

Activity Announcement

Diabetes Management Certificate

ACPE Activity Number(s): 0204-0000-20-731-HO1-Pthru to 0204-0000-20-742-HO1-P
Release Date: November 4, 2020
Expiration Date: November 4, 2023
Activity Type: Application-based
CE Credit Hour(s): 33 hours/12 modules
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 continuing pharmacy education activity is intended for pharmacists seeking to expand their knowledge and skills in all aspects of diabetes management.

Activity Overview

These modules are designed for participants to increase the knowledge and skills necessary to provide patient-centered diabetes care management. The curriculum addresses basic principles associated with diagnosis, classification, and pathophysiology of diabetes; goals of diabetes management; facilitating behavior change in patients; using technological devices for treatment and monitoring; and practical considerations for optimizing glycemic management in inpatient and ambulatory settings. The course further concentrates on acquiring advanced knowledge and skill in diabetes treatment, optimizing care in patients of varying age or situation with different complications or comorbidities. Upon completion of all the modules, participants should be proficient in assessing patients with diabetes and recommending pharmacologic and non-pharmacologic treatment regimens based on patient-related factors.

Learning Objectives and Schedule of Activities

Activity CE Information	Title, Description and Learning Objectives
<p>ACPE #: 0204-0000-20-731-HO1-P</p> <p>CE Hours: 2.0</p> <p>Activity Type: Application-based</p>	<p>Title: Introduction to Diabetes Management</p> <p>Faculty:</p> <ul style="list-style-type: none"> • Jane K. Dickinson, RN, PhD, CDCES • Susan Cornell, Pharm.D., CDCES, FAPhA, FADE <p>This activity provides an overview of the language of diabetes and a basic introduction to the pathophysiology, classification, diagnosis, and treatment of different types of diabetes.</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Apply the recommendations for strengths-based, person-centered language in diabetes.

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	<ul style="list-style-type: none"> • Recognize words and phrases that are unhelpful in diabetes. • Identify professional resources for diabetes language. • Compare the pathophysiology of at least six types of diabetes. • Explain the appropriate screening and diagnostic criteria used for different types of diabetes. • Differentiate treatment options for patients with various types of diabetes other than type 2.
<p>ACPE #: 0204-0000-20-732-HO1-P</p> <p>CE Hours: 2.0</p> <p>Activity Type: Application-based</p>	<p>Title: Goals of Diabetes Management</p> <p>Faculty:</p> <ul style="list-style-type: none"> • Diana Isaacs, Pharm.D., BCPS, BCACP, BC-ADM, CDCES, FADCES • Joshua J. Neumiller, Pharm.D., CDCES, FADCES, FASCP <p>This activity discusses establishing individualized glucose targets, blood glucose monitoring, and screening and prevention of diabetes complications.</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Develop individualized glucose goals for different types of patient scenarios. • Compare and contrast self-monitoring of blood glucose to continuous glucose monitors. • Design a glucose monitoring plan for a given patient scenario. • Describe the microvascular and macrovascular complications of diabetes. • Apply current recommendations for the screening of chronic complications in patients with type 1 and type 2 diabetes. • Apply current treatment goals and recommendations to prevent and/or slow the progression of chronic complications in patients with type 1 and type 2 diabetes.
<p>ACPE #: 0204-0000-20-733-HO1-P</p> <p>CE Hours: 2.75</p> <p>Activity Type: Application-based</p>	<p>Title: Facilitating Behavior Change</p> <p>Faculty:</p> <ul style="list-style-type: none"> • Diana Isaacs, Pharm.D., BCPS, BCACP, BC-ADM, CDCES, FADCES • Dawn Noe, RDN, LD, CDCES

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	<p>This activity provides an overview of diabetes self-management education and support, including nutrition, physical activity, and overcoming challenges, to optimize patient outcomes.</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Describe the importance of diabetes self-management education and support to improve outcomes. • Use principles of motivational interviewing in a patient encounter. • Discuss the impact of physical activity on glucose management including types of activity, safety concerns, and medication adjustments. • Recommend physical activity using a strengths-based approach. • Apply the current nutrition consensus statement on nutrition for adults with type 1, type 2, and pre-diabetes with considerations for weight management and disordered eating. • Differentiate between evidence-based eating patterns and carbohydrate counting, including teaching resources for these options. • Compare and contrast approaches to diabetes nutrition such as ketogenic, fasting / intermittent fasting, and personalized nutrition with gut microbiome. • Apply appropriate person-centered nutrition approaches to people with diabetes and pre-diabetes. • Discuss challenges to diabetes self-management including stress, sleep, support, mental health, diabetes distress/burnout, and social determinants of health.
<p>ACPE #: 0204-0000-20-734-HO1-P</p> <p>CE Hours: 2.0</p> <p>Activity Type: Application-based</p>	<p>Title: Diabetes Treatment: Oral and Non-Insulin Injectables</p> <p>Faculty:</p> <ul style="list-style-type: none"> • Jessica L. Kerr, Pharm.D., CDCES <p>This activity describes the mechanisms of action, monitoring parameters, and shared decision making principles needed to effectively treat people with diabetes using oral and non-insulin injectables.</p> <p>Learning Objectives:</p>

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	<ul style="list-style-type: none"> • Apply drug mechanism of action through a pathophysiologic treatment approach. • Compare and contrast drug therapy efficacy and monitoring parameters to determine appropriate use through evidence-based medicine. • Discuss patient and provider perceived barriers to drug therapy. • Recommend drug therapy for specific patient case scenarios. • Design shared decision discussions about drug therapy to reduce clinical inertia.
<p>ACPE #: 0204-0000-20-735-HO1-P</p> <p>CE Hours: 2.25</p> <p>Activity Type: Application-based</p>	<p>Title: Diabetes Treatment with Insulin</p> <p>Faculty:</p> <ul style="list-style-type: none"> • Diana Isaacs, Pharm.D., BCPS, BCACP, BC-ADM, CDCES, FADCES <p>This activity describes the different types of insulin, calculating initial doses of insulin, adding insulin to existing drug therapy regimens, and modifying insulin doses as needed to ensure optimal patient outcomes.</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Compare and contrast insulin types. • Calculate insulin doses for a person with a new diagnosis of type 1 diabetes. • Explain how to safely add insulin to non-insulin agents. • Design an insulin regimen based on individual patient factors. • Modify a treatment plan for a person needing intensification of insulin therapy. • Adjust treatment plans using pattern management skills based on hypoglycemia, hyperglycemia, or other treatment considerations.
<p>ACPE #: 0204-0000-20-736-HO1-P</p> <p>CE Hours: 2.75</p> <p>Activity Type: Application-based</p>	<p>Title: Diabetes Treatment for Cardiovascular Conditions</p> <p>Faculty:</p> <ul style="list-style-type: none"> • Christine Schumacher, Pharm.D., BCPS, BCACP, BC-ADM, CDCES, FCCP • Elizabeth Van Dril, Pharm.D. <p>This activity discusses cardiovascular outcomes trials and making evidence-based therapeutic recommendations for people with diabetes and other co-morbid conditions such as atherosclerotic cardiovascular disease, chronic heart failure, and chronic kidney disease.</p>

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	<p>Learning Objectives:</p> <ul style="list-style-type: none"> • Interpret the historical significance behind the requirement for cardiovascular outcomes trials. • Apply evidence from the cardiovascular outcomes trials for DPP-4 inhibitors, GLP-1 receptor agonists, and SGLT2 inhibitors to support therapeutic recommendations for people with type 2 diabetes and atherosclerotic cardiovascular disease. • Discuss the onset, prognosis, and etiology of chronic heart failure in persons with type 2 diabetes. • Apply evidence from the cardiovascular outcomes trials for DPP-4 inhibitors, GLP-1 receptor agonists, and SGLT2 inhibitors to support therapeutic recommendations for people with type 2 diabetes and heart failure. • Describe clinical practice considerations for the management of persons with type 2 diabetes and chronic heart failure. • Apply evidence from the cardiovascular and renal outcomes trials for DPP-4 inhibitors, GLP-1 receptor agonists, and SGLT2 inhibitors to support therapeutic recommendations for people with type 2 diabetes and chronic kidney disease. • Modify antihyperglycemic therapy according to current recommendations for renal dosing adjustments. • State the proposed rationale for the nephroprotective effects of SGLT2-inhibitors. • Apply evidence from the cardiovascular outcomes trials to support therapeutic recommendations for people with type 2 diabetes. • Design a treatment plan to improve blood glucose management in people with type 2 diabetes, taking into account co-morbid conditions and patient specific factors.
<p>ACPE #: 0204-0000-20-737-HO1-P</p> <p>CE Hours: 3.75</p> <p>Activity Type: Application-based</p>	<p>Title: Diabetes Treatment: Weight, Hypoglycemia, and Cost Considerations</p> <p>Faculty:</p> <ul style="list-style-type: none"> • Jennifer Clements, Pharm.D., BCPS, BCACP, CDCES, FCCP • Joshua J. Neumiller, Pharm.D., CDCES, FADCES, FASCP • Diana Isaacs, Pharm.D., BCPS, BCACP, BC-ADM, CDCES, FADCES

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	<p>This activity covers evidence-based recommendations for diabetes treatment in patients with obesity and hypoglycemia, including cost considerations.</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Distinguish pathophysiological concepts related to obesity. • Summarize current evidence-based recommendations for the treatment of obesity. • Develop a treatment plan for a person with obesity and diabetes. • Describe strategies and treatments currently available for the management of hypoglycemia. • Differentiate between glucose-lowering medications based on their risk of contributing to hypoglycemia. • Design an appropriate treatment and monitoring plan for a person with hypoglycemia unawareness. • Apply recommendations for hypoglycemia prevention and treatment to a patient case scenario. • Compare and contrast different cost savings programs for people with diabetes. • Recommend a cost-saving strategy for a person having difficulty paying for diabetes medications.
<p>ACPE #: 0204-0000-20-738-HO1-P</p> <p>CE Hours: 4.0</p> <p>Activity Type: Application-based</p>	<p>Title: Diabetes Technology</p> <p>Faculty:</p> <ul style="list-style-type: none"> • Diana Isaacs, Pharm.D., BCPS, BCACP, BC-ADM, CDCES, FADCES • Andrew Bzowyckyj, Pharm.D., BCPS, CDCES <p>This activity discusses continuous glucose monitoring devices and insulin pumps, designing and adjusting treatment regimens based on glucose data, and utilizing diabetes-related mobile applications to optimize patient outcomes.</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Compare and contrast continuous glucose monitoring devices. • Design a treatment regimen based on continuous glucose monitoring data. • Use the DATAA tool to engage in discussion with a person with diabetes about their glucose data. • Describe how continuous glucose monitoring data is integrated with connected devices.

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	<ul style="list-style-type: none"> • Discuss critical teaching content before starting insulin pump therapy. • Compare and contrast the currently available insulin pumps. • Use insulin pump data to adjust treatment. • Evaluate the quality of diabetes-related mobile applications using evidence-informed criteria. • Differentiate between the various diabetes-related mobile applications available. • Apply the utility of a mobile application’s characteristics and functionalities to a patient-specific scenario.
<p>ACPE #: 0204-0000-20-739-HO1-P</p> <p>CE Hours: 3.0</p> <p>Activity Type: Application-based</p>	<p>Title: Pharmacotherapy Complications</p> <p>Faculty:</p> <ul style="list-style-type: none"> • Jennifer Clements, Pharm.D., BCPS, BCACP, CDCES, FCCP • John M. Moorman, Pharm.D., BCPS <p>This activity describes evidence-based recommendations for managing macrovascular and microvascular complications and hyperglycemic crises in persons with diabetes.</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Summarize current evidence-based recommendations for the management of macrovascular complications for persons with diabetes. • Recommend a treatment plan for a person with diabetes and macrovascular complications. • Summarize current evidence-based recommendations for the management of microvascular complications for persons with diabetes. • Recommend a treatment plan for a person with diabetes and microvascular complications. • Differentiate the pathophysiology behind diabetic ketoacidosis and hyperosmolar hyperglycemic state. • Design an appropriate treatment plan for managing hyperglycemic crises.
<p>ACPE #: 0204-0000-20-740-HO1-P</p> <p>CE Hours: 3.25</p> <p>Activity Type: Application-based</p>	<p>Title: Special Populations</p> <p>Faculty:</p> <ul style="list-style-type: none"> • Pamela Stamm, Pharm.D, BCPS, BCACP, CDCES, FASHP • Faith A. Poprik, RN, MSN, FNP-BC

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	<ul style="list-style-type: none"> • Diana Isaacs, Pharm.D., BCPS, BCACP, BC-ADM, CDCES, FADCES <p>This activity discusses guidelines and recommendations to effectively treat diabetes in special populations, including older adults, pediatrics, and pregnancy.</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Use current guidelines to guide therapy decisions in older adults with diabetes. • Use patient-specific characteristics to individualize A1C and blood glucose goals. • Compare the potential risks versus benefits of therapies for older adults. • Evaluate medication regimens of older adults to determine candidacy for deprescribing. • Design a treatment plan for pediatric patients that considers individualized glycemic targets. • Differentiate common symptoms for children with new onset type 1 and type 2 diabetes and the appropriate first steps in medical treatment. • Prioritize diabetes management strategies based on the child/adolescent’s age, development, home environment, and school setting. • Recommend appropriate lifestyle interventions, pharmacologic interventions, and treatment modalities for children with type 1 and type 2 diabetes. • Describe the diagnostic criteria for gestational diabetes. • Discuss glucose targets for pregnancy. • Assess which diabetes-related medications should be stopped in pregnancy. • Design a treatment regimen for a person with gestational diabetes or pre-existing diabetes in pregnancy.
<p>ACPE #: 0204-0000-20-741-HO1-P</p> <p>CE Hours: 2.5</p> <p>Activity Type: Application-based</p>	<p>Title: Ambulatory Care Roles in Diabetes</p> <p>Faculty:</p> <ul style="list-style-type: none"> • Andrew Bzowyckyj, Pharm.D., BCPS, CDCES • Mary Ann Kliethermes, B.S.Pharm., Pharm.D. • Pamela Stamm, Pharm.D, BCPS, BCACP, CDCES, FASHP <p>This activity describes different ambulatory care roles and considerations in diabetes, interprofessional care model integration, certifications available for pharmacists,</p>

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	<p>reimbursement opportunities, and the application of population health measures.</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Apply evidence-informed principles for successful integration within an interprofessional care team. • Compare and contrast the various certifications available for pharmacists in diabetes care. • Differentiate sustainable reimbursement opportunities for pharmacists providing diabetes services in various health care practices. • Interpret the rules and regulations of billing codes available to pharmacists for diabetes services reimbursement. • Differentiate population health and chronic care management approaches for persons with diabetes. • Develop strategies to improve the health of a diabetes population. • Interpret quality measure reports to establish target measures of population health initiatives. • Recommend mHealth apps based on patient specific monitoring needs and technology desires for persons with diabetes.
<p>ACPE #: 0204-0000-20-742-HO1-P</p> <p>CE Hours: 2.75</p> <p>Activity Type: Application-based</p>	<p>Title: Diabetes Management in the Hospital Setting</p> <p>Faculty:</p> <ul style="list-style-type: none"> • Amy Donihi, Pharm.D., BCPS, BC-ADM, FCCP • John M. Moorman, Pharm.D., BCPS <p>This activity covers the current standards of care and strategies for ensuring good glycemic management for patients in the inpatient setting.</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Compare various approaches to achieving good glycemic management in the hospital setting. • Apply current standards of inpatient care to manage hospitalized patients with hyperglycemia or diabetes. • Use effective strategies to safely optimize the glycemic management of hospitalized patients with diabetes and hyperglycemia. • Interpret blood glucose data to improve glycemic management across the hospital. • Prioritize the need to improve quality of care for hospitalized patients with diabetes through institutional policy and protocol development.

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- Design hospital policies and protocols that align with recommendations from national organizations to optimize patient care outcomes.
- Describe the impact of diabetes management teams on the quality of care of hospitalized patients with diabetes.
- Design an institutional diabetes management team using current best practices as a framework.
- Recommend specific strategies to ensure safety and quality in inpatient glycemic management.
- Recommend insulin regimens for hospitalized patients with hyperglycemia based on patient-specific characteristics and current glycemic patterns.

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 be discussed in the activity.

In this activity, only the individual(s) below have a relevant financial relationship.

- Diana Isaacs, Pharm.D., BCPS, BCACP, BC-ADM, CDCES
 - Consultant/speaker, Xeris Pharmaceuticals, Inc.
 - Speaker, Novo Nordisk
 - Consultant, LifeScan Inc.
 - Speaker, DexCom, Inc.
 - Speaker, Abbott Laboratories
 - Consultant, Companion Medical, Inc.

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

Methods and CE Requirements

This online activity consists of a combined total of 12 learning modules. Pharmacists are eligible to receive a total of 31 hours of continuing education credit by completing all 12 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

System 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 web sites.

View the [minimum technical and system requirements](#) for learning activities.