### Title, Objectives & ACPE UAN

**Drug Information Pearls – REMS, Shortages, and VAERS, Oh My! (0.1CEU) A-0167-0000-17-001-L03-P/T**

**Pharmacist Objectives:**
1. Describe 3 basic components of a medication guide required by law, and identify 2 ways medication guide components ensure patient safety.
2. Defend the importance of a Risk Evaluation and Mitigation Strategies (REMS) program for an example drug and apply this process to other drugs in the future.
3. Compare and contrast drug shortage information provided by FDA and ASHP.
4. Identify adverse events required by law to be reported to the Vaccine Adverse Event Reporting System (VAERS).
5. Differentiate between VAERS data and data from observational studies designed to investigate reported post-marketing vaccine adverse events.

**Technician Objectives:**
1. Indicate 3 basic components of a medication guide required by law.
2. Identify whether a specific drug has a REMS program.
3. Compare and contrast the methods for reporting drug shortages to FDA and ASHP.
4. Describe 3 ways to report a vaccine related adverse event to FDA.

**Pharmacist Objectives:**
1. Compare the pathophysiology of idiopathic seizures and drug-induced seizures.
2. Identify specific drugs and medication classes most commonly associated with seizures at therapeutic doses and in overdose.
3. Evaluate the efficacy of specific anticonvulsants for treatment of drug-induced seizures.
4. Examine the risks associated with administration of specific anticonvulsants for treatment of drug induced seizures.
5. Develop a pharmaceutical care plan for managing drug-induced seizures.

**Technician Objectives:**
1. List three drugs associated with seizures in overdose.
2. Review available formulations of benzodiazepines.
3. Differentiate between phenytoin and fosphenytoin.

**Drug-Induced Seizures: Common Causes and Management Principles (0.1CEU) A-0167-0000-17-002-L01-P/T**

**Pharmacist Objectives:**
1. Compare the pathophysiology of idiopathic seizures and drug-induced seizures.
2. Identify specific drugs and medication classes most commonly associated with seizures at therapeutic doses and in overdose.
3. Evaluate the efficacy of specific anticonvulsants for treatment of drug-induced seizures.
4. Examine the risks associated with administration of specific anticonvulsants for treatment of drug induced seizures.
5. Develop a pharmaceutical care plan for managing drug-induced seizures.

**Technician Objectives:**
1. List three drugs associated with seizures in overdose.
2. Review available formulations of benzodiazepines.
3. Differentiate between phenytoin and fosphenytoin.

**When the Going Gets Tough: Managing Opioid-Induced Constipation (0.1CEU) A-0167-0000-17-003-L01-P/T**

**Pharmacist Objectives:**
1. Describe the pathophysiology of opioid-induced constipation and recognize contributing factors.
2. Evaluate the use of targeted therapies for management of opioid-induced constipation.
3. Apply evidence-based practices to formulate a treatment strategy for opioid-induced constipation.

**Technician Objectives:**
1. Define opioid-induced constipation and recognize contributing factors.
2. List brand and generic names of targeted therapies for opioid-induced constipation.
3. Identify the dosage forms and appropriate storage of targeted therapies for opioid-induced constipation.
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Name, Position</th>
<th>Mentor, Qualifications</th>
<th>Title</th>
<th>Pharmacist Objectives</th>
<th>Technician Objectives</th>
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| 3/16 Thur.| 4:00 pm| HSEB 2600| Anthony Trovato, PharmD | Erin Bailey, PharmD, BCOP                                | Vaccines in Patients with Functional and Anatomical Asplenia (0.1CEU) A-0167-0000-17-004-L01-P/T | 1. Identify what conditions constitute anatomical and functional asplenia.  
2. Review which vaccines are recommended in asplenic patients.  
3. Recognize which vaccines should not be given simultaneously in asplenic patients.  
4. Compare vaccine timing recommendations in asplenic patients from various organizations.  
5. Design vaccine schedules for 2 asplenic patients. | 1. Identify proper storage and preparation of the vaccines used in asplenic patients.  
2. Recognize which vaccines should not be given simultaneously in asplenic patients.  
3. Distinguish which brand name vaccines correspond to the appropriate generic vaccines. |
| 3/18 Sat. | 9:00 am| HSEB 2600| Irene Pan, PharmD | Laura Shane McWhorter, PharmD, BCPS, BC-ADM, CDE, FASCP, FAADE | Time to Get Psyched: An Overview of Old and New Antipsychotic Agents (0.1CEU) A-0167-0000-17-005-L01-P/T | 1. Compare and contrast first generation and second generation antipsychotic agents and their mechanisms of action.  
2. Describe common side effects and warnings associated with antipsychotic agents.  
3. Analyze evidence for the use of the newest FDA-approved antipsychotic agents.  
4. Select appropriate pharmacotherapy based on co-morbidities, side effects, formulation and monitoring requirements. | 1. Identify common side effects for first generation antipsychotics and second generation antipsychotics.  
2. List brand and generic names for newly approved antipsychotic agents.  
3. Compare the cost of antipsychotic medications. |
| 3/18 Sat. | 10:00 am| HSEB 2600| Emma Jones, PharmD | Dan Witt, PharmD, FCCP, BCPS                              | aDAPTing to the New Guideline: Updates on Duration of Dual Antiplatelet Therapy (0.1CEU) A-0167-0000-17-006-L01-P/T | 1. Identify patients indicated for DAPT.  
2. Compare and contrast the various P2Y₁₂ inhibitors.  
3. Assess the appropriateness of DAPT based on the current literature.  
4. Accurately calculate an individualized DAPT score. | 1. Recognize dosing regimens of P2Y₁₂ inhibitors.  
2. Define shorter, standard and longer duration of DAPT.  
3. Select the corresponding generic name of P2Y₁₂ inhibitor given the brand name. |
| 3/18 Sat. | 11:00 am| HSEB 2600| Heidi Pigott, PharmD | Christine Jamjian, PharmD, AAHIVP                       | The Fall of the “EFV”pire and the “Integrase”tion of INSTIs: Updates to the HIV Guidelines (0.1CEU) A-0167-0000-17-007-L02-P/T | 1. Review updates to the DHHS HIV guidelines for Treatment-Naïve.  
2. Compare and contrast newly recommended regimens with alternative regimens.  
3. Apply patient-specific criteria to select an appropriate HIV regimen.  
4. Design a comprehensive monitoring plan for a patient with HIV. | 1. Identify at least 3 single tablet regimens.  
2. List 1 benefit with new drug, tenofovir alafenamide.  
3. Recall which regimens can be switched to tenofovir alafenamide.  
4. Employ strategies to help switch patients to newly recommended regimens from alternative regimens. |
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<thead>
<tr>
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<tbody>
<tr>
<td>3/21 Tue</td>
<td>HSEB 2110 at 3:00 pm</td>
<td>Jessica Carey, PharmD</td>
<td>Pulmonary Arterial Hypertension (PAH) (0.1CEU)</td>
<td>A-0167-0000-17-008-L01-P/T</td>
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<td>Mentor: Teshia Sorensen, PharmD, BCPS</td>
<td>1. Define the hemodynamic parameters used to diagnose PAH.</td>
<td>1. List PAH specific therapy agents included in R.E.M.S Programs.</td>
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<td>2. Recognize screening and monitoring parameters for PAH specific therapy.</td>
<td>2. Distinguish PAH specific therapy agents by mechanism of action.</td>
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<td>3. Demonstrate knowledge of safety measures for administration of PAH specific therapy in the inpatient setting.</td>
<td>3. Identify two FDA-labeled indications for riociguat (Adempas).</td>
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<td>4. Formulate an appropriate treatment plan for a Group 1 PAH patient naive to PAH specific therapy.</td>
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<td>5. Identify two FDA-labeled indications for riociguat (Adempas).</td>
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<td>3/21 Tue</td>
<td>HSEB 2110 at 4:00 pm</td>
<td>Laura Steffens, PharmD</td>
<td>Busting Through the Blood Brain Barrier: Antibiotics in Bacterial Meningitis Therapy (0.1CEU)</td>
<td>A-0167-0000-17-009-L01-P/T</td>
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<td>Mentor: Russell Benefield, PharmD, BCPS</td>
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<td>1. List several barriers to antibiotic penetration into the central nervous system for treatment of infection.</td>
<td>1. Identify antibiotics that come as premixed bags, with a mini-bag or Advantage system, or need to be compounded by the IV center.</td>
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<td>2. Describe the physiology of various areas of the brain in the setting of meningitis compared to an uninflamed state.</td>
<td>2. Demonstrate the importance of timing of antibiotic administration in patients presenting with bacterial meningitis and medication delivery implications.</td>
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<td>3. Evaluate a specific antibiotic’s potential to cross the blood brain barrier based on its physiochemical properties.</td>
<td>3. Recognize look-alike sound-alike issues with the cephalosporin antibiotic drug class to avoid medication errors.</td>
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<td>4. Analyze literature critically with regards to methodological strengths and weaknesses of cerebral spinal fluid pharmacokinetic studies and how this translates to clinical application.</td>
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<td>5. Develop clinical recommendations for antibiotic treatment for a patient with bacterial meningitis.</td>
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<td>3/23 Thu</td>
<td>HSEB 2110 at 3:00 pm</td>
<td>Leila Khurshid, PharmD</td>
<td>Weighing In: Enoxaparin and DOAC Dosing in Obesity (0.1CEU)</td>
<td>A-0167-0000-17-010-L01-P/T</td>
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<td>Mentor: Jeanette Bean, PharmD, BCPS</td>
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<td>1. Recognize and define the pharmacokinetic changes in obesity.</td>
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<td>2. Evaluate the risks of inadequately dosing enoxaparin or DOACs in an obese patient.</td>
<td>2. Explain the significance of under-dosing a patient with an anticoagulant.</td>
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<td>3. Apply dosing and monitoring strategies for enoxaparin in an obese patient.</td>
<td>3. Estimate an appropriate dose of enoxaparin given a patient case.</td>
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<td>4. Outline evidence and recommendations regarding direct oral anticoagulants (DOACs) in obesity.</td>
<td>4. Evaluate the role of direct oral anticoagulants (DOACs) in obesity.</td>
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<td>5. Formulate an appropriate treatment plan given a patient case.</td>
<td>5. Interpret a patient case to determine risk factors and potential benefit of anticoagulation.</td>
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Pharmacist Objectives:

1. Outline the recent clinical recommendations provided in the 2016 HAP/VAP guidelines.
2. Identify the risk factors associated with multi drug resistant pathogens (MDR) in patients with HAP/VAP.
3. Design an empiric medication regimen for a patient with HAP/VAP.
4. Assess the need for antibiotic de-escalation and discontinuation.

Technician Objectives:

1. Compare and contrast medications available to treat patients with HAP/VAP.
2. Define the following terms: HAP, VAP, empiric antibiotic therapy, de-escalation.
3. Identify two common pathogens empiric therapy is directed towards.

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