Royal Berkshire NHS Foundation Trust

# Clinical Guideline

# Virtual Acute Care Unit: Alcohol withdrawal pathway

### Authors

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## 1.0 Background

The COVID-19 pandemic has demonstrated the need to extend the use of telemedicine to manage more patients out of hospital and reduce the risk of nosocomial infections. In 2018/19, there were 358,000 estimated admissions where the main reason was attributable to alcohol; this constitutes 2.1% of all hospital admissions.[1] Outpatient alcohol detox has been shown to be a safe and cost-effective alternative to inpatient management[1] and current NICE guidance on outpatient-based assisted withdrawal sets out parameters to do so safely for patients with mild and moderate dependence.[1] Medically assisted community alcohol withdrawal programmes have been implemented in other trusts e.g., in Nottinghamshire where the community detox involves daily face-to-face reviews with primary care physicians and 24-hour carers for the first 5 days of detox.[1] A small trial with 4 participants has demonstrated that telemedicine can be used to support community withdrawal, with no medical or psychosocial complications[2], however larger-scale data is lacking. The Virtual Acute Care Unit (VACU; previously called AMU Virtual Ward) was established in April 2020[2] and has already managed 1500 patients with COVID-19. Other conditions such as pneumonia and PE are now being managed by VACU and this is both safe and cost-effective.

## 2.0 About the triage pathway

We propose a triage pathway for patients with acute alcohol withdrawal syndrome to identify those suitable for outpatient management and a treatment strategy on how to monitor and manage these patients in the VACU.

Initial assessment is made using the Prediction of Alcohol Withdrawal Severity Scale (PAWSS) to identify patients at high risk of complicated withdrawal[2]. This is a 10-item score which aims to stratify patients into high-risk and low-risk groups for complicated alcohol withdrawal defined as seizures and delirium tremens. In a study of 403 patients, the PAWSS score of 4 was associated with a 99.5% negative predictive value for excluding complicated alcohol withdrawal. This would therefore seem a safe cut-off to consider for a community detox pathway.
Prior to discharge, the VACU team has to test that the patient has the ability to initiate and hold videocalls. As an additional layer of safety, the team will also talk to the patient's NOK, and ensure they are also able to initiate and hold videocalls and have sufficient information on the management plan. The patient (+/- NOK - verbally if not present in the hospital) is also required to sign a contract (see appendix 1) stating that they are contactable and will follow our advice, as well as inform the team immediately if there is a relapse.

## 3.0 About virtual assessments

Virtual ward assessments are made based on the patients' Glasgow Modified Alcohol Withdrawal Score (GMAWS), a 5-item score assessing physical and cognitive aspects of active alcohol withdrawal.[3] If necessary, the NOK will be spoken to as well. Benzodiazepine doses can be adjusted based on daily assessments and issued supply will be limited to one to two days to

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minimise risk of substance abuse. (To further enhance monitoring capabilities in the future, handheld breathalysers may be considered.)

## 4.0 The Prediction of Alcohol Withdrawal Severity Scale (PAWSS)

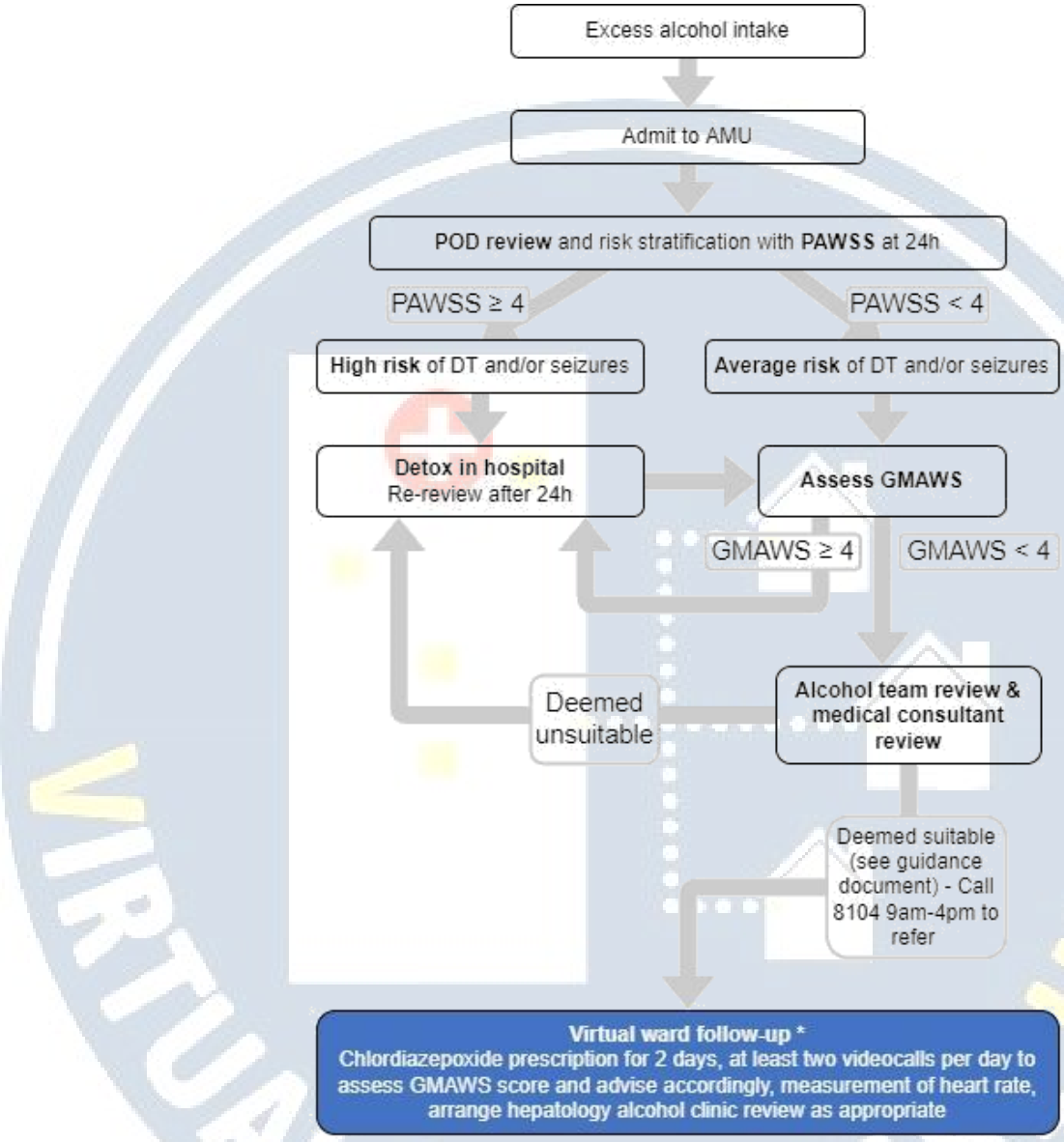
| | |
|---|---|
| Part A – Threshold criteria: | |
| Have you consumed any amount of alcohol in the last 30 days?<br>OR<br>Did the patient have elevated blood alcohol levels on admission?<br>→ If YES, proceed with the test | No point |
| Part B – Based on patient interview – give 1 point for each YES | |
| 1. Have you been intoxicated or drunk within the last 30 days? | |
| 2. Have you ever undergone alcohol use disorder rehabilitation treatment or treatment for alcoholism? (I.e., inpatient or outpatient treatment programmes) | |
| 3. Have you ever experienced any previous episodes of alcohol withdrawal, regardless of severity? | |
| 4. Have you ever experienced blackouts? | |
| 5. Have you ever experienced alcohol withdrawal seizures? | |
| 6. Have you ever experienced delirium tremens? | |
| 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 – give 1 point for each YES | |
| 9. Was the patient’s blood alcohol level > 200 on presentation? | |
| 10. Is there evidence of increased autonomic activity? (E.g., HR > 120 bpm, tremor, sweating, agitation, nausea) | |
| Score ≥ 4 indicates a high risk of complicated alcohol withdrawal | |

## 5.0 The Glasgow Modified Alcohol Withdrawal Score (GMAWS)

Use this score at least 8 hours since the last drink. Adapted from McPherson et al. (2012).

| | | |
|---|---|---|
| **Tremor** | No tremor | 0 |
| | On movement | 1 |
| | At rest | 2 |
| **Sweating** | No sweat visible | 0 |
| | Moist | 1 |
| | Drenching | 2 |
| **Hallucinations** | None present | 0 |
| | Dissuadable | 1 |
| | Not dissuadable | 2 |
| **Orientation** | Orientated | 0 |
| | Vague, detached | 1 |
| | Disorientated, no contact | 2 |
| **Agitation** | Calm | 0 |
| | Anxious | 1 |
| | Panicky | 2 |
| **Initiating treatment in hospital** | ● 0: Repeat score in 2 hours; discontinue after scoring 0 on 4 consecutive occasions except if < 48 hours after last drink)<br>● 1 – 3: Give 20 mg of chlordiazepoxide; repeat score in 2 hours<br>● 4– 8: Give 40mg of chlordiazepoxide; repeat score in 1 hour<br>● 9 – 10: Give 40mg of chlordiazepoxide; repeat score in 1 hour; escalate to senior medical staff<br>● **Max. 250 mg chlordiazepoxide per 24 hours** | |

## 6.0 Referral pathway: To be used by senior clinician or consultant




* Patients and NOK (if available) need to also complete the consent form in appendix 1 of the Alcohol Detox Pathway guidance document.

## 7.0 Criteria

**Inclusion criteria**

- Patients with active harmful alcohol consumption who are willing to undergo alcohol detox to achieve abstinence
- Reviewed by the alcohol liaison team as an inpatient

**Exclusion criteria**

- Combined substance abuse
- Lacking the cognitive, physical or technical ability to take video calls
- History of delirium tremens
- Patient lives alone and can't stay with someone
- Liver cirrhosis (compensated or decompensated)
- Clinical suspicion of alcoholic hepatitis
- Suspicion of hepatic or Wernicke's encephalopathy
- Patients with difficult social circumstances e.g., addictive relationships

### Consider keeping as inpatient if:

- Poorly controlled chronic medical condition e.g., diabetes mellitus, CKD, COPD, heart failure
- Mental health issues e.g., risk of self harm
- Difficult social situation

## 8.0 Checklist prior to discharge:

- **Documented PAWSS and GMAWs**
- **Trial to videocall (optional)**: Patients must be able to hold video calls → **trial** this prior to discharge.
- **Correct address**: Ensure address on EPR is correct.
- **NOK briefing**: Ensure NOK is briefed on the virtual management and is also able to initiate and hold video calls. (This requires patient to consent to NOK involvement)
- **Consent form**: Patient and NOK must sign a consent form that they must be contactable and that they have to inform us immediately if they experience a relapse.
- **Thiamine prescription**: Issue a thiamine prescription.
- **Chlordiazepoxide prescription for 2 days**: Issue the amount required for 2 days and clearly document regime on EPR and to the patient. Patient must have spare PRN doses.
- **Blood pressure monitor**: This is used to monitor HR and BP.
- **Information leaflet**: This includes our phone number, safety net advice, and a table where they can document their symptoms and chlordiazepoxide regime.
- **Tremor (optional)**: Consider monitoring tremor by holding phone at arm's length - or using a phone app (liftpulse) - do at discharge and compare subsequent measurements to this baseline.
- **Alcohol liaison nurses** have reviewed the patient and there is a community plan in place.
- **PT/INR** done to check liver function

## 9.0 VACU management of patients with AWS

- Minimum of twice daily video call with assessment of GMAWS score
- Advice on symptom-triggered benzodiazepine dosing
- Issuing prescription of benzodiazepines
- Clear handover of chlordiazepoxide weaning between clinicians to ensure continuity
- Follow-up until GMAWS of 0 on 4 consecutive readings
- Referral to Hepatology alcohol clinic (Summer Clarke on Friday mornings at RBH) 4-6 weeks following completion of detox, for review and fibroscan by nurse specialist (also opportunity to give further advice, prescriptions to help with return to alcohol consumption e.g. Acamprosate etc.). Please forward patients details to Cat-4 team.

**Consider readmission if**

- GMAWS > or = 8
- Relapse
- Seizures
- Noncompliance
- Any other clinical concern

## 10.0 References

https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-alcohol/2020/part-1

[2] Hayashida M, Alterman AI, McLellan AT, O'Brien CP, Purtill JJ, Volpicelli JR, Raphaelson AH, Hall CP. Comparative effectiveness and costs of inpatient and outpatient detoxification of patients with mild-to-moderate alcohol withdrawal syndrome. N Engl J Med. 1989 Feb 9;320(6):358-65.

[3] http://pathways.nice.org.uk/pathways/alcohol-use-disorders NICE Pathway last updated: 30 October 2020

[4] https://www.nottsapc.nhs.uk/media/1041/nottinghamshire-primary-care-alcohol-misuse-guidelines.pdf

[5] Ghodsian, Shahrouz MD*; Brady, Thomas J. MD†; Eller, Kent MD‡; Madover, Scott PhD‡; Beeson, Deanna MSW‡,§; Marchman, Dani LCSW§ Telemedicine Detoxification Treatment for Alcohol, Opioid, or Sedative-Use, Hypnotic-Use, or Anxiolytic-Use Disorders, Addictive Disorders & Their Treatment: September 2018 - Volume 17 - Issue 3 - p 143-146

[6] Nunan J, Clarke D, Malakouti A, Tannetta D, Calthrop A, Xu XH, Chan NB, Khalil R, Li W, Walden A. Triage Into the Community for COVID-19 (TICC-19) Patients Pathway - Service evaluation of the virtual monitoring of patients with COVID pneumonia. Acute Med. 2020;19(4):183-191.

[7] Maldonado JR, Sher Y, Das S, Hills-Evans K, Frenklach A, Lolak S, Talley R, Neri E, Prospective Validation Study of the Prediction of Alcohol Withdrawal Severity Scale (PAWSS) in Medically Ill Inpatients: A New Scale for the Prediction of Complicated Alcohol Withdrawal Syndrome, Alcohol and Alcoholism, Vol. 5m0, Issue 5, Sept/Oct 2015, Pages 509–518

[8] A. McPherson, G. Benson, E.H. Forrest, Appraisal of the Glasgow assessment and management of alcohol guideline: a comprehensive alcohol management protocol for use in general hospitals, QJM: An International Journal of Medicine, Volume 105, Issue 7, July 2012, Pages 649–656,

## Appendix 1. Consent form for home care management for alcohol detox

This consent form is for patients and their NOK with active harmful alcohol consumption who are willing to undergo alcohol detox to achieve abstinence.

### Management of alcohol detox at home

You have been found to be suitable to be discharged to the AMU Virtual Ward and to continue your detox for alcohol at home. In order for it to be safe to send you home, we need you to agree to the following:

1) I agree that I will **not drink alcohol** during my detox.
2) I agree that I will immediately contact the virtual ward team if I have started drinking alcohol again during my detox.
3) I agree to be contacted daily by the virtual ward team to check on how I feel and to answer some simple questions. This will be at least twice a day between, the first call will usually be between 9–11am.
4) I will provide a contact telephone number on which you can speak to me (and a further emergency contact).
5) I will return to the hospital if directed to do so.
6) I agree to take chlordiazepoxide (Librium) tablets as directed by the clinician who calls me, otherwise I may have a seizure.
7) I agree that I will contact the virtual ward if I begin to feel unwell, or come straight back to hospital via the Emergency Department (A&E).

**Patient**

**My contact number is:**

**My emergency contact is:**

**I agree to be contacted as part of this scheme and will make myself available all day every day while I am on chlordiazepoxide ("Librium") for alcohol withdrawal.**

**Signed:** **Date:**

**Next of kin**

**My contact number is:**

**My emergency contact is (if possible):**

**I agree to be contacted as part of this scheme and will make myself available all day every day as a next of kin to the individual undergoing detox.**

**Signed:** **Date:**