

Pharmacist Administration of Maintenance Long-Acting Injectable Medications

Activity Announcement

In June of 2022, the State of Maryland published regulations allowing pharmacist administration of long-acting injectable maintenance medications. Pharmacists are required to complete a board approved training program prior to providing administration.

This educational series is comprised of seven (7) home study modules and one (1) in-person learning lab training. The home study begins with a review of regulations and policies for pharmacist administration of long-acting maintenance medications. The modules then move through the various disease states which currently have long-acting maintenance injections available, including Opioid Use Disorder, Schizophrenia and Bipolar Disorder, HIV, and Gender Affirming Care. The final home study modules will review the preparation of long-acting injectable medications as well as various techniques and locations.

This program is designed to meet the educational requirements for Maryland Pharmacists to provide administration of long-acting injectables.

Resources:

1. COMAR: <https://casetext.com/regulation/maryland-administrative-code/title-10-maryland-department-of-health/part-4/subtitle-34-board-of-pharmacy/chapter-103441-administration-of-a-maintenance-injectable-medication>
2. Videos: SMI Adviser <https://smiadviser.org/about/lai>
3. APhA Medication Administration Services: <https://www.pharmacist.com/Practice/Patient-Care-Services/Medication-Safety-Access/Medication-Administration>

Learning Objectives

Module 1: Pharmacist Administration of Long-Acting Injectable Maintenance Medications: Understanding the Regulations (UAN: 0025-0000-23-065-H03-P, 1.0 Contact Hours)

At the end of this knowledge-based activity, the learner should be able to:

1. Describe the current regulations for pharmacist administration of long-acting injectable medications in Maryland.
2. Outline the training requirements for pharmacist administration of long-acting injectable medications in the State of Maryland.
3. Describe examples of documentation utilized in pharmacist administration of long-acting injectable medications.
4. Review example policies utilized in pharmacist administration of long-acting injectable medications.

Module 2: Maryland Pharmacist Opioid Use Disorder (OUD) LAI Administration Training (UAN: 0025-0000-23-066-H01-P, 1.0 Contact Hours)

At the end of this knowledge-based activity, the learner should be able to:

1. Describe the management of a patient population with opioid use disorder, including current treatment guidelines.

2. List current long-acting injectable medication(s) utilized in the treatment of opioid use disorder.
3. Outline pharmacokinetics, significant drug interactions, warnings/precautions, and adverse effects for long-acting injectable medication(s) for the treatment of opioid use disorder.
4. Describe the dosing and administration frequency of the long-acting injectable medication(s) for the treatment of opioid use disorder.

Module 3: Long-Acting Injectable Medications for the Treatment of Schizophrenia and Bipolar Disorder

(UAN: 0025-0000-23-067-H01-P, 2.0 Contact Hours)

At the completion of this knowledge-based activity, the learner should be able to:

1. Describe the management of a patient population with schizophrenia or bipolar disorder, including treatment guidelines.
2. List the current long-acting injectable medications utilized in the treatment of schizophrenia or bipolar disorder.
3. Outline the pharmacokinetic, significant drug interactions, warnings/precautions, and adverse effects for the long-acting injectable medications for the treatment of schizophrenia or bipolar disorder.
4. Describe the dosing and administration frequency of the long-acting injectable medications for the treatment of schizophrenia or bipolar disorder.

Module 4: Long-acting Antiretroviral Therapies

(UAN: 0025-0000-23-068-H02-P, 1.0 Contact Hours)

At the completion of this knowledge-based activity, the learner should be able to:

1. Describe the management of a patient population with HIV, including treatment guidelines.
2. List the current long-acting injectable medications utilized in the treatment/prevention of HIV.
3. Outline the pharmacokinetic, significant drug interactions, warnings/precautions, and adverse effects for the long-acting injectable medications for the treatment/prevention of HIV.
4. Describe the dosing and administration frequency of the long-acting injectable medications for the treatment/prevention of HIV.

Module 5: Pharmacologic Interventions for Transgender/Non-binary Adolescents and Adults

(UAN: 0025-0000-23-069-H01-P, 1.0 Contact Hours)

At the end of this knowledge-based activity, the learner should be able to:

1. Recognize the goals of transgender care management at different transitional stages.
2. Classify which pharmacologic agents are indicated for use at different stages, particularly long-acting injectable formulations.
3. Contrast the different dosing and administration preparations for long-acting injectable puberty suppression and GAHT.
4. Identify important monitoring parameters and medication related variables for a given pharmacologic intervention.

Module 6: Long-Acting Maintenance Medication Administration Techniques

(UAN: 0025-0000-23-070-H99-P, 1.0 Contact Hours)

At the end of this knowledge-based activity, the learner should be able to:

1. Identify routes of administration for long-acting maintenance injections administered by a pharmacist.
2. Describe appropriate injection technique for intramuscular and subcutaneous injections.
3. Describe how to give a medication via z-track administration.
4. Review volumes of injection for various injection routes.

Module 7: Long-Acting Maintenance Medication Preparation Techniques

(UAN: 0025-0000-23-109-H01-P, 0.5 Contact Hours)

At the end of this knowledge-based activity, the learner should be able to:

1. Describe the preparation and storage of long-acting maintenance injectable medications.
2. Identify resources to review the preparation and administration prior to providing injections.

Speakers

Megan Ehret, PharmD, MS, BCPP

Professor; Co-Director of the Mental Health Program, University of Maryland School of Pharmacy

Bethany DiPaula, PharmD, BCPP

Professor; Co-Director of the Mental Health Program, University of Maryland School of Pharmacy

Neha Pandit, PharmD, BCPS

Professor, University of Maryland School of Pharmacy

Amy Kruger Howard, MS, PharmD

Pediatric Clinical Pharmacist, University of Maryland School of Pharmacy

Dr. Megan Ehret, planner and author/presenter for this activity, participated in a focus group on a Peer to Peer Summit on unbranded LAI use with Janssen Pharmaceuticals and served on the consumer council which provides insights into LAI use in an unbranded fashion for Otsuka Pharmaceuticals. All financial relationships have been mitigated. Dr. Pandit, author and presenter for this activity, has received a research grant from Thera Technologies. All financial relationships for Dr. Pandit have been mitigated. Dr. DiPaula and Howard, presenters for this activity, have no financial relationships to disclose. None of the other planning committee members have any financial relationships to disclose.

CE Credits: up to 7.0 CE Contact Hours

Universal Activity Numbers: 0025-0000-23-065-H03-P; 0025-0000-23-066-H01-P; 0025-0000-23-067-H01-P; 0025-0000-23-068-H02-P; 0025-0000-23-069-H01-P; 0025-0000-23-070-H99-P; 0025-0000-23-109-H01-P

Target Audience: Pharmacists

Activity Launch Date: May 22, 2023

Activity Expiration Date: May 22, 2026

Fee: \$295.00

Criteria for Successful Completion

To successfully complete a module, learners must complete all activity components including the audiovisual presentations, active learning exercises, a post-test, and activity evaluation. Participants must receive a score of at least 70% on each post-test to receive credit. A post-test may be taken up to three (3) times. A link to the evaluation will be available once learners have successfully completed all other course segments. Statements of CE Credit will be available electronically via CPE Monitor within sixty (60) days of completion of the activity.

Use of Trade Names: The trade names of the drugs and delivery systems in this module are for the purpose of product identification only. This activity does not intend to imply endorsement for any commercial products discussed.

Privacy and Confidentiality: The University of Maryland School of Pharmacy is committed to protecting the privacy of our learners. All enrollees are protected under The Family Educational Rights and Privacy Act (20 U.S.C. § 1232g; 34 CFR Part 99) (FERPA). The UMB Policy on Confidentiality and Disclosure of Student Records can be found at: <https://www.umaryland.edu/policies-and-procedures/library/academic-affairs/policies/iii-630a.php>.

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Technology Requirements

Supported Internet Browsers	Windows <ul style="list-style-type: none"> Internet Explorer version 11 and above Chrome 43 and above FireFox 4.0 (or later) MacOS <ul style="list-style-type: none"> Safari 13 and above Chrome 43 and above
Minimum Memory	8 GB (or more)
Minimum Storage	6 GB (or more)
Minimum Processor	PC: 2 GHz or faster Intel processor MacOS: Multi-core Intel processor
Minimum Internet Speeds	High speed internet connection
Other	Participants must be able to play audio (either through speakers or headphones) as well as ability to open PDF files and view and edit Word, and PPT documents.



The University of Maryland School of Pharmacy is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education. No additional financial support was received for these activities.

Refund Policy:

- A refund, less a \$75 administration fee, will be made if cancellations are requested within 15 days of purchase. Other restrictions may apply. Refund requests must be submitted in writing to CEHelp@rx.umaryland.edu.
- Refunds are not available in the following circumstances: A learner has logged into a course or series; Has launched course materials; Course materials have been shipped; or Request is made after 15 days of the ordering date.
- Course registrations are non-transferrable.

Contact Us:

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