# Complete Alcohol Withdrawal Syndrome (AWS) Scenario

## Developed by Kameg, K., Howard, V., Perozzi, K., & Englert, N. Robert Morris University

**School of Nursing & Health Sciences Template adapted from J. Sarasnick, MSN, RN**

**Scenario Planning Template: Initial Elements**

**Course:** NURS 4031 Transition to Professional Practice **Scenario Topic/Name:** Alcohol Withdrawal Syndrome Developed by Kameg, K., Howard, V., Perozzi, K., & Englert, N. Robert Morris University, School of Nursing & Health Sciences Template adapted from J. Sarasnick, MSN, RN

### References Used:

Adams, B., & Ferguson, K. (2017). Pharmacologic management of alcohol withdrawal syndrome in intensive care units. *AACN Advanced Critical Care*, *28*(3), 233–238.

Foertsch, M. J., Winter, J. B., Rhoades, A. G., Martin, L. T., Droege, C. A., & Ernst, N. E. (2019). Recognition, assessment, and pharmacotherapeutic treatment of alcohol withdrawal syndrome in the intensive care unit. *Critical Care Nursing Quarterly*, *42*(1), 12–29.

Halter, M. J. (2018). *Varcarolis’ foundations of psychiatric mental health nursing: A clinical approach* (8th ed.). St.

Louis, MO: Elsevier.

Higgins-Biddle, J. C., & Babor, T. F. (2018). A review of the Alcohol Use Disorders Identification Test (AUDIT), AUDIT-C, and US AUDIT for screening in the United States: Past issues and future directions. *The American Journal of Drug and Alcohol Abuse*, *44*(6), 578–586.

Linder, L. M., Robert, S., Mullinax, K., & Hayes, G. (2018). Thiamine prescribing and Wernicke’s encephalopathy risk factors in patients with alcohol use disorders at a psychiatric hospital. *Journal of Psychiatric Practice*, *24*(5), 317–322.

Parsons, G. (2018). Prevalence, identification and harms of alcohol use disorders. *Prescriber*, *29*(11), 19–23.

Thursz, M., Gual, A., Lackner, C., Mathurin, P., Moreno, C., Spahr, L., ... Cortez-Pinto, H. (2018). EASL clinical practice guidelines: Management of alcohol-related liver disease. *Journal of Hepatology*, *69*(1), 154–181.

**Estimated Scenario Time:** 30 minutes **Estimated Debriefing Time:** 30 minutes **Instructors of the Course:**

### Simulation Facilitator:

**Facilitation Prompting:** Partial

**Student level:** Senior BSN Students

### Prerequisite Knowledge/Pre-scenario Learning Activity:

1. Successful completion of NURS 4020 Advanced Management of the Adult II
2. Successful completion of NURS 4025 Nursing Care of Psychiatric Clients
3. Read Chapter 22 of Halter, M. J. (2018). *Varcarolis’ foundations of psychiatric mental health nursing: A clinical approach* (8th ed.). St. Louis, MO: Elsevier.

### Scenario Description

Helene is a 70-year-old female admitted to the hospital for acute gastritis. On the second day of admission, she becomes anxious and jittery and begins to hallucinate. Her husband, George, brings these behaviors to the attention of the nurse. During the scenario, the nursing student will have the opportunity to provide nursing care for a client experiencing symptoms of acute alcohol withdrawal.

# Scenario Planning Template: Objectives

## Learning Objectives

Upon completion of this scenario, the participant will be able to:

1. Assess the client who is experiencing signs and symptoms of alcohol withdrawal (Psychomotor Domain).
   * Tremors, diaphoresis, hypertension, tachycardia, hallucinations
   * The Clinical Institute Withdrawal Assessment for Alcohol scale (CIWA-Ar) score
2. Utilize therapeutic communication while caring for the client who is experiencing signs and symptoms of alcohol withdrawal (Affective Domain).
   * Establish rapport with the patient and husband
   * Use open-ended questions, empathy, clarification, etc.
3. Utilize appropriate Nursing Diagnoses to plan care for the client who is experiencing signs and symptoms of alcohol withdrawal (Cognitive Domain).
   * Deficient knowledge
   * Ineffective individual coping
   * Ineffective health maintenance
   * Risk for injury
4. Intervene effectively for the client who is experiencing signs and symptoms of alcohol withdrawal (Psychomotor Domain).
   * Quiet, well-lit room with environmental cues
   * IVF: NSS at 100 mL/hour
   * Thiamine 100mg IV prior to giving any glucose containing IVF
   * Folate 1mg
   * Multivitamin with B-12
   * CIWA-Ar Score: 18 – Lorazepam 0.5-1 mg IV q 15 min prn withdrawal symptoms
5. Evaluate the effectiveness of interventions for the client who is experiencing signs and symptoms of alcohol withdrawal (Cognitive and Psychomotor Domains).
   * Vital signs
   * Level of agitation/anxiety
   * Sedation scale
   * Absence of seizure activity
   * Absence of falls
   * Absence of hallucinations
6. Reflect upon the learning that occurred during the simulation scenario (Affective Domain).
   * Journal
   * Discussions during debriefing
   * Administer post-simulation evaluation survey upon conclusion of experience.

**Identify Type of Mannequin, Task Trainer, or Standardized Patient**

**Scenario Planning Template: Supplies**

## High-fidelity mannequin for patient

**Standardized patient or actor to play the role of spouse**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Equipment Needed** | | | | | |
|  | PPE gloves |  | Mask |  | Goggles |
|  | Isolation Gown |  | Stethoscope |  |  |
| X | SPO2 | X | ECG Monitor |  | Defibrillator/Pacer |
|  | Lab Reports | X | MD Orders | X | Medical Records |
|  | EMR—SLS# | X | iPod touch/PDA |  | Reference Material (book) |
|  | Oxygen NC |  | Oxygen FM |  | Oxygen Non-Rebreather |
| X | Suction |  | Tracheostomy |  | Foley |
| X | IV in Place |  | IV Start Kit |  | Crash Cart |
| X | Glucometer |  | X-rays |  | 12 Lead Type, i.e. NSR |
|  | ECG Machine (12 lead) |  | Blood |  | Baby Bottle |
|  | Ventilator |  | Vaginal Bleeding |  | Pediatric Supplies |
|  | Diaphoresis |  | Bloody wound | X | ID/Allergy Band |
|  | Nasal Secretions |  | Mouth Secretions |  | Urine |
|  | Other: |  | Other: |  | Other: |
| **Medications and IV Fluids: Dosage, Diluents Used, Methods of Delivery** | | | | | |

1. NSS 1 liter bag
2. Thiamine 100mg IV
3. Folate IV
4. Multivitamin/B12 for IV bag
5. Lorazepam 1mg IV q15 minutes for symptoms of alcohol withdrawal—Monitor sedation scale

**Scenario Planning Template: Patient Information**

## Simulated Patient History

Name: Helene Bender Age: 70

Weight: 140 lb. Height: 5’6” Gender: Female

Past Medical History: Gastritis Medications: Pepcid 20mg qd Allergies: PCN

MD: Dr. Molnar

Simulation Setting: Inpatient Unit—Medical Surgical Floor

Background of presenting illness: Mrs. Bender was admitted 2 days ago for severe epigastric distress and heme positive emesis while at home. Her hemoglobin/hematocrit (H/H) were 10.9 gr/dL / 35%. An endoscopy performed yesterday revealed gastritis, and she was placed on IV Protonix. She was admitted to monitor H/H and epigastric symptoms.

**Initial Vital Signs for Mannequin**

Temperature 99.0º F

SPO2 94%

Heart Rate 120

NIBP 150/90

ABP

CVP/PA

ECG Rhythm Sinus Tachycardia

Yes

Pulses normal

Sweating

Pulses normal, weak, or absent

Pedal, dorsal, femoral, carotid, brachial

Respirations shallow, labored, or normal

30—labored

**Scenario Planning Template: Embedded Participants and Roles**

XX Primary Nurse

Secondary Nurse

XX Family Member: George (husband)

Family Member

XX MD or NP

Ancillary Personnel (type)

**Scripts**

## Helene

### Initially:

What is climbing on the wall? Why am I shaking?

Where am I?

Where’s my purse? I need to leave to go to Bingo.

### Helene’s Responses to Alcohol Withdrawal Assessment Scoring Guidelines (CIWA-Ar)

Nausea/Vomiting: 0

Anxiety: 4

Paroxysmal Sweats: 1

Tactile Disturbance: 0

Visual Disturbance: 4

Tremors: 2

Agitation: 3

Orientation and Clouding of Sensorium: 2 Auditory Disturbances: 3

Headache: 1

### Helene Bender’s Responses to CAGE Questionnaire

Following Lorazepam administration:

**Helene:** I’m feeling much more relaxed. What happened? Why am I in the hospital?

**RN:** *Helene, I am concerned about your drinking. When was your last drink, and how much did you drink?*

**Helene:** Oh, honey, I’m not sure. I think I had a few drinks with my friends at lunch the day before I came in. Then my stomach started to bother me. I thought it was from the crab cakes.

**RN:** *Have you ever experienced something similar to this before?*

**Helene:** No.

**RN***: C: Have you ever felt you should cut down on your drinking?*

**Helene:** Well, sometimes George tells me this, but he is so conservative and strait-laced. All my friends drink like I do. I have to have drinks with them when we go out to lunch.

**George:** I am concerned about her. I just see her drinking more and more.

**RN:** *A: Have people annoyed you by criticizing your drinking?*

**Helene:** George is always the first to get on my nerves about my drinking. And, sometimes, my friends agree with him. Do you believe it? What kinds of friends are these?

**RN:** *G: Have you ever felt bad or guilty about your drinking*?

**Helene:** Well, only when my friends make a comment. But I’ve tried to quit several times.

**RN:** *E: Have you ever had an eye-opener, a drink first thing in the morning to steady your nerves or get rid of a hangover*?

**Helene:** I usually have a shot of whiskey in my coffee. It calms my nerves in the morning and helps me to think clearly. Then, my luncheons usually start around 12 noon, so I will have whatever is on the menu, spiked, of course.

### RN expected actions:

Educate on complications of alcohol abuse/dependence Utilize therapeutic communication

Contact MD with repeat CIWA-Ar score

## MD Script

“What are the vital signs and CIWA-Ar score for Mrs. Bender?”

“I’m giving you a verbal order for Lorazepam 0.5-1 mg IV q15 minutes X 4 prn symptoms of agitation and hallucinations. Give her thiamine 100mg IV X 1. Also, start IVF NSS at 100mL/hour and add MVI, B12, folate 100mg. Call me after she has received these medications. Perform the CAGE assessment when you can.”

After CAGE Questionnaire:

“Okay. Continue the CIWA-Ar protocol and the Ativan order. I will order a psychiatric consultation to discuss substance abuse.”

## George Bender (Helene’s husband)

George has been the loving and enabling husband of Helene for 50 years. He is aware of her alcohol use but has not made the determination that it is detrimental to her health. He is caring and very concerned and scared about her initial state of withdrawal. He asks many questions of the primary nurse and does everything within his power to calm Helene down, yet his over-attentiveness begins to contribute to the anxiety of the situation. He tries to respond to the questions asked of Helene during the CIWA-Ar and CAGE assessments. The primary nurse should reinforce that Helene should be the one responding to the questions.

During the course of the scenario, George can ask or state:

“Why is she acting so funny?”

“Why are you giving her those medications? Do they have any side effects?” “She usually has a drink around noon time each day.”

“She is quite a socialite and attends many functions during the week.”

# Scenario Planning Template: Patient Report

Mrs. Bender is a 70-year-old female admitted with acute epigastric distress and Heme positive emesis (coffee ground) 2 days ago. Her admitting hemoglobin and hematocrit (H/H) was 10.9 gm/dL / 35%. She had an EGD yesterday that revealed a small gastric ulcer, and she was placed on IV Protonix. She continues to be monitored for her H/H and signs of epigastric pain. VS have been stable with trends: Temp 98.4°; BP 120/76; Pulse 90; RR 16. It is admission day 3 at 10 a.m. Her husband, George, is at the bedside today and has just called for the nurse. As you enter the room, George states that his wife is “acting funny.”

# Scenario Planning Template: Implementation

## Opening State and Objectives

Assess the client who is experiencing signs and symptoms of alcohol withdrawal

* Tremors, diaphoresis, hypertension, tachycardia, hallucinations
* CIWA-Ar Score

Utilize therapeutic communication while caring for the client who is experiencing signs and symptoms of alcohol withdrawal.

* Establish rapport with the patient
* Use of open-ended questions, empathy, clarification, etc.

### Initial VS/Physiologic Parameters:

BP: 150/90; Temp: 99.0º F; Pulse 120; RR 30; Patient states: “I feel so nervous. Please get that crawly thing off the wall now! Where’s my purse? I need to leave to go to bingo.”

### Anticipated Interventions:

Upon entering the room, the student acting in the role of the primary nurse notes that Mrs. Bender’s vital signs are abnormal and that she is having hallucinations. The student should explore the patient’s alcohol use and should utilize the CIWA-Ar tool and calculate a score. During this period, the student must utilize therapeutic communication techniques to develop a therapeutic environment of trust.

## Next State and Objectives

Intervene effectively for the client who is experiencing signs and symptoms of alcohol withdrawal.

* + Quiet, well-lit room with environmental cues
  + IVF: NSS at 100 mL/hour
  + Thiamine 100mg IV prior to giving any glucose containing IV fluid
  + Folate 1mg
  + Multivitamin with B-12
  + CIWA-Ar Score: 18 – Lorazepam 0.5-1 mg IV q 15 min prn withdrawal symptoms

### Vital Signs/Physiologic Parameters: No change

**Anticipated Interventions:** After calculating the CIWA-Ar score (18), the student telephones the MD on call to obtain orders to treat the acute alcohol withdrawal symptoms. The MD orders IVF, thiamine, folate, multivitamin, and Lorazepam as listed previously. The student should provide a quiet, well-lit room and ensure that the environmental cues (clock, calendar) are within the patient’s view in order to provide frequent reorientation. The student will then initiate the IVF and medication regimen, assuring appropriate

nursing considerations and assessments are in place prior to initiation. The student must continue to provide therapeutic communication techniques with both the patient and the husband, George. The student nurse provides brief and concise patient education regarding the signs and symptoms of acute alcohol withdrawal and the need for immediate intervention.

## Final State and Objectives

Evaluate the effectiveness of interventions for the client who is experiencing signs and symptoms of alcohol withdrawal.

* + VS
  + Level of agitation/anxiety
  + Sedation scale
  + Absence of seizure activity
  + Absence of falls
  + Absence of hallucinations

## Vital Signs/Physiologic Parameters:

Following medication administration: VS: 98.6ºF, 92, 14 130/80; CIWA-Ar = 2

Patient’s diaphoresis resolves and patient states, “I’m starting to feel sleepy. What just happened?”

**Anticipated Interventions:** Following medication and IVF administration, the student nurse re-evaluates the VS and patient’s level of sedation. The student nurse must continue to educate both Helene and George about side effects of the medications and the need for frequent reorientation and assessment for seizure activity. The student nurse also explores the patient’s alcohol use and administers the CAGE questionnaire.

# Scenario Planning Template: Debriefing and Evaluation

## Objective 6: Reflect upon the learning that occurred during the simulation scenario (Affective Domain)

### Journal

* + Discussions during debriefing
  + Administer post-simulation evaluation survey upon conclusion of experience.

### Debriefing Questions

1. What worked well during the scenario?
2. If you had the opportunity to participate in the same scenario again, what would you do differently?
3. What was the primary problem?
4. What were your priorities of care?
5. State observations of each objective, state point of view about observation, then elicit learners’ points of view.
6. Please provide the rationales for the interventions you performed.
7. How will you use this information in the real-life clinical setting?

**Question What are the signs and symptoms of Alcohol Withdrawal Syndrome (AWS)?**

**Evidence-Based Clinical Questions**

Answer Symptoms of light or moderate AWS may include hypertension, tachycardia, tremors, hyperreflexia, irritability, anxiety, headache, nausea, and vomiting. If left untreated, these symptoms may progress to more severe forms of AWS characterized by delirium tremens, seizures, coma, cardiac arrest, and death (Halter, 2018; Thursz et al., 2018).

Rationale AWS is a complex neurologic disorder that develops after a reduction in or cessation of chronic and alcohol consumption that alters neurotransmitter conduction. This is primarily driven by Reference downregulation of gamma-aminobutyric acid (GABA) leading to autonomic excitation and

psychomotor agitation (Foertsch, 2019).

**Question When do symptoms of alcohol withdrawal (AWD) appear?**

Answer The classic sign of alcohol withdrawal is tremulousness that begins 6 to 8 hours after alcohol cessation. Psychotic and perceptual disturbances may begin in 8 to 10 hours. Withdrawal seizures may occur within 12 to 24 hours after alcohol cessation (Halter, 2018; Thursz et al., 2018).

**Question What is the purpose for administering nutritional supplements (MVI, folate, thiamine) for the treatment of AWS? Why must the thiamine be given prior to any glucose-containing fluids?**

Rationale Alcohol is a CNS depressant. Upon abrupt cessation of alcohol intake, an individual may and experience CNS activation, causing the symptoms of alcohol withdrawal.

Reference

Answer Patients with alcohol dependence are often thiamine deficient. Thiamine deficiency is associated with the development of Wernicke’s encephalopathy and Wernicke-Korsakoff syndrome.

Rationale Thiamine administration has a low risk of adverse effects and can prevent the development and of these conditions. In particular, thiamine should be given before administration of IV fluids Reference containing glucose, as the IV administration of glucose may precipitate acute thiamine

deficiency (Linder, Robert, Mullinax, & Hayes, 2018).

Multivitamins containing or supplemented with folate should be given routinely, and deficiencies of potassium, magnesium, glucose, and phosphate should be corrected as needed.

**Question What is the purpose of the CAGE questionnaire and Alcohol Use Disorders Identification Test (AUDIT)?**

Answer Both are screening instruments used to assess alcohol consumption, drinking patterns, and alcohol-related problems. The CAGE Questionnaire is a 4-item screen. A score of 2 or more is significant; however, even a score of 1 requires further assessment. The AUDIT is a 10-item

screening tool developed by the World Health Organization. A score of 8 or more is considered to indicate hazardous or harmful alcohol use (Halter, 2018; Higgins-Biddle & Babor, 2018).

Rationale Both the CAGE questionnaire and the AUDIT have been validated in numerous studies as and indicators of the need for further investigation of alcohol use (Higgins-Biddle & Babor, 2018). Reference

**Question What is the CIWA-Ar tool, and why is this used?**

Answer The CIWA-Ar scale (The Clinical Institute Withdrawal Assessment for Alcohol scale) is used widely as a means to gauge the severity of alcohol withdrawal. The CIWA-Ar is a numeric scale with numbers being assigned to severity of symptoms such as anxiety, nausea, headache, and several other parameters.

Rationale The CIWA-Ar score is used to guide treatment parameters with benzodiazepines (Parsons, 2018; and Thursz et al., 2018).

Reference

**Question What are common side effects of benzodiazepines, and why are they used for treatment of alcohol withdrawal?**

Answer Common side effects include an exacerbation of the therapeutic effects of sedation and somnolence. Benzodiazepines enhance GABA transmission and are effective in treating the CNS excitation that accompanies alcohol withdrawal.

Rationale The initial therapeutic goal in patients with AWS is control of agitation and autonomic

and stimulation. Rapid and adequate control of autonomic stimulation reduces the incidence of Reference clinically important adverse events. Benzodiazepines are recommended as the primary agents

for managing AWS. Current evidence does not clearly indicate that a specific benzodiazepine is superior to others. Agent selection should be based on patient-specific factors such as renal

and hepatic metabolism, duration of action, and clearance. Careful monitoring of sedation scale is key following administration (Adams & Ferguson, 2017; Foertsch et al., 2019).