

## Materials for this course will release 03/29/2023

### Emergency Medicine Pharmacy Specialty Review Course and Practice Exam (No Recert Credit (Cert # L239108)

**Teaser:** This online Specialty Review Course and Practice Exam package will help you prepare for the Board of Pharmacy Specialty (BPS) examination. With this course, get comprehensive, practical guidance, with a variety of complex cases, including references for further study.

Tag: Certifications; Emergency Medicine



ACPE Numbers: Various - see listing below

Pre-Sale Date: 03/15/2023

Content Release Date: 03/29/2023 Expiration Date: 02/13/2024 Activity Type: Application-based

CE Credits: 25 contact hours (ACPE only)

Activity Fee: \$425 (ASHP member); \$625 (non-member)

#### Accreditation



The American Society of Health-System Pharmacists is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education with Commendation.



The American College of Clinical Pharmacy is accredited by the Accreditation Council for Pharmacy Education as providers of continuing pharmacy education.

## **Target Audience**

These activities are intended for pharmacists who are seeking to update their knowledge and skills commensurate with a board certification examination in the areas listed below.

## **Activity Overview**

This online course provides a robust preparatory curriculum for the pharmacy professional preparing for the Board of Pharmacy Specialties (BPS) Emergency Medicine Pharmacy Specialty Certification Examination. Designed based on the domains, tasks, and knowledge statements developed by the BPS for the certification examination, this course will help you prepare for the exam by identifying areas needed for in-depth review of emergency medicine issues by:

- · Reviewing pertinent clinical topics and practice skills
- Providing exam practice questions
- Listing valuable references for further study

These activities are part of the ASHP and ACCP professional development program.



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### **REVIEW COURSE**

This course consists of 21 activities (see table below) and provides up to 25 contact hours of continuing pharmacy education credit. The Review Course includes case-based presentations for application to real-life scenarios, a practice exam along with correct answers, and links to the reference sources, and domains, tasks, and knowledge statements to help you prepare for the BPS Specialty Examination.

Learning Activity	ACPE Number	Contact Hours	ACPE Expiration Date
Complex Case: Pulmonary	0204-9999-23-920-H01-P	1.50 ACPE	03/29/26
Complex Case: Cardiovascular - ACS	0204-9999-23-921-H01-P	1.00 ACPE	03/03/26
Complex Case: Cardiovascular - Acute Decompensated Heart Failure	0204-9999-23-922-H01-P	1.00 ACPE	03/03/26
Complex Case: Cardiovascular - Dysrhythmia	0204-9999-23-923-H01-P	1.00 ACPE	03/03/26
Complex Case: Seizures and Status Epilepticus	0204-9999-23-924-H01-P	1.00 ACPE	03/02/26
Complex Case: Headache	0204-9999-23-925-H01-P	1.00 ACPE	03/02/26
Complex Case: Ischemic Stroke	0204-9999-23-926-H01-P	1.00 ACPE	03/02/26
Complex Case: Psychiatry	0204-9999-23-927-H01-P	1.50 ACPE	03/02/26
Complex Case: Hepato-gastrointestinal	0204-9999-23-928-H01-P	1.00 ACPE	03/03/26
Complex Case: Endocrine	0204-9999-23-929-H01-P	1.00 ACPE	03/03/26
Complex Case: Infectious Diseases - Sepsis	0204-9999-23-930-H01-P	1.50 ACPE	03/04/26
Complex Case: Infectious Diseases - Meningitis	0204-9999-23-931-H01-P	1.00 ACPE	03/04/26
Complex Case: Toxicology - Adult	0204-9999-23-932-H01-P	1.50 ACPE	03/03/26
Complex Case: Toxicology - Pediatric	0204-9999-23-933-H01-P	1.50 ACPE	03/04/26
Complex Case: Surgery and Trauma - Blunt Trauma	0204-9999-23-934-H01-P	1.50 ACPE	03/02/26
Complex Case: Surgery and Trauma - Penetrating Trauma	0204-9999-23-935-H01-P	1.00 ACPE	03/02/26
Complex Case: Genitourinary	0204-9999-23-936-H01-P	1.00 ACPE	03/03/26
Complex Case: Obstetric Emergencies	0204-9999-23-937-H01-P	1.00 ACPE	03/02/26
Complex Case: Hematology	0204-9999-23-938-H01-P	1.00 ACPE	03/04/26
Complex Case: Oncology	0204-9999-23-939-H01-P	1.00 ACPE	03/29/26
Statistics, Evidence-based Medicine, and Research Design	0204-9999-23-940-H04-P	2.00 ACPE	03/04/26

### **Learning Objectives**

After participating in these CPE activities, learners should be able to:

## **Complex Case: Pulmonary**

ACPE #: 0204-9999-23-920-H01-P

- Identify initial management in medical emergencies using available patient-specific information (e.g., age-related, risk factors, relevant acuity indices).
- Summarize strategies for procurement, preparation, and administration of time-sensitive therapies.
- Adjust patient-centered care plan based upon response, monitoring and patient-specific information.
- Identify adverse drug events and medication errors in emergency medicine.
- Evaluate protocols for adherence to evidence-based guidelines to assure safe and cost effective medication use and optimal resource allocation.

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#### Complex Case: Cardiovascular - ACS

ACPE #: 0204-9999-23-921-H01-P

- Identify initial management in medical emergencies using available patient-specific information (e.g., age-related, risk factors, relevant acuity indices, pre-hospital providers).
- Develop therapeutic and monitoring plans based on medication-related problems, patient- and disease-specific information, and laboratory data.
- Summarize strategies for procurement, preparation, and administration of time-sensitive therapies.
- Assess applicability and limitations of published data and reports to care of patient.
- Modify treatment plan based upon monitoring patient's response to initial therapy.

## **Complex Case: Cardiovascular - Acute Decompensated Heart Failure**

ACPE #: 0204-9999-23-922-H01-P

- Assess patient presentation based upon patient-specific signs, symptoms, acuity indices, laboratory and other diagnostic results.
- Evaluate medication-related problems based on presentation, history (e.g., pre-hospital providers), medication use, and/or laboratory data.
- Summarize strategies for procurement, preparation, and administration of time-sensitive therapies.
- Modify treatment plan based upon monitoring patient's response to initial therapy.

#### Complex Case: Cardiovascular - Dysrhythmia

ACPE #: 0204-9999-23-923-H01-P

- Identify initial management in medical emergencies using available patient-specific information (e.g., age-related, risk factors, relevant acuity indices, pre-hospital providers).
- Summarize strategies for procurement, preparation, and administration of time-sensitive therapies.
- Modify treatment plan based upon monitoring patient's response to initial therapy.

### **Complex Case: Seizures and Status Epilepticus**

ACPE #: 0204-9999-23-924-H01-P

- Identify initial management in medical emergencies using available patient-specific information (e.g., age-related, risk factors, relevant acuity indices, pre-hospital providers).
- Evaluate medication-related problems based on presentation, history (e.g., pre-hospital providers), medication use, and laboratory data.
- Develop therapeutic and monitoring plans based on medication-related problems, patient- and disease-specific information, and laboratory data.
- Summarize strategies for procurement, preparation, and administration of time-sensitive therapies.
- Modify treatment plan based upon patient's response to initial therapy.

## **Complex Case: Headache**

ACPE #: 0204-9999-23-925-H01-P

- Evaluate medication-related problems based on presentation, history (e.g., pre-hospital providers), medication use, and laboratory data.
- Develop therapeutic and monitoring plans based on medication-related problems, patient- and disease-specific information, and laboratory data.
- Modify treatment plan based upon monitoring patient's response to initial therapy.
- Develop education, discharge and follow-up care plans based upon patient- and disease specific factors to improve adherence and continuity of care.

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## **Complex Case: Ischemic Stroke**

ACPE #: 0204-9999-23-926-H01-P

- Identify initial management in medical emergencies using available patient-specific information (e.g., age-related, risk factors, relevant acuity indices).
- Evaluate medication-related problems based on presentation, history (e.g., pre-hospital providers), medication use, and laboratory data.
- Develop therapeutic and monitoring plans based on medication-related problems, patient- and disease-specific information, and laboratory data.
- Summarize strategies for procurement, preparation, and administration of time-sensitive therapies.
- Modify treatment plan based upon monitoring patient's response to initial therapy.

#### **Complex Case: Psychiatry**

ACPE #: 0204-9999-23-927-H01-P

- Interpret signs, symptoms, laboratory and other diagnostic and acuity results.
- Develop therapeutic and monitoring plans based on medication-related problems, patient- and disease-specific information, and laboratory data.
- Select alternative routes of administration based upon patient-specific factors.
- Modify treatment plan based upon monitoring patient's response to initial therapy.
- Assess applicability and limitations of published data and reports to care of patient.

### **Complex Case: Hepato-gastrointestinal**

ACPE #: 0204-9999-23-928-H01-P

- Interpret signs, symptoms, laboratory and other diagnostic and acuity results.
- Develop therapeutic and monitoring plans based on medication-related problems, patient- and disease-specific information, and laboratory data.
- Select alternative routes of administration based upon patient-specific factors.
- Modify treatment plan based upon monitoring patient's response to initial therapy.

## **Complex Case: Endocrine**

ACPE #: 0204-9999-23-929-H01-P

- Interpret signs, symptoms, laboratory and other diagnostic and acuity results.
- Develop therapeutic and monitoring plans based on medication-related problems, patient- and disease-specific information, and laboratory data.
- Select alternative routes of administration based upon patient-specific factors.
- Modify treatment plan based upon monitoring patient's response to initial therapy.
- Develp education, discharge and follow-up care plans based upon patient- and disease specific factors to improve adherence and continuity of care.

#### **Complex Case: Infectious Diseases - Sepsis**

ACPE #: 0204-9999-23-930-H01-P

- Develop therapeutic and monitoring plans based on medication-related, patient- and disease-specific information, laboratory data, and available evidence.
- Summarize strategies for procurement, preparation, and administration of time-sensitive therapies.
- Modify treatment plan based upon patient's response to initial therapy and stewardship guidelines
- Evaluate medication use protocols for adherence to evidence-based guidelines.
- Identify principles of quality assurance and continuous quality improvement (e.g., RAC, MUE).



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#### **Complex Case: Infectious Diseases - Meningitis**

ACPE #: 0204-9999-23-931-H01-P

- Identify initial management in medical emergencies using available patient-specific information (e.g., age-related, risk factors, relevant acuity indices).
- Interpret signs, symptoms, laboratory and other diagnostic and acuity results.
- Develop therapeutic and monitoring plans based on medication-related problems, patient- and disease-specific information, and laboratory data.
- Select alternative routes of administration based upon patient-specific factors.
- Summarize strategies for procurement, preparation, and administration of time-sensitive therapies.
- Modify treatment plan based upon monitoring patient's response to initial therapy.

#### Complex Case: Toxicology - Adult

ACPE #: 0204-9999-23-932-H01-P

- Identify initial management in medical emergencies using available patient-specific information (e.g., age-related, risk factors, relevant acuity indices).
- Develop therapeutic and monitoring plans based on medication-related, patient- and disease-specific information, and laboratory data.
- Interpret signs, symptoms, and laboratory and other relevant diagnostic test results.
- Evaluate policies and processes for availability of essential drugs (e.g., drug shortages) and emergency preparedness.
- Summarize strategies for procurement, preparation, and administration of time-sensitive therapies.
- Modify treatment plan based upon monitoring patient's response to initial therapy.

## **Complex Case: Toxicology - Pediatric**

ACPE #: 0204-9999-23-933-H01-P

- Identify initial management in medical emergencies using available patient-specific information (e.g., age-related, risk factors, relevant acuity indices).
- Develop therapeutic and monitoring plans based on medication-related problems, patient- and disease-specific information, and laboratory data.
- Summarize strategies for procurement, preparation, and administration of time-sensitive therapies.
- Modify treatment plan based upon patient's response to initial therapy.

## **Complex Case: Surgery and Trauma - Blunt Trauma**

ACPE #: 0204-9999-23-934-H01-P

- Identify initial management in medical emergencies using available patient-specific information (e.g., age-related, risk factors, medication use, acuity indices).
- Interpret signs, symptoms, and laboratory and other diagnostic test results.
- Develop therapeutic and monitoring plans based on medication-related problems, patient- and disease-specific information, and laboratory data.
- Modify treatment plan based upon monitoring the patient's response to initial therapy.



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#### **Complex Case: Surgery and Trauma - Penetrating Trauma**

ACPE #: 0204-9999-23-935-H01-P

- Identify initial management in medical emergencies using available patient-specific information (e.g., age-related, risk factors, medication use, and acuity indices).
- Interpret signs, symptoms, acuity indices, laboratory and other diagnostic results (e.g., pre-hospital care).
- Develop therapeutic and monitoring plans based on medication-related problems, patient- and disease-specific information, and laboratory data.
- Select alternative routes of administration based upon patient-specific factors.
- Modify treatment plan based upon patient's response to initial therapy.

## **Complex Case: Genitourinary**

ACPE #: 0204-9999-23-936-H01-P

- Interpret signs, symptoms, and laboratory and other relevant diagnostic test results.
- Develop therapeutic and monitoring plans based on medication-related problems, patient- and disease-specific information, and laboratory data.
- Develop discharge and follow-up care plans based upon patient- and disease specific factors and public health recommendations to ensure continuity of care.

## **Complex Case: Obstetric Emergencies**

ACPE #: 0204-9999-23-937-H01-P

- Identify initial management in medical emergencies using available patient-specific information (e.g., age-related, risk factors, relevant acuity indices) and best available evidence.
- Interpret signs, symptoms, and laboratory and other relevant diagnostic test results.
- Develop therapeutic and monitoring plans based on medication-related problems, patient- and disease-specific information, and laboratory data.
- Modify treatment plan based upon monitoring the patient's response to initial therapy.

#### **Complex Case: Hematology**

ACPE #: 0204-9999-23-938-H01-P

- Develop therapeutic and monitoring plans based on medication-related problems, patient- and disease-specific information, and laboratory data.
- Modify treatment plan based upon monitoring the patient's response to initial therapy.
- Develop discharge and follow-up care plans based upon patient- and disease specific factors to improve adherence and continuity of care.

## **Complex Case: Oncology**

ACPE #: 0204-9999-23-939-H01-P

- Identify initial management in medical emergencies using available patient-specific information (e.g., age-related, risk factors, laboratory data).
- Summarize strategies for procurement, preparation, and administration of time-sensitive therapies.
- Modify treatment plan based upon monitoring the patient's response to initial therapy.



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#### Statistics, Evidence-based Medicine, and Research Design

ACPE #: 0204-9999-23-940-H04-P

- Given an excerpt from a study...Evaluate quality and appropriateness, with specific attention to study design, statistical analysis, internal/external validity, source of bias/confounders, and quality of conclusions and interpretation of graphs.
- Explain why a statistical test is appropriate or not appropriate, based on the sample distribution, data type, and study design.
- Interpret clinical and statistical significance for results from commonly used statistical tests.
- Explain the strengths and limitations of different types of measures of central tendency (mean, median, and mode) and data spread (standard deviation, standard error of the mean, range, and interquartile range).
- Evaluate odds ratio, risk/incidence rate, relative risk, number needed to treat, number needed to harm, and other risk estimates.
- Assess whether the study applies to a specified patient population.

#### **Faculty**

### Heather Draper, PharmD, BCPS\*

Clinical Pharmacy Specialist, Emergency Medicine Mercy Health Saint Mary's Grand Rapids, Michigan

#### Ryan Feldman, PharmD, BCPS, DABAT

Emergency Medicine Pharmacist Froedtert Health Medical College of Wisconsin Clinical Toxicologist Milwaukee, Wisconsin

### **Emily Frederick, PharmD, BCPS**

Associate Professor and Vice Chair Sullivan University College of Pharmacy and Health Sciences Clinical Pharmacist University of Louisville Hospital Louisville, Kentucky

#### Curtis Geier, PharmD, BCCCP

Emergency Medicine Clinical Pharmacist
Zuckerberg San Francisco General Hospital/San Francisco
Department of Public Health
Assistant Clinical Professor
University of California San Francisco
San Francisco, California

#### Josh Heffren, PharmD, BCPPS

Pharmacy Operations Supervisor, Emergency Medicine Children's National Hospital Washington, DC

#### Daniel Jarrell, PharmD, BCCCP, BCPS

Clinical Pharmacist - Emergency Medicine
Banner University Medical Center – Tucson
Clinical Assistant Professor, Department of Pharmacy
Practice
University of Arizona
Tucson, Arizona

## Elizabeth (Libby) Johnson, PharmD, BCPS

Critical Care Supervisor and Emergency Medicine Clinical Pharmacist JPS Health Network Fort Worth, Texas

## Jenny Koehl, PharmD, BCPS

Attending Emergency Medicine Clinical Pharmacist Massachusetts General Hospital Boston, Massachusetts

#### Maggie Ma, PharmD, BCPS

Clinical Pharmacy Specialist, Emergency Medicine The University of Texas at MD Anderson Cancer Center Houston, Texas

## Megan Musselman, PharmD, MS, BCPS, BCCCP\*

PGY2 Emergency Medicine Residency Program Director North Kansas City Hospital Kansas City, Missouri



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## Marianne Pop, PharmD, MPH, BCPS

Clinical Assistant Professor University of Illinois Chicago College of Pharmacy EM Clinical Pharmacist OSF Saint Anthony Medical Center Rockford, Illinois

### Gabrielle Procopio, PharmD, BCPS

Emergency Medicine Clinical Pharmacist Hackensack University Medical Center Assistant Professor of Emergency Medicine Hackensack Meridian School of Medicine Hackensack, New Jersey

#### Elizabeth (Liz) Rozycki, PharmD, BCPS

Specialty Practice Pharmacist, Emergency Medicine Ohio State University Wexner Medical Center Columbus, Ohio

### Andrew Smith, PharmD, MBA, BCPS, BCCCP

Emergency Medicine Clinical Pharmacist Specialist Scripps Mercy San Diego San Diego, California

#### Heather Tilley, PharmD

Emergency Medicine Clinical Pharmacist Children's National Hospital Washington, DC

## Kyle Weant, PharmD, BCPS, BCCCP, FCCP

Clinical Assistant Professor University of South Carolina College of Pharmacy Emergency Medicine Clinical Pharmacy Specialist Prisma Health Richland Columbia, South Carolina

### David Zimmerman, PharmD, BCCCP\*

Associate Professor of Pharmacy Duquesne University Emergency Medicine Pharmacist University of Pittsburgh Medical Center-Mercy Pittsburgh, Pennsylvania

## Juliana Zschoche, PharmD, BCPS

Clinical Pharmacy Specialist, Emergency Medicine The Johns Hopkins Hospital Baltimore, Maryland

\*Content Matter Experts

#### **Reviewers**

Kristi Hofer, PharmD Susan Dombrowski, PharmD

## Disclosures

In accordance with our accreditor's Standards of Integrity and Independence in Accredited Continuing Education, ASHP requires that all individuals in control of content disclose all financial relationships with ineligible companies. An individual has a relevant financial relationship if they have had a financial relationship with an ineligible company in any dollar amount in the past 24 months and the educational content that the individual controls is related to the business lines or products of the ineligible company.

An ineligible company is any entity producing, marketing, re-selling, or distributing health care goods or services consumed by, or used on, patients. The presence or absence of relevant financial relationships will be disclosed to the activity audience.

No one in control of the content of this activity has a relevant financial relationship (RFR) with an ineligible company.

As required by the Standards of Integrity and Independence in Accredited Continuing Education, all relevant financial relationships have been mitigated prior to the CPE activity.



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## **Methods and CE Requirements**

Activities can be completed in any order. Each activity consists of audio, video, and/or PDFs and evaluations. Learners must review all content and complete the evaluations to receive continuing pharmacy education credit for each activity.

Follow the prompts to claim, view, or print the statement of credit within 60 days after completing the activity.

### **System Technical Requirements**

Courses and learning activities are delivered via your Web browser and Acrobat PDF. For all activities, you should have a basic comfort level using a computer and navigating web sites.

View the minimum technical and system requirements for learning activities.

### Development

ASHP collaborates with ACCP on Emergency Medicine Pharmacy activities.

To maintain its strict, independent standards for certification, BPS does NOT endorse or provide review information, preparatory courses, or study guides for Board Certification Examinations.