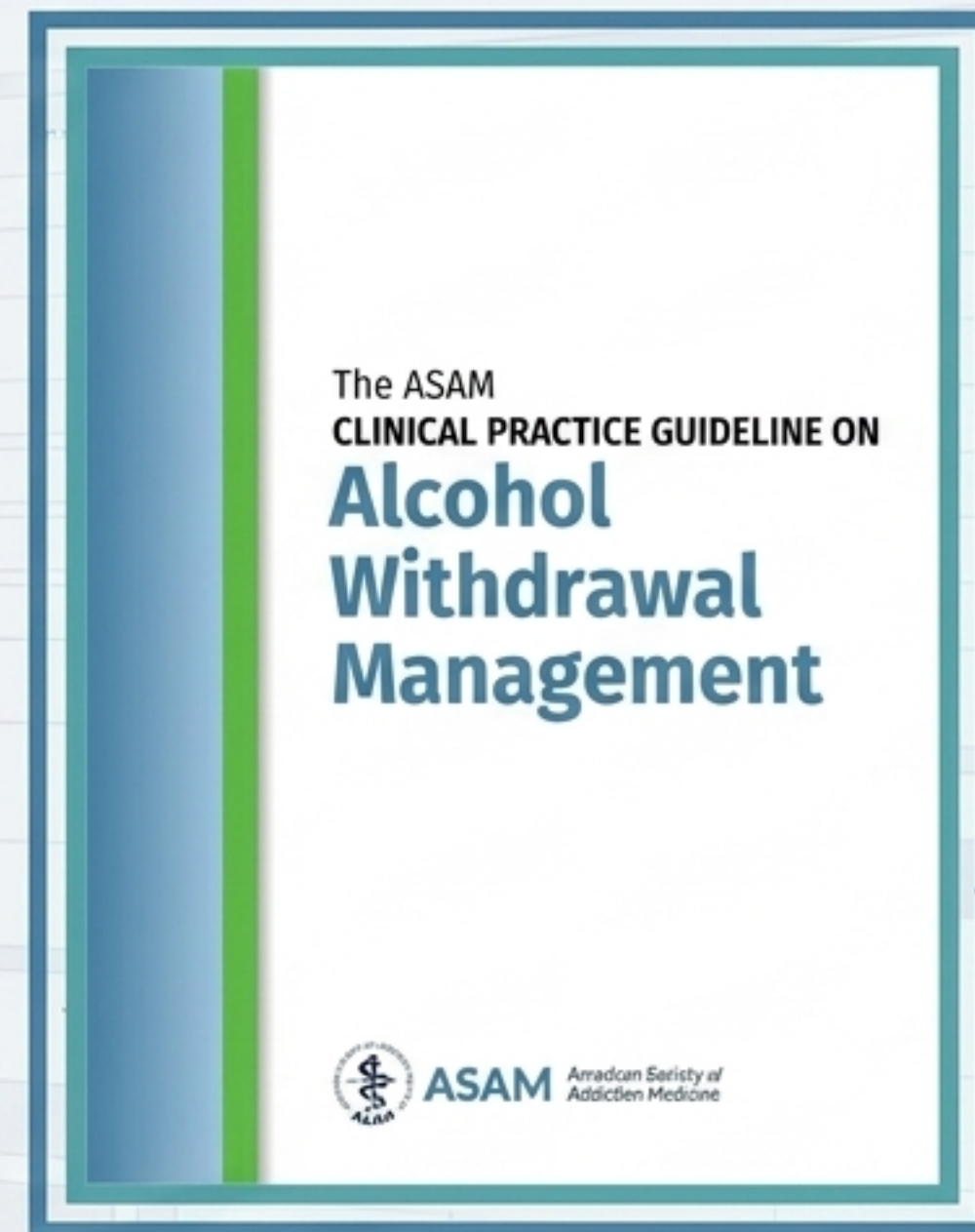


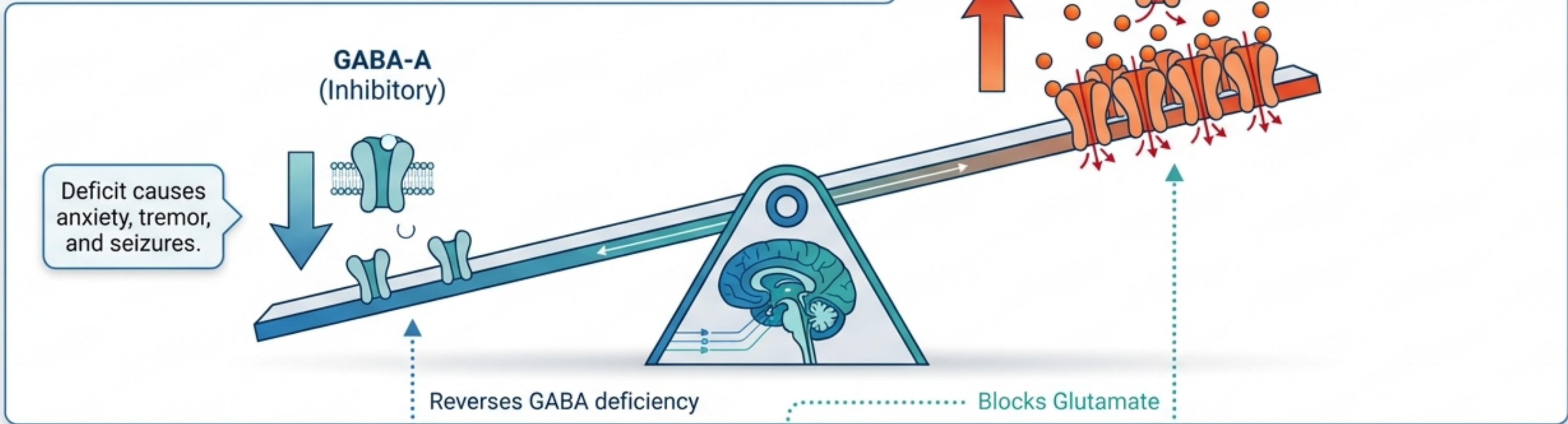
Clinical Playbook: The ASAM Guideline on Alcohol Withdrawal Management

Translating diagnostic logic, risk-based triage, and pharmacological protocols into an actionable clinical workflow.



The Neuroscience of Alcohol Withdrawal: An Imbalance of Excitation and Inhibition

Prolonged alcohol use alters the signaling of the extended amygdala, upregulating excitatory receptors and downregulating inhibitory receptors. Abrupt cessation triggers a hyper-excitable state.



 **Benzodiazepines**

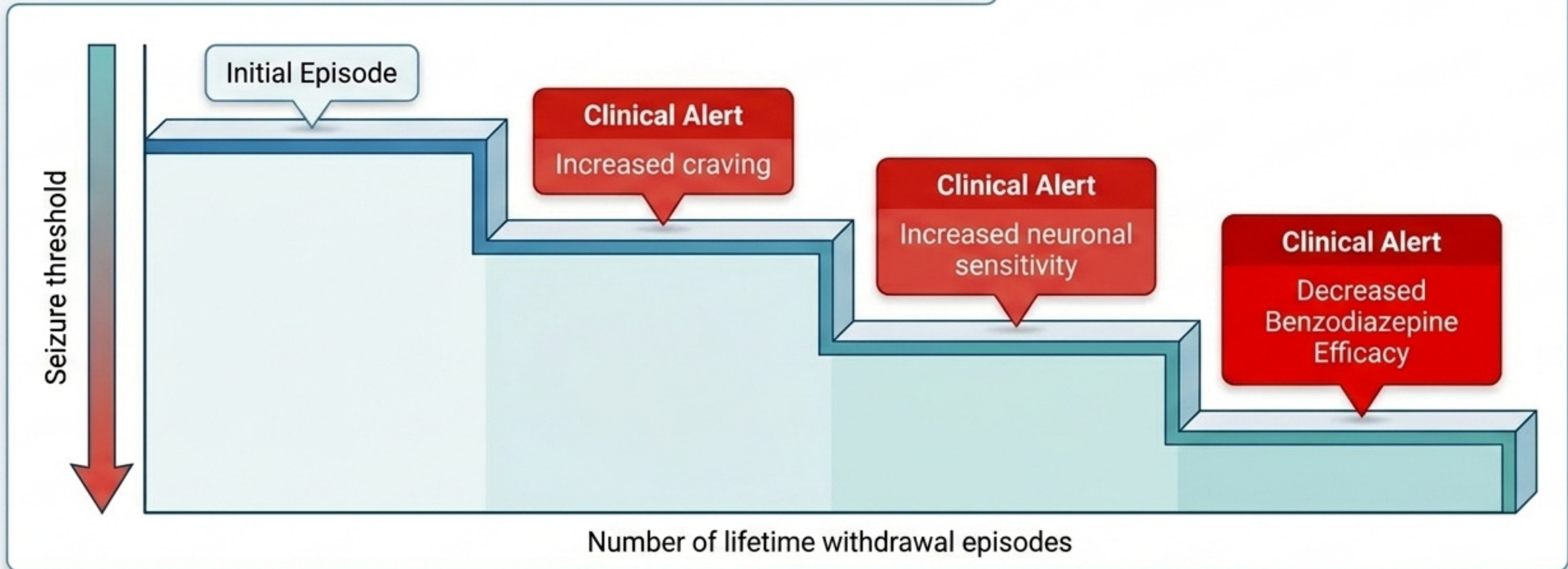
 **Gabapentin**

 **Phenobarbital**

Dual mechanism

The Kindling Effect: Why Successive Episodes Become Progressively More Severe

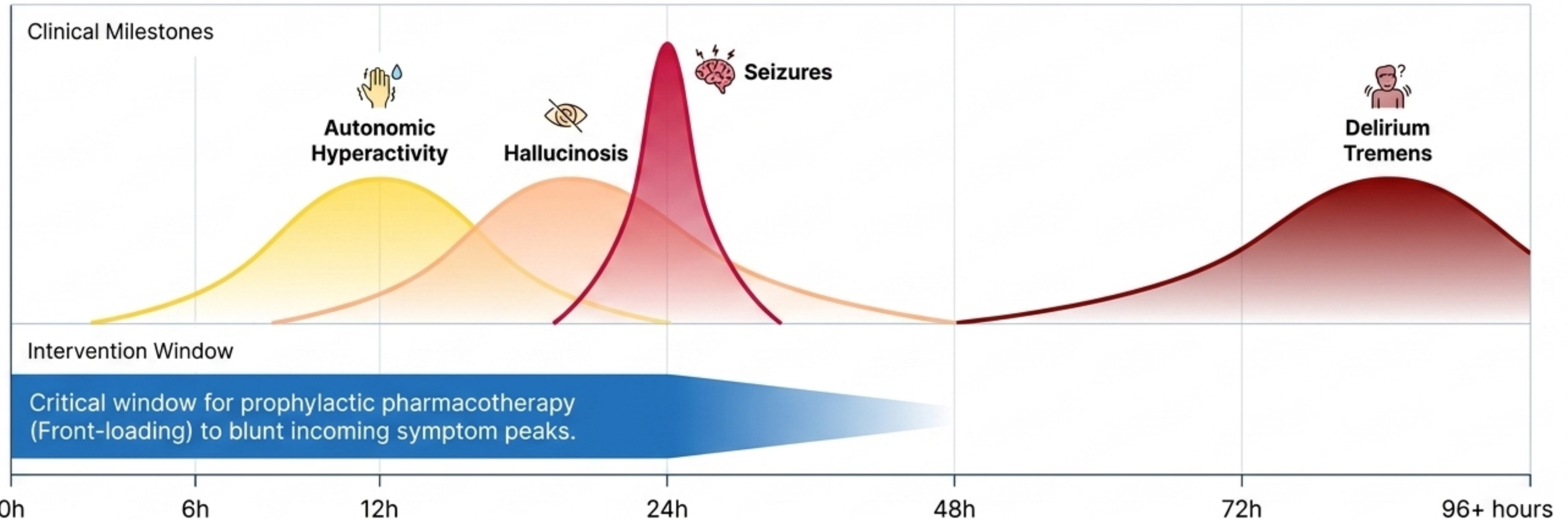
Repeated episodes of alcohol withdrawal physically alter the brain, lowering the seizure threshold, amplifying neuronal excitability, and decreasing responsiveness to standard benzodiazepine treatments.



The Risk Window: Mapping the Timeline of Symptom Onset

Symptoms progress predictably, though not strictly sequentially. Seizures can occur without prior prominent symptoms, and the risk of severe complications peaks between 24 and 96 hours.

Risk Window Timeline

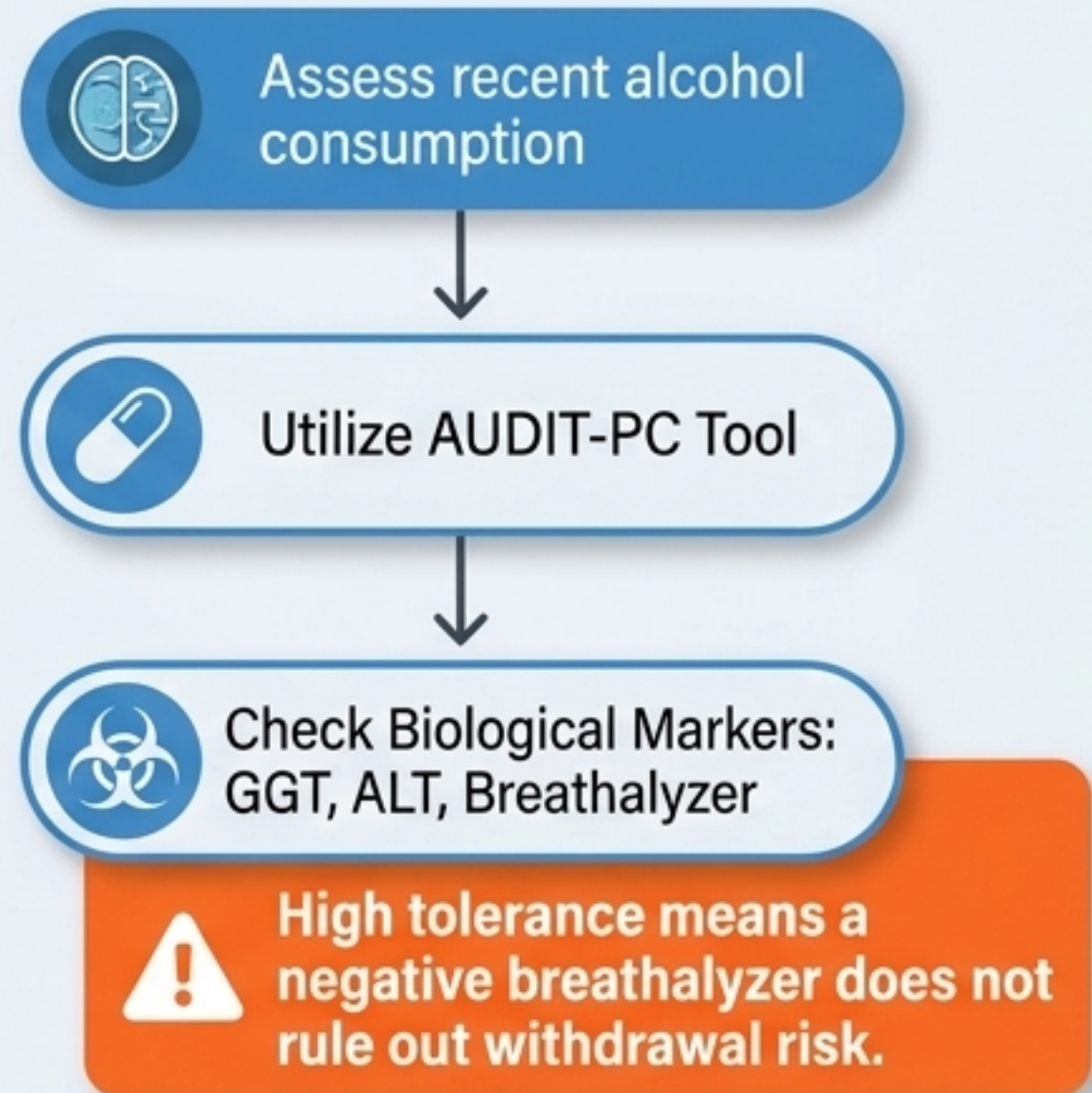


You Are Here: **[1. Identification]** → 2. Assessment → 3. Triage → 4. Active Management

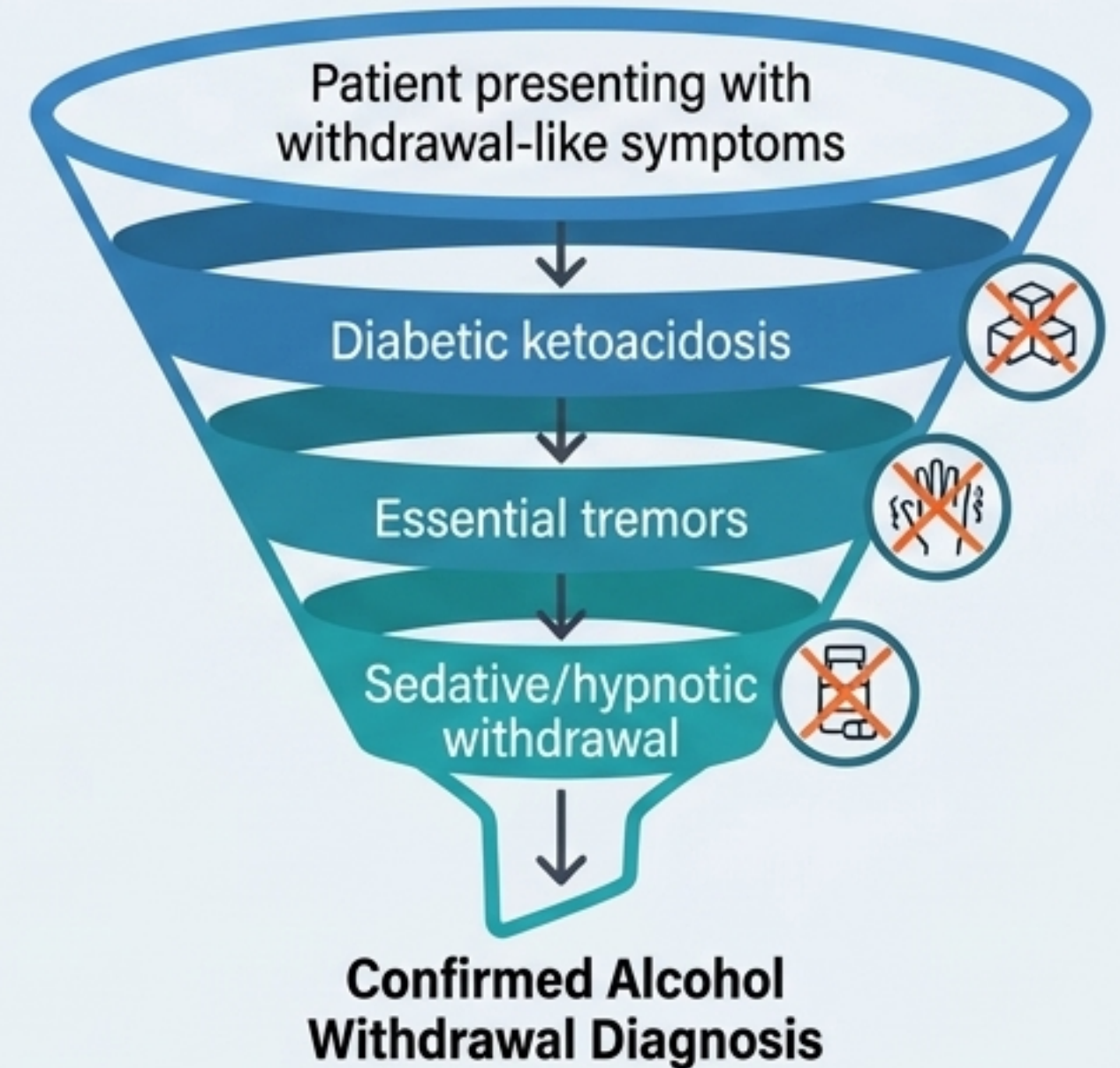
Identification & Diagnosis: Establishing Baseline Risk Before Symptoms Appear

Identify risk based on recent, heavy, and regular consumption—even if a patient's Blood Alcohol Concentration (BAC) is positive. Do not use symptom severity scales (like CIWA-Ar) to establish a diagnosis.

Universal Screening



Differential Diagnosis



The Assessment Scale Toolkit: Matching the Instrument to the Clinical Need

CIWA-Ar is the industry standard but is unsuitable for uncommunicative or delirious patients. Predictive scales are required to evaluate risk prior to symptom onset.

	CIWA-Ar	SAWS	PAWSS	LARS
Primary Function	Symptom Monitoring	Symptom Monitoring	Risk Prediction	Risk Prediction
Setting Applicability	Inpatient / Level 2-WM	Level 1-WM (Ambulatory)	Medical/Surgical Inpatient	General Admission
Administration Type	Clinician-administered	Self-Administration	Clinician-administered	Clinician-administered
Key Limitation	Requires self-report; susceptible to confounding illnesses.	Not for high-acuity patients.	Best for identifying severe withdrawal in medically ill.	Less accurate for patients with severe medical comorbidities.

1. Identification → **[2. Assessment]** → 3. Triage → 4. Active Management

Initial Assessment: Identifying Red Flags for Complicated Withdrawal

Before determining the level of care, stratify the patient's risk for complications (seizures, delirium) and life-threatening exacerbations of existing conditions. Multiple concurrent risk factors exponentially increase clinical danger.

High Risk



History of withdrawal delirium/seizures



Seizure during current episode



Marked autonomic hyperactivity

Elevated Risk



Age > 65



Concomitant use of addictive substances (especially GABAergic agents like benzos/barbiturates)



Positive BAC with concurrent withdrawal symptoms

Complicating Factors



Comorbid medical/surgical illness (e.g., TBI)



Active moderate psychiatric disorder

1. Identification → 2. Assessment → **[3. Triage]** → 4. Active Management


Triage Matrix: Determining the Appropriate Level of Care (LOC)


Safely match the patient to the least intensive environment. Ambulatory management is preferred for mitigated risk factors, but low psychosocial support or comorbid instability demands escalation.


Level 1-WM Ambulatory without extended monitoring	<ul style="list-style-type: none">✓ CIWA-Ar < 10✓ Requires reliable caregiver✓ Requires safe housing✓ Requires safe housing✓ Stable medical/psychiatric state
Level 2-WM Ambulatory with extended monitoring	<ul style="list-style-type: none">✓ CIWA-Ar 10–18✓ Suitable if prior severe withdrawal was >1 year ago✓ Mild cognitive impairment acceptable✓ Moderate/stable medical conditions acceptable
Inpatient Levels 3.2, 3.7, 4-WM	<ul style="list-style-type: none">⚠ CIWA-Ar ≥ 19⚠ Required for recent complicated withdrawal⚠ Suspected head injury⚠ Suspected head injury⚠ Active destabilizing medical problems⚠ Lack of safe housing


The Pharmacotherapy Matrix: Evaluating the Core Agents


Benzodiazepines remain the gold standard for preventing complicated withdrawal, but anticonvulsants offer distinct advantages for ambulatory settings and bridging to long-term care.


 **Benzodiazepines**
(Diazepam, Lorazepam, Chlordiazepoxide)


 **Primary Indication:**
First-line for moderate/severe withdrawal.


 **Mechanism:**
GABA-A agonist.


 **Risk/Advantage:**
Risk of over-sedation, **respiratory depression**. Prefer longer-acting agents.


 **Setting:**
All settings (with appropriate dosing).


 **Carbamazepine / Gabapentin**


 **Primary Indication:**
Monotherapy for mild/moderate ambulatory; adjunct for severe.


 **Mechanism:**
Blocks glutamate / modulates GABA.


 **Risk/Advantage:**
Lower toxicity risk with alcohol, less sedating. Bridge therapy potential.


 **Setting:**
Ambulatory preferred.

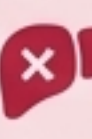
 **Phenobarbital**


 **Primary Indication:**
Alternative/Adjunct for severe withdrawal or benzo-contraindication.


 **Mechanism:**
Dual GABA agonist and Glutamate blocker.


 **Risk/Advantage:**
Narrow therapeutic window. **Risk of toxicity**.


 **Setting:**
Level 2-WM or Inpatient only (requires experienced providers).

 **Valproic Acid**

 **Primary Indication:**
Adjunct only.

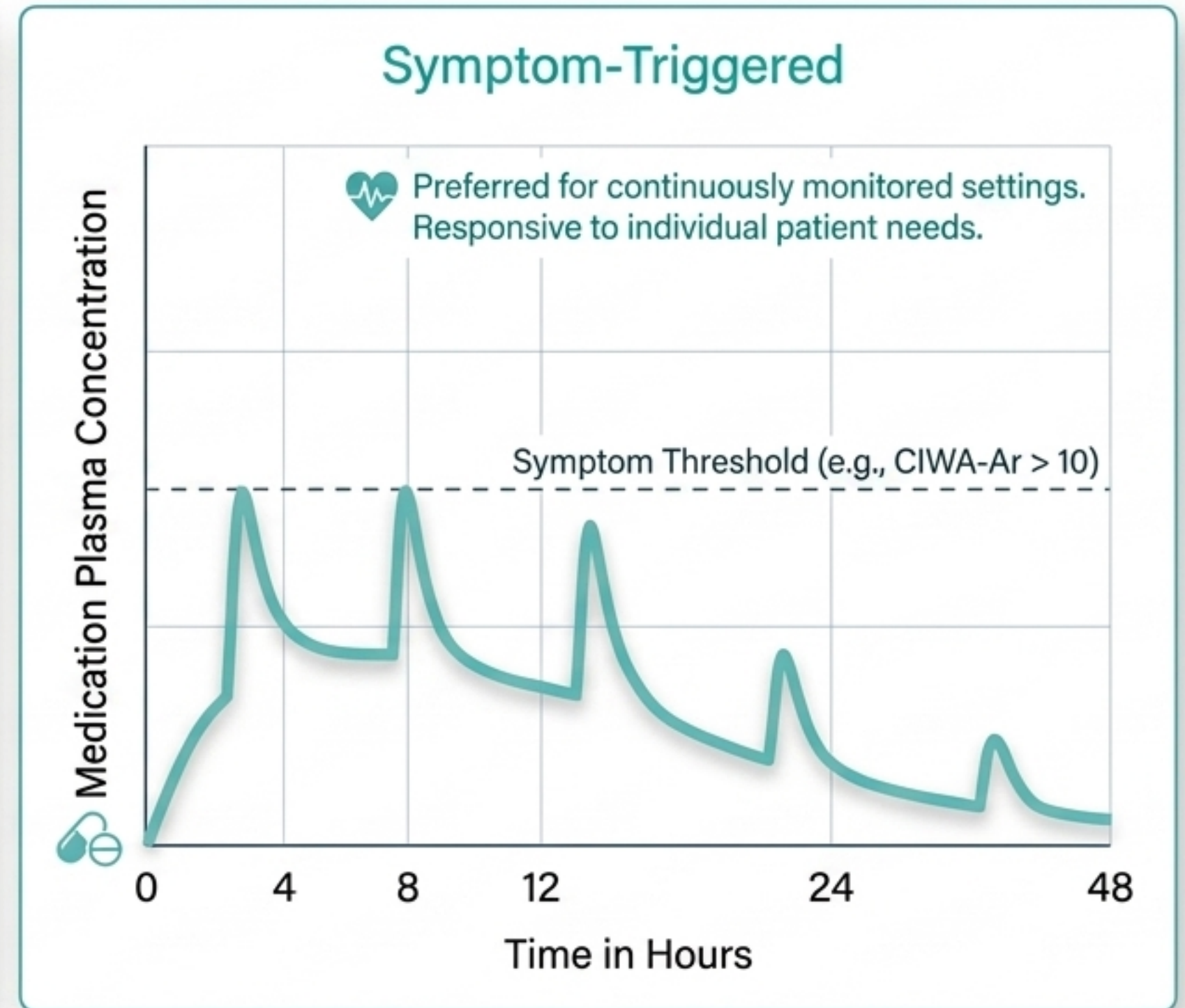
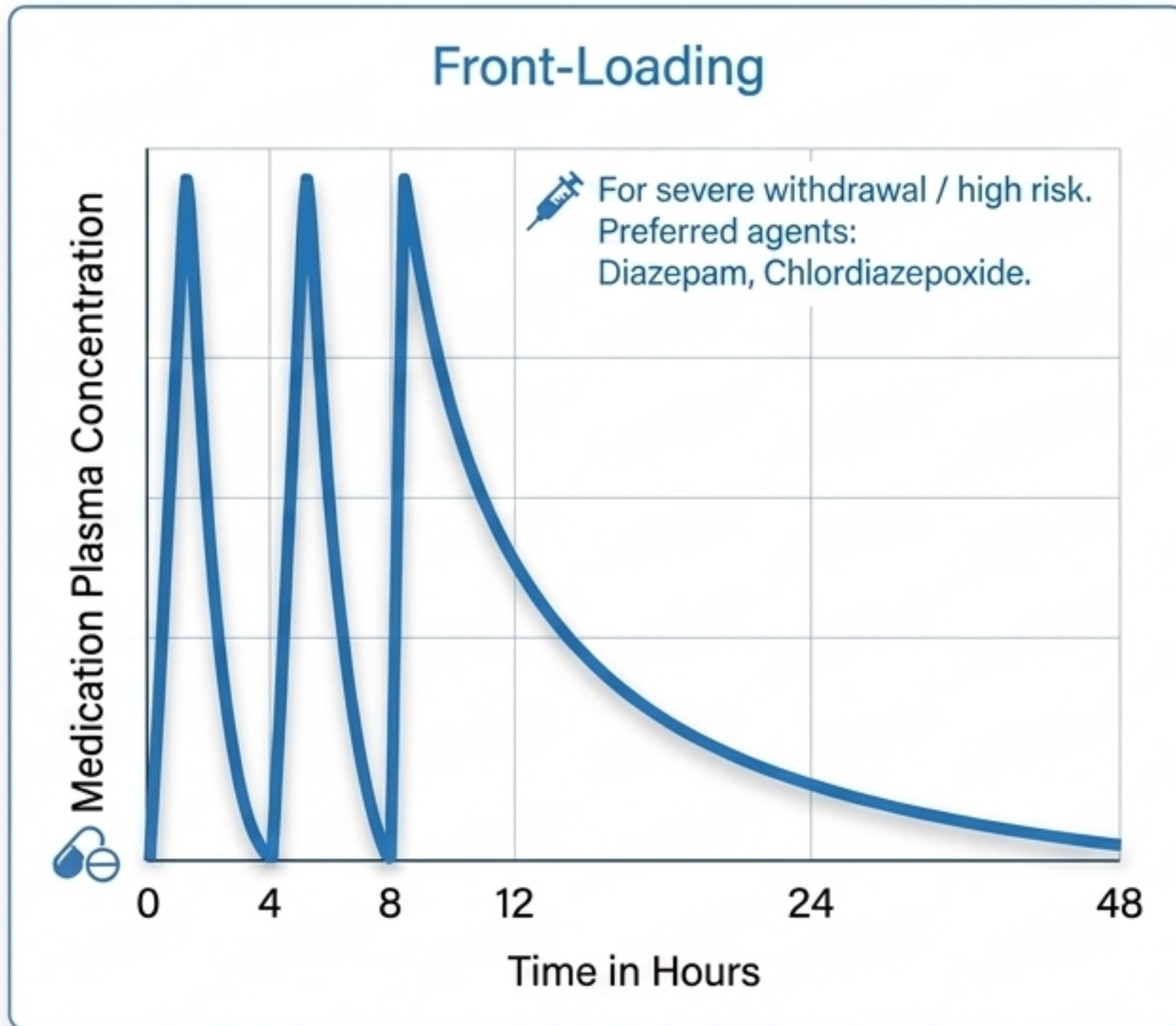
 **Mechanism:**
GABA modulator.

 **Risk/Advantage:**
NEVER use as monotherapy.

 **Setting:**
Contraindications for **liver disease** and **women of childbearing potential**.

Dosing Regimens: Front-Loading vs. Symptom-Triggered Treatment

Symptom-triggered dosing is highly individualized and reduces total medication use. Front-loading achieves rapid stabilization for high-risk patients by taking advantage of the extended half-life of long-acting benzodiazepines.



Ambulatory Management (Levels 1 & 2-WM): Monitoring & Supportive Care

Ambulatory management relies heavily on continuous patient and caregiver education. Daily face-to-face or remote check-ins are mandatory for the first five days.

The Daily Check-in

- ✓ Assess vital signs and hydration
- ✓ Evaluate sleep quality and orientation
- ✓ Screen for suicidality
- ✓ Conduct a breathalyzer test

Supportive Prescriptions

- 📦 Non-caffeinated fluids
- 📦 Daily multivitamin
- 📦 Oral Thiamine (100 mg PO/day for 3–5 days)

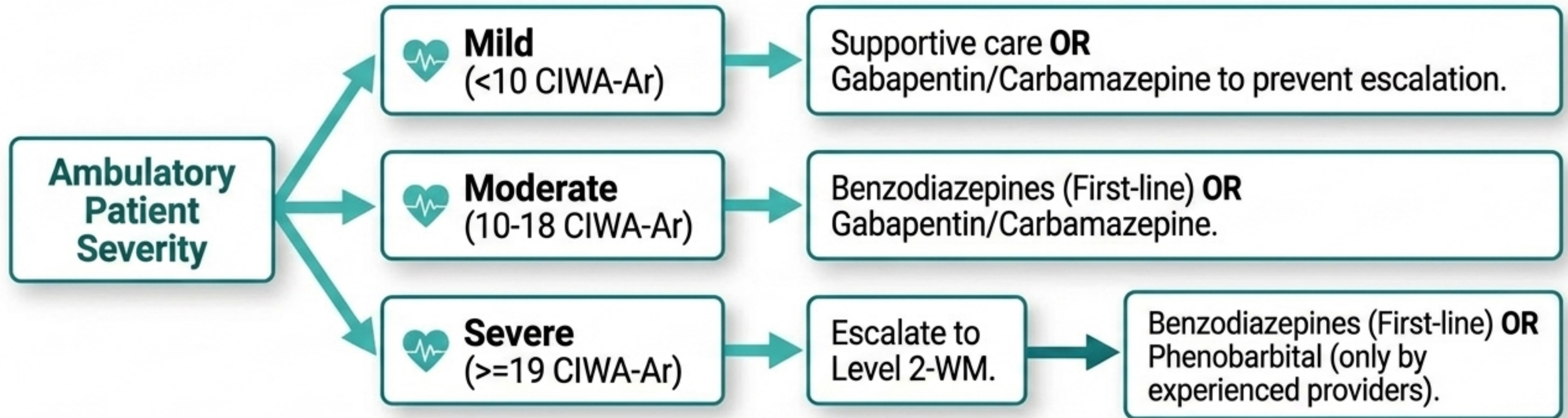
Warning Signs for Transfer

- ⚠️ Unstable vital signs
- ⚠️ Persistent vomiting or hallucinations
- ⚠️ Return to alcohol use

Mandates immediate transfer to inpatient care.

Ambulatory Pharmacotherapy: Balancing Symptom Control and Diversion Risk

In the absence of 24-hour monitoring, medication choice must account for the risk of drug-alcohol toxicity and medication diversion.



Benzodiazepine Diversion/Toxicity Risk:

Prescribe only minimum doses until next visit. Warn patients strictly against combining with alcohol or opioids.

Inpatient Management (Levels 3 & 4-WM): High-Acuity Monitoring & Support

Inpatient settings allow for aggressive prophylactic treatment and rapid correction of acute nutritional deficiencies that can cause irreversible brain damage.

Observation Protocol

- ✓ Assess every 1–4 hours until stable.
- 🕒 Define stable as CIWA-Ar < 10 for 24h.
- 🕒 Extend observation to 4–8 hours post-stabilization.

Wernicke Encephalopathy Prevention

- 🧪 IV/IM Thiamine (100mg/day for 3-5 days).

! Explicit Note

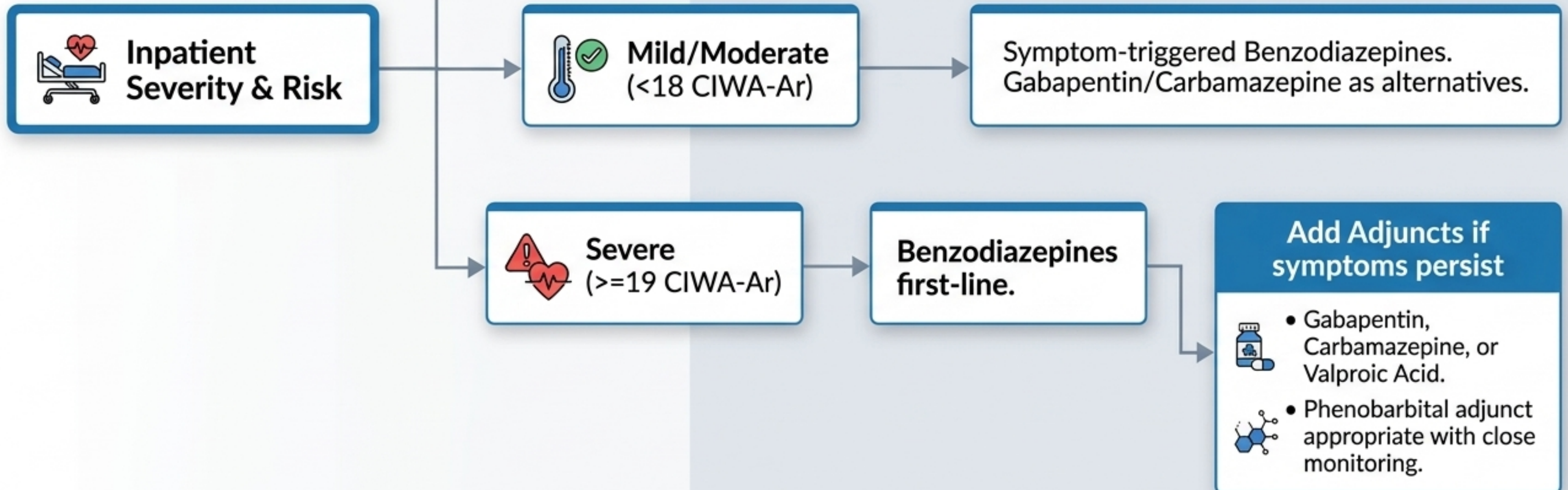
Glucose and thiamine can be administered concurrently; do not delay glucose for nutritionally compromised patients.

Electrolyte Correction

- ❤️ Administer Magnesium for cardiac arrhythmias / hypomagnesemia.
- 💧 Supplement severe hypophosphatemia (< 1 mg/dL).
- 🌿 Provide folate in critically ill patients.

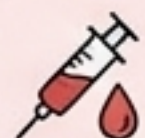
Inpatient Pharmacotherapy: Aggressive Prevention and Symptom Control

Inpatient monitoring allows for high-dose front-loading and the safe use of adjunct medications to rapidly stabilize severe neurochemical imbalances.



Complicated Withdrawal: Managing Alcohol Withdrawal Seizures

Seizures can occur without prior prominent symptoms (typically 8–48 hours post-cessation). Immediate pharmacological intervention is required to prevent status epilepticus or progression to delirium.



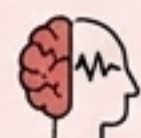
Immediate Action

- Administer fast-acting parenteral Benzodiazepines. (IV Lorazepam/Diazepam preferred).
- Phenobarbital is a secondary option.



Monitoring

- Admit to close monitoring.
- Reassess every 1-2 hours for 6-24 hours.
- Continuously monitor fluid and electrolytes.



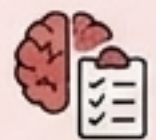
Neurological Diagnostics

- If new onset, or focal deficits are present, mandate EEG and neuroimaging.
- Do NOT assume etiology without ruling out head trauma/meningitis.

Contraindication: A2AAs, beta-blockers, and Phenytoin are **INEFFECTIVE** for preventing/treating alcohol withdrawal seizures.

Complicated Withdrawal: Managing Alcohol Withdrawal Delirium

Developing 72–96 hours post-cessation, delirium requires critical care admission, continuous observation, and massive pharmacological sedation to achieve light somnolence.



Assessment

- Do NOT use CIWA-Ar.
- Use CAM-ICU, DDS, or RASS.
- Differentiate from alcohol-induced psychotic disorder (hallucinations occur in clear consciousness).



Pharmacotherapy

- Very large, repeated IV doses of Benzodiazepines.
- Do not hesitate to use doses far exceeding typical population limits.
- Monitor for hyponatremia and metabolic acidosis.

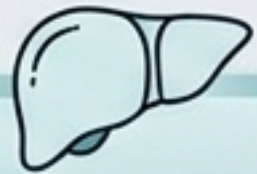


Adjuncts & Safety

- Phenobarbital or Antipsychotics (Haloperidol) can be used as adjuncts if benzos alone fail.
- **CRITICAL:** Antipsychotics are NEVER used as monotherapy.

Special Populations: Tailoring the Pharmacological Approach

Concurrent medical conditions radically alter the metabolism and risk profile of standard withdrawal protocols.



Hepatic Impairment

- Use benzodiazepines with less hepatic metabolism (e.g., Lorazepam, Oxazepam, Oxazepam, Temazepam).
- Adjust all standard doses downward.



Pregnancy

- Inpatient treatment strongly considered.
- Benzos/Barbiturates are drugs of choice (benefits outweigh teratogenic risks).
- NEVER use Valproic Acid.
- Use short-acting benzos near delivery to prevent neonatal intoxication.



Concurrent Opioid Use

- Extreme caution with Benzodiazepines due to synergistic respiratory depression.
- Co-manage OUD (buprenorphine/methadone) simultaneously.
- Do not delay OUD treatment.

Escalation Protocol: Resistant Alcohol Withdrawal (RAW)

When massive doses of benzodiazepines fail to control severe agitation and autonomic hyperactivity, clinicians must switch mechanisms to stabilize the patient in the ICU.

Patient requires **>200mg Diazepam** (or **>50mg IV/hour**) with no symptom control.

Escalate to **RAW Protocol** in ICU



Phenobarbital Adjunct

- Target both GABA and Glutamate receptors to overcome benzo-resistance.



Dexmedetomidine

- Alpha-2 agonist used in the ICU to crush autonomic hyperactivity.
- **Note:** Does not treat underlying seizure risk.



Propofol

- For extreme RAW.
- Requires mechanical ventilation in the ICU.

The Care Continuum: The “Warm Handoff” to AUD Treatment

Withdrawal management is not a standalone treatment for Alcohol Use Disorder—it is merely the entry node. Failing to initiate long-term AUD treatment concurrently is an incomplete clinical pathway.



The Withdrawal Management Dashboard: Core Principles

A risk-matched, visually tracked methodology for safe and effective alcohol withdrawal management.



1. Screen Universally, Assess Risk Early

Use AUDIT-PC and PAWSS/LARS to predict complications before symptoms appear.



2. Match Level of Care to Risk

Use the ASAM Criteria. Keep low-risk patients ambulatory; escalate unmitigated risks, poor support, or severe comorbidities to inpatient.



3. Medicate to Mechanism

Use longer-acting Benzodiazepines as the gold standard; leverage Gabapentin/Carbamazepine for ambulatory bridging, and reserve Phenobarbital for experienced inpatient/Level 2-WM use.



4. Monitor and Pivot

Front-load high-risk patients, use symptom-triggered dosing for monitored patients, and be prepared to escalate to ICU protocols for RAW.



5. Bridge to Recovery

Initiate AUD treatment during the acute withdrawal phase to ensure long-term behavioral stabilization.

