



Role of Vital Signs in Symptom-triggered Alcohol Withdrawal Scoring

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SCHOOL OF PHARMACY

BACKGROUND

- CIWA-Ar is a commonly used scale to assess withdrawal symptoms but requires patient's self-reported symptoms for accurate assessment.
- The Alcohol Withdrawal Assessment Scale (AWAS) is an objective scale that does not require patient input and includes vital signs when assessing severity of withdrawal.
- Benzodiazepine (BZD) therapy is indicated for AWAS scores of 3 or higher, with the max score being 53.
- BZD may be held by providers if the elevated AWAS score is thought to be due to vital signs.
- Vital sign abnormalities may be due to numerous different causes other than alcohol withdrawal such as infection, pain, or hypertension.

Scan here to view AWAS order set:



METHODS

- Retrospective chart review from January 1, 2024 to June 30, 2024
- 880 patient encounters evaluated
- Exclusion criteria: patients <18 or >89 years old, less than three AWAS assessments
- 710 patients and 790 patient encounters included
- 73.8% of patients were male and patients had an average age of 53 years (21-87 years)

RESULTS

Figure 1: Average AWAS Scores per Encounter

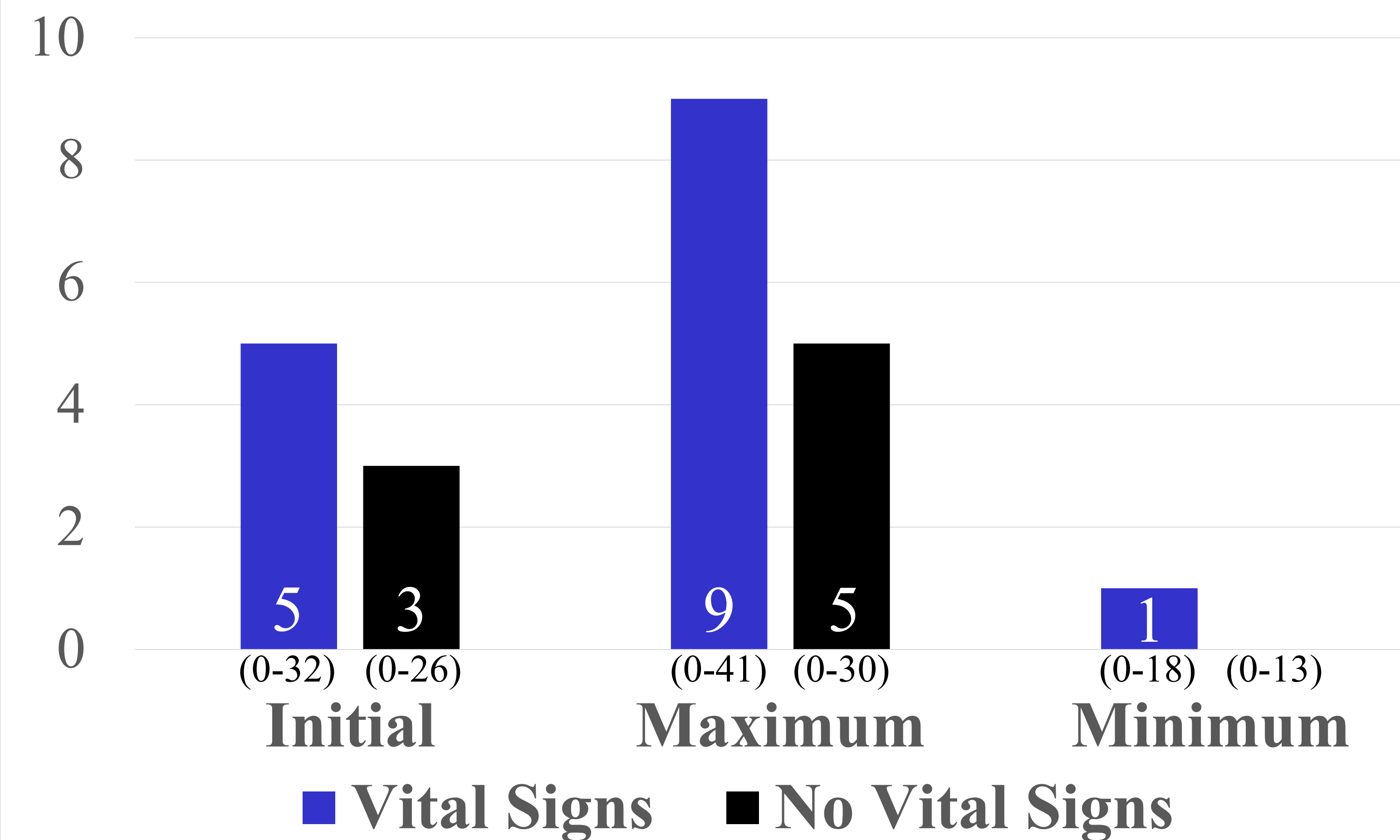


Figure 2: Number of AWAS Assessments

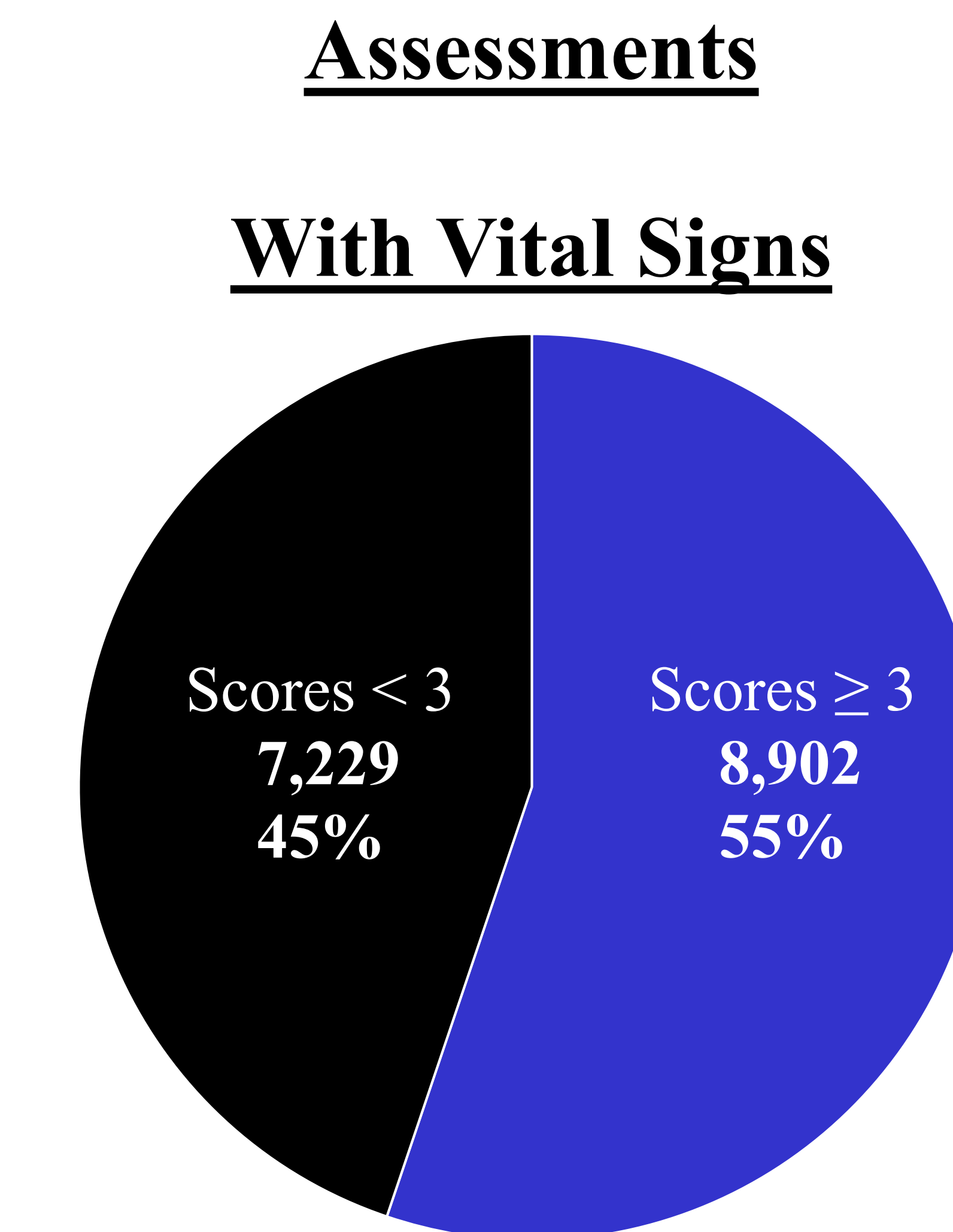
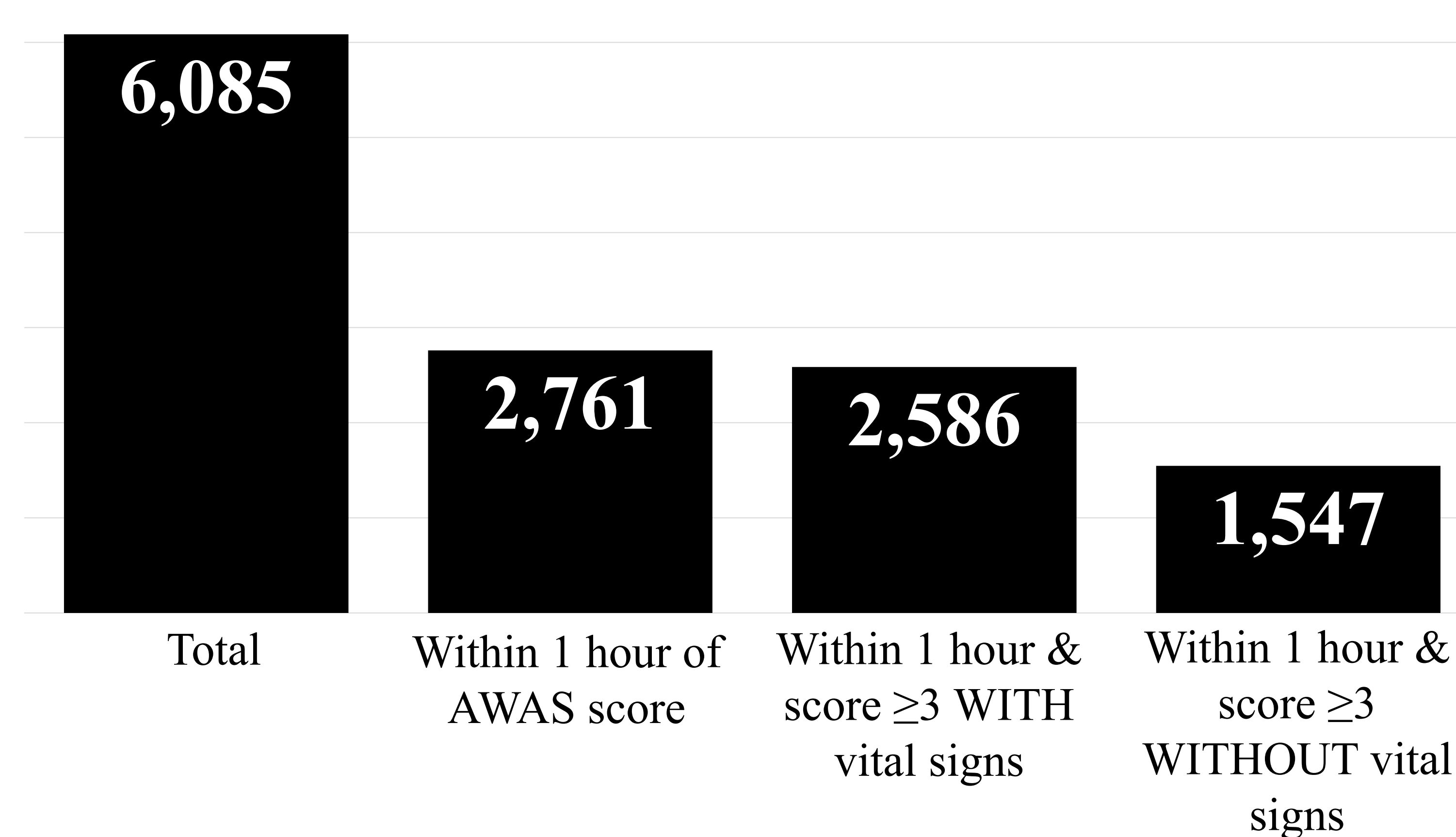
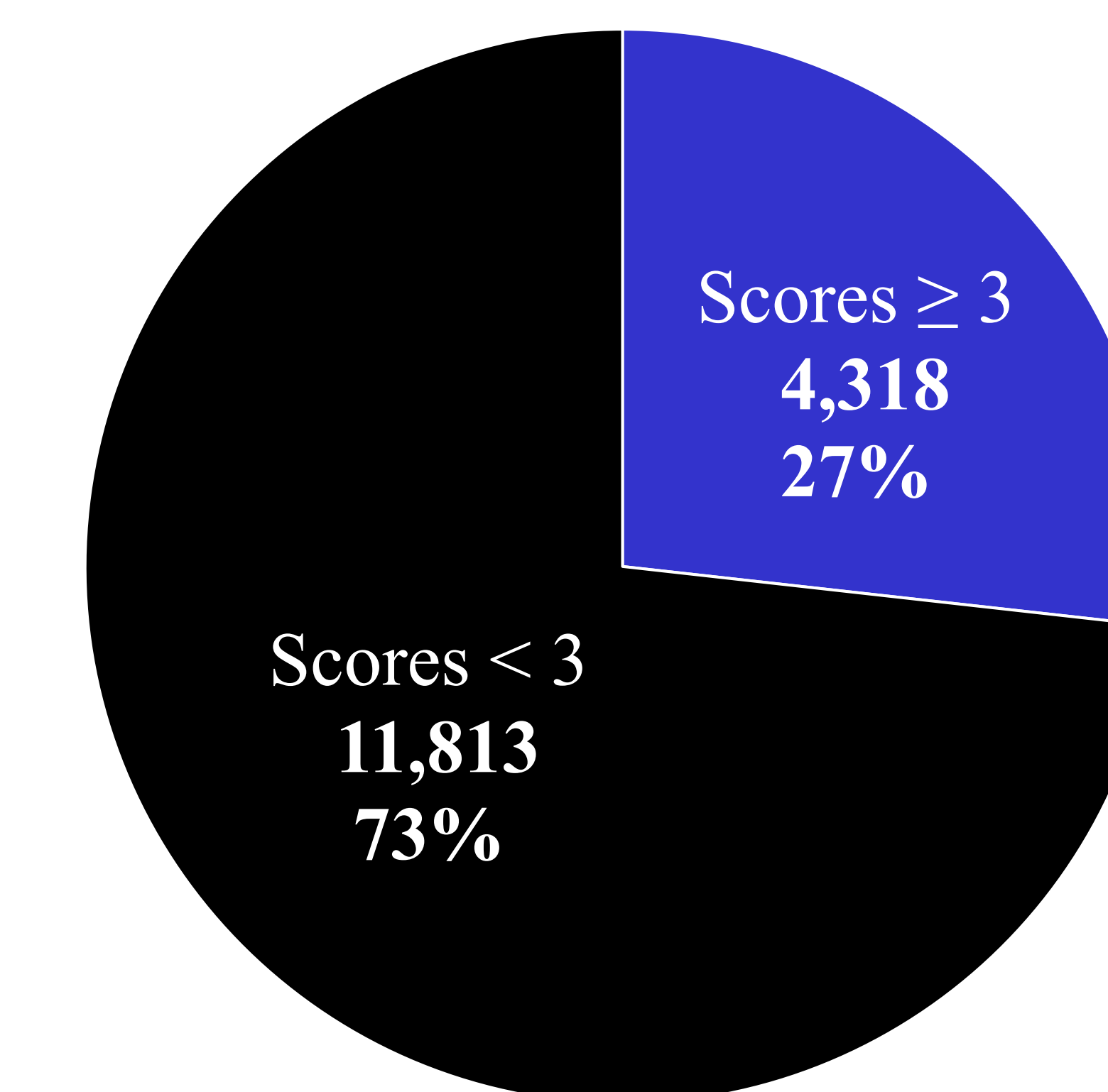


Figure 3: Number of Benzodiazepine Administrations



Without Vital Signs



- 31% of scores ≥ 3 had a corresponding BZD administration within 1 hour.
- 55% of BZD administrations occurred outside of the AWAS order set.
- 40% of patients would not have received a BZD if vital signs were removed from the assessment.
- 29% (2586/8902) of scores ≥ 3 with vital signs and 36% (1547/4318) without vital signs resulted in BZD administration (p < 0.0001; Chi-Square test)

LIMITATIONS

- Frequent deviations from AWAS order set due to concern of overmedication
- BZD may be given for alternative reasons while on AWAS protocol
- Potential inter-rater differences in AWAS scoring

CONCLUSION

- Removing vital signs from the AWAS order set could increase provider trust and adherence to the order set.
- Exclusion of vital signs in AWAS may not alter the administration of BZD for patients in severe alcohol withdrawal.

REFERENCES

- Sullivan J, Sykora K, Naranjo C, Sellers E. Assessment of alcohol withdrawal: the revised clinical institute withdrawal assessment for alcohol scale (CIWA-Ar). *British Journal of Addiction*. 1989;84:1353-1357.