Pulmonary I (Module 1) – Credit Hours: 7.5

Chapter: Asthma and COPD
Learning Objectives
1. Given patient information, distinguish between and assess the status of asthma, severe asthma, chronic obstructive pulmonary disease (COPD) (and its complications), and asthma-COPD overlap syndrome (ACOS).
2. Design an initial therapeutic regimen consistent with current treatment guidelines for asthma, severe asthma, COPD, and ACOS, and revise as appropriate according to therapeutic response.
3. Evaluate a patient’s asthma or COPD therapy to maximize outcomes and justify adjunctive therapy and modifications based on individuals' needs, skill level, and preferences.
4. Judge the patient-specific effect of new and emerging therapies according to current understanding of the pathophysiology, available evidence, and drug-specific properties.

Chapter: Cystic Fibrosis
Learning Objectives
1. Distinguish among therapy recommendations according to age and additional comorbidities for patients with cystic fibrosis (CF).
2. Evaluate advances in chronic management of CF, including appropriate selection, use, and monitoring of cystic fibrosis transmembrane regulator (CFTR) modulators; anti-inflammatory agents; and inhaled antibiotics.
3. Assess patients with CF for acute pulmonary exacerbations for patients and select appropriate outpatient or inpatient treatment and associated monitoring, including treatment of common pathogens and long-term treatment of allergic bronchopulmonary aspergillosis and pathogens such as nontuberculous mycobacteria.
4. Evaluate common barriers to treatment adherence, and determine approaches to patient/caregiver education that promote patient/caregiver/team collaborative or “coproduction” of care.
5. Justify opportunities for pharmacists to contribute to the care of patients with CF, including possible practice models, involvement in quality improvement initiatives, and clinical research.

Chapter: Acute Pulmonary Embolism in Adults
Learning Objectives
1. Using patient data, risk stratification tools, imaging studies, and prognostic indicators, design a patient-centered therapeutic management plan for acute pulmonary embolism (PE).
2. Justify an appropriate anticoagulant or thrombolytic for treatment of acute PE, depending on patient-specific considerations. 3. Evaluate the risks and benefits of thrombolytic use in intermediate-risk, high-risk, and cardiac arrest–associated acute PE.
Emergency Medicine I (Module 2) – Credit Hours: 3.5

Chapter: Anaphylaxis and Angioedema
Learning Objectives
1. Develop monitoring parameters on the basis of patient population and therapeutic management selection for acute and chronic gout management.
2. Apply guidelines to the selection of appropriate acute management of a gout flare.
3. Assess a patient profile for nonpharmacologic management and potential agents that may precipitate a gout flare.
4. Justify the selection and dosing of xanthine oxidase inhibitors in patients with chronic kidney disease.
5. Evaluate a patient profile for initiation or alteration of chronic gout therapy management.

Chapter: Toxic Ingestions
Learning Objectives
1. Account for the challenges in treating patients with toxic ingestions.
2. Develop a treatment plan for a patient experiencing bleeding with a direct oral anticoagulant.
3. Evaluate the benefits and challenges in the prehospital administration of naloxone.
4. Design a treatment plan for the patient with malignant hyperthermia.

Emergency Medicine II (Module 3) – Credit Hours: 4.5

Chapter: Alternative Routes of Drug Administration
Learning Objectives
1. Evaluate older adult patients for risk factors associated with vertigo.
2. Distinguish the differences among varying presentations of older adult patients with vertigo-related symptoms and their potential underlying causes.
3. Design a treatment plan that includes appropriate pharmacologic and nonpharmacologic interventions.
4. Develop effective individualized patient and caregiver education.

Chapter: Pharmacy in Emergency Care
Learning Objectives
1. Assess the current clinical practices of the emergency medicine (EM) clinical pharmacist.
2. Justify the pharmacist’s role in medication safety in the emergency department (ED).
3. Discuss pharmacist integration into the ED and with EM teams.
4. Assess the current state of EM education and experiences for pharmacy students and residents.
5. Evaluate the resources available to EM clinical pharmacists.