generate a focused differential diagnosis (1.3)
- Students will learn the treatment appropriate for the patient's condition(1.6)
- Student will learn to apply established and emerging basic science principles to health care (2.2)
- Students will apply principles of epidemiological sciences to identification and management of patients' health problems (2.4)

Pleural Effusion

- Students will learn to gather essential information from patients through history taking, physical exam and use of laboratory data, imaging studies and other tests. (1.1)
- Students will learn to apply the relevant clinical data to categorize the disease process and generate a focused differential diagnosis (1.3)
- Students will learn the treatment appropriate for the patient's condition(1.6)
- Student will learn to apply established and emerging basic science principles to health care (2.2)
- Students will apply principles of epidemiological sciences to identification and management of patients' health problems (2.4)

Chest Diagnostics

Chest X Rays

- Discuss the basic techniques of chest radiographs (2.1, 2.2)
- Describe the normal anatomy on chest radiograph (2.1, 2.2)
- Interpret a chest radiograph using a standard sequence (2.1, 2.2)
- Recognize several common radiographic abnormalities of the chest (2.1, 2.2)

♣ EKG I, II, and III: 12 Lead EKG Interpretation

- Describe the components of an EKG tracing according to: Rate, Rhythm, Intervals, Axis, Hypertrophy, Infarct changes (2.1, 2.2)
- Interpret the EKG tracing within the clinical context of the patient, i.e., age, presenting complaint, relevant clinical history (2.1, 2.2)
- Recognize normal variation in the 12-lead electrocardiogram (2.1, 2.2)
- Identify common abnormal electrocardiographic findings to include:
 - o Early repolarization, e.g., WPW (2.1, 2.2)
 - o Chamber enlargement, e.g., RAE, LAE, LVH, RVH (2.1, 2.2)
 - o Bundle branch blocks/hemi-blocks (2.1, 2.2)
 - o Ischemic syndromes/acute infarction (2.1, 2.2)
 - o ST-T wave changes (2.1, 2.2)
 - o Arrhythmias such as atrial flutter, fibrillation, AV block, PVCs (2.1, 2.2)
 - o Electrolyte abnormalities such as hyperkalemia, hypokalemia (2.1, 2.2)

Cardiac Auscultation

- Describe the chest wall anatomy and identify the key listening areas (2.1, 2.2)
- Recognize the first and second sounds at the apex and base (2.1, 2.2)
- Recognize the effect of P-R interval on the intensity of the first heart sound. (2.1, 2.2)
- Recognize physiological and paradoxical splitting of S2(2.1, 2.2)
- Recognize third heard sounds, pericardial knock, tumor plop (atrial myxoma), and the opening snap of mitral stenosis(2.1, 2.2)
- Recognize fourth heart sounds. (2.1, 2.2)
- Evaluate the timing of murmurs and correctly identify systolic and diastolic murmurs as well as friction rubs (2.1, 2.2)
- Evaluate pulsus paradoxes and identify clinically significant measurements (2.1, 2.2, 1.3)
- Describe and understand the auscultation findings of a normal heart examination to include the rate, rhythm, and heart sounds as follows: The heart has a rate of 70 beats per minute and a regular rhythm. At the apex, S1 > S2 and is constant. At the base S2 > S1 and S2 splits normal with A2 > P2. No murmurs, rub, or gallops are heard (2.1, 2.2)
- Given a clinical scenario and the Student Auscultation Manikin, recognize an S3 gallop and the murmurs of mitral stenosis, mitral regurgitation, aortic stenosis, aortic regurgitation (1.1, 2.1, 1.3)

Gastrointestinal Pathology

GERD/Dyspepsia:

- Define dyspepsia and GERD (2.1, 2.2)
- Differentiate the clinical presentations of non-ulcerative dyspepsia and peptic ulcer disease (1.1, 1.2)
- Describe the evaluation and diagnosis of a patient presenting with "gastritis-like" symptoms (1.3, 2.3)
- Discuss the appropriate treatment of patients presenting with ulcerative and/or non-ulcerative dyspepsia (2.4)
- Identify and prevent common complications (2.4)

Diarrhea

- Describe the prevalence, etiology, and pathophysiology of acute and chronic diarrhea (2.1, 1.1, 2.2).
- Determine characteristics of diarrhea (1.1, 2.1).
- Assess for risk factors and predisposing conditions including inherited conditions.
- Evaluate for an underlying etiology (2.4).
- Consider causes of acute diarrhea and chronic diarrhea (1.1, 1.2, 1.3)
- Determine severity and cause in select cases, e.g., CBC, creatinine, electrolytes, C diff toxin NAAT, occult blood, fecal calprotectin (1.7, 1.8)
- Develop and prioritize a differential diagnosis including common and not-to-miss diagnoses (1.3, 1.2).
- Determine severity and causes of acute and chronic diarrhea (1.7, 1.8)
- Develop and prioritize a differential diagnosis including common and not-to-miss diagnoses (1.3, 1.2).
- Describe a rational and evidence-based approach to treatment(2.3, 2.4)

♣ GI Bleed

- Students will learn to gather essential information from patients through history taking, physical exam and use of laboratory data, imaging studies and other tests. (1.1)
- Students will learn to apply the relevant clinical data to categorize the disease process and generate a focused differential diagnosis (1.3)
- Students will learn the treatment appropriate for the patient's condition(1.6)
- Student will learn to apply established and emerging basic science principles to health care (2.2)
- Students will apply principles of epidemiological sciences to identification and management of patients' health problems (2.4)

Diabetes

Diabetes Mellitus: Prevention, Diagnosis, Outpatient Management

- Discuss the epidemiology of diabetes mellitus in the USA (2.4)
- Summarize the guidelines for screening and diagnosis of Type II Diabetes (1.2, 2.3)
- Discuss non-pharmacological management of diabetes mellitus (1.6)
- Discuss pharmacological management of Diabetes: medication classes (1.6, 2.3)
- Identify and manage the complications of diabetes mellitus and management (cardiovascular, retinopathy, neuropathy, and nephropathy)(2.4)

Diabetes Inpatient Management

- Define the criteria for the diagnosis of diabetes (2.1, 1.3)
- Apply to the following clinical presentation schemes to the evaluation of patients with these problems :
 - 1. Diabetes and Obesity
 - 2. Diabetes and Hyperlipidemia
 - 3. Weight Gain and Obesity (1.3)
- Discuss the questions to be addressed on the history, and describe the physical findings to look for on examinations of a patient with diabetes mellitus (1.1, 1.3)
- Recognize the medications used for treatment of diabetes and how they are given (1.2, 1.6, 6.3)
- Recognize how to screen for complications of diabetes mellitus and discuss the importance of this screening (2.4, 1.1)
- Describe the common complications of diabetes mellitus and how they are treated (2.4) Describe the psychiatric manifestations of diabetes mellitus and hypoglycemia (2.1, 2.2)

Peripheral Neuropathy

Identify and manage the complications of diabetes mellitus and management (2.4)

Metabolic Events

Nutrition and Metabolic Changes

- Describe current recommendations for nutrition and exercise (2.1, 2.2)
- Assess patient knowledge of diet and lifestyle behaviors that improve metabolic/glycemic control (2.1, 2.2)
- Interpret nutrition labels and summarize information into patient-appropriate education (2.1, 2.2)

- Describe the diagnostic criteria for the metabolic syndrome, prediabetes, and diabetes. (2.1, 2.2)
- Recognize risk factors for developing type 2 diabetes and changes to minimize the risk of developing type 2 diabetes (2.1, 2.2)
- Discuss recommendations for weight loss and how to apply recommendations to individuals (2.1, 2.2)
- Recognize a patient's stage for change using trans theoretical stages of change and how to tailor recommendations based on assessment (2.1, 2.2)
- Identify barriers to patient adherence to nutrition and exercise recommendations and propose methods of addressing and overcoming barriers to improve patient adherence (2.1, 2.2)
- Implement aspects of motivational interviewing into appropriate client interactions (2.1, 2.2)
- Recognize when it is appropriate to refer for additional counseling and education (2.1, 2.2)

Obesity Management

- Review the prevalence and disease burden of obesity in the USA (2.4)
- Describe the pathogenesis and effects of obesity (2.1)
- Describe the process for screening and evaluation for obesity (2.3)
- Review strategies for the prevention of obesity (2.5)
- Discuss the treatment of obesity including the role of diet, exercise, behavioral, drug and surgical therapy (1.3, 1.6)

Hyperlipidemia

- Identify the epidemiology and risk factors for the development of dyslipidemia (DLD) (2.4)
- Describe the societal burden of DLD associated chronic disease in the USA (2.4)
- Discuss the diagnosis and indication for treatment in a patient presenting with DLD (1.3, 1.6)
- Describe non pharmacological management of dyslipidemia (1.6)
- Describe pharmacological management of Dyslipidemia to include appropriate agent selection (1.6)

Calcium and bone disorders

- List the names of diseases caused by abnormalities of bone metabolism (2.1)
- Describe the physiology of extrinsic and intrinsic factors impacting bone remodeling (2.1)
- Describe the prevalence, etiology, and pathophysiology of bone disorders (1.2, 1.2)
- Determine characteristics of symptoms, assess for risk factors and predisposing conditions (1.1,1.2, 2.4)
- List non-pharmacologic treatment modalities for a patient with bone disorders (2.5)
- List pharmacological treatment modalities for a patient with bone disorders (1.6, 2.3)
- Identify patients at risk for osteopenia and osteoporosis requiring screening and further evaluation (1.3, 1.4)
- Describe possible complications (1.8)
- Describe a rational and evidence-based approach to screening (1.2, 2.3)

Eating Disorders

• Describe main findings of eating disorders (2.1, 2.2, 2.3)

• Be familiar with the epidemiology, clinical findings, course, etiology, diagnosis and management of eating disorders (2.4, 2.5)

Neurotransmitters

Neurotransmitters

- Identify the major neurotransmitter groups responsible for producing psychiatric symptoms (2.2)
- Describe the psychiatric diagnoses associated with symptom constellations (2.2, 2.3, 1.3)
- Describe the brain regions which may contribute to the production of psychiatric symptoms (2.1, 2.2)
- Classify the major groups of psychotropic drugs by indications and neurotransmitters affected (2.2)

Psychotic Disorders

- Describe the differential diagnosis of psychotic disorders and situations which might raise concerns for medical etiologies (1.3)
- Describe the clinical presentation, classification, prognosis, biology and guidelines of schizophrenia (1.3, 2.3)
- Describe the spectrum of psychiatric disorders from Brief Psychotic Disorder to Schizophreniform Disorder to Schizophrenia and be able to differentiate each condition (1.3, 2.3)
- Describe Schizoaffective Disorder and how to differentiate it from Schizophrenia or Mood Disorders with psychotic symptoms (1.3, 2.3)
- Describe the following: Delusional Disorder, Shared Psychotic Disorder, Psychotic Disorder due to a General Medical Condition, and Substance Induced Psychotic Disorder (1.3, 2.3)

Antipsychotics

- Describe indication of antipsychotics (1.6)
- Describe the black box warning of antipsychotic use (5.2, 6.3, 1.6)
- Describe mechanism of action, pharmacokinetics, drug interactions, and side effect of antipsychotics (6.3, 1.6, 2.2)

Temporal Lobe Epilepsy/Encephalitis

• Identify the major neurotransmitter group responsible for producing Neuro-psychiatric symptoms (2.2)

Reno-vascular

Chronic Kidney Disease

- Describe the pathophysiology of CKD and the underlying metabolic consequences (2.1, 2.2)
- Describe the mechanisms by which proteinuria and hypertension lead to renal damage and how RAAS blockade mitigates progression (2.1, 2.2)
- Assess for ongoing risk factors in CKD (2.1, 2.3)
- Assess factors affecting fluid and electrolyte balance (2.1,2.2)

- Assess for associated complications in CKD (1.7,1.8)
- Describe a rational and evidence-based approach to treatment of CKD (1.4, 1.5)
- List factors that slow progression of CKD (2.3, 1.4)
- Describe strategies for avoidance of nephrotoxic agents in CKD (2.1, 2.2)
- Describe when renal replacement therapy or transplantation is indicated (2.3, 2.4, 2.5)
- Describe the expected course of CKD, including possible complications (1.7, 1.8)

Acid- Based Disturbances

- Define acidosis and alkalosis (2.1, 2.2)
- Describe the 4 primary acid-base disorders (2.1, 2.2)
- List the common causes of each acid-base disorder (1.3)
- Diagnose and evaluate patients with acid-base disorders (1.3)
- Discuss medical management for each acid-base disorder (1.6, 1.2)

Hypertension

- Discuss the diagnosis of hypertension in adults (2.1 2.4)
- Define treatment goals for patients being managed for hypertension (2.3, 2.4)
- Discuss guideline based approach to treatment of hypertension (2.3,2.4)
- Identify indications for evaluation and treatment of resistant hypertension (1.5)
- Identify patients presenting with hypertensive emergency and urgency (1.5)

Sleep

Sleep Disorders

- Describe the main DSM-5 sleep-awake disorders (2.1, 2.2)
- Be familiar with the clinical presentation of breathing-related sleep disorders (1.3)
- Be familiar with the clinical presentation of parasomnias (1.3)
- Be familiar with main medication, hypnotics, used in sleep disorders (1.6)
- Contrast normal sleep architecture for both NREM and REM sleep (2.1)
- Describe the following dysomnias (2.1, 1.3):
 - o Primary Insomnia
 - o Primary Hypersomnia
 - Narcolepsy
 - o Breathing-Related Sleep Disorders
 - o Circadian-Rhythm Sleep Disorders
- Describe the following parasomnias (2.1, 1.3)
 - o Nightmare Disorder
 - o Sleep Terror Disorder
 - Sleepwalking Disorder
- Describe the treatment of dysomnias, including behavioral therapy, pharmacotherapy, and specific interventions including CPAP (1.2, 1.6, 6.3)
- Describe the following sleep disorders (2.1, 1.3)
 - o Situational Insomnia
 - o Conditioned Insomnia
 - o Insomnia related to other mental disorders
 - o Sleep Disorders due to a General Medical Condition

Substance Induced Sleep Disorder

Childhood Behavior Disorders

Autism Spectrum Disorder

- Describe autism spectrum disorder (1.1)
- Review the genetic versus environmental influences on autism spectrum disorder (2.4)
- Outline the psychiatric diagnostic assessment and the instruments utilized, specifically for children and adolescents, as it relates to autism spectrum disorder (1.2, 2.2, 2.3)
- Learn about the comorbidities with autism spectrum disorder (2.1)
- Learn the basic concepts of pharmacology and psychosocial treatments for autism spectrum disorder (1.8, 1.9, 2.3, 2.4)

ADHD/Learning Disorder

- Describe ADHD and the varying presentation types (1.1)
- Outline the etiology of ADHD (2.4)
- Describe the comorbidities associated with ADHD (2.1)
- Discuss the common medications used in treatment of ADHD (1.8, 1.9, 2.3, 2.4)
- Describe the evidence-based psychosocial therapies and other approaches utilized in the treatment of ADHD (2.3, 2.4)

♣ CD, ODD, ICD

- Identify and describe disruptive, impulse-control and conduct disorders including oppositional defiant disorder, intermittent explosive disorder, conduct disorder, antisocial personality disorder, pyromania, and kleptomania.
- Discuss treatment approaches to disruptive, impulse-control, and conduct disorders.

Period Health Exam Child

- Discuss appropriate intervals and milestones for pediatric well child examinations (3.2, 3.4, 6.3)
- Describe appropriate framework for exam features, and developmental screening recommendations at appropriate intervals. (3.2, 3.4, 6.3)
- Demonstrate understanding of age-appropriate anticipatory guidance and counselling in pediatric patients (3.2, 3.4, 6.3)

Substance Abuse & Toxicology

Substance Use Disorder

- Describe the criteria for drug abuse/dependency and types of drug usage. (2.1, 2.3)
- Describe abuse/dependency of opioids including location of action, symptoms of intoxication and withdrawal. (2.2, 2.3, 6.3)
- Describe sedative-hypnotic abuse/dependency. (2.2, 2.3, 6.3)
- Describe hallucinogens intoxication and complications of usage. (2.2, 2.3, 6.3)
- Describe stimulant intoxication, withdrawal, and complications of usage. (2.2, 2.3, 6.3)

• Describe abuse of inhalants, nicotine and anabolic steroids. (2.2, 2.3, 6.3)

Psychiatry of Alcohol

- Discuss epidemiology of alcoholism and its comorbidities. (2.4)
- Describe criteria for alcohol abuse and dependency. (2.1, 2.3)
- Describe the screening for alcoholism and diagnostic blood tests. (2.2, 2.3, 2.4)
- Describe the subtypes of alcoholism, pathological intoxication, and alcohol psychotic disorder with hallucinations. (2.2, 2.3, 2.4)
- Describe alcohol withdrawal, delirium tremens, and detoxification. (2.1, 2.2, 2.3)
- Describe Fetal Alcohol Syndrome, Wernicke Encephalopathy and Korsakoff's syndrome. (2.1, 2.2, 2.3)
- Describe the medication and non-medication treatment for alcoholism. (1.2, 1.6)

Cirrhosis

- Describe the prevalence, etiology, and pathophysiology of cirrhosis and its complications (1.1, 1.2, and 1.3).
- Determine risk factors and predisposing conditions including hereditary conditions (2.3,2.4)
- Describe a rational and evidence-based approach to treatment (1.3, 1.4, and 1.5).
- Identify appropriate scoring systems to estimate prognosis (1.2, 1.3).
- Describe possible complications (1.7, 1.8).

Pancreatitis

- Describe the prevalence, etiology, and pathophysiology of acute pancreatitis (2.1, 2.2).
- Assess for risk factors (2.4).
- Determine severity, cause, extent and presence of associated complications (1.7, 1.8).
- Describe a rational and evidence-based approach to treatment (1.4, 1.5, and 1.3).

Provoked Seizures

• Describe abuse/dependency of opioids including location of action, symptoms of intoxication and withdrawal (2.2, 2.3, 6.3).

Toxicological Emergencies

- Describe the general ED management of the poisoned patient (1.2, 1.4)
- Discuss the role of the Poison Control Center in the US healthcare system (6.1, 7.2) Describe basic management of common and high-risk poisonings (1.2, 1.4)

Behavioral Issues

Personality Disorders

- Describe the differential diagnosis of psychotic disorders and situations which might raise concerns for medical etiologies.(1.3)
- Describe the clinical presentation, classification, prognosis, biology and guidelines of schizophrenia. (1.3, 2.3)

- Describe the spectrum of psychiatric disorders from Brief Psychotic Disorder to Schizophreniform Disorder to Schizophrenia and be able to differentiate each condition.(1.3, 2.3)
- Describe Schizoaffective Disorder and how to differentiate it from Schizophrenia or Mood Disorders with psychotic symptoms. (1.3, 2.3)
- Describe Delusional Disorder, Shared Psychotic Disorder, Psychotic Disorder due to a General Medical Condition, and Substance Induced Psychotic Disorder. (1.3, 2.3)

Psychiatric Emergencies

- Describe epidemiology of suicides, months with peaks in suicide, where United States ranks world-wide, countries with highest suicide risks, and states with highest and lowest risks. (2.4)
- Describe ways of identifying the potentially suicidal patients including what symptom correlates most highly with completed suicide.(1.5)
- Describe how to assess suicide risk including population risk factors and individual risk factors.(1.5, 2.4)
- Describe treatment principles for the suicidal patient.(1.6, 2.5)
- Describe how to assess the potentially violent patient, and recognize mental disorders associated with violent behaviors. (1.5, 1.3, 2.5)

Mental Health Concerns & Preventative Care

4 Anxiety Disorders: Phobias, OCD, Agoraphobia, Hording, Trichotillomania

- Describe anxiety and how it is felt is mediated in the brain.(2.1, 2.2)
- Describe Phobic Disorders (2.1, 2.2, 1.3)
- Describe main findings of Body Dysmorphic Disorder, Hording Disorder, Trichotillomania, Excoriation Disorder (1.3)

Psychotherapies

- Be able to describe main types of psychotherapies and their indications.(1.6, 6.3)
- Be familiar with the basic concept of psychotherapies (2.3, 2.5)

Smoking Cessation

- Discuss the Key clinical recommendations for practices (2.4)
- Report the 5 A's of counseling strategies (2.5)
- Describe the 5 R's of motivational strategies (2.5)
- Identify the First-Line therapies for smoking cessation (1.4)
- Discuss alternative therapies to assist smoking cessation (1.4)

Periodic Health Exam: Adult Cancer Prevention

- Identify cancer sites with evidence-based guidance of periodic screening (1.1, 1.3)
- Describe the guidelines for cancer screening in average risk individuals (1.3)
- Apply clinical reasoning to determine exception to periodicity in above average risk individuals for cancer screening(1.3)

Human Trafficking

- Outline the definition of Human Trafficking (2.1)
- Describe the types of Human Trafficking (1.1, 2.1)

- Identify demographics of Victims and Traffickers (2.4)
- Identify red flags seen in potential victims (1.7, 1.8)
- Outline the medical and psychiatric complications of the victims (2.4).
- Explain the action steps to take if you suspect human trafficking (2.3, 2.4).
- Detail strategies to improve awareness and knowledge on the issue of human trafficking (1.7, 1.8)
- Discuss resources that can be integrated into practice to help identified victims (1.6, 1.5)

♣ PTSD

- Describe the DSM-5 diagnostic criteria for PTSD (2.1, 2.2, 2.3)
- Describe Acute Stress Disorder and Adjustment Disorder (2.1, 2.2, 2.3)
- Describe clinical management of trauma and stressor-related disorders (1.3)

Vaginitis/Cervicitis

- Identify risk factors of vaginitis(2.4)
- Understand pathophysiology of different causes of vaginitis (2.1)
- Differentiate the causes of vaginitis in pre- and postmenopausal patients (2.2)
- Select appropriate diagnostic methods for patient presenting with symptoms of vaginitis (1.3)
- Manage acute and recurrent vaginitis(1.6)

Sexual Dysfunction

- Describe the most common DSM-5 sexual dysfunctions (2.1, 2.2)
- Describe the etiology and management of sexual dysfunctions (1.3, 2.2, 2.3)
- Be familiar with the concept of gender dysphoria (2.5)
- Describe the main clinical points of paraphilic disorders (2.1, 2.2)

Musculoskeletal Pain

Ankle Pain

- Demonstrate an understanding of the anatomy of the ankle that is relevant to common ankle injuries (2.1)
- Recognize symptoms and signs of common ankle injuries (1.1)
- Demonstrate a proper ankle exam that efficiently locates damaged structures (1.1)
- Describe general treatment guidelines, including proper rehab, for common ankle injuries (2.3, 3.4)
- Appropriately apply the Ottawa ankle rules for assessment of ankle injuries (1.6, 2.3)

4 Hip Pain

- Demonstrate an understanding of the anatomy of the knee that is relevant to common knee injuries (2.1)
- Recognize symptoms and signs, or patterns of common knee injuries (1.1)
- Demonstrate a proper knee exam that efficiently locates damaged structures (1.1)
- Know general treatment guidelines, including proper rehab, for common knee injuries (2.3, 3.4)

Back Pain

- Demonstrate an understanding of the anatomy of the low back that is relevant to low back injuries (2.1)
- Demonstrate the appropriate physical examination to evaluate low back pain (1.1)
- Recognize risk factors for and prevalence of acute low back pain (2.4)
- Describe the initial work-up of adults with acute low back pain, per AHCPR guidelines (2.5, 3.4)
- Differentiate between uncomplicated and complicated causes of acute low back pain (1.5)
- Appropriately recommend therapy and reconditioning for acute low back pain (1.6, 6.4)
- Recommend appropriate referrals for routine or emergent care (6.4)

♣ Shoulder Pain

- Demonstrate an understanding of the anatomy of the shoulder that is relevant to shoulder injuries (2.1)
- Recognize symptoms and signs, or patterns of common shoulder injuries (1.1)
- Demonstrate a proper shoulder examination that efficiently locates damaged structures (1.1)
- Describe general principles of management of shoulder injuries (1.6, 2.4)

Knee Pain

- Demonstrate an understanding of the anatomy of the hip that is relevant to shoulder injuries (2.1)
- Recognize symptoms and signs, or patterns of common hip injuries (1.1)
- Demonstrate a proper hip examination that efficiently locates damaged structures (1.1)
- Describe general principles of management of hip injuries (1.6, 2.4)

Endocrine Disorders

Endocrine Diseases with Psychiatric Presentations:

- Describe endocrine disorders that occur in conjunction with psychiatric conditions. (1.3)
- Describe and recognize common psychiatric symptoms of endocrine diseases (1.1, 2.2, 2.3)
- Describe and interpret key physical exam findings of endocrine disorder. (1.1)
- Identify and interpret key laboratory tests and imaging to diagnose the disorder. (1.2, 2.3) List appropriate initial treatments based on underlying etiology. (2.3, 2.4)

Thyroid and Adrenal Disorder

- Recognize the signs and symptoms of hypothyroidism and hyperthyroidism (2.1, 2.2, 2.3)
- Review the appropriate work-up to diagnose the various adrenal disorders (2.3, 1.2)
- Identify the usual treatment of adrenal disorders (1.2, 1.6)
- Discuss the work-up and treatment of thyroid disorders.(1.2, 1.6)

Geriatrics

Geriatrics

- Describe the physiological changes of aging (2.1)
- Outline the process and components of a geriatric assessment (2.2, 2.3, 1.3)
- Discuss the implications of polypharmacy (6.3)
- Describe how to work up and manage geriatric falls and gait instability (1.3)
- Discuss the health care financing options for the elderly (5.5)

• Describe some of the psychiatric issues associated with the elderly(2.4)

Delirium

- List the symptoms frequently seen in delirium (1.3)
- List common etiologies of delirium including medications (1.2, 2.1)
- Treatment of delirium (1.2, 1.6)

Palliative care – Mapping pending

- Compare and contrast palliative care with routine care and hospice care
- Describe the components of the palliative approach to patient are
- Describe the additional services and disciplines involved in the palliative care team
- Understand the roles of the other members of the palliative care team

Research & Presentations

Research

- Gain a working knowledge of contemporary practices in approval of drugs, devices, and biologics for use in clinical practice (2.6)
- Explain how emerging basic scientific knowledge leads to medical advances, including understanding of the basis of disease and how translational research is required for the development of application to treatment. (2.2, 2.3)
- Explain the fundamental difference between an investigator-initiated research and a clinical trial.(2.6)
- Describe the role of review boards in conducting ethical research (i.e. IRB, IACUC, IBC, etc). (2.6)
- Understand the essential role MDs play in the drug development and testing process. (2.6)
- Identify basic clinical trial study designs and the importance and morality of placebo controlled studies.(2.6)

How to critique a journal club – Mapping pending

- What is the importance of a journal club.
- How to decide the initial goals.
- What are the components of a successful journal club.
- How to measure impact?
- How to draw conclusion?

Soap Note – Mapping pending

- Discuss the components of an efficient SOAP note
- Discuss strategies to identify the appropriate time to write a SOAP note
- Review strategies on how to maintain professionalism and a professional voice in a SOAP note presentation

HEENT & Somatic

Headache

• Identify common causes of primary headache (2.4)

- Identify symptoms of headache that require urgent evaluation (1.5)
- Discuss indications for CT and MRI in patients resenting with Headaches (1.3, 2.3, 1.2, 1.6)
- Describe management strategies for chronic headaches (1.6, 1.2)

Somatic Disorders

- Describe the DSM-5 somatic symptom and related disorders (2.1, 2.2)
- Be familiar with clinical presentation and management of somatic disorders (1.3, 1.6) Understand the frequency of undetected physical illness and the importance of a high suspicion index and good medical evaluation. (2.1, 2.2, 2.3)
- Describe conditions, which manifest early in a person's life, including Somatization Disorder, Conversion Disorder, Body Dysmorphic Disorder, and Illness Anxiety Disorder. (2.4)
- Describe the condition which usually manifests later in life (Pain Disorder) (2.4)
- Describe condition where there is a simulation of physical symptoms including Malingering and Factitious Disorder. (2.1, 2.2, 2.3)
- List the treatment for the various Somatoform Disorders. (1.2, 1.6, 6.3)

Fatigue

- Understand the prevalence and significance of the complaint of fatigue (2.1, 4.1, 4.3, 1.5)
- Perform an appropriate H&P in regards to complaints of fatigue (1.1)
- Understand the diagnostic plan and diagnostic criteria (1.2, 1.6, 2.1, 2.2, 2.3)
- Communicate in an empathetic and sympathetic manner with fatigue patients by explaining the mental and physical aspects of the disease (4.2, 4.3)
- Know the physiology, pathology, and psychological mechanisms contributing to the disease (2.1, 2.2)
- Know the principles of disease management and improve the patient's quality of life(1.5, 1.6, 1.8, 2.3, 2.4)

Examination of the Eye/Common Presentation of eye complaints

- Under reasonable circumstances (cooperative patient with a cooperative pupil, good equipment, dark room), be able to confidently view the optic nerve head, retinal vessels, fovea and macula and peripheral fundus past the arcade vessels (1.1)
- After viewing these structures, be able to tell normal from abnormal (1.5, 2.1)
- Be able to put a name to the more common abnormalities (2.2)
- Within the realm of common abnormalities, be able to distinguish eye disease from an eye manifestation of a systemic disease (2.2, 2.3)
- Know some historical or diagnostics tips to help sort out the common causes of a red eye (2.3)
- Know the basics of treatment of the more worrisome causes (1.5, 1.6)
- Show where to look for lumps and bumps, what they are, and how to fix them (1.7, 1.3)

Optic Neuritis/MS

- Identify MS symptoms and signs as well as diagnoses criteria (2.1, 2.2, 2.3)
- Learn about MS management (1.2, 1.6)

Ocular Emergencies in the Primary Care Setting

• Compare and contrast between the more common causes of sudden vision loss versus gradual vision loss (1.5, 2.2)

- Identify clinical presentations of ocular emergencies(1.5, 2.2)
- Know that 'sudden' vision loss is often gradual vision loss suddenly noticed (1.1)
- Know some historical or diagnostic tips to help sort out the causes of vision loss (1.1, 2.3)
- Categorize causes of vision loss due to eye diseases versus eye manifestations of a systemic disease (2.1, 2.2)

Ear Pain, Pharyngitis, Rhinitis

- Compare infections vs. non-infectious causes of ear pain (2.1)
- Explain the various tests for otitis media (1.2)
- Describe optimal management strategies (1.3, 1.6)
- Discuss the classification and differential diagnosis for a patient presenting with pharyngitis (2.1 2.2)
- Identify the criteria for the diagnosis pharyngitis (1.1, 1.2,2.2)
- Describe the guidelines for the treatment of a patient presenting with pharyngitis (1.2,2.4)
- Discuss the chronic sequel of streptococcal pharyngitis. (2.4)
- Describe the pathophysiology of chronic rhinitis (2.4)
- Develop appropriate differentials for patient presenting with chronic rhinitis(1.1,1.2,1.6)
- Discuss workup of and evaluation of a patient presenting with rhinitis (1.3, 2.3)
- Describe optimal management of chronic rhino sinusitis (1.3, 2.1)

Cough

- Differentiate between acute, sub-acute and chronic cough in a direct relation to time frame presentation. (1.1, 1.2)
- Identify the most common etiologies for each classification (1.2)
- Evaluate and decide on appropriate management for chronic cough in adults (2.3)
- Evaluate and decide on appropriate management for chronic cough in children (2.3)

PNES/Functional Neuro Disorder

- Identify risk factors, characteristics of PNES (2.1, 2.2, 2.3)
- Learn about the diagnoses and management of PNES (1.2, 1.6)

Infections

🖶 UTI

- Define urinary tract infections (UTIs) (1.2, 2.1)
- Discuss the diagnosis of UTI's. (1.2, 2.2)
- Differentiate between complicated and uncomplicated UTIs (1.3)
- Discuss the indication for treatment and hospitalization of a patient presenting with a UTI (1.5, 1.6)

Skin and Soft Tissue Infection

- Describe the epidemiology, pathophysiology, predisposing factors, and microbiology of skin and soft tissue infections (2.1, 2.2, and 1.1).
- Assess for risk factors and predisposing conditions (2.4).
- Determine cause and severity (1.7, 1.8).

- Develop and prioritize a differential diagnosis including common and not-to-miss diagnoses (1.3, 1.2).
- Develop a rational and evidence-based approach to treatment (2.3, 2.4, 1.9).
- Identify the need for parental antibiotics, hospitalization and surgical consultation (1.6, 1.5, 6.4)

Pneumonia

- Describe the prevalence, etiology, and pathophysiology of Pneumonia (2.1, 2.2, 1.1).
- Assess for comorbidities that increase risk of complicated infection (2.4).
- Determine severity and complications of illness (1.7, 1.8).
- Describe initial triaging decisions.
- Assess for comorbidities (2.4)
- Describe a rational and evidence-based approach to treatment (1.4, 1.5, 1.3, 1.9).
- List appropriate antimicrobial therapy
- Describe infection related and noninfectious related complications (1.7, 1.8).
- Describe prevention strategies (1.6, 1.5)

Hematology

Anemia

- Describe the prevalence, etiology, and pathophysiology of common causes of anemia (2.1, 2.2, and 1.1).
- Assess for ongoing risk factors including heritable conditions and underlying disease (2.4).
- Develop and prioritize a differential diagnosis including common and not-to-miss diagnoses (1.7, 1.8).
- Describe a rational and evidence-based approach to treatment (2.3, 2.4, and 1.9).
- Describe urgent treatment if needed(1.5)

DVT/PE or VTE

- Describe the prevalence, etiology, and pathophysiology of VTE(2.1,2.2, 1.1)
- Determine risk factors, etiology and predisposing conditions(1.2, 1.2
- Determine presence of right heart failure (1.8).
- Describe a rational and evidence-based approach to treatment (1.4, 1.5).
- Use a validated clinical risk score to establish pre-test probability for DVT or PE(1.2,.13
- Describe acute complications, chronic complications and possible complications (1.7, 1.8).

Thrombocytopenia – Mapping pending

- Key clinical history and physical exam finding in thrombocytopenia
- Describe the prevalence, etiology and pathophysiology of common causes of thrombocytopenia
- Develop and prioritize a differential diagnosis including common and not-to-miss diagnoses
- Describe a rational and evidence-based approach to treatment
- Describe urgent treatment if needed

Ultrasound

- ♣ Point-of-Care Ultrasound (POCUS) basics
 - Describe the difference between POCUS and ultrasound obtained through the radiology department (1.8)
 - Discuss the various indications for POCUS in the ED (1.2-1.4)
 - Discuss how POCUS can impact patient care(1.2-1.4)
 - Describe some basic POCUS techniques and ultrasound fundamentals(1.2-1.4, 1.8)