



# Advanced Practice Provider Skills Course and Career Panel

## Addiction in the Hospital Setting

- Michael Strong, MD, MEd – University of Iowa Hospitals and Clinics
- Matthew McWeeny, MSN, CNP, PMHNP-BC - Cleveland Clinic



ACLP  
Consultation-Liaison  
Psychiatry 2023

Integrating Care and Evidence Across the Lifespan



## CLP 2023

Disclosure: Michael Strong, MD, MEd

With respect to the following presentation, in the 24 months prior to this declaration there has been no financial relationship of any kind between the party listed above and any ACCME-defined ineligible company which could be considered a conflict of interest.



## CLP 2023

Disclosure: Matthew McWeeny, MSN, CNP, PMHNP-BC

With respect to the following presentation, in the 24 months prior to this declaration there has been no financial relationship of any kind between the party listed above and any ACCME-defined ineligible company which could be considered a conflict of interest.



# Hospitalizations & Substance Use Disorders (SUD)

- Annual medical cost associated with SUD in US emergency departments and inpatient settings exceeded \$13 billion in 2017
- Up to 25% of hospitalized patients have a substance use disorder
  - Longer hospital stays
  - Higher costs
  - Increased readmissions





# Unaddressed SUD

- Untreated withdrawal
- Disruptive patient behaviors
- Failure to complete recommended medical therapy
- High rates of AMA discharges
- Poor patient experience
- Provider distress





# Hospitalization as a “Reachable Moment”

- Multiple evidence-based and highly effective interventions for SUD
  - Medications
  - Behavioral interventions
  - Harm-reduction strategies
- *Hospital-based* addictions care shown to:
  - increase engagement
  - reduce subsequent use
  - lower readmission rate
  - improve provider experience





# Barriers to Hospital-Based Addictions Care

- Insufficient staffing, funding
- Viewed as outpatient concern
- Stigma and avoidance
- Lack of knowledge, i.e. “where do I even begin?”

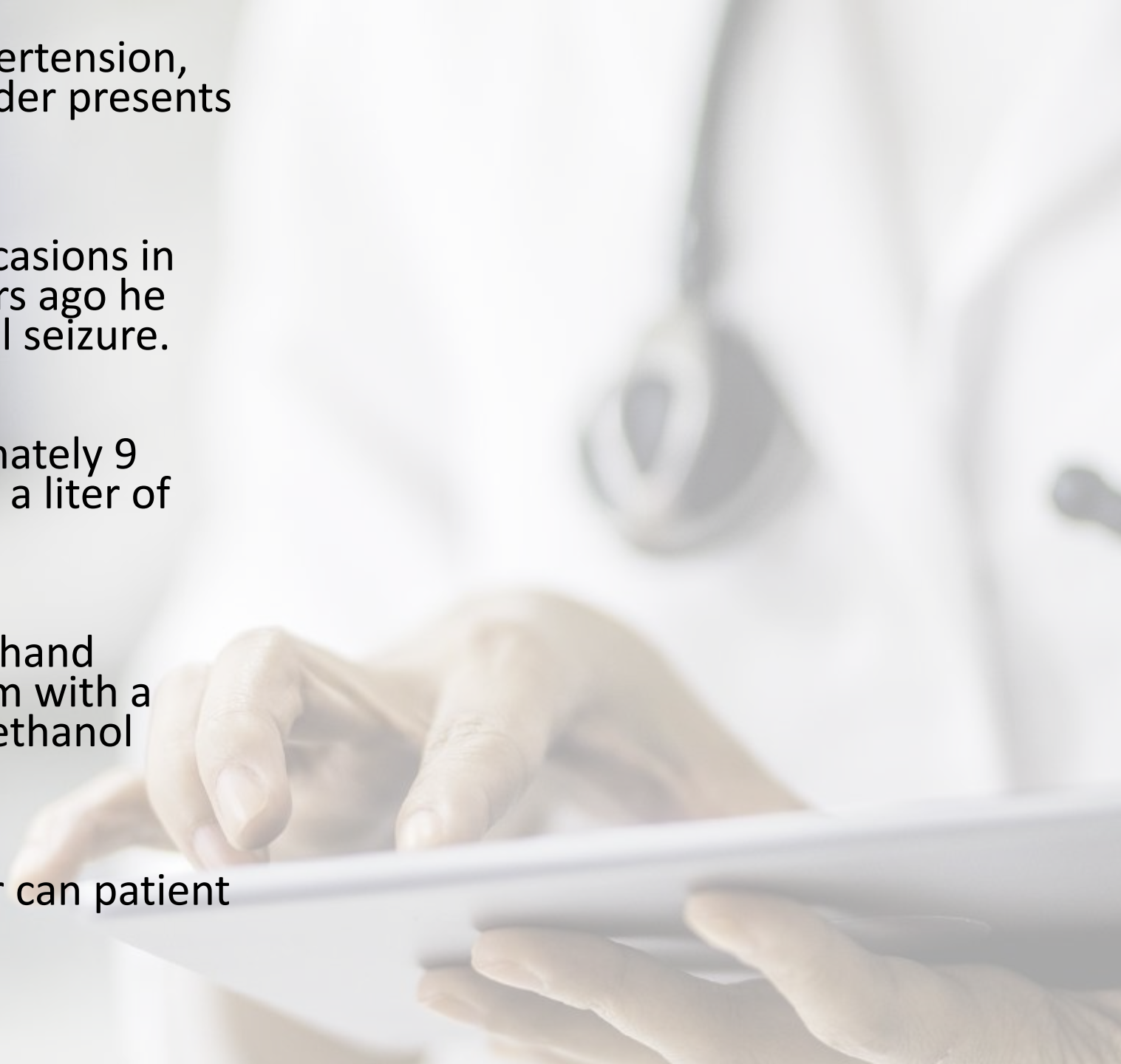
37 y/o male with history of PTSD, hypertension, hyperlipidemia, and alcohol use disorder presents to the ED requesting alcohol detox.

He has presented similarly on four occasions in the past six months. Of note, two years ago he had a documented alcohol withdrawal seizure.

He reports his last drink was approximately 9 hours ago and he is currently drinking a liter of vodka a day.

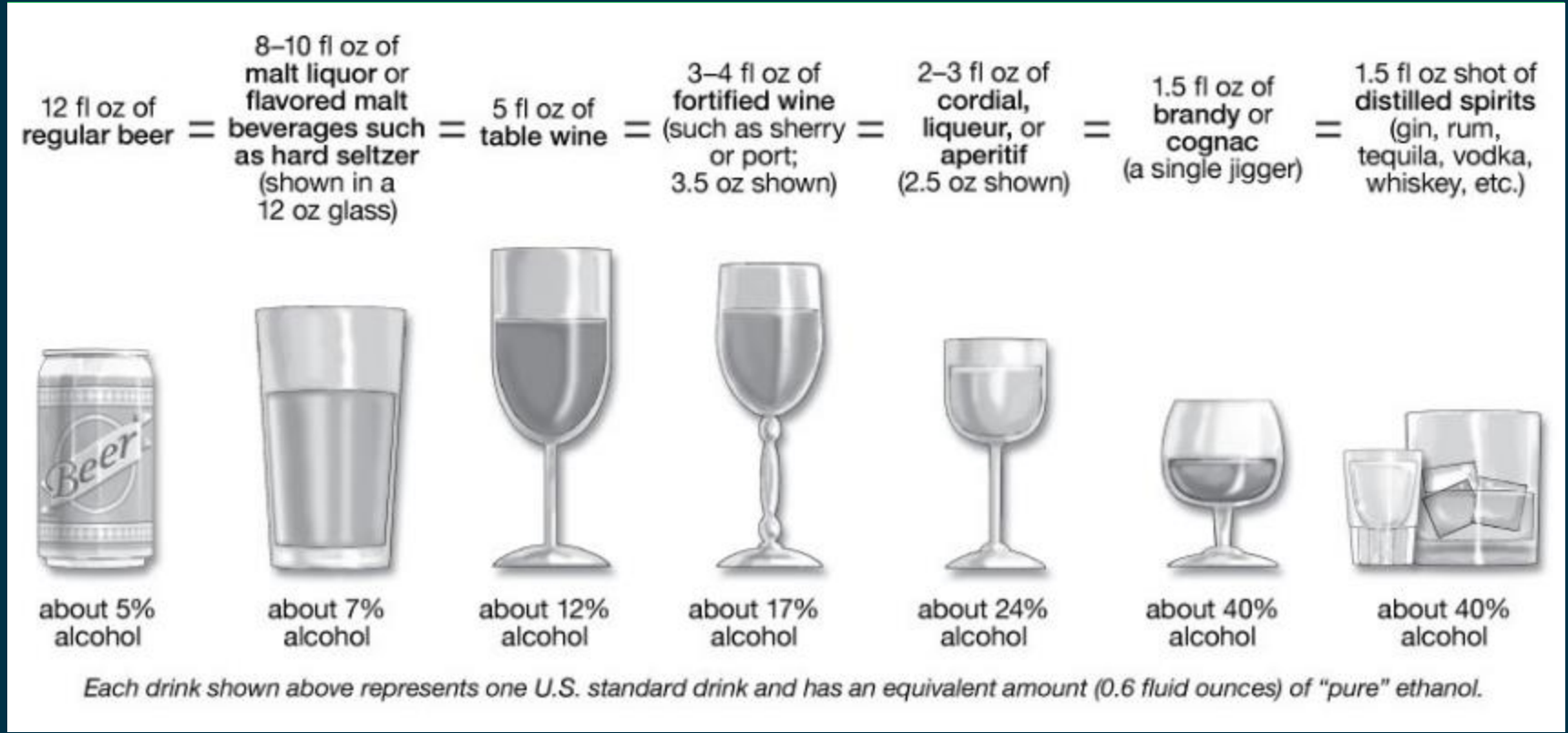
He is anxious appearing, has bilateral hand tremors, and is tachycardic to 122 bpm with a blood pressure of 172/91. His serum ethanol level is 356.6 mg/dL.

- Should admission be considered, or can patient be managed as an outpatient?





# Alcohol – what's in a drink?





## Hazardous Drinking

- Males: >14 drinks per week or >4 drinks per occasion
- Females: >7 drinks per week or >3 drinks per occasion
- Binge drinking:  $\geq 5$  standard drinks in males and  $\geq 4$  standard drinks in females

## Alcohol Use Disorder

- Heavy doses of alcohol with repeated and significant distress, impaired functioning, cravings, and physiologic dependence (tolerance and/or withdrawal)
- Periods of remission and relapse
- Men > women, younger patients (18-25 y/o)
- **Up to 1/3 of Americans meet criteria in their lifetime**



# Pathophysiology of Alcohol Withdrawal

- GABA (gamma-aminobutyric acid) is major inhibitory neurotransmitter in CNS
  - Low blood alcohol concentrations (BAC) -> euphoria and disinhibition
  - Increasing BAC -> motor impairment, slurred speech, stupor, coma, respiratory failure, and death
- Chronic alcohol exposure leads to adaptive changes in GABA, glutamate, and norepinephrine pathways
  - Down-regulation of GABA<sub>A</sub> receptors
  - Up-regulation of glutamate receptors
  - Overall increase in baseline neuronal excitability



# Alcohol Withdrawal

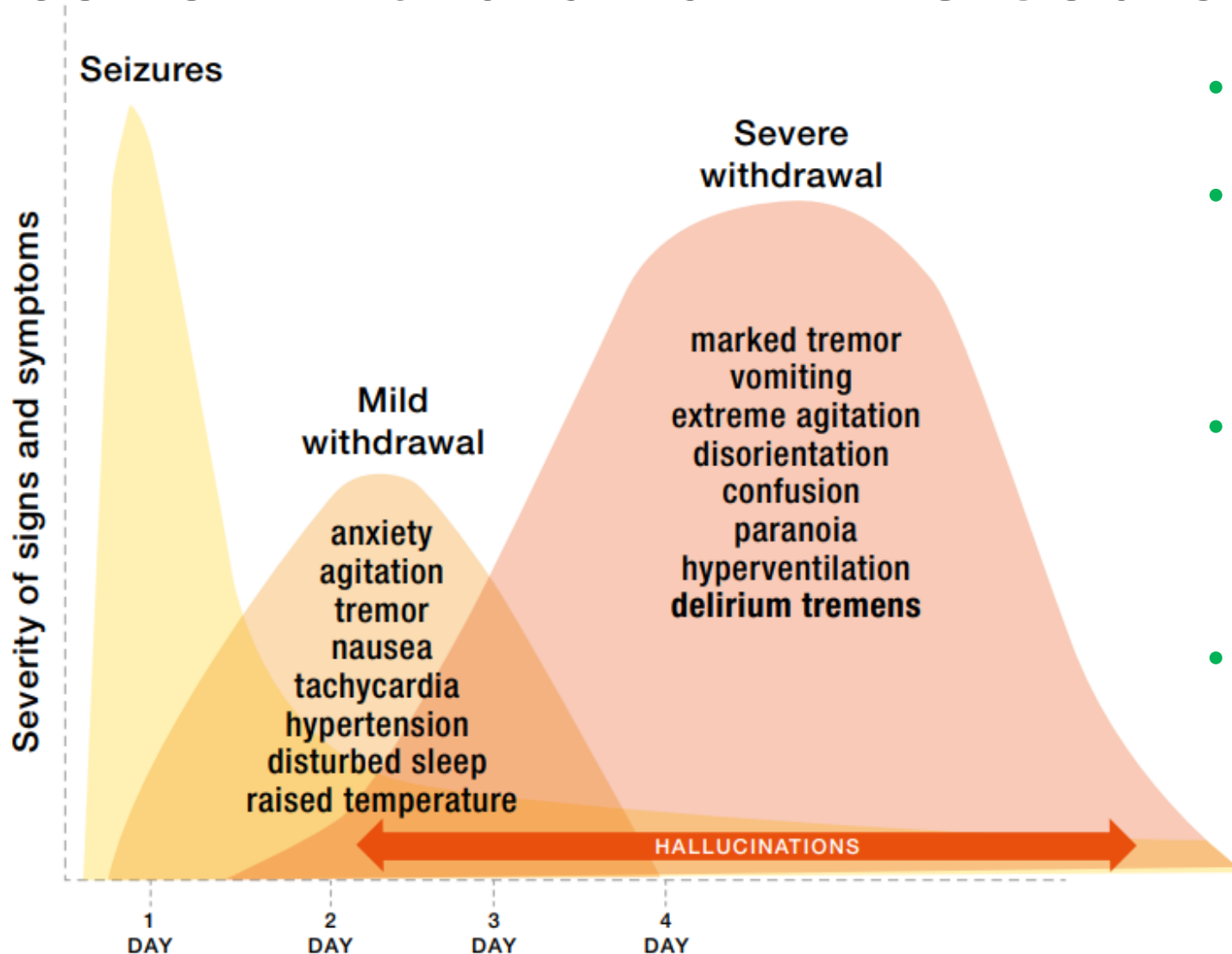
**DSM-5-TR diagnostic criteria** include two or more of the following **within several hours to a few days after cessation or reduction in alcohol use**:

- Autonomic hyperactivity (e.g., sweating or pulse rate greater than 100 bpm)
- Increased hand tremor
- Insomnia
- Nausea or vomiting
- Transient visual, tactile, or auditory hallucinations or illusions
- Psychomotor agitation
- Anxiety
- Generalized tonic-clonic seizures

->2-7% of hospitalized patients with heavy alcohol use develop moderate to severe withdrawal



# Alcohol Withdrawal Time Course and Symptoms



- Majority of withdrawal mild and self-limited
- Withdrawal seizures
  - 6-48 hours after last drink, generalized tonic-clonic, untreated will progress to delirium tremens (DT) in roughly 1/3 of pts
- Alcoholic hallucinosis
  - 12-48 hours after last drink, can occur with minimal VS abnormalities and intact sensorium, can last upwards of one week
- Severe withdrawal, including DT
  - Onset typically 48-96 hours after last drink, can last up to two weeks



# Risk Factors for Severe or Complicated Withdrawal

- History of withdrawal delirium or seizure
- Multiple prior withdrawal episodes
- Comorbid medical or surgical illness (especially TBI)
- Longer duration of heavy and regular use
- Seizure(s) during the current episode
- Autonomic hyperactivity
- Physiological dependence on other GABAergic agents
- Onset of withdrawal symptoms with elevated BAC
- Increased age (>65)

**Prediction of Alcohol Withdrawal Severity Scale (PAWSS)**  
Maldonado et al., 2014

**Part A: Threshold Criteria:** (1 point either)

1. Have you consumed any amount of alcohol (i.e., been drinking) within the last 30 days? \_\_\_\_\_

OR did the patient have a "+" BAL upon admission? \_\_\_\_\_

*IF the answer to either is YES, proceed with test:*

**Part B: Based on patient interview:** (1 point each)

2. Have you ever experienced previous episodes of alcohol withdrawal? \_\_\_\_\_

3. Have you ever experienced alcohol withdrawal seizures? \_\_\_\_\_

4. Have you ever experienced delirium tremens or DT's? \_\_\_\_\_

5. Have you ever undergone of alcohol rehabilitation treatment? \_\_\_\_\_  
(i.e., in-patient or out-patient treatment programs or AA attendance)

6. Have you ever experienced blackouts? \_\_\_\_\_

7. Have you combined alcohol with other "downers" like benzodiazepines or barbiturates during the last 90 days? \_\_\_\_\_

8. Have you combined alcohol with any other substance of abuse during the last 90 days? \_\_\_\_\_

**Part C: Based on clinical evidence:** (1 point each)

9. Was the patient's blood alcohol level (BAL) on presentation > 200? \_\_\_\_\_

10. Is there evidence of increased autonomic activity? \_\_\_\_\_  
(e.g., HR > 120 bpm, tremor, sweating, agitation, nausea)

**Total Score:** \_\_\_\_\_

Notes: Maximum score = 10. This instrument is intended as a SCREENING TOOL. The greater the number of positive findings, the higher the risk for the development of alcohol withdrawal syndromes. A score of 2 or 4 suggests HIGH RISK for moderate to severe AWS; prophylaxis and/or treatment may be indicated.



# Alcohol Withdrawal Management

- Measured by scales such as Clinical Institute Withdrawal Assessment for Alcohol Revised (CIWA-Ar)
- Prediction of Alcohol Withdrawal Severity Scale (PAWSS)
- Fluid, electrolyte, thiamine repletion
- Vitamin supplementation
- Medications
  - Benzodiazepines
  - Gabapentin, carbamazepine, valproic acid
  - Phenobarbital, dexmedetomidine, propofol in benzo-resistant/refractory
- AUD treatment engagement (acamprosate, disulfiram, naltrexone), mutual support groups





**Learning Objectives:**

- 1) Understand the definition of alcohol withdrawal and recognize its signs and symptoms
- 2) Describe different approaches in managing alcohol withdrawal

**Step 1: Learn the pathophysiology of alcohol withdrawal.**

- The primary effects of alcohol on the central nervous system includes enhanced  $\gamma$ -aminobutyric acid (GABA)-ergic and reduced glutamatergic neurotransmission.
- Chronic exposure to alcohol produces adaptive changes in several neurotransmitter systems including GABA, glutamate, and norepinephrine pathways. A down-regulation of GABA<sub>A</sub> receptors and upregulation of NMDA glutamate receptors are present. These changes pose targets for treatment of alcohol withdrawal.
- Alcohol withdrawal symptoms typically occur after an abrupt change in regular drinking pattern when alcohol use has been heavy and prolonged. Due to chronic suppression of excitatory neurotransmission via introduction of exogenous GABA (alcohol), after cessation of alcohol consumption relatively increased excitatory neurotransmitter action is present leading to withdrawal symptoms.

**Step 2: Recognize signs and symptoms of alcohol withdrawal**

- DSM-5 criteria for diagnosis of alcohol withdrawal include two or more of the following symptoms, beginning a few hours or days after stopping or reducing alcohol intake: diaphoresis/tachycardia, hand tremors, difficulty sleeping, nausea/vomiting, illusions or perceptual disturbances, physical agitation, anxiety, seizures.
  - In order to meet DSM-5 criteria for diagnosis of alcohol withdrawal, the above listed symptoms must cause clinical distress or significant impairment in daily functioning and cannot be due to a general medical condition (including withdrawal from other misused substances).
- Components of alcohol withdrawal are listed in Table 1.
- One of the most effective approaches to detect risk of alcohol withdrawal is proactive screening for alcohol use. Two validated screening tools for problematic alcohol use include:
  - AUDIT-C: scores of > 4 for men and > 3 for women are likely indicative of problematic drinking
  - CAGE: score of two positive items indicates a need for further assessment
- Seizures and delirium tremens are considered to be complicated alcohol withdrawal states due to high mortality associated with them.
- Risk factors associated with developing delirium tremens include:
  - History of severe withdrawal symptoms
  - Chronic and significant daily alcohol use
  - Age > 40 years old
  - Multiple medical comorbidities
  - Onset of withdrawal symptoms while having an elevated blood alcohol level

## 1st-line: Benzodiazepines

- **Symptom-triggered** preferred for mild/moderate withdrawal, pts require less medications overall with shorter treatment period
- **Fixed-schedule** if unable to reliably monitor symptoms, potential for complicated withdrawal, comorbid medical issues place at higher risk
  - Lorazepam 1-4 mg every 4-6 hours
  - Chlordiazepoxide 25-50 mg PO every 6-8 hours
  - Diazepam regimen 10-20 mg every 6-12 hours
- **Front-loading** for those at high risk of severe withdrawal (e.g. CIWA-AR <19) – diazepam or chlordiazepoxide
- Longer-acting agents preferred
- Monitor for over-sedation / respiratory depression





**Learning Objectives:**

- 1) Understand the definition of alcohol withdrawal and recognize its signs and symptoms
- 2) Describe different approaches in managing alcohol withdrawal

**Step 1: Learn the pathophysiology of alcohol withdrawal.**

- The primary effects of alcohol on the central nervous system includes enhanced  $\gamma$ -aminobutyric acid (GABA)-ergic and reduced glutamatergic neurotransmission.
- Chronic exposure to alcohol produces adaptive changes in several neurotransmitter systems including GABA, glutamate, and norepinephrine pathways. A down-regulation of GABA<sub>A</sub> receptors and upregulation of NMDA glutamate receptors are present. These changes pose targets for treatment of alcohol withdrawal.
- Alcohol withdrawal symptoms typically occur after an abrupt change in regular drinking pattern when alcohol use has been heavy and prolonged. Due to chronic suppression of excitatory neurotransmission via introduction of exogenous GABA (alcohol), after cessation of alcohol consumption relatively increased excitatory neurotransmitter action is present leading to withdrawal symptoms.

**Step 2: Recognize signs and symptoms of alcohol withdrawal**

- DSM-5 criteria for diagnosis of alcohol withdrawal include two or more of the following symptoms, beginning a few hours or days after stopping or reducing alcohol intake: diaphoresis/tachycardia, hand tremors, difficulty sleeping, nausea/vomiting, illusions or perceptual disturbances, physical agitation, anxiety, seizures.
  - In order to meet DSM-5 criteria for diagnosis of alcohol withdrawal, the above listed symptoms must cause clinical distress or significant impairment in daily functioning and cannot be due to a general medical condition (including withdrawal from other misused substances).
- Components of alcohol withdrawal are listed in Table 1.
- One of the most effective approaches to detect risk of alcohol withdrawal is proactive screening for alcohol use. Two validated screening tools for problematic alcohol use include:
  - AUDIT-C: scores of  $> 4$  for men and  $> 3$  for women are likely indicative of problematic drinking
  - CAGE: score of two positive items indicates a need for further assessment
- Seizures and delirium tremens are considered to be complicated alcohol withdrawal states due to high mortality associated with them.
- Risk factors associated with developing delirium tremens include:
  - History of severe withdrawal symptoms
  - Chronic and significant daily alcohol use
  - Age  $> 40$  years old
  - Multiple medical comorbidities
  - Onset of withdrawal symptoms while having an elevated blood alcohol level

## Alternatives:

- **Carbamazepine, gabapentin** appropriate in mild/moderate withdrawal
- **Valproic acid** as adjunct, *evidence limited in monotherapy*, avoid in liver disease / women of childbearing potential
- **Phenobarbital** as alternative and/or adjunct if experienced in its use
  - narrow therapeutic window
  - IV use reserved for ICU settings
- **Alpha2-adrenergic agonists** such as clonidine or dexmedetomidine as adjuncts for autonomic hyperactivity and anxiety
- **Beta blockers** as adjuncts for persistent tachycardia and hypertension



# Behavioral Treatments and Mutual-Support Groups

- Mutual Self-Help
  - Alcoholics Anonymous - [www.aa.org](http://www.aa.org)
  - Self-Management and Recovery Training (SMART) – [www.smartrecovery.org](http://www.smartrecovery.org)
  - Secular Organization for Sobriety – 9 principles instead of AA 12 – [www.sossobriety.org](http://www.sossobriety.org)
- CBT
- Motivational Interviewing
- Contingency management





An unknown female looking to be in her mid-fifties was found unconscious in her car at a local park, where a bystander called 911. EMS found her to have pale and cold skin on exam, shallow breathing and with pinpoint pupils. They elected to administer naloxone at the scene, after which her clinical status improved, and they brought her to your ED for further evaluation.

Upon meeting with her, she endorses a remote back injury treated for several years with prescription opioids until her PCP retired last year, after which she has had trouble re-establishing care and found herself increasingly relying on friends and family to provide her with a variety of opioid medications, some of which she worries might be contaminated.

She admits to using larger amounts of opioids over time with significant difficulty in cutting back, and actually had a similar episode of overdose 3 months ago.

What treatment would you offer her in the emergency room?



# OUD in the General Hospital Setting

- From 2005 to 2017...
  - Opioid-related ED visits more than tripled
  - Opioid-related inpatient hospital stays increased 119%
- 2021 National Survey on Drug Use and Health, 3.3 percent or 9.9 million people  $\geq$  age 12 misused opioids in past year
  - 8.7 million with pain reliever misuse
  - 1.1 million with heroin use
- Fentanyl and other high potency synthetic opioids increasingly present in US drug supplies, accounting for the majority of substance-related overdose/poisoning deaths



# OUD in the General Hospital Setting

**JAMA Health Forum™**



**Original Investigation**

## Association Between Hospital Adoption of an Emergency Department Treatment Pathway for Opioid Use Disorder and Patient Initiation of Buprenorphine After Discharge

Keisha T. Solomon, PhD; Jason O'Connor, PhD; Jason B. Gibbons, PhD; Austin S. Kilaru, MD; Kenneth A. Feder, PhD; Lingshu Xue, PhD; Brendan Saloner, PhD; Elizabeth A. Stuart, PhD; Evan S. Cole, PhD; Eric Hulseay, DrPH; Zachary Meisel, MD; Esita Patel, PhD; Julie M. Donohue, PhD



# OUD in the General Hospital Setting

1. Prioritize clinical stabilization of acute intoxication or withdrawal
2. If acutely intoxicated – do not initiate Medications for Opioid Use Disorder (MOUD) until more clinically stable, monitor for onset of withdrawal
  - Consider naloxone, an opioid antagonist, if concerns of overdose
3. Assess severity of active withdrawal using standardized tools -> **Clinical Opiate Withdrawal Scale (COWS)**
4. Medication-assisted management to ease symptoms
5. Review medical and psychiatric history, screen for comorbid psychiatric disorders, infectious diseases (viral hepatitis, HIV, and tuberculosis), acute trauma, and pregnancy to facilitate treatment planning



## Intoxication

- Drooping eyelids
- Constricted pupils
- Reduced respiratory rate
- Scratching (secondary to histamine release)
- Head nodding

## Withdrawal

- Restlessness, irritability, anxiety
- Dilated pupils
- Insomnia
- Yawning
- Abdominal cramps, diarrhea, vomiting
- Sweating
- Piloerection



Wesson & Ling

Clinical Opiate Withdrawal Scale

**APPENDIX 1**  
**Clinical Opiate Withdrawal Scale**

For each item, circle the number that best describes the patient's signs or symptom. Rate on just the apparent relationship to opiate withdrawal. For example, if heart rate is increased because the patient was jogging just prior to assessment, the increase pulse rate would not add to the score.

Patient's Name: _____		Date and Time ___/___/___ : _____	
Reason for this assessment: _____			
<b>Resting Pulse Rate:</b> _____ beats/minute <i>Measured after patient is sitting or lying for one minute</i> 0 pulse rate 80 or below 1 pulse rate 81-100 2 pulse rate 101-120 4 pulse rate greater than 120		<b>GI Upset: over last 1/2 hour</b> 0 no GI symptoms 1 stomach cramps 2 nausea or loose stool 3 vomiting or diarrhea 5 multiple episodes of diarrhea or vomiting	
<b>Sweating: over past 1/2 hour not accounted for by room temperature or patient activity.</b> 0 no report of chills or flushing 1 subjective report of chills or flushing 2 flushed or observable moistness on face 3 beads of sweat on brow or face 4 sweat streaming off face		<b>Tremor observation of outstretched hands</b> 0 no tremor 1 tremor can be felt, but not observed 2 slight tremor observable 4 gross tremor or muscle twitching	
<b>Restlessness</b> <i>Observation during assessment</i>		<b>Yawning</b> <i>Observation during assessment</i>	

- 11-item scale
- Inpatient or outpatient settings
- 47-point scale
  - Mild 5-12
  - Moderate 13-24
  - Moderately severe 25-36
  - Severe >36

e Research Library] at 14:04 02 September 2015





# Opioid Withdrawal Management

- Withdrawal management *on its own (i.e. detox)* not recommended
  - Advise patients of increased risk of subsequent overdose and/or death
  - Standard of Care = Maintenance medication + psychosocial treatments
- Supportive measures to target symptoms of withdrawal – anxiety, insomnia, nausea/vomiting, diarrhea, pain, autonomic symptoms
  - Hydroxyzine, dicyclomine, loperamide, ondansetron, trazodone, ibuprofen, acetaminophen
- Alpha-2 adrenergic agonists safe and effective, may also treat anxiety, restlessness, pain
  - Clonidine 0.1-0.2 mg every 4-6 hours -> monitor response, hypotension, sedation
  - Available PO, IV, and 7-day transdermal patch
- In withdrawal, methadone and buprenorphine: *more effective, more pts retain/complete treatment, decreased risk of overdose death*



# Medications for Opioid Use Disorder (MOUD)

Three FDA-approved medications with excellent efficacy:

- Methadone
- Buprenorphine
- Naltrexone

**Table 2: MAT Options and Initiation for Opioid Use Disorder**

Medication	Methadone	Buprenorphine	Naltrexone
<b>Mechanism of Action</b>	Mu opioid receptor agonist Weak NMDA agonist	Partial mu opioid receptor agonist	Mu opioid receptor antagonist
<b>Uses</b>	Medically supervised withdrawal, maintenance MAT	Medically supervised withdrawal, maintenance MAT	Prevention of relapse to opioid misuse, following medically supervised withdrawal
<b>Formulations and Typical Dose range</b>	Oral: 20-200 mg daily	Sublingual tablet: 2-32 mg daily Sublingual film, tablet (in combination with naloxone): 2/0.5-32/8 mg daily Subcutaneous injection and Subcutaneous implant – not typically started in hospital	Oral: 50 mg daily Intramuscular injection: (Vivitrol) 380 mg every 28 days
<b>Possible Adverse Effects</b>	<b>Most common:</b> Constipation, sedation, hyperhidrosis, dizziness, nausea and vomiting <b>Concerns:</b> respiratory depression, QT prolongation, sexual dysfunction, orthostatic hypotension and syncope, misuse potential, neonatal abstinence syndrome As a full opioid agonist, risk of overdose symptoms if titrated too quickly. Check drug interactions given CYP3A4 metabolism.	<b>Most common:</b> Constipation, nausea and vomiting, hyperhidrosis, insomnia, blurred vision, <b>Concerns:</b> peripheral edema, respiratory depression (particularly combined with benzodiazepines or other CNS depressants), misuse potential, neonatal abstinence syndrome <b>Implant:</b> Nerve damage during insertion/removal, accidental overdose, or misuse if extruded, local migration or protrusion <b>Subcutaneous Injection:</b> Injection site itching or pain,	<b>Most common:</b> Nausea and vomiting, anxiety, insomnia, headache elevated LFTs, muscle and joint cramps <b>Concerns:</b> precipitated opioid withdrawal, hepatotoxicity, depression, suicidality, anorexia/decreased appetite, or other appetite disorders <b>Intramuscular:</b> Pain, swelling, induration, insomnia
<b>Patient already on MAT admitted to hospital</b>	Verify outpatient methadone dose with OTP program, continue if verified unless medically contraindicated	Verify outpatient dose, consider transition to methadone if patient requiring acute pain management/sedation with opioids, otherwise continue unless medically contraindicated	Discontinue if patient will require opioid medication for pain/sedation, monitor for withdrawal precipitation
<b>Initiation</b>	“Start low go slow” Day 1: 10 to 20 mg total, MDD 30 mg Day 2+: Increase slowly by 5 mg every few days in response to symptoms of opioid withdrawal and level of sedation at the peak plasma level 2 to 4 hours after dosing. Stabilization after 4-5 weeks	Initiate while patient is in mild-moderate withdrawal. Day 1: start at 2-4 mg buprenorphine (tab, film), MDD 8mg. Day 2-3: Increase additional 2 to 4 mg every 2 hours up to approximately a 16 mg total daily dose to treat continuing opioid withdrawal. Stabilization after several days	Patients have completed withdrawal and are opioid free for 7 days (short acting) and up to 14 days (long acting). Better evidence for injection vs daily oral



# ACLP Journal Article Annotations – 2023 2<sup>nd</sup> Quarter

Journal Article Annotations  
2023, 2nd Quarter

## Addiction

Annotations by Julian J. Raffoul, MD, PhD  
July, 2023

1. [Impact of Medication-Based Treatment on Health Care Utilization Among Individuals with Opioid Use Disorder](#)

---

### PUBLICATION #1 – Addiction

Impact of Medication-Based Treatment on Health Care Utilization Among Individuals with Opioid Use Disorder

Manesh Gopaldas, Kevin Wenzel, Aimee N C Campbell, Ali Jalali, Marc Fishman, John Rotrosen, Edward V Nunes, Sean M Murphy

*Abstract:* [Psychiatr Serv.](#) 2023 Jun 20;appips20220549. doi: 10.1176/appi.ps.20220549. Online ahead of print 

***Recommending the use of MOUD for these patients will help save lives and reduce the strain on an already burdened health care system***



# Disparities in OUD Treatment

- Maintain awareness of structural disparities that impact access to MAT in vulnerable populations, including people of color, LGBTQ+ populations, different age groups
  - Patients may have own biases regarding MOUD and OUD
  - Methadone only prescribed in structured opioid treatment programs (OTPs)

***Bioethical Considerations of Harm Reduction.***

**Thursday 11/9 from 11:30 AM – 1:00 PM**

**Co-sponsored by ACLP's Addiction & Toxicology, and Bioethics SIGs**



## Academy of Consultation-Liaison Psychiatry How To Guide: Opioid Use Disorder

### How to Treat Opioid Use Disorder in the General Hospital Setting

#### Learning Objectives:

- 1) Diagnose Opioid Use Disorder, Opioid Intoxication, and Opioid Withdrawal
- 2) Determine whether a patient would benefit from Medication Assisted Treatment (MAT) initiation
- 3) Incorporate special considerations, metabolic profile, and any contraindications when choosing MAT

#### Step 1: Determine if Patient is in Acute Opioid Intoxication or Withdrawal (Table 1)

- Prioritize clinical stabilization of acute intoxication or withdrawal prior to doing an assessment for Opioid Use Disorder (see Table 1 for diagnosis of intoxication or withdrawal).
- If patient in active withdrawal, assess severity of withdrawal with clinical instruments such as the [Clinical Opiate Withdrawal Scale \(COWS\)](#), initiate medication-assisted management to ease withdrawal symptoms (see Step 4 and 5).
- If patient is acutely intoxicated:
  - Do not initiate treatment of MAT until patient more stable clinically. Monitor patient for onset of withdrawal symptoms.
  - Consider administration of naloxone, an opioid antagonist, if there are concerns of opioid overdose (see Table 1).

**Table 1: Diagnoses of Opioid Intoxication and Opioid Withdrawal (Integrating DSM5 Criteria)**

Opioid Intoxication	Opioid Withdrawal
<p>A. Recent use of opioids</p> <p>B. Clinical level behavioral and psychological alterations become apparent during or shortly after use of an opioid.</p> <p>C. Pupils will become constricted and will be accompanied by one of the following during or shortly after use of an opioid (indicative of decreased responsiveness):</p> <ol style="list-style-type: none"> <li>1. Somnolence or loss of consciousness</li> <li>2. Speech articulation will be slurred.</li> <li>3. There will be deficits in attention or memory.</li> </ol> <ul style="list-style-type: none"> <li>• Urine toxicology is positive for most opioids such as morphine, heroin, codeine, oxycodone, fentanyl, for 12 to 36 hours after use. Methadone and buprenorphine will not be detected in usual urine opioid tests, and they must be specifically tested.</li> <li>• Administer intranasal or initiate IV naloxone at 0.4 mg to 0.8 mg IV if patient has signs of overdose, including diminished consciousness with difficulty</li> </ul>	<p>A. Sudden cessation or reduction of normal opioid dose, OR opioid antagonist given after opioid use</p> <p>B. Three (or more) of the following, developing within minutes to several days after Criterion A:</p> <ul style="list-style-type: none"> <li>• dysphoric moods</li> <li>• nausea or vomiting</li> <li>• muscle aches</li> <li>• lacrimation or rhinorrhea</li> <li>• pupillary dilation,</li> <li>• piloerection or sweating</li> <li>• diarrhea</li> <li>• yawning</li> <li>• insomnia</li> <li>• autonomic hyperactivity (tachypnea, hyperreflexia, tachycardia, sweating, hypertension, hyperthermia)</li> </ul> <ul style="list-style-type: none"> <li>• The <a href="#">COWS</a> can be used to determine level of withdrawal severity. Score is between 0 to 47                             <ul style="list-style-type: none"> <li>• mild withdrawal (5 to 12)</li> <li>• moderate withdrawal (13 to 24)</li> <li>• moderately severe withdrawal (25 to 36)</li> <li>• severe withdrawal (greater than 37)</li> </ul> </li> </ul> <p>C. The symptoms in Criterion B cause clinically</p>

Mira Zein M.D., Residency Education Subcommittee  
Vers. 02/23/2023



## The ASAM National Practice Guideline for the Treatment of Opioid Use Disorder

2020 Focused Update



GuidelineCentral.com®



Providers  
Clinical Support  
System

## Practice-Based Guidelines: Buprenorphine in the Age of Fentanyl

PCSS Guidance—May, 2023

### APA Resource Document

## Resource Document on the Treatment of Opioid Use Disorder in the General Hospital

Approved by the Joint Reference Committee, October 2022

"The findings, opinions, and conclusions of this report do not necessarily represent the views of the officers, trustees, or all members of the American Psychiatric Association. Views expressed are those of the authors." —APA Operations Manual

This Resource Document explores the pharmacology of opioid use disorder (OUD) treatment, education around OUD and its management, specialty-specific concerns, barriers to care, and an approach to reduction of stigma. While the APA recognizes that the topic of OUD treatment is broad and deserves nuanced attention, the scope of this Resource Document is limited to treatment of OUD in the general hospital.

Prepared by the Council on Consultation-Liaison Psychiatry and the Council on Addiction Psychiatry

#### TABLE OF CONTENTS

- I. [Introduction](#)
- II. [Overview of Pharmacologic Treatment](#)
  1. [Buprenorphine](#)
  2. [Methadone](#)
  3. [Naltrexone](#)
  4. [Naloxone](#)
- III. [In-Hospital Treatment Protocols](#)
  1. [In-Hospital MOUD Initiation and Continuation](#)
  2. [Perioperative Management of Patients with OUD](#)
- IV. [Transitions of Care](#)
  1. [Bridge Clinics](#)
  2. [Inpatient Psychiatry](#)
  3. [Outpatient Parenteral Antimicrobial Therapy](#)
  4. [Patient Navigation](#)
- V. [Specialty-Specific Considerations](#)
  1. [Infectious Disease](#)
  2. [The Pregnant Patient](#)
  3. [The Emergency Department](#)
- VI. [Barriers](#)
  1. [Education](#)
  2. [Institutional Policies](#)
  3. [Marginalized and Vulnerable Populations](#)
  4. [COVID-19 Pandemic](#)
- VII. [Culture Change Through Day-to-Day Liaison Work](#)
  1. [Easing Teams Through Stigma](#)
  2. [Make Treatment Easier for Providers](#)
  3. [Acknowledging Punitive Policies and Their Carceral Association](#)



# Take Home Points

Hospital-based addictions care presents opportunity to engage patients, support providers, and improve outcomes and quality of care

Use of standardized scales can help monitor symptoms of withdrawal, effectiveness of interventions, and stratify risk for complicated withdrawal

Pharmacotherapy for treatment of AUD and OUD are highly effective yet remain underutilized

Patients with SUD continue to face discrimination, stigma, structural inequities and negative bias from society, including healthcare and community service providers.

# Clinical Case



 ACLP

Consultation-Liaison  
Psychiatry 2023

Integrating Care and Evidence Across the Lifespan





# Clinical Case

Mr K. is a 57-year-old male presenting to the hospital for a scheduled inguinal hernia repair. He has a past medical history significant for coronary artery disease, hypertension, and chronic lower back pain. The surgical procedure was completed without complications, and he was transferred to the floor for further monitoring. On post-op day 2, nursing staff informed the surgical team of a change in mental status and new onset agitation overnight. Psychiatry was subsequently consulted for management of change in mental status and agitation.

## **Chart Review:**

No known psychiatric history noted

CBC: + thrombocytopenia

CMP: K 3.4. Na 134. LFT's mildly elevated

Urine drug screen on admission: + Opioids and EtOH. Otherwise unremarkable

CT Brain: no acute intracranial process: completed after patient was found with AMS

Patient currently receiving opioids for post-op surgical pain



# Clinical Case Cont.

**Exam:** Patient is disheveled, lying in bed, hospital gown only covering lower body, swinging legs over bed rails. Pulling gown, sheets, and reaching into the air trying to grasp objects. Mumbling, slow, underproductive speech. Unable to attend to conversation. AxO x 0. + diaphoresis, mydriasis, tremor, HTN, tachycardia, psychomotor agitation.

At the conclusion of the exam, Mr. K's wife makes it into the hospital to visit and can provide further information. She reports that Mr. K has been drinking 1/5 of Jack Daniel's daily for the past 7 years. She believes his last drink to have been on the morning prior to his scheduled hospital admission. You also find out that Mr. K is prescribed Oxycodone 10mg TID by an outside pain management physician for his chronic back pain.

- **Briefly discuss your differential diagnosis and what additional history you would like to obtain from patient's spouse. How might this guide your management and next steps?**
- **What medications, if any, would you start for this patient?**



# Thiamine Deficiency & Wernicke-Korsakoff Syndrome

- Uncommon, but often missed given variable presentation. **Consider in all patients with heavy alcohol use.**
  - Males > females
  - Average age of onset in AUD related pts >40 years old
  - Malnutrition, TPN, hyperemesis gravidarum, bariatric surgery, cancer, pancreatitis
- Wernicke's encephalopathy, Korsakoff syndrome with range of presenting features
  - Classic triad:
    - 1) gait disturbance,
    - 2) altered cognitive state
    - 3) nystagmus/ophthalmoplegia or other eye movement disorders
- Thiamine repletion
  - GI absorption erratic
  - IV/IM formulations preferred, PO if unavailable
  - 500 mg TID x3 days, then 250 mg daily for 5 days (or until no longer seeing improvement)
  - **Give before glucose**



## Clinical Case Cont.

After speaking with the covering provider, you learn that there are significant staffing shortages such that your recommendation for 1:1 observation and frequent monitoring of alcohol withdrawal symptoms with CIWA-Ar will be challenging. You also are told that the patient is continuing to endorse significant pain despite the treatment team ordering their standard post-op pain regimen.

- **How does this information change your management strategy?**
- **Following improvement in patient's mental status, how would you incorporate education regarding chronic opioid use in the setting of suspected severe alcohol use disorder?**



**Help us improve and please  
fill out the post course survey!**

