

The Role of Vital Signs in Symptom-triggered Alcohol Withdrawal Scoring

Anna Knebel, PharmD Candidate; Misty Gonzalez, PharmD, BCPP; Patrick Finnegan, PharmD, BCPS

Abstract

Introduction:

The Alcohol Withdrawal Assessment Scale (AWAS) is used throughout a large, primary care hospital to monitor alcohol withdrawal in non-ICU patients. Unlike the widely accepted CIWA-Ar tool, AWAS is completed objectively by nursing staff and includes vital signs. This causes debate among providers about the clinical relevance of these factors in determining treatment needs, since vital signs can be elevated for various reasons besides alcohol withdrawal. This study aims to determine whether inclusion of vital signs in the AWAS enhances alcohol withdrawal management or leads to unnecessary benzodiazepine administrations.

Methods:

A retrospective chart review was conducted on 790 patient encounters with AWAS scores recorded between January 1, 2024, and June 30, 2024. The AWAS components include temperature, pulse, diastolic blood pressure, respirations, tremor, sweating, hallucinations, orientation, contact, and agitation. The components are numerically scored with a max AWAS score of 53, with benzodiazepine therapy initiated for scores of 3 or higher. The primary endpoint is initial, maximum, and minimum AWAS scores with and without vital signs. Secondary endpoints include length of hospital stay, number of AWAS scores collected, benzodiazepine administrations, and number of AWAS scores qualifying for benzodiazepine therapy.

Results:

The primary endpoint results showed a 2-point difference in initial AWAS scores, 4 points in maximum scores, and 1 point in minimum scores when vital signs were removed. The median length of stay was 15 hours, and the median number of AWAS scores per patient was 16. Out of the 16,131 documented AWAS scores, 55% of these scores were ≥ 3 . Benzodiazepines were administered in 29% of qualifying scores with vital signs and 36% without vital signs.

Conclusion:

Removal of vital signs from AWAS could increase provider trust and adherence to the order set leading to improved patient care in alcohol withdrawal.