



# Pharmacy Grand Rounds

200 First Street SW  
Rochester, Minnesota 55905  
<https://ce.mayo.edu/pharmacy-grandrounds-2024>

## To Hold or Not to Hold? The Use of Metformin with Contrast Media Inpatient and Incretin Mimetics Perioperatively

**Session Date:** 04/23/2024

**Session Time:** 11:00 – 11:45 AM (CST)

### Target Audience

This continuing education (CE) session was planned to meet the needs of professional staff who deal with the selection and monitoring of medication(s) as part of their patient care duties, including pharmacists, RNs, APRNs, PAs, MDs.

### Activity Overview

Current 2024 ADA guidelines recommend use of metformin and glucagon-like peptide 1 (GLP-1) agonists for management of type 2 diabetes. Previous diabetes guidelines recommended metformin as a first-line agent, making it a commonly utilized oral antihyperglycemic medication. However, metformin may be held for a variety of reasons such as concern for possible lactic acidosis or coadministration of metformin with intravenous contrast media. GLP-1 agonist use has increased over time with literature showing benefit in patients with type 2 diabetes and history of ASCVD and/or CKD or in the treatment of obesity. Because GLP-1 agonists slow gastric emptying, there is question of whether GLP-1 agonists should be held perioperatively for risk of aspiration. This presentation will review literature regarding inpatient use of metformin with contrast administration and risk of lactic acidosis as well as risk of aspiration with GLP-1 agonists perioperatively to evaluate use in these settings.

### Learning Objectives

At the conclusion of this knowledge-based CE session, participants should be able to:

1. Discuss the risk of lactic acidosis with metformin use.
2. Describe the current literature available for administration of contrast media and concurrent use of metformin.
3. Apply guideline recommendations for glucagon-like peptide-1 (GLP-1) receptor agonist use perioperatively to a patient case.

## Faculty Information

Caitlin Schanz, PharmD  
PGY2 Internal Medicine Pharmacy Resident  
Mayo Clinic Hospital - Rochester, MN

Caitlin received a Doctor of Pharmacy degree from University of Minnesota College of Pharmacy and is the current PGY2 Internal Medicine pharmacy resident at Mayo Clinic Hospital – Rochester. Her practice interests include anticoagulation, transitions of care, infectious diseases, and antimicrobial stewardship.

Krysta Larson, PharmD  
PGY2 Ambulatory Care Pharmacy Resident  
Mayo Clinic Hospital - Rochester, MN

Krysta received a Doctor of Pharmacy degree from Creighton University College of Pharmacy and completed her PGY1 training with an Ambulatory Care Focus at Froedtert and the Medical College of Wisconsin. She is a current PGY2 Ambulatory Care Resident at Mayo Clinic Hospital – Rochester. Her practice interests include primary care, cardiology, endocrinology, transplant, and transitions of care.



## Approved Provider Statement



JOINT ACCREDITATION™  
INTERPROFESSIONAL CONTINUING EDUCATION

In support of improving patient care, this activity is planned and implemented by Mayo Clinic College of Medicine and Science. Mayo Clinic College of Medicine and Science is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC) to provide continuing education for the healthcare team.

### Credit Statements

#### AMA

Mayo Clinic College of Medicine and Science designates this live activity for a maximum of 0.75 *AMA PRA Category 1 Credits*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

#### ACPE



**ACPE Universal Activity Number (UAN):** JA0000238-0000-24-004-L01-P

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## AAPA



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## Educational Format and CE Requirements

This CE session is available as a live presentation, including live webcast.

Participants must complete the following to record attendance and obtain CE credit:

1. Attend the entire session.
2. Text the session code to 507-200-3010 within 48 hours of the live presentation to record attendance.
  - a. This number is only used for receiving text messages related to tracking attendance
  - b. Employees are encouraged to create a contact in their mobile phone, as the same number is used to record attendance for every session
3. Complete the online evaluation for the respective session within 2 weeks of live presentation.

Pharmacist CE credit is electronically transferred to the National Association of Boards of Pharmacy CPE Monitor. To track CE, please go to [NABP CPE Monitor](#).

Non-pharmacist attendees can print out a record of attendance at [ce.mayo.edu](http://ce.mayo.edu) after completing the evaluation and claiming credit.

[Live Webcast](#) - access during presentation times

## Disclosure Summary

As a provider accredited by Joint Accreditation for Interprofessional Continuing Education, Mayo Clinic College of Medicine and Science must ensure balance, independence, objectivity and scientific rigor in its educational activities. All who are in a position to control the content are required to disclose all financial relationships with any ineligible company. Faculty will also identify any off-label and/or investigational use of pharmaceuticals or instruments discussed in their content for FDA compliance.

Listed below are individuals with control of the content of this program:

The faculty report the following relationships:

- Caitlin Schanz, PharmD and Krysta Larson, PharmD
  - Declare no financial relationship(s) pertinent to this session
  - Declare off-label use of medications will not be discussed during this presentation

Course Director and Planning Committee Members declare no relevant financial relationship(s) pertinent to this session. Members include:

- Jennifer Elmer, DNP, APRN, CCNS
- Andrew Herber, PA-C
- Sarah Jane Kotval, BSW, RSS Coordinator
- Scott Nei, PharmD, BCPS, BCCCP, FCCM, FMSHP
- Wayne Nicholson, MD, PharmD, BCPS
- Sara Thompson, PharmD, MEd, BCACP

All relevant financial relationships have been mitigated.

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<https://ce.mayo.edu/content/disclosures>

## **System and Technical Requirements**

For participants viewing the webcast, sessions are delivered via Mayo Clinic intranet web browser and Adobe® PDF. For participants viewing outside the Mayo Clinic firewall, a VPN connection is required for remote access. Recommended web browser includes Google Chrome. This session is planned and coordinated by **the Department of Pharmacy, Mayo Clinic.**