POWER-PAK C.E.®
PHARMACY C.E. PROGRAM
DESCRIPTIONS AND LEARNING OBJECTIVES

2017-2018 Influenza Season: A Review for Pharmacists and Pharmacy Technicians

FACULTY

Clark Kebodeaux, PharmD, BCACP
Clinical Assistant Professor
University of Kentucky College of Pharmacy
Lexington, Kentucky

UAN: 0430-0000-17-079-H06-P
Credits: 2.0 hours (0.20 ceu)

GOAL

To provide information on historical and new trends in influenza immunization that impact patient care, including updated recommendations provided by the Advisory Committee on Immunization Practices for the 2017-2018 influenza season.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Define** current and historical trends that impact influenza immunization recommendations
2. **Describe** the Advisory Committee on Immunization Practices recommendations and updates that guide current influenza immunization practices
3. **Recognize** appropriate influenza immunization-related recommendations for patients in special populations
4. **Identify** appropriate communication techniques to support influenza immunization recommendations

A Systems Approach to Improving Medication Safety

FACULTY

Donna Horn, RPh, DPh
Director, Patient Safety–Community Pharmacy
Institute for Safe Medication Practices
Horsham, PA

UAN: 0430-0000-16-069-H05-P
Credits: 2.0 hours (0.20 ceu)

GOAL

To improve the pharmacist's awareness of multiple underlying system failures that often lead to error, many of which can be identified through root cause analysis or assessed using case reviews or other investigative techniques.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Use** the Institute for Safe Medication Practices' (ISMP)"Key Elements of the Medication Use System" to identify and prevent risk in daily practice;
2. **Describe** how to analyze a medication error using a specific set of steps and associated tools to identify contributing factors and root causes of the event;
3. **Specify** how to use information gathered during root cause analysis to minimize the reoccurrence of medication errors;
4. **Select** effective error reduction strategies that can prevent patient harm and engage in practices that ensure patient safety.

Abuse-Deterrent Formulations: Clinical Applications and Utility in Chronic Pain

FACULTY

Jeffrey Fudin, BS, PharmD, DAAPM, FCCP, FASHP
President and Director, Scientific and Clinical Affairs
REMITIGATE, LLC
Albany, NY

Thien C. Pham, BS, PharmD
Clinical Pharmacy Specialist, Pain Management
VA Long Beach Healthcare System
Long Beach, CA

Jacqueline Cleary, PharmD
Assistant Professor of Pharmacy Practice
Albany College of Pharmacy and Health Sciences
Albany, NY

UAN: 0430-0000-16-108-H05-P
Credits: 2.0 hours (0.20 ceu)

GOAL

To understand the rationale and utility of abuse-deterrent formulations, examine the various technologies, and review their current regulatory status.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Identify** the characteristics that make various opioids desirable among abusers;
2. **Understand** how oral formulations of opioids are abused;
3. **Describe** and differentiate among the various abuse-deterrent formulations (ADFs) and how they can deter opioid abuse;
4. **Review** the regulatory status of abuse-deterrent products in the United States; and
5. **Describe** validated risk assessment tool applicability for employing universal precautions and how this could apply to ADF preference.

Aerosol Delivery Devices Used in the Treatment of Asthma: Improving Patient Education to Prevent Hospital Readmissions

FACULTY

Dean R. Hess, PhD RRT FAARC
Assistant Director of Respiratory Care
Massachusetts General Hospital
Associate Professor of Anesthesia, Harvard Medical School
Boston, MA

UAN: 0430-0000-17-022-H01-P
Credits: 2.0 hours (0.20 ceu)

GOAL

To improve pharmacists' understanding of the performance characteristics related to various aerosol delivery devices and distinguish which aerosol delivery device is most appropriate for an individual patient.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Compare** the performance characteristics of pressurized metered dose inhalers, dry powder inhalers, and nebulizers
2. **List** the correct steps for the use of various aerosol delivery devices
3. **Discuss** advantages and disadvantages of various aerosol delivery devices
4. **Select** the appropriate aerosol delivery device for an individual patient

Compounding Preparations for Ophthalmic Use in Humans

FACULTY

Linda McElhiney, PharmD, MSP, RPh, FIACP, FACA, FASHP
Compounding Pharmacist
Indiana University Health Compounding
Indianapolis, IN

UAN: 0430-0000-16-068-H01-P
Credits: 2.0 hours (0.20 ceu)

GOAL

To review the components and delivery systems of sterile compounded ophthalmic medications and how to properly prepare them according to United States Pharmacopeia standards.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Review** the anatomy of the eye;
2. **Describe** different medication delivery systems for sterile ophthalmic preparations;
3. **Discuss** the components used to prepare sterile compounded ophthalmic preparations; and
4. **Summarize** the United States Pharmacopeia (USP) standards and other relevant guidelines for compounding, dispensing, and storing sterile ophthalmic preparations in effect as of this writing.

Current Topics in Sterile Compounding: The Drug Quality and Security Act

FACULTY

Erin Albert, MBA, PharmD, JD, PAHM
Health Outcomes Pharmacist – Myers and Stauffer, LC
CEO – Pharm, LLC
Indianapolis, IN

Angela V. Ockerman, BS, RPh, PharmD
Butler University College of Pharmacy and Health Sciences
Indianapolis, IN

UAN: 0430-0000-16-068-H01-P
Credits: 2.0 hours (0.20 ceu)

GOAL

To present information on the laws and oversight governing compounding pharmacies and newly designated outsourcing facilities.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Discuss** the issues that led to the introduction and passage of the Drug Quality and Security Act (DQSA);
2. **List** the provisions for compounding and outsourcing facilities stipulated in the DQSA;
3. **Compare** and contrast the definitions of compounding and outsourcing facilities provided in Sections 503A and 503B of the Federal Food, Drug & Cosmetic Act (FDCA); and
4. **Describe** the process for becoming an outsourcing facility under Section 503B of the FDCA.

Diabetes Update: New and Emerging Antihyperglycemic Agents

FACULTY

Joshua J. Neumiller, PharmD, CDE, FASCP
Associate Professor
Department of Pharmacotherapy
Washington State University
Spokane, WA

UAN: 0430-0000-16-042-H01-P
Credits: 2.0 hours (0.20 ceu)

GOAL

To educate pharmacists on select new and emerging medications for the treatment of diabetes mellitus. Emphasis will be placed on the mechanisms of action, efficacy, tolerability, and key patient counseling information for each agent and/or drug class.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Discuss** the mechanisms of action and pharmacodynamic/pharmacokinetic characteristics of new and

emerging antihyperglycemic agents.
2. **Compare** and contrast new and emerging insulins, glucagon-like peptide-1 (GLP-1) receptor agonists, and sodium-glucose co-transporter-2 (SGLT-2) inhibitors.
3. **Discuss** tolerability and safety considerations for select antihyperglycemic agents.
4. **Summarize** key patient counseling information for the antihyperglycemic agents discussed in this lesson.

Emergency Contraception: An Update for Pharmacists

FACULTY

Laura Borgelt, PharmD, FCCP, BCPS, NCMP
Associate Dean of Administration and Operations and Professor
Departments of Clinical Pharmacy and Family Practice
University of Colorado Anshutz Medical Campus
Skaggs School of Pharmacy and Pharmaceutical Sciences
Aurora, CO

UAN: 0430-0000-16-067-H01-P
Credits: 2.0 hours (0.20 ceu)

GOAL

To review the four available methods of emergency contraception and educate pharmacists about each methods' strengths and limitations.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1 **Compare** and contrast various methods of emergency contraception (EC) including their efficacy, mechanism of action, contraindications, dosing, potential drug interactions, and adverse effects;
2. **Explain** ongoing legislation regarding access and prescription status of EC;
3. **Describe** when EC should be recommended to a patient seeking EC; and
4. **Counsel** patients regarding the proper use of oral EC, including referral to primary health care provider when necessary.

Evidence-Based Treatment of Dyslipidemia: Patient-Centered Evaluation and Management

FACULTY

Joseph J. Saseen, PharmD, BCPS, BCACP
Professor, Departments of Clinical Pharmacy and Family Medicine
Vice-Chair, Department of Clinical Pharmacy
University of Colorado School of Pharmacy
Aurora, CO

UAN: 0430-0000-16-071-H01-P
Credits: 2.0 hours (0.20 ceu)

GOAL

This activity's goal is to highlight recent changes in management approaches for dyslipidemia; review drugs used to lower lipids; and address select special populations.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Describe** the American College of Cardiology/American Heart Association cholesterol guidelines and the National Lipid Association recommendations for patient-centered management of dyslipidemia;
2. **Compare** and contrast currently available medications for the treatment of dyslipidemia;
3. **Explain** statin adverse effects, including those related to cognition, new-onset diabetes, and muscle symptoms; and
4. **Summarize** treatment of dyslipidemia in special populations.

Factor Replacement Therapy in Hemophilia A and Hemophilia B

FACULTY

Michelle Bryson, PharmD, BCPS
Clinical Assistant Professor
Drug Information Group
Department of Pharmacy Practice
University of Illinois at Chicago, College of Pharmacy
Chicago, Illinois

Lara K Ellinger, PharmD, BCPS
Clinical Assistant Professor
Drug Information Group
Department of Pharmacy Practice
University of Illinois at Chicago, College of Pharmacy
Chicago, Illinois

UAN: 0430-0000-16-083-H01-P
Credits: 2.0 hours (0.20 ceu)

GOAL

To inform pharmacists of the available factor replacement products and prophylaxis and treatment strategies for hemophilia and enable them to provide comprehensive care for patients with hemophilia A or hemophilia B.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Summarize** the epidemiology and presentation of hemophilia A and hemophilia B;
2. **List** characteristics of available factor replacement therapies;
3. **Review** treatment and prophylactic strategies for bleeding and bleeding-related complications; and
4. **Describe** complications associated with factor replacement therapies.

FDA's Risk Evaluation and Mitigation Strategies Program: What Pharmacists Need to Know

FACULTY

Casey Covrett, PharmD, BCPS
Clinical Editor
Postgraduate Healthcare Education, LLC
[at the time this article was prepared]

UAN: 0430-0000-16-036-H03-P
Credits: 2.0 hours (0.20 ceu)

GOAL

The goal of this activity is to update pharmacists regarding the progression of risk evaluation and mitigation strategies (REMS).

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Explain** the evolution from risk minimization action plans (RiskMAPs) to REMS.
2. **Identify** key elements that may be included in REMS.
3. **Describe** the effect that a REMS has on the health care distribution system.
4. **Summarize** the existing challenges surrounding REMS.

HIV Treatment Overview and Considerations for Antiretroviral Use in Patients with HCV Coinfection

FACULTY

John M. Conry, PharmD, AAHIVP, FNAP
College of Pharmacy and Health Sciences
St. John's University
Queens, New York

Clinical Coordinator of Pharmaceutical Care Services
Project Renewal
New York, New York

UAN: 0430-0000-16-091-H02-P
Credits: 3.0 hours (0.30 ceu)

GOAL

To review screening and management of human immunodeficiency virus (HIV), hepatitis C virus (HCV), and HIV/HCV coinfected treatment-naive patients, with special emphasis on the role of the pharmacist as a member of the health care team caring for the HIV/HCV-coinfected patient.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Review** the epidemiology and screening recommendations for human immunodeficiency virus (HIV) and hepatitis C virus (HCV) infections;
2. **Identify** treatment goals for HIV-infected patients and for HCV-infected patients;
3. **Describe** the current HIV treatment guidelines and the appropriate selection of antiretrovirals when initiating therapy in antiretroviral-naive HIV-infected patients;
4. **Describe** the current HCV treatment guidelines and the appropriate selection of treatment when initiating therapy in treatment-naive HCV-infected patients; and
5. **Discuss** how drug interactions between HIV and HCV treatments affect the care of HIV/HCV coinfected patients.

Implementing and Providing Transitions of Care Among Health Care Settings

FACULTY

Julianna Burton, PharmD, BCPS, BCACP, FCSHP
Assistant Chief of Pharmacy
Department of Pharmacy
University of California–Davis Medical Center
Sacramento, CA

Pamela Mendoza, PharmD
Transitions of Care Pharmacist
Department of Pharmacy
University of California–Davis Medical Center
Sacramento, CA

UAN: 0430-0000-16-044-H04-P
Credits: 2.0 hours (0.20 ceu)

GOAL

Inform and educate pharmacists about transitions of care and the need for collaboration with other health care professionals as patients transition from one health care setting to the next and provide resources, tools, and key components for implementing and/or improving transitions of care as suggested in primary literature and governing bodies.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Describe** different transitions of care (TOC) models and barriers to effective TOC among care settings;
2. **Explain** components of medication reconciliation, including methods for obtaining the best possible medication history;
3. **Outline** a plan to introduce transitions of care in health systems and key elements to obtain administrative buy-in; and
4. **List** financial options to support transitions of care.

Management of Pain, Agitation, and Delirium in Critically Ill Adult Patients

FACULTY

Gilles L. Fraser, PharmD, MCCM
Professor of Medicine
Tufts University College of Medicine
Director Clinical Specialist Critical Care
Department of Pharmacy
Maine Medical Center
Portland, ME

Lauren Payne, PharmD
PGY2 Critical Care Resident
Maine Medical Center
Portland, ME

UAN: 0430-0000-16-038-H01-P
Credits: 2.0 hours (0.20 ceu)

GOAL

To improve pharmacists understanding of best standards of care in regards to therapeutic management of pain, agitation, and delirium in critically ill adults.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Select** patient-care strategies to potentially improve the experience of the critically ill patient by increasing patient comfort.
2. **Use** the 2013 American College of Critical Care Medicine (ACCM) pain, agitation, and delirium guidelines to develop prevention and treatment plans for critically ill patients.
3. **Discuss** pharmacologic agents for treatment of pain and agitation in the intensive care unit (ICU).
4. **List** ways to expand the pharmacist's role in making pain, agitation, and delirium-related recommendations in the ICU.

Medical Marijuana: Pharmacologic and Regulatory Considerations

FACULTY

Gerald Gianutsos, PhD, JD
Associate Professor of Pharmacology
School of Pharmacy
University of Connecticut
Storrs, CT

UAN: 0430-0000-16-081-H01-P
Credits: 2.0 hours (0.20 ceu)

GOAL

To provide an understanding of the pharmacology, effects, side effects, and potential clinical uses of marijuana constituents and to provide a basis for the appreciation of the controversy and legal issues surrounding state and federal programs that attempt to regulate the availability of marijuana for medical and non-medical uses.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **List** the potential therapeutic applications of marijuana;
2. **Describe** the effects of marijuana on the central nervous system and other organ systems;
3. **Recognize** the advantages and disadvantages of different natural and synthetic cannabinoids and routes of administration;
4. **Describe** the differences and similarities among states that permit marijuana to be used for medical purposes; and
5. **Analyze** the controversy between state and federal law as it applies to marijuana and the historical context of regulation.

A Review of Nonsterile Compounding Essentials for Veterinary Patients (Module 10)

FACULTY

Gigi Davidson, RPh, DICVP
Director of Clinical Pharmacy Services
North Carolina State Veterinary Hospital
Raleigh, NC

UAN: 0430-0000-16-061-H04-P
Credits: 2.5 hours (0.25 ceu)

GOAL

To provide pharmacists with knowledge and skills to facilitate preparation of high quality and legally compliant simple, moderate, and complex nonsterile compounded preparations for veterinary patients.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Summarize** regulatory boundaries for legally compliant preparation of nonsterile compounds for veterinary patients.
2. **Differentiate** species-specific considerations for preparing simple, moderate, and complex nonsterile compounds for veterinary patients.
3. **Identify** drugs, excipients, vehicles, flavors, and preservatives that are toxic in veterinary patients.
4. **Describe** preparation of and quality assurance assessments for commonly prescribed simple, moderate, and complex nonsterile veterinary compounded preparations.
5. **Provide** comprehensive counseling and monitoring for caregivers administering compounding preparations for nonhuman patients.

Opioid Analgesics: Best Practices for Prescribing, Dispensing, and Preventing Diversion

FACULTY

Mark Rose, BS, MA
Licensed Psychologist and Researcher/Field of alcoholism and drug addiction
North Central Biomedical Communications, Inc
St. Paul, Minnesota

UAN: 0430-0000-17-017-H03-P
Credits: 3.0 hours (0.30 ceu)

GOAL

To increase pharmacists' understanding of opioid use, diversion, and abuse in West Virginia; review safe and effective opioid prescribing and dispensing practices for pain management; and review opioid antagonist prescribing and administration in West Virginia.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Using** data from West Virginia, describe the epidemiology of chronic pain, demographics of patients who abuse opioids, addiction/abuse risk factors, and opioids' abuse potential

2. **Describe** opioids' characteristics (including toxicities and drug interactions), associated use disorders, and behavioral responses to prescribed opioids
3. **Describe** best practices for prescribing of opioid analgesics and management of patients with pain
4. **Discuss** the complete range of legal requirements for controlled substance prescriptions, identification of fraudulent prescriptions, drug-seeking behaviors, and drug diversion
5. **Describe** risk reduction approaches, including FDA risk evaluation and mitigation strategies (REMS), and the West Virginia Controlled Substance Monitoring Program
6. **Using** a case study, apply best practices for opioid analgesics in ways that deal with known and potential abusers effectively, efficiently, and safely
7. **Educate** patients on appropriate drug administration of naloxone rescue therapy and other overdose prevention strategies

Opioids: Addiction, Overdose Prevention, and Patient Education

FACULTY

Kelly N. Gable, PharmD, BCPP
Associate Professor
Southern Illinois University–Edwardsville, School of Pharmacy
Edwardsville, IL
Psychiatric Care Provider
Places for People
St. Louis, MO

UAN: 0430-0000-15-006-H05-T
Credits: 2.0 hours (0.20 ceu)

GOAL

This activity is designed to educate pharmacists about treatment concerns associated with addiction, life-saving treatments to prevent opioid overdose and patient education about naloxone rescue therapy.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Discuss** national trends specific to opioid use and overdose.
2. **Describe** the neurobiology of opioid use disorder and addiction.
3. **Understand** the signs and symptoms of opioid use disorder, intoxication, and withdrawal.
4. **Identify** patients who are at risk for opioid use disorder and opioid overdose.
5. **Recognize** how to educate patients on appropriate drug administration of naloxone rescue therapy and other overdose prevention strategies.

Optimizing Use of Biologic DMARDs in Rheumatoid Arthritis

FACULTY

Steven Kheloussi, PharmD
Adjunct Professor, Pharmacy Practice
Wilkes University, School of Pharmacy
Medication Therapy Management Pharmacist
Geisinger Health Plan
Wilkes-Barre, PA

UAN: 0430-0000-16-037-H01-P
Credits: 2.5 hours (0.25 ceu)

GOAL

To review clinical and practical aspects of use of biologic disease-modifying antirheumatic drugs in treatment of patients with rheumatoid arthritis.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Describe** the role of biologic disease-modifying antirheumatic drugs (DMARDs) in the treatment of patients with rheumatoid arthritis (RA).
2. **Recall** dosing, precautions, contraindications, and warnings involving the use of biologic DMARDs in patients with RA.
3. **Review** appropriate subcutaneous injection techniques for select biologic DMARDs.
4. Identify the need for tuberculosis screening and appropriateness of vaccinations in patients using biologic DMARDs.
5. **List** available RA disease activity indices that are increasingly being used in patient monitoring.

Pediatric Readiness in the Hospital Setting: Preparing Pharmacists for Pediatric Emergencies

FACULTY

Pamela Lada Walker, PharmD, MHA, BCPS
Clinical Coordinator, Emergency Medicine Pharmacy Services
Adjunct Clinical Assistant Professor
Department of Pharmacy
University of Michigan
Ann Arbor, Michigan

Jeannette Wick, RPh, MBA, FASCP
Visiting Professor
School of Pharmacy
University of Connecticut
Storrs, Connecticut

UAN: 0430-0000-16-075-H01-P
Credits: 2.0 hours (0.20 ceu)

GOAL

To discuss the unique issues that pharmacists must consider when providing care for pediatric patients in institutional settings during times of disasters (biological, chemical, natural, and radiological).

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Describe** the different agencies involved in disaster preparedness;
2. **Discuss** the pharmacodynamic differences that elevate risk in pediatric populations;
3. **Categorize** the different biological terrorism agents per classifications of the Centers for Disease Control and Prevention; and
4. **Prepare** a disaster pharmaceutical plan for pediatric patients for exposures that include biological agents, chemical agents, and radiological agents

Perioperative Pharmacy Care—What Every Pharmacist Should Know

FACULTY

Jeannette Wick, RPh, MBA, FASCP
Visiting Professor
School of Pharmacy
University of Connecticut
Storrs, Connecticut

UAN: 0430-0000-16-072-H01-P
Credits: 2.0 hours (0.20 ceu)

GOAL

To describe four major areas of perioperative care relevant to pharmacists practicing in acute and other care settings: antibiotic prophylaxis in surgical patients; malignant hyperthermia, safe use of alvimopan, and management of systemic toxicities of local anesthetics.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Describe** the prevalence and economic burden of surgical site infections.
2. **Summarize** Surgical Care Improvement Project performance measures and their application in the hospital including antibiotic selection, timing of initial dose, when to stop, and intraoperative re-dosing recommendations.
3. **List** details about the pathophysiology of malignant hyperthermia, causative agents, and the pharmacist response team's drug therapy management options and responsibilities.
4. **Explain** the alvimopan (Entereg) Risk Evaluation Mitigation Strategy.
5. **Recognize** local anesthetic systemic toxicity and be able to actively assist with emergency treatment.
6. **List** various contraindications and warnings for nonprescription products commonly recommended for headache and other common conditions causing pain.

Pharmacist Immunization Practices and OARRS Updates: Ohio Pharmacy Law

FACULTY

Joseph R. Sabino, BS, MS, RPh
Clinical Editor and Medical Writer
Wilmington, North Carolina

UAN: 0430-0000-16-003-H03-P
Credits: 1.0 hours (0.10 ceu)

GOAL

To update pharmacists on the current status of key issues in Ohio Statutes and Rules governing immunizations administered by pharmacists and pharmacy interns as well as guidance for the appropriate use of the Ohio Automated Rx Reporting System (OARRS).

EDUCATIONAL OBJECTIVES

Upon completion of this program, participants should be better able to:

1. List the general guidelines in Ohio Statutes and Rules for immunizations permitted for pharmacist and pharmacy intern administration;
2. Explain the education and legal requirements for pharmacists and pharmacy interns to lawfully administer immunizations;
3. Review basic record keeping requirements for the administration of immunizations;
4. Identify the standards that have been established for the use of the Ohio Automated Rx Reporting System (OARRS);
5. Describe the nature and use of Morphine Equivalent Dose (MED) on the OARRS report.

Pharmacotherapeutic Agents for Smoking Cessation

FACULTY

Kristen M. Wiese, PharmD
Clinical Pharmacist
Adult Ambulatory Psychiatry
Pharmacogenomics Fellow
Department of Clinical, Social, & Administrative Pharmacy
College of Pharmacy
University of Michigan
Ann Arbor, MI

UAN: 0430-0000-16-109-H01-P
Credits: 2.0 hours (0.20 ceu)

GOAL

The goal of this program is to increase the pharmacist's knowledge base regarding pharmacologic treatment options used for smoking cessation, with a focus on nicotine replacement therapies.

EDUCATIONAL OBJECTIVES

Upon completion of this program, participants should be better able to:

1. **Describe** the health benefits of smoking cessation;
2. **Recognize** patients who are appropriate candidates for nicotine replacement therapy (NRT);
3. **Compare** available formulations of NRTs and how they differ with respect to dosing, adverse events, and pharmacokinetic parameters;
4. **Explain** alternative pharmacologic treatment options for smoking cessation; and Counsel patients on the use of prescription and over-the-counter NRTs.

Primer on Prevention and Treatment of HIV Infection

FACULTY

David Cluck, PharmD, BCPS, AAHIVP
Clinical Assistant Professor and Clinical Pharmacist, Infectious Disease
Department of Pharmacy Practice
East Tennessee State University – Gatton College of Pharmacy
Johnson City, TN

UAN: 0430-0000-16-076-H02-P
Credits: 3.0 hours (0.30 ceu)

GOAL

To educate pharmacists about prevention and treatment of human immunodeficiency virus (HIV) infection and review Florida-specific legislation related to HIV testing requirements.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. Discuss the epidemiology of HIV infection including trends related to incidence and transmission
2. Summarize opportunistic infections associated with HIV/acquired immunodeficiency syndrome (AIDS)
3. Outline infection control practices for HIV infection as well as nonpharmacologic and pharmacologic methods of prevention
4. Review preferred antiretroviral drug regimens for treatment-naive and treatment-experienced patients
5. Describe HIV testing-related requirements of the Florida Omnibus AIDS Act

Reaching for the 'Stars': Medication Nonadherence, Root Causes, and Methods for Intervention

FACULTY

Jennifer Strobecker, PharmD, BCPS
Director Corporate Pharmacy Services, Clinical Operations
Molina Healthcare, Inc.
Midvale, UT

UAN: 0430-0000-16-084-H04-P
Credits: 2.0 hours (0.20 ceu)

GOAL

To describe medication nonadherence and pharmacists' roles in addressing it under the Medicare Five-Star Quality Rating System.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Differentiate** between the fee-for-service model and quality-based performance health care models;
2. **Define** Centers for Medicare & Medicaid Services (CMS) standards for nonadherence using proportion of days covered (PDC);
3. **List** the consequences of medication nonadherence;
4. **Describe** the CMS Five-Star Quality Rating System's medication adherence quality measures and their role in Medicare Part D;
5. **Outline** the necessary components of the high-touch model;
6. **Recall** the patient, provider, and external factors that contribute to nonadherence; and
7. **Use** strategies to identify and resolve barriers to adherence through a high-touch model.

Safe and Effective Use of Extended-Release and Long-Acting Opioids: Overview of ER/LA Opioid Risk Evaluation Mitigation Strategy

FACULTY

Michele Matthews, PharmD, CDE, BCACP
Associate Professor of Pharmacy Practice
Massachusetts College of Pharmacy and Health Sciences
Boston, MA

UAN: 0430-0000-16-039-H05-P
Credits: 2.0 hours (0.20 ceu)

GOAL

Provide pharmacists with timely and practical education on the role of long-acting and extended-release opioids in the management of chronic pain with emphasis on safety and appropriate monitoring.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Describe** components of the Risk Evaluation Mitigation Strategy (REMS) program associated with the prescribing of extended-release/long-acting (ER/LA) opioids.
2. **Determine** the appropriateness of ER/LA opioid therapy for patients with chronic pain.
3. **Implement** monitoring strategies to ensure the safe and effective use of ER/LA opioids.
4. **Educate** patients on the benefits and risks of ER/LA opioids to improve adherence and minimize adverse effects.
5. **Calculate** a day's supply of both oral solid and liquid dosage forms.

Texas State Law Primer and Updates

FACULTY

Eli G. Phillips, Jr., PharmD, JD
Director, Pharmacy Compliance
Quality & Regulatory Affairs
Cardinal Health

UAN: 0430-0000-15-026-H03-P
Credits: 1.0 hour (0.10 ceu)

GOAL

To review professional pharmacy practice requirements of both pharmacists and pharmacy technicians in the state of Texas.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Recognize** the purpose and composition of the Texas State Board of Pharmacy;
2. **Understand** the continuing education requirement(s) for pharmacy technicians;
3. **Describe** the legal requirements for various product substitutions;
4. **Identify** the situations that require a pharmacist to provide patient counseling; and
5. **Support** pharmacists in preparing prescriptions within legal limits.

The Drug Supply Chain Security Act: Improving the Integrity of Drug Distribution

FACULTY

Marsha K. Millonig, MBA, BPharm
President & CEO
Catalyst Enterprises, LLC
Eagan, Minnesota

UAN: 0430-0000-15-056-H01-P
Credits: 2.0 hours (0.20 ceu)

GOAL

The goal of this activity is to provide relevant education to pharmacists about the Drug Supply Chain Security Act (DSCSA) to improve the integrity of the drug supply distribution chain, while learning methods to identify suspect product.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Review** how the Drug Supply Chain Security Act (DSCSA) will improve the integrity of the drug supply distribution chain;
2. **Describe** the "track and trace" language in the DSCSA;
3. **List** DSCSA requirements and their effective dates;
4. **Explain** what documentation has to "move" with the product; and
5. **Describe** methods for identifying suspect product delivered to the pharmacy.

The Utility of Root Cause Analysis and Failure Mode and Effects Analysis in the Hospital Setting

FACULTY

Jennifer Gibson, PharmD
Medical Writer
President of Excalibur Scientific

UAN: 0430-0000-15-062-H05-P
Credits: 2.0 hours (0.20 ceu)

This course is approved by the Florida Board of Pharmacy, provider number 50-17869.

CE Broker Course ID: 20-494329
Postgraduate Healthcare Education, LLC reports registered course completions by Florida license holders to the CE Broker System.

GOAL

Identifying and preventing medication errors is a significant challenge in all health care settings. Pharmacists must understand common methodologies for detecting sources of risk in order to participate in error and risk investigations and to implement changes in pharmacy practice.

EDUCATIONAL OBJECTIVES

Upon completion of this program, participants should be able to:

1. **Discuss** the prevalence of medication errors in the United States;
2. **Describe** the utility of root cause analysis (RCA) in the health care setting;
3. **Outline** the steps involved in a failure mode and effects analysis (FMEA);
4. **Summarize** the benefits of drawing from a multidisciplinary team to complete patient safety evaluations; and
5. **List** 4 strategies that can be employed in the pharmacy to help reduce medication errors.

Update on the Prescription Drug Abuse Epidemic for Pharmacists and Pharmacy Technicians

FACULTY

Gerald Gianutsos, PhD, JD
Associate Professor of Pharmacology
School of Pharmacy
University of Connecticut
Storrs, CT

UAN: 0430-0000-16-020-H03-P
Credits: 2.0 hours (0.20 ceu)

GOAL

The goal of the activity is to update pharmacists and pharmacy technicians about the current issues surrounding the nonmedical use of prescribed controlled substances, including the approaches to and consequences of regulatory efforts to minimize diversion, with an emphasis on rescheduling.

EDUCATIONAL OBJECTIVES

Upon completion of this program, participants should be better able to:

1. **State** the current prevalence of the diversion of prescribed controlled substances, as well as some concerns associated with this diversion;
2. **Describe** the differences among criteria for designating controlled drugs into different schedules;
3. **Identify** how federal and state laws regulating controlled substances may differ;
4. **Outline** the process for reclassification of controlled substances; and
5. **Discuss** how reclassification can affect pharmacists, pharmacy technicians, and patients.

USP General Chapter <797>: A Guide to Sterile Compounding for Pharmacy Personnel

FACULTY

Patricia C. Kienle, RPh, MPA, FASHP
Cardinal Health Innovative Delivery Solutions
Angela G. Long, MS, MPH
RightInsight

UAN: 0430-0000-17-041-H04-P
Credits: 2.0 hours (0.20 ceu)

GOAL

To present requirements for establishing and maintaining policies, facilities, and personnel needed for production of sterile compounded preparations in accordance with laws, regulations, and standards in the United States.

LEARNING OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **List** the key regulations, standards, and enforcement bodies for sterile compounding.
2. **Identity** the types of primary engineering controls used for nonhazardous and hazardous sterile compounding
3. **State** the two physical tests that must be successfully completed by compounders and

the frequency the tests must be performed
4. **Differentiate** viable and nonviable testing for compounding facilities
5. **List** the work practices required when compounding sterile preparations.

USP General Chapter <800>: A Pharmacy Professional's Guide to Handling and Compounding Hazardous Drugs

FACULTY

Patricia C. Kienle, RPh, MPA, FASHP
Cardinal Health Innovative Delivery Solutions

Angela G. Long, MS, MPH
RightInsight

UAN: 0430-0000-17-060-H07-P
Credits: 2.0 hours (0.20 ceu)

GOAL

To present information on the practice issues, standards, and regulatory framework related to the handling of and compounding hazardous drugs.

LEARNING OBJECTIVES

Upon completion of this activity, participants should be better able to:
1. **State** the purpose of the United States Pharmacopeia Chapter <800>, to whom it applies, and in what locations
2. **Identify** the document that must be used to identify hazardous drugs
3. **Define** the process for establishing an assessment of risk
4. **Cite** the types of engineering controls appropriate for use with hazardous drugs
5. **List** the type of environmental monitoring used to detect hazardous drug contamination

Vaccine Storage, Handling, and Administration, and Vaccine Adverse Events: A Review for the Pharmacist

FACULTY

Michael D. Hogue, PharmD, FAPhA, FNAP
Chair & Professor
Department of Pharmacy Practice
Samford University—McWhorter School of Pharmacy
Birmingham, AL

UAN: 0430-0000-16-065-H01-P
Credits: 2.0 hours (0.20 ceu)

GOAL

To inform pharmacists about current practices in vaccine storage, handling, and administration, and provide an update on adverse reactions to vaccines.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Identify** the appropriate parameters for vaccine storage and handling;
2. **Discuss** the significance of the Vaccine Adverse Event Reporting System, National Vaccine Errors Reporting Program, and Vaccine Injury Compensation Program, and pharmacists' professional responsibility to participate in these programs;
3. **Describe** the procedures for handling vaccines that have been exposed to a deviation in required storage temperature; and
4. **Discuss** mechanisms for pharmacists to ensure, to the best of their ability, vaccine safety.

Zika Virus and Its Effects in Pregnancy

FACULTY

Ruth P. Ebiasah, PharmD, MS
National Institutes of Health
National Institute of Allergy and Infectious Diseases
Bethesda, Maryland

Thucuma K. Sise, PharmD, BCPS
National Institutes of Health
National Institute of Allergy and Infectious Diseases
Bethesda, Maryland

Michelle Wildman, PharmD
National Institutes of Health
National Institute of Allergy and Infectious Diseases
Bethesda, Maryland

UAN: 0430-0000-16-082-H01-P
Credits: 2.0 hours (0.20 ceu)

GOAL

To educate pharmacists and pharmacy technicians about the effect of Zika infection during pregnancy, modes of transmission, signs and symptoms of infection, and preventive measures.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. **Describe** the characteristics of Zika virus and its various modes of transmission.
2. **Recognize** the clinical presentation of Zika infections, including signs and symptoms, and discuss the tools used to definitively diagnose a Zika infection.
3. **Identify** the potential complications that could affect the fetus as a result of Zika infection during pregnancy.
4. **Counsel** patients on important information about Zika virus, including preventive measures for avoiding exposure to infection.