### A Deeper Dive Into Opioid & Antipsychotic Medication Adverse Drug Events (ADEs)

#### Welcome!

- All lines are muted, so please ask your questions in Q&A
- For technical issues, chat to the 'Technical Support' Panelist
- Please actively participate in polling questions that will pop up on the lower righthand side of your screen





The Quality Improvement Services Group of ALLIANT HEALTH SOLUTIONS

# We will get started shortly!

### Tanya Vadala, Pharm.D.

#### **MEDICATION SAFETY PHARMACIST, IPRO**

Tanya is an IPRO pharmacist with 17 years of clinical pharmacy, community pharmacy, academia, quality improvement and medication safety experience. Prior to joining IPRO, she worked at various community pharmacies and taught at Albany College of Pharmacy and Health Sciences in Albany, NY. She specializes in Medication Therapy Management (MTM), medication reconciliation, opioids, immunizations, and patient self-care. Her formal teaching experience includes courses in pharmacy practice and clinical experiential teaching.



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### **Objectives**

- Learn Today:
  - Define Adverse Drug Event (ADE)
  - Review common ADEs for opioids and antipsychotics
  - Identify risk factors for opioid and antipsychotic ADEs
  - Examine patient cases
  - Determine if the cases were ADE related
- Use Tomorrow:
  - Use the materials learned from the LAN to prevent and identify ADEs in practice

### **Definitions**

**ADE** = Adverse Drug Event

**CDC**: An adverse drug event (ADE) is when someone is harmed by a medicine.<sup>1</sup>

**CMS**: An injury resulting from drug-related medical interventions.<sup>2</sup>



**Preventable ADEs**: result from a medication error that reaches the patient and causes any degree of harm. It is generally estimated that about half of ADEs are preventable.

**Non-preventable ADEs**: when medications are prescribed and administered appropriately. These are commonly know as side effects.

# **Opioid** ADEs<sup>2</sup>

#### Mental Status Changes Due to Opioid Use

- Falls
- Hallucinations/Delusions
- Disorientation or confusion
- Light-headedness, dizziness, or vertigo
- Lethargy or somnolence

- Agitation
- Anxiety
- Unresponsiveness
- Decreased:
  - Blood pressure
  - Pulse
  - Pulse oximetry
  - Respirations

### **Opioid ADEs Continued**<sup>2</sup>

#### Gastrointestinal Changes Due to Opioid Use

- Constipation (lack of bowel movement for three or more days or straining to move bowels regardless of frequency)
- Bloating or abdominal distension
- Abdominal pain
- Headaches associated with symptoms above

- Diarrhea or leaking stool
- Decreased bowel sounds
- Nausea/vomiting
- Decreased or absent ability to urinate
- Rapid heartbeat
- Sweating
- Fever
- Low or elevated BP

# **Opioid ADE Risk Factors**<sup>2</sup>

- Opioid naiveté (someone who has not been taking opioids)
- Opioids used in combination with sedatives or other opioids
- History of opioid abuse
- Uncontrolled pain
- Advanced age

- Opioid tolerance
- Severe pain
- Low fluid intake/dehydration
- Low body weight
- Altered mental status including: history of head injury, traumatic brain injury, or seizures
- Decreased mobility

# **Opioid Related Interventions**<sup>2</sup>

#### Mental Status Changes

Constipation

- Administration of Narcan/naloxone
- Transfer to hospital
- Call to physician regarding new onset of relevant signs or symptoms
- Abrupt stop order for medication

- New orders for laxative, stool softeners, suppositories and/or enemas
- New order for abdominal x-rays
- Transfer to hospital

#### Case #1

67-year-old female is reporting lower back pain, stomach pain, and headache. She has a history of migraines but states this is not a migraine.

Medications:

- Aspirin 81mg QD
- Percocet 1tab QID PRN
- Imitrex 50mg PRN





72-year-old male resident has fallen for the 3<sup>rd</sup> time this week. He seems a little confused but is alert and oriented. Transferred to your home last week from the hospital.

Medications:

- Hydrocodone/APAP 5/325mg QID PRN
- Seroquel 50mg BID
- Amlodipine 10mg QAM



### **Antipsychotic ADEs**<sup>2</sup>

- Falls
- Confusion
- Sedation
- Cardiac arrhythmias
- Orthostatic hypotension
- Destabilized blood sugar
- Akathisia
- Parkinsonism
- Anticholinergic effects



### **Antipsychotic ADE Risk Factors**<sup>2</sup>

- Chronic or as needed use of antipsychotic medications
- Use of more than one psychotropic medication including more than one drug from the same class or different classes
- Advanced age
- Polypharmacy

### **Antipsychotic Related Interventions**<sup>2</sup>

- Transfer to hospital
- Call to physician regarding new onset of relevant signs or symptoms
- New order for restraint
- Abrupt stop order for medication

#### **Case #3**

87-year-old male resident states it feels like his heart is skipping a beat. He was recently brought back to the home from a short stay in the hospital.

Medications:

- Aspirin 81 mg QAM
- Amlodipine 5mg QAM
- Quetiapine 25mg QHS (started at hospital)



#### **Case #4**

76-year-old female states she cannot see. Upon exam, you notice this loss of vision because of her uncontrollable eye blinking.

- Medications:
  - Haloperidol 2mg TID
  - Simvastatin 20mg QHS
  - Metformin 500mg BID



### References

- 1. <u>https://www.cdc.gov/medicationsafety/adult\_adversedrugevents.html</u>
- 2. <u>https://www.cms.gov/Medicare/Provider-Enrollment-and-</u> <u>Certification/QAPI/Downloads/Adverse-Drug-Event-Trigger-Tool.pdf</u>
- 3. <u>https://psnet.ahrq.gov/primer/medication-errors-and-adverse-drug-events</u>

#### **Contact Information:**

Tanya Vadala, Pharm.D. Medication Safety Pharmacist, IPRO <u>TVadala@ipro.org</u>



### **Objectives Check In!**

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#### How will this change what you do? Please tell us in the poll...



### **Closing Survey**



- Please turn your attention to the poll that has popped up in your lower right-hand side of your screen
- Completion of this survey will help us steer our topics to better cater to your needs

Behavioral Health Outcomes & Opioid Misuse	<ul> <li>✓ Promote opioid best practices</li> <li>✓ Decrease high dose opioid prescribing and opioid adverse events in all settings</li> <li>✓ Increase access to behavioral health services</li> </ul>	CMS 12 <sup>th</sup>
Patient Safety	<ul> <li>✓ Reduce risky medication combinations</li> <li>✓ Reduce adverse drug events</li> <li>✓ Reduce C. diff in all settings</li> </ul>	SOW Goals
Chronic Disease Self-Management	Increase performance on ABCS clinical quality measures (i.e., aspirin use, blood pressure control, cholesterol management, cardiac rehab) Identify patients at high-risk for developing kidney disease & improve outcomes Identify patients at high risk for diabetes-related complications & improve outcomes	
Quality of Care Transitions	<ul> <li>✓ Convene community coalitions</li> <li>✓ Identify and promote optical care for super utilizers</li> <li>✓ Reduce community-based adverse drug events</li> </ul>	
Nursing Home Quality	<ul> <li>✓ Improve the mean total quality score</li> <li>✓ Develop national baselines for healthcare related infection</li> <li>✓ Reduce emergency department visits and readmissions</li> </ul>	e

#### Making Health Care Better Together



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### **Program Directors**

### **Upcoming Events**



### **Learning and Action Webinars**

**Nursing Homes** Tuesdays, 2pm ET/1pm CT

**Community Coalitions** Thursdays, 12:30 pm ET/11:30am CT

May 18, 2021: A deeper dive into Diabetic	April 22, 2021: UAB Ticket To Ride: COVID
Agent and Anticoagulation Medication Adverse	and Vaccine Communication Across Care
Drug Events	Continuum
June 15, 2021: TBD	May 27, 2021: Powerful Partnerships - Area Offices on Aging & Community Coalitions



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