Chapters and Learning Objectives:

**Pulmonology I (Module 1) – Credit Hours: 4.0**

**Chapter: Rare Lung Diseases**

**Learning Objectives**

1. Evaluate pharmacologic agents for airway clearance in pediatric patients with primary ciliary dyskinesia.
2. Design treatment of infections common in pediatric patients with primary ciliary dyskinesia.
3. Analyze the appropriateness of treatment options for acute pulmonary hemorrhage in a pediatric patient.
4. Assess published data on pharmacologic agents, including corticosteroids and immunosuppressive agents, and whole lung lavage regarding the treatment of pediatric interstitial lung diseases.

**Chapter: Complicated Pneumonia**

**Learning Objectives**

1. Distinguish the differences between uncomplicated and complicated pneumonias.
2. Develop an appropriate inpatient antimicrobial regimen for a patient with complicated pneumonia.
3. Evaluate cultures from pleural fluid and create an outpatient antimicrobial regimen.
4. Design a therapeutic plan for a patient with pneumonia complicated by empyema.
5. Assess a patient’s readiness for hospital discharge on the basis of clinical severity, culture sensitivities, and available outpatient antimicrobials.

**Pulmonology II (Module 2) – Credit Hours: 4.5**

**Chapter: Cystic Fibrosis**

**Learning Objectives**

1. Distinguish between the various classes of cystic fibrosis transmembrane conductance regulator (CFTR) mutations and terminology used to reference groups of CFTR mutations.
2. Evaluate the appropriateness of pharmacologic treatment options based on age, lung function, bacterial colonization, and other individual patient factors.
3. Assess literature for the currently approved CFTR modulators and devise a chronic maintenance care plan including CFTR modulators, monitoring, drug-drug interaction evaluation, and dosage adjustments when appropriate for pediatric patients with cystic fibrosis.
4. Justify relevance of the pharmacist’s role in management of pediatric cystic fibrosis patients.
Chapter: Management of the Patient with a Tracheostomy
Learning Objectives

1. Distinguish common indications and comorbid conditions for pediatric patients with tracheostomy.
2. Evaluate pharmacologic agents for airway clearance in pediatric patients with tracheostomy.
4. Develop a care plan for the treatment of infections common in pediatric patients with tracheostomy.
5. Justify the inclusion of the pharmacist in care management of the pediatric patient with tracheostomy.

Pulmonology III (Module 3) – Credit Hours: 4.5

Chapter: Interactive Case: Management of Drowning
Learning Objectives

2. Devise a plan for evidence-based usage of controversial pharmacological therapies in the management of pediatric drowning.
3. Given a patient case, apply learned concepts to determine the place of antibiotic therapy in pediatric drowning.

Chapter: Recorded Webcast: New Technologies in Drug Delivery to the Lungs
Learning Objectives

1. Assess inhaled drug therapy options on the basis of drug deposition in the respiratory tract.
2. Evaluate the advantages and disadvantages of each type of respiratory delivery device.
3. Analyze the role of spacer and valved holding chamber devices and how they aid in the delivery process of metered dose inhaler devices.
4. Justify the use of each delivery device for various age groups of pediatric patients.

Pulmonology IV (Module 4) – Credit Hours: 3.5

Chapter: Recorded Webcast: Pediatric Asthma Practice Management
Learning Objectives

1. Apply guidelines to identify a pharmacist’s role in asthma care.
2. Identify pharmacy services that can be used in pediatric asthma practice.
3. Discuss regulatory and legal considerations for management of a pediatric asthma practice.
4. Evaluate methods for seeking reimbursement for pharmacy services provided.
Chapter: Interactive Case: Steroids for Bronchopulmonary Dysplasia

Learning Objectives

1. Describe prenatal steroid therapy recommendations from the American College of Obstetricians and Gynecology.
2. Assess the differences in steroid agents and routes for bronchopulmonary dysplasia (BPD).
3. Determine the role of steroids in therapy for early postnatal prevention of BPD.
4. Design a management strategy for late prevention and treatment of BPD.