**Activity Announcement**

## Pain Management Certificate

**ACPE Activity Number(s):** 0204-0000-20-755-H08-P thru 0204-0000-20-763-H08-P
**Release Date:** December 23, 2020
**Expiration Date:** December 23, 2023
**Activity Type:** Application-based
**CE Credit Hour(s)**: 21.5 hours/9 activities (see below for details)
**Activity Fee:** $445.00/$545.00 member/non-member

## Accreditation for Pharmacists

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

## Target Audience

This activity is intended for pharmacists seeking to expand their knowledge and skills in pain management.

## Activity Overview

The Pain Management Certificate is designed for participants to increase the knowledge and skills necessary to provide patient-centered pain management. The curriculum addresses basic principles associated with pain pathogenesis and assessment, effective pharmacologic and non-pharmacologic treatment options, and appropriate therapeutic regimens. The course further concentrates on acquiring advanced knowledge about managing pain associated with specific disease states most often encountered in practice. Upon completion of all the modules, participants should be proficient in assessing pain and identifying pharmacologic and non-pharmacologic treatment options based on disease states and other patient-related factors.

This self-guided program consists of 9 modules comprised of online home study activities and will provide 21.5 hours of ACPE continuing education for pharmacists.

## Learning Objectives and Schedule of Activities

| Activity CE Information | Title, Description and Learning Objectives |
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| **ACPE #: 0204-0000-20-755-H08-P**<br><br>**CE Hours: 1.5**<br><br>**Activity Type: Knowledge-based** | **Title: Pathogenesis and Assessment Of Pain**<br><br>**Faculty:**<br>• **James B. Ray, Pharm.D., C.P.E.**<br>• **Mary Lynn McPherson, Pharm.D., M.A., M.D.E., BCPS**<br><br>This activity covers a general overview of the pain manifestation and assessment.<br><br>**Learning Objectives:** |

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| | • Identify where the five phases of nociception take place within the peripheral and central nervous systems.<br>• Differentiate between hyperalgesia and allodynia.<br>• Contrast nociceptive and neuropathic pain.<br>• Distinguish between acute and chronic pain.<br>• Differentiate between a unidimensional and multidimensional pain assessment.<br>• Identify the eight elements of symptom analysis and provide examples of how to obtain this information when evaluating a complaint of pain. |
| **ACPE #: 0204-0000-20-756-H08-P**<br><br>**CE Hours: 3.25**<br><br>**Activity Type: Application-based** | **Title: The Role of Analgesics in Managing Pain**<br><br>**Faculty:**<br>• **Mary Lynn McPherson, Pharm.D., M.A., M.D.E., BCPS**<br><br>This activity describes nonopioid, opioid, and adjuvant analgesics and covers the decision-making process for identifying the most appropriate medication therapy regimens for acute and chronic pain management.<br><br>**Learning Objectives:**<br>• Describe the pharmacodynamic and pharmacokinetic properties of acetaminophen and the nonsteroidal anti-inflammatory drugs (NSAIDs).<br>• Describe the role of non-opioid analgesics in the management of acute and chronic pain and recommend specific dosing regimens.<br>• Describe the role of adjuvant analgesics in the management of acute and chronic pain.<br>• Propose specific adjuvant analgesic dosing regimens for patients suffering from acute and chronic pain.<br>• List recommendations for first, second, third and fourth-line treatment options for neuropathic pain from national and international guidelines.<br>• Describe the role of opioid analgesics in the management of acute and chronic pain.<br>• Propose specific opioid analgesic dosing regimens for patients suffering from acute and chronic pain.<br>• Explain how patient- and agent-related variables influence the selection of an opioid for a specific patient. |

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| | • Describe the steps in the drug therapy decision-making process.<br>• Recommend an analgesic regimen with appropriate patient monitoring and regimen adjustment to meet therapeutic goals in a patient with a complaint of pain. |
| **ACPE #: 0204-0000-20-757-H08-P**<br><br>**CE Hours: 1.75**<br><br>**Activity Type: Application-based** | **Title: Acute Postoperative Pain**<br><br>**Faculty:**<br>• **Lee A. Kral, Pharm.D.**<br><br>This activity discusses assessment, therapeutic regimens, and monitoring parameters for treating acute postoperative pain.<br><br>**Learning Objectives:**<br>• Explain the pathophysiology of acute pain.<br>• Discuss parameters that should be reviewed as part of a pre-operative pain assessment.<br>• Describe the role of acetaminophen, NSAIDs, gabapentin, lidocaine, and ketamine in the treatment of peri-operative pain.<br>• Contrast neuraxial and regional analgesia.<br>• Recognize possible adverse effects with analgesic pharmacotherapy.<br>• Select an appropriate opioid for a given patient.<br>• Discuss dosing and adjustment of patient controlled analgesia in a given patient.<br>• Develop a plan to assess pain and function.<br>• Recognize potential adverse effects associated with pain medication regimen. |
| **ACPE #: 0204-0000-20-758-H08-P**<br><br>**CE Hours: 2**<br><br>**Activity Type: Application-based** | **Title: Neuropathic and Functional Pain Syndromes**<br><br>**Faculty:**<br>• **Lee A. Kral, Pharm.D.**<br><br>This activity describes the presentation and appropriate treatment for neuropathic and functional pain syndromes.<br><br>**Learning Objectives:**<br>• Describe the presentation of peripheral neuropathic pain.<br>• Apply currently available evidence-based guidelines for the treatment of peripheral neuropathic pain. |

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| | • Choose an appropriate analgesic based on co-morbidities for a given patient.<br>• Compare the efficacy and safety of agents used for neuropathic pain.<br>• Describe the presentation of different central pain syndromes.<br>• Distinguish the different types of pain that occur within each type of central pain syndrome.<br>• Identify the symptoms of central pain syndromes in a given patient.<br>• Propose appropriate analgesic(s) and/or non-pharmacologic therapies given a patient with central pain.<br>• Describe the pathophysiology and clinical presentation of central sensitization.<br>• Compare and contrast typical neuropathic pain with central sensitization.<br>• Identify both pain and non-pain related symptoms / co-morbidities associated with central sensitization.<br>• Propose a management plan for a patient with a presentation of pain that is likely related to central sensitization. |
| **ACPE #: 0204-0000-20-759-H08-P**<br><br>**CE Hours: 2**<br><br>**Activity Type: Application-based** | **Title: Musculoskeletal Pain**<br><br>**Faculty:**<br>• **Lee A. Kral, Pharm.D.**<br><br>This activity covers the presentation, considerations, and treatment options for patients suffering from osteoarthritis, gout, and lower back pain.<br><br>**Learning Objectives:**<br>• Identify risk factors for osteoarthritis in a given patient.<br>• Recommend a management strategy for a patient with osteoarthritis based on published guidelines.<br>• Discuss the risks and benefits of analgesic therapy for management of osteoarthritis.<br>• Describe a plan for a patient with gout to lower serum uric acid.<br>• Propose a plan to treat an acute gouty attack for a patient.<br>• Compare the benefits and risks of agents used to treat and prevent gout.<br>• Identify physical, social, and emotional risk factors for low back pain. |

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| | • Recognize “red flags” in a patient with low back pain.<br>• Propose a treatment plan including analgesic and non-drug therapy.<br>• Discuss desirable corticosteroid properties. |
| **ACPE #: 0204-0000-20-760-H08-P**<br><br>**CE Hours: 2.75**<br><br>**Activity Type: Application-based** | **Title: Autoimmune, Headache, and Sickle Cell Disease Pain**<br><br>**Faculty:**<br>• **Christopher M. Herndon, Pharm.D., FASHP**<br>This activity discusses the epidemiology, pathogenesis, and appropriate treatment of pain associated with autoimmune disorders, sickle cell disease, and headache and orofacial pain disorders.<br><br>**Learning Objectives:**<br>• Review the epidemiology of arthralgia, myalgia, and visceral pain associated with common autoimmune / rheumatologic conditions.<br>• Describe the pathogenesis of painful manifestations of common autoimmune / rheumatologic conditions.<br>• Identify common autoimmune / rheumatologic conditions based on signs, symptoms, laboratory values, and test results.<br>• Select pharmacologic and non-pharmacologic therapies for the prevention or treatment of pain for the real or simulated patient with autoimmune / rheumatologic disease.<br>• Describe the epidemiology and pathogenesis of primary headaches and facial pain syndromes.<br>• Classify commonly encountered primary headache and facial pain syndromes.<br>• Choose pharmacologic and non-pharmacologic treatment modalities for primary headaches and facial pain syndromes using evidence-based guidelines as available.<br>• Recognize the epidemiology and pathogenesis of Sickle Cell Disease (SCD).<br>• Describe the painful manifestations of SCD during and between vaso- occlusive crisis (VOC).<br>• Identify validated methods for assessing pain in the pediatric patient population.<br>• Discuss the risks for disparities in care for at-risk patient populations.<br>• Select pharmacologic and non-pharmacologic therapies for the prevention or treatment of pain |

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| | for the real or simulated patient with SCD using recent SCD practice guidelines. |
| **ACPE #: 0204-0000-20-761-H08-P**<br><br>**CE Hours: 3**<br><br>**Activity Type: Application-based** | **Title: Special Considerations in Pain Management**<br><br>**Faculty:**<br>• **Christopher M. Herndon, Pharm.D., FASHP**<br>• **Kate Jeffers Taucher, Pharm.D., M.H.A., BCOP**<br>• **Michele L. Matthews, Pharm.D., BCACP, FASHP**<br><br>This activity explains the effect of mental health in chronic pain treatment, cancer pain management, and discusses special considerations needed in patients who are pregnant, lactating, or with organ dysfunction.<br><br>**Learning Objectives:**<br>• Describe the common co-occurring psychiatric conditions frequently experienced by those with chronic pain.<br>• Recognize effects of untreated co-morbid psychiatric conditions on pain management outcomes.<br>• Identify common myths of treating pain in those with previous or current substance use disorders.<br>• List common pain scenarios in cancer-related pain.<br>• Discuss treatment approaches to assist with cancer related pain.<br>• Describe the management of pain related a variety of cancer pain syndromes.<br>• Identify effective therapy for bone metastases.<br>• Describe the role of cancer survivorship management.<br>• Compare and contrast analgesics based on effective and safe use in patients with hepatic and/or renal dysfunction.<br>• Select a pharmacotherapeutic care plan for a patient with acute or chronic pain in the setting of organ dysfunction.<br>• Compare and contrast analgesics based on effective and safe use in the perinatal and postpartum settings.<br>• Propose a pharmacotherapeutic care plan for a woman with acute or chronic pain in the perinatal or postpartum setting. |
| **ACPE #: 0204-0000-20-762-H08-P** | **Title: Managing Patients on Opioid Therapy** |

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| **CE Hours: 3.5**<br><br>**Activity Type: Application-based** | **Faculty:**<br>• **Christopher M. Herndon, Pharm.D., FASHP**<br>• **Mary Lynn McPherson, Pharm.D., M.A., M.D.E., BCPS**<br><br>This activity covers many aspects of appropriate opioid prescribing including safety and risk mitigation, fentanyl and buprenorphine dosing, methadone therapy, opioid conversions, and managing pain in those with tolerance or substance use disorder.<br><br>**Learning Objectives:**<br>• Distinguish between abuse, addiction, dependence, and tolerance.<br>• Propose a strategy to maximize opioid safety specific to a patient with an indication for opioid analgesics.<br>• Recognize potential aberrant drug taking behaviors of a real or simulated patient based on prescription drug monitoring review, drug screen, interpretation, and validated risk tools.<br>• Identify the three FDA approved naloxone delivery methods for opioid overdose reversal.<br>• Identify different formulations and strengths of transdermal fentanyl delivery systems on the market.<br>• List three contraindications and three precautions associated with the use of transdermal fentanyl.<br>• Calculate the appropriate equianalgesic dose of transdermal fentanyl with a given patient.<br>• Recommend a starting dose, and equivalent dose of transdermal buprenorphine and transmucosal buprenorphine.<br>• Describe the pharmacodynamic and pharmacokinetic properties of methadone.<br>• List five drugs that inhibit and five drugs that induce the metabolism of methadone.<br>• List characteristics of appropriate and inappropriate candidates for methadone therapy.<br>• Recommend a starting dose of methadone for specific patients.<br>• Describe cardiac safety monitoring recommendations for methadone patients.<br>• List and explain five reasons why a clinician would need to switch a patient from one opioid regimen to another.<br>• Define potency, equipotency and bioavailability. |

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| | • List the five step process in opioid conversion calculations.<br>• Calculate a conversion to a new opioid regimen, taking into consideration patient-specific variables including level of pain control.<br>• Describe the history of opioid medication use.<br>• Recognize a patient characterized as opioid tolerant and select appropriate opioid doses accordingly.<br>• Identify methods to treat opioid use disorder while concurrently treating pain.<br>• Explain opioid overdose management strategies and methods for naloxone rescue advocacy. |
| **ACPE #: 0204-0000-20-763-H08-P**<br><br>**CE Hours: 1.75**<br><br>**Activity Type: Application-based** | **Title: Optimizing Pain Management for Patients**<br><br>**Faculty:**<br>• **Suzanne A. Nesbit, Pharm.D., BCPS, C.P.E., FCCP**<br>• **Lee A. Kral, Pharm.D.**<br><br>This activity describes how metrics can be used to optimize patient-centered pain management practices and nonpharmacologic pain management.<br><br>**Learning Objectives:**<br>• Describe opioid stewardship principles and the role of pharmacists in related initiatives.<br>• Apply strategies to aid in improvement of quality based metrics.<br>• Identify the role pharmacists can play in strategies to improve quality metrics and patient care experience.<br>• Discuss the updated Joint Commission Pain Standards.<br>• Explain the advantages and disadvantages of multidisciplinary rehab programs.<br>• Distinguish the cognitive behavioral techniques that might be helpful with specific components of the biopsychosocial model of chronic pain.<br>• Discuss the efficacy of massage and acupuncture in association with possible analgesic mechanisms.<br>• Differentiate between TENS unit, scrambler therapy and spinal cord stimulator therapies. |

## Faculty Information

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## Disclosures

In accordance with ACCME and ACPE Standards for Commercial Support, ASHP requires that all individuals in a position to control the content of this activity disclose financial relationships with ACCME-defined commercial entities. An individual has a relevant financial relationship if he or she (or spouse/domestic partner) has a financial relationship, in any amount, occurring in the past 12 months with a commercial entity whose products or services will discussed in the activity.

All planners, presenters, reviewers, and staff report no financial relationships relevant to this activity.

## Methods and CE Requirements

This online activity consists of a combined total of 9 learning modules. Pharmacists are eligible to receive a total of 21.5 hours of continuing education credit by completing all 9 modules within this certificate program.

Participants must participate in the entire activity, complete the evaluation and all required components to claim continuing pharmacy education credit online at ASHP eLearning Portal (http://elearning.ashp.org). Follow the prompts to claim credit and view your statement of credit within 60 days after completing the activity.

**Important Note – ACPE 60 Day Deadline:**
Per ACPE requirements, CPE credit must be claimed within 60 days of being earned – no exceptions! To verify that you have completed the required steps and to ensure your credits have been reported to CPE Monitor, we encourage you to check your NABP eProfile account to validate your credits were transferred successfully before the ACPE 60-day deadline. After the 60 day deadline, ASHP will no longer be able to award credit for this activity.

## System Technical Requirements

Courses and learning activities are delivered via your Web browser and Acrobat PDF. Users should have a basic comfort level using a computer and navigating websites.

View the minimum technical and system requirements for learning activities.