

ACUTE ALCOHOL WITHDRAWAL MANAGEMENT

Guidelines for Management of Acute Medical Emergencies

Approved By:	Policy and Guideline Committee
Date Approved:	21 November 2014
Trust Ref:	B30/2014 (formerly C7/2002)
Version:	3
Supersedes:	2 - Acute Medical Emergencies – Acute Alcohol Withdrawal Management (2014)
Author / Originator(s):	Alcohol Liaison Team Dr. A. Grant, Cons Gastroenterologist, Dr. N. Langford, Cons in Clinical Pharmacology
Name of Responsible Committee/Individual:	Alcohol Liaison Team Leader
Latest Review Date	17 November 2017 Policy and Guideline Committee
Next Review Date:	November 2020

ACUTE ALCOHOL WITHDRAWAL MANAGEMENT-Guidelines for Management of

Acute Medical Emergencies

CONTENTS		
SECTION	DESCRIPTION	PAGE
1	Introduction	3
2	Scope and Roles	3-4
2.1	Guideline Scope	3
2.2	Roles and responsibilities in managing alcohol withdrawals	3-4
3	Confirming alcohol consumption and identification of alcohol related problems	4-5
3.1	Taking an Alcohol History	4
3.2	Types of Drinkers	4
3.2.1	Low Risk or Sensible Drinkers	4
3.2.2	Increasing risk or Hazardous Drinkers	4
3.2.3	Higher risk or Harmful	4
3.2.4	Alcohol Dependent Patients	4-5
4	Alcohol withdrawal management	5-8
4.1	What causes Alcohol Withdrawals	5
4.2	Signs and Symptoms of Alcohol Withdrawals: see Appendix 3	5-6
4.3	Does this patient require medical admission for alcohol withdrawal?	6
4.4	Managing Alcohol Withdrawals for patients admitted to hospital Glasgow Modified Alcohol Withdrawal Scale	6-7
4.5	How to use the Glasgow Modified Alcohol Withdrawal Scale	7
4.6	(GMAWS)	7-8
5	Wernicke's encephalopathy (WE)	8-9
5.1	What is Wernicke 's Encephalopathy (WE)	8
5.2	Signs and Symptoms of WE	8
5.3	Prevention and Treatment of WE	9
6	Referrals to the Hospital Alcohol Liaison Team	9
7	Teaching and Training	9
8	Monitoring and Audit Criteria	9-10
9	Keywords	10
10	References	10
Appendix 1	Information on Units of Alcohol	11
Appendix 2	Audit C Questionnaire	12-13
Appendix 3	Alcohol withdrawal features	14
Appendix 4	Alcohol withdrawal algorithm	15
Appendix 5	Glasgow Modified Alcohol Withdrawal Scale	16-17
Appendix 6	Guidelines for vitamin supplementation and prevention and/or treatment for Wernicke's Encephalopathy	18
Appendix 7	Gradual Reduction of Alcohol Intake	19
Appendix 8	Leicester Emergency Department Paddington Alcohol Test	20

Section	Change Made	Page
2.23	Change to include turning point and limits of their interventions	4
6. Referrals to the Hospital Alcohol/Substance Abuse Liaison team	Update of hospital numbers and Availability	9
7. Teaching and Training	Update of hospital numbers and Availability	10

1. Introduction

- 1.1 This document sets out the University Hospitals of Leicester (UHL) NHS Trust's guideline for patients who are admitted suffering with Alcohol misuse. Alcohol misuse is a common problem resulting in about 1.1million alcohol-related hospital admissions in England in 2015/16.
- 1.2 It is estimated that there are about 600,000 people that are dependent on alcohol in England (Alcohol Concern 2014). Patients may present to hospital either directly as a result of intoxication or indirectly following a consequence of intoxication or acute alcohol withdrawal.
- 1.3 All areas of the hospital may be affected. The following guideline provides advice for how patients should be screened for harmful drinking as well as the management of patients who are dependent on alcohol.

2. Guideline Scope and Roles and Responsibilities

2.1 This guideline applies to:

Staff group(s)

- Alcohol Liaison Team (Turning Point)
- The medical team in charge of the patient's overall care
- The ward nurse
- The hospital pharmacy

Clinical area(s)

- All clinical areas across UHL where a patient with alcohol withdrawal is admitted to.

Patient group(s)

- Adult patients within all clinical areas across UHL

2.2 Roles and responsibilities in managing alcohol withdrawals

2.2.1 Management of Alcohol Withdrawals requires a multidisciplinary approach and expert management

2.2.2 The responsibility of the overall management of the patient sits with the medical team in charge of the overall care. The medical team will hold responsibility for initiating the use of the GMAWS, all prescribing issues and for considering the impact of the Alcohol Withdrawals on the patients overall treatment.

Given the potential complexity of co-morbid Alcohol Dependence and other physical health conditions, care will often require regular Registrar or Consultant oversight.

2.2.3 Turning Point will provide advise, support and start brief interventions to the patient. They can also arrange continuing support from their community resources on patient discharge where applicable. The workers cannot give advice on medical interventions for the patient while an inpatient.

2.2.4 The ward nurse will monitor and implement the use of the GMAWS, administer medication as per prescription and guidance, and offer general care and support.

2.2.5 The pharmacist will ensure that necessary medications are supplied to the clinical setting promptly to reduce the potential for complications arising from delayed administration of medication. The pharmacist will also provide relevant pharmacological advice.

3. Confirming Alcohol consumption and identification of alcohol related problems

3.1 Taking an Alcohol History

As part of the admission assessment for all patients they should be asked about their alcohol intake. Please note the following as good practice:

- Consumption of alcohol should be documented in units (see appendix 1 regarding the calculation of units drunk)
- It is essential to ascertain the pattern of drinking, stating whether the number of units drunk relate to a daily or weekly consumption
- If problematic/ harmful drinking is detected, the pattern of drinking and length of time the problem has been going on for should also be documented
- Is there a history of alcohol withdrawals, when these have been and what has occurred should also be documented including whether the patient has previously suffered with seizures?

3.2 Types of Drinkers

3.2.1 Low Risk or sensible drinkers

The recommended maximum daily limits for drinking alcohol are, for both men and women, 14 units per week, spread across 3-5 days, with at least 2-3 days per week abstinent. People drinking at this pattern are considered to be at low risk of developing any problems as a result of their alcohol consumption.

3.2.2 Increasing risk or hazardous drinker

These are people that drink 14-35 units weekly. They are considered to be at risk of developing significant physical or mental health problems due to their drinking. This group also includes binge drinkers. Binge drinkers are defined as those who consume twice the recommended daily limits, that is, about 6 units for women and above 8 units for men daily, over a short period of time (1-5days) .

This group of drinkers is harder to detect when they present as they often attend sober and usually appear to have a normal lifestyle. However early detection allows for brief interventions to be offered, which is more likely to result in a reduction in the amount consumed

3.2.3 Higher risk or harmful drinkers

These are people that show signs of clear alcohol related harm due to their drinking pattern.

For women this constitutes drinking at 35+ units weekly.

ADVICE:

Patients drinking less than 60units per week will not usually require alcohol withdrawal management.

However as the risk of Alcohol Withdrawal Symptom (AWS) is not necessarily directly related to intake, and the alcohol history may not always be accurate, monitor for any withdrawals.

3.2.4 Alcohol Dependent Patients

Alcohol dependence starts at an intake of around 10+ units daily (although it could be less). Alcohol dependent patients are individuals who show a cluster of physiological, behavioural and cognitive problems as a result of their drinking. Alcohol takes on a much higher priority, often with a strong desire to drink despite awareness of harmful consequences.

According to the WHO International Classification of Diseases-10, a definitive diagnosis of dependence should usually be made if three or more of the following are present or have been present at any time within the previous year:

1. A strong desire or sense of compulsion to take alcohol
2. Difficulty in controlling drinking in terms of its onset termination or level of use
3. A physiological withdrawal state when drinking has ceased or been reduced or drinking to avoid alcohol withdrawal symptoms
4. Evidence of tolerance, such that increased doses of alcohol are required in order to achieve effects originally produced by lower doses
5. Progressive neglect of other interests
6. Persisting with alcohol use despite awareness of overtly harmful consequences.

Most patients would present to hospital as a result of complications with point 3 above - a physiological withdrawal state.

ADVICE:

Use Audit-C (appendix 2) to help identify types of drinkers. Please note that a score of 20+ indicates possible dependency. Dependency here relates to physical dependency characterised by alcohol withdrawals as opposed to alcohol dependency syndrome

4. Alcohol Withdrawal Management

4.1 What causes Alcohol Withdrawals?

Abrupt cessation of or reduction in, long-term high dose alcohol consumption produces well defined symptoms collectively described as alcohol withdrawal syndrome (AWS). The intensity of alcohol withdrawal is variable between individuals ranging from mild to its most severe manifestation that include seizures, hallucinations and delirium.

Within the International Classification of Diseases (WHO, 2007), for a diagnosis of AWS to be made there must be clear evidence of:

- Recent cessation or reduction of alcohol intake after repeated, and usually prolonged and / or high-dose use.
- Symptoms and signs which are compatible with the known features of the AWS, and

- Symptoms and signs that cannot be accounted for by an alternative medical, mental or behavioural disorder unrelated to alcohol

ADVICE:

High dose use could be patients that drink over 15 units of alcohol per day, and/ or who score 20 or more on the AUDIT-C (NICE, CG115)

4.2 Signs and Symptoms of Alcohol Withdrawals: see Appendix 3

4.2.1 Considerations for the management of patients undergoing alcohol withdrawal:

- During alcohol withdrawal management, it is essential to closely monitor for signs of over-sedation or break through withdrawals.
- Exceptional patient groups, patients with severe withdrawals and patients requiring intravenous or intramuscular sedation, require close monitoring with an early warning score (EWS). Ideally 1 hourly care is required in an appropriately monitored area (such as Liver HDU or ACB).
- Observe for dehydration or any electrolyte imbalance (all patients should have their electrolytes checked including magnesium, calcium and potassium concentrations)
- Treat any concurrent conditions. Many patients presenting with alcohol abuse may also have other conditions associated with self-neglect.
- **Reassure patients**

ADVICE:

Alcohol withdrawal hallucinations typically occur within the first 2 days after stopping or reducing alcohol intake. For some patients this will not progress to delirium tremens (DT's) and will occur in the presence of a clear sensorium. However the presence of hallucinations is a significant indicator that progression to DT's is more likely and this indicates the need for closer monitoring.

4.3 Does this patient require medical admission for alcohol withdrawal?

4.3.1 Patients at high risk of alcohol withdrawal seizures, delirium tremens (DTs), individuals aged under 16 with alcohol withdrawal problems or vulnerable adults with alcohol withdrawal problems should be admitted to hospital and offered medically assisted alcohol withdrawal.

Patients not in these groups may be suitable for treatment in the community. For more information see **Appendix 4**. (They should be advised to slowly reduce their alcohol intake as outlined in **Appendix 7**)

4.3.2 It is important to avoid either under-treatment, which may lead to DTs or seizures or over-treatment, associated with sedation.

DTs are fatal in 15-20 % of patients whilst early detection and prompt initiation of treatment usually prevents onset and reduces mortality to around 1%.

Patients most at risk are those with high fever, tachycardia, and dehydration, an associated illness (pneumonia or pancreatitis) or where diagnosis is delayed. These patients will also be at risk of developing Wernicke's Encephalopathy and Korsakoffs Psychosis (See Section 5)

ADVICE:

Please note that patients who are physically dependent on alcohol and not admitted to hospital should be advised to gradually reduce their intake at a rate of not more than 5 units per day.

(See Appendix 7 for information on the gradual reduction of alcohol intake)

4.4. Managing Alcohol Withdrawals for patients admitted to hospital

- 4.4.1 Oral benzodiazepines are the group of drugs recommended for the routine management of alcohol withdrawals. The most appropriate approach to the management of alcohol withdrawals is considered to be symptom triggered dosing. Within UHL we have chosen the Glasgow Modified Alcohol Withdrawal Scale (section 4.6 and **Appendix 5**) to help manage alcohol withdrawals in a symptom triggered fashion.
- 4.4.2 NICE guidelines (2010) recommend that symptom triggered dosing of medication is associated with decreased complication and better patient outcomes. Symptom triggered dosing consists of prescribing benzodiazepines (Diazepam) on an 'as and when' basis, with the dose to be administered being guided by the symptoms that the patient presents with.
- 4.5.3 This allows more flexibility in dose administration and reduces the potential for inadequate or excessive dosing. It can also help avoid unnecessary use of medications, over sedation and other side effects, and has the added benefit of reducing length of stay.

4.5. Glasgow Modified Alcohol Withdrawal Scale (GMAWS)

- 4.5.1 The GMAWS aims to assist staff in selecting treatment pathways for Alcohol Withdrawal Symptoms (AWS). It is a five- variable assessment tool aimed at managing AWS in acute hospitals.

These AWS are:

- Tremor
- Sweating
- Hallucinations
- Orientation
- Agitation

- 4.5.2 The scoring allows for withdrawing risk to be assessed and managed through a suggested diazepam dose. It also allows for high risk patients to be assessed and dealt with in both a fixed and symptom triggered fashion. Patients that present with severe withdrawals (DTs) can be managed through parenteral administration of benzodiazepines.

4.6 How to use the Glasgow Modified Alcohol Withdrawal Scale (GMAWS)

- 4.6.1 After ascertaining physical dependency either through use of the AUDIT tool (**Appendix 2: Score 20+ signifying possible dependency**), patients with recent history of drinking

about 15 units/day or presenting with alcohol withdrawal, the GMAWS approach to alcohol withdrawal management should be adopted.

The following procedure should be used in conjunction with the flow-chart set out in **Appendix 5**:

1. Ensure patient details are documented correctly
2. Identify whether the patient is high risk or otherwise. If high risk and not an exceptional patient (see box 2 appendix 50 then admitting doctor to start on a fixed dose oral diazepam regime and symptom triggered as required (PRN) doses.
3. If patient is not high risk then please start on symptom triggered treatment. Also assess if patient is an exceptional patient as they may need PRN lorazepam instead of diazepam.
4. Diazepam or Lorazepam PRN doses to be guided by the Alcohol Withdrawal Scale and the assessment of the following withdrawal symptoms: Tremor, Sweating, Hallucinations, Orientation and Agitation as per the GMAWS scoring system. Each symptom is scored from 0-2
5. The amount of diazepam to be given and the frequency of assessments is dependent on the score as below:
 - Score 0 = No diazepam Repeat score in 2 hours and discontinue if score remains 0 on 4 consecutive occasions, except if during the first 48 hours after cessation of alcohol
 - Score 1 - 3 = 10mg diazepam. Repeat score in 2hours
 - Score 4 – 8 = 20mg diazepam. Repeat score in 1hour
 - Score 9 – 10 = 20mg diazepam. Repeat score in an hour and discuss with medical staff regarding management of severe withdrawal as per regime.
6. All patients who are scoring on the GMAWS system require referral to Hospital Alcohol Liaison Team (HALT) for review and further support on 07535658329
7. Seek senior review if high doses of diazepam (over 120mg) or Lorazepam (12mg) are needed (See Appendix 2, Box 3). Some patients may require doses over 120mg diazepam in 24 hours. Please seek senior review if exceeding these doses
8. Discontinue scoring after patient scores 0 (zero) on 4 consecutive occasions, except if during the first 48 hours after cessation of alcohol.

5. Wernicke's Encephalopathy (WE)

Every patient who appears to have signs of alcohol withdrawal and / or started on GMAWS management regime should be assessed for WE.

5.1 What is Wernicke's Encephalopathy (WE)

WE is a neurological disease caused by thiamine (Vitamin B1) deficiency. If untreated it can lead to Korsakoffs syndrome, characterised by chronic amnesia or death

WE is a medical emergency that is reversible with timely administration of appropriate treatment. Chronic alcohol users are at particular risk of WE because:

- They are more likely to have a lower level of self-care and poor diet
- Their absorption of thiamine is reduced by both alcohol and /or malnutrition
- They have increased metabolic demands in relation to glucose utilisation and alcohol metabolism
- They have reduced hepatic storage of thiamine
- Ethanol neurotoxicity causes impaired utilisation of thiamine

5.2 Signs and Symptoms of WE

5.2.1 Traditionally there has been mention of observing for the classic triad of symptoms:

- Oculomotor abnormalities
- Cerebellar dysfunction (Ataxia)
- Confusion

However: only 16.5% of patients exhibit all 3 signs (the triad of symptoms). Focusing on identifying the triad of symptoms will lead to under diagnosis of WE which can be fatal to 20% of patients if they progress to develop Korsakoffs psychosis

5.2.2 Therefore **clinicians are advised to make a presumptive diagnosis of WE** should any patient present with a history of alcohol misuse and any of the signs stated below:

- I. Acute Confusion
- II. Ataxia
- III. Unexplained hypotension with hypothermia
- IV. Nystagmus
- V. Decreased consciousness level
- VI. Ophthalmoplegia

5.3 Prevention and Treatment of WE

Patients presenting with potential signs of WE require urgent treatment with intravenous vitamin B complex (Pabrinex®). Treatment should be given as laid out in Appendix 6. If symptoms have subsided after that time oral vitamin B supplementation may be commenced. Patients who remain symptomatic should continue to receive intravenous vitamin B therapy.

6. Referrals to the Hospital Alcohol/Substance Abuse Liaison team

6.1 All patients admitted with an alcohol related issue as outlined in this guideline should be referred to the Hospital Substance Misuse Liaison Team. The Hospital Substance Misuse Liaison Team is available 5 days a week as below. However, referrals to the team can be made outside of these hours by voicemail:

Monday to Thursday: 08.00 – 17.00

Friday: 08.00 - 16.30

6.2 Please refer on **07734694857** or **07535658329**. You can email the team on UHL.Liaison@turning-point.co.uk, however, as this is an external address, it should be used for advice only and no identifying information on patients should be used.

6.3 Please note that the following information is required to accept a referral:

- Patient name and ward location. An **S** number is preferable. (Please specify if patient already discharged) However, do not delay the discharge of a patient who is medically fit for discharge, the Hospital Substance Misuse Liaison Team can arrange out-patient follow up
- Amount the patient drinks
- Has the patient consented to being seen by the Hospital Substance Misuse Liaison Team?

6.4 **In the Emergency Department (ED) or Emergency Decisions Unit (EDU)** referrals can be made through completing a Leicester Emergency Department Paddington Alcohol Test (LEDPAT) (See appendix 8).

There are four box files labelled “Alcohol Referral” which contain blank LEDPATs as well as advice and information around alcohol and support available through Turning Point. These box files are located at:

- **ED Blue Zone – Injuries – Staff Base**
- **ED Assessment Bay – Staff Base**
- **Children’s ED – Office adjacent to Staff Base**
- **Emergency Decisions Unit - Staff Cupboard (code: 7823)**
-

Once the LEDPAT has been completed please put the form in the relevant boxes in ED arrivals area, EDU or Minors ready for collection. The LEDPAT doubles as both a screening tool and a referral form from ED/EDU

6.5 **In the case of Alcohol Related Liver Disease**, please contact the Gastro Registrar for the week or the in-reach consultant via switch board

7. Teaching and Training

7.1 A comprehensive training package will be provided by the Hospital Alcohol Liaison Team on the medical and other wards within UHL where patients with alcohol withdrawal symptoms are frequently admitted.

7.2 Training is available for other areas upon request - contact the Alcohol Liaison Team on **07734694857** or **097535658329** or email: UHL.Liaison@turning-point.co.uk

8. Monitoring and Audit Criteria

Following implementation of this guideline the guideline will become part of the audit cycle performed by the Acute Medical Unit at the Leicester Royal Infirmary.

Element to be monitored	Lead	Tool	Frequency	Reporting arrangements	Leads for recommendation
Review relevant procedure followed	Alcohol liaison service (ALS)	See attached appendices	Annual audit by AMU team in conjunction with ALS	Local meetings	Via audit lead

9. Keywords

Alcohol, Alcohol withdrawal, Wernicke’s Encephalopathy, WE, WKS, Delirium Tremens, DTs

10. References

Alcohol Concern (2017) *Statistics on Alcohol*, [Online] Available from <https://www.alcoholconcern.org.uk/alcohol-statistics> (Accessed on 30th November 2017).

Alcohol Screening & Withdrawal Management Guideline Group (2011) *Glasgow Modified Alcohol Withdrawal Scale*. National Health Service. Greater Glasgow and Clyde

Benson, G. McPherson, A. Reid, S. (2012) *An Alcohol Withdrawal Tool for use in hospitals*. *Nursing Times*; **108**: 26, 15-17

Department of Health (2017) *Audit C*. [Online] Available from: <https://www.alcohollearningcentre.org.uk/assets/AUDIT-C-June-2017.docx> (Accessed on 30th November 2017)

Drinkaware (2017). Your Alcohol Risk levels. [Online] Available from: <https://www.drinkaware.co.uk/understand-your-drinking/is-your-drinking-a-problem/your-drinking-risk-level> (Accessed on 30th November 2017)

Heather, N. Peters, T. Stockwell, T (2001). *International Handbook of Alcohol Dependence and Problems*. John Wiley and Sons Ltd. Chichester

Kettering General Hospital (2012), *Guidelines for vitamin supplementation and prevention and/or treatment for Wernicke's Encephalopathy*, Alcohol Use Disorders Policy, Kettering General Hospital

Martin, C. (2008) (Ed). *Identification and treatment of Alcohol Dependency*. M&K Publishing. Keswick

NHS Digital *Statistics on Alcohol, England, 2017*, [Online] Available from <http://digital.nhs.uk/catalogue/PUB23940> (Accessed on 30th November 2017).

NICE Guidelines [CG100] (2010). *Alcohol-use disorders: Diagnosis and Clinical Management of Alcohol-related physical complications*. [Online] Available from: <http://www.nice.org.uk/guidance/cg100> (Accessed on 30th November 2017)

NICE Guidelines [CG115] (2011). *Alcohol-use disorders: diagnosis, assessment and management of harmful drinking and alcohol dependence*. [Online] Available from: <http://www.nice.org.uk/guidance/cg115> (Accessed on 30th November 2017)

NICE Pathways (2014). *Acute Alcohol Withdrawal*. [Online] Available from: <http://pathways.nice.org.uk/pathways/alcohol-use-disorders#path=view%3A/pathways/alcohol-use-disorders/acute-alcohol-withdrawal.xml&content=view-index> (Accessed on 30th November 2017)

Thomson, A. Cook, C. Touquet, R. Henry, J. (2002). *The Royal College of Physicians Report on Alcohol: Guidelines for managing Wernicke's Encephalopathy in the Accident and Emergency Department*. *Alcohol and Alcoholism*. **37**, 6, 513 – 521

Thomson, A. Marshall, E. Bell, D. (2013). *Time to Act on the Inadequate Management of Wernicke's Encephalopathy in the UK*. *Alcohol and Alcoholism*. **48**, 1, 4-8

World Health Organisation (1994) *The International Classification of Mental and Behavioural Disorders – Clinical descriptions and diagnostic guidelines*, WHO

Appendix 1: Information on Units of Alcohol

A unit of alcohol is a beverage containing 8g or 10mls of ethanol (pure alcohol). This can be calculated as follows

$$\% \text{ ABV} \times \text{Volume (Litres)} = \text{Units}$$

e.g. a 2 litre bottle of 7.5% cider will contain 15 units of alcohol
 $7.5\% \times 2 \text{ Litres} = 15 \text{ units}$

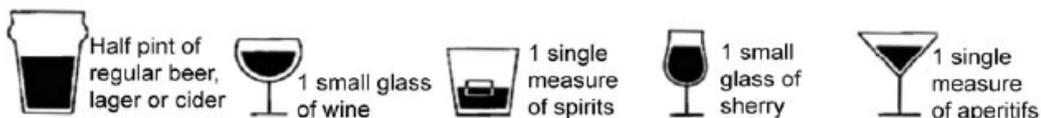


...and each of these is more than one unit



Summary: Units are essential in giving a clear indication of amounts consumed and types of drinkers. Current advice is to drink no more than 14 units per week on a regular basis, spread throughout, with at least two days off a week.

This is one unit of alcohol...



...and each of these is more than one unit



AUDIT – C

Questions	Scoring system					Your score
	0	1	2	3	4	
How often do you have a drink containing alcohol?	Never	Monthly or less	2 - 4 times per month	2 - 3 times per week	4+ times per week	
How many units of alcohol do you drink on a typical day when you are drinking?	1 -2	3 - 4	5 - 6	7 - 9	10+	
How often have you had 6 or more units if female, or 8 or more if male, on a single occasion in the last year?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	

Scoring:

A total of 5+ indicates increasing or higher risk drinking.
 An overall total score of 5 or above is AUDIT-C positive.
 If scoring 5+ Continue AUDIT



Score from AUDIT- C (other side)



Remaining AUDIT questions

Questions	Scoring system					Your score
	0	1	2	3	4	
How often during the last year have you found that you were not able to stop drinking once you had started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
How often during the last year have you failed to do what was normally expected from you because of your drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
How often during the last year have you needed an alcoholic drink in the morning to get yourself going after a heavy drinking session?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
How often during the last year have you been unable to remember what happened the night before because you had been drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
Have you or somebody else been injured as a result of your drinking?	No		Yes, but not in the last year		Yes, during the last year	
Has a relative or friend, doctor or other health worker been concerned about your drinking or suggested that you cut down?	No		Yes, but not in the last year		Yes, during the last year	

Scoring: 0 – 7 Lower risk, 8 – 15 Increasing risk, 16 – 19 Higher risk, 20+ Possible dependence



**TOTAL Score equals
AUDIT C Score (above) +
Score of remaining questions**

Appendix 3:

Alcohol withdrawal features

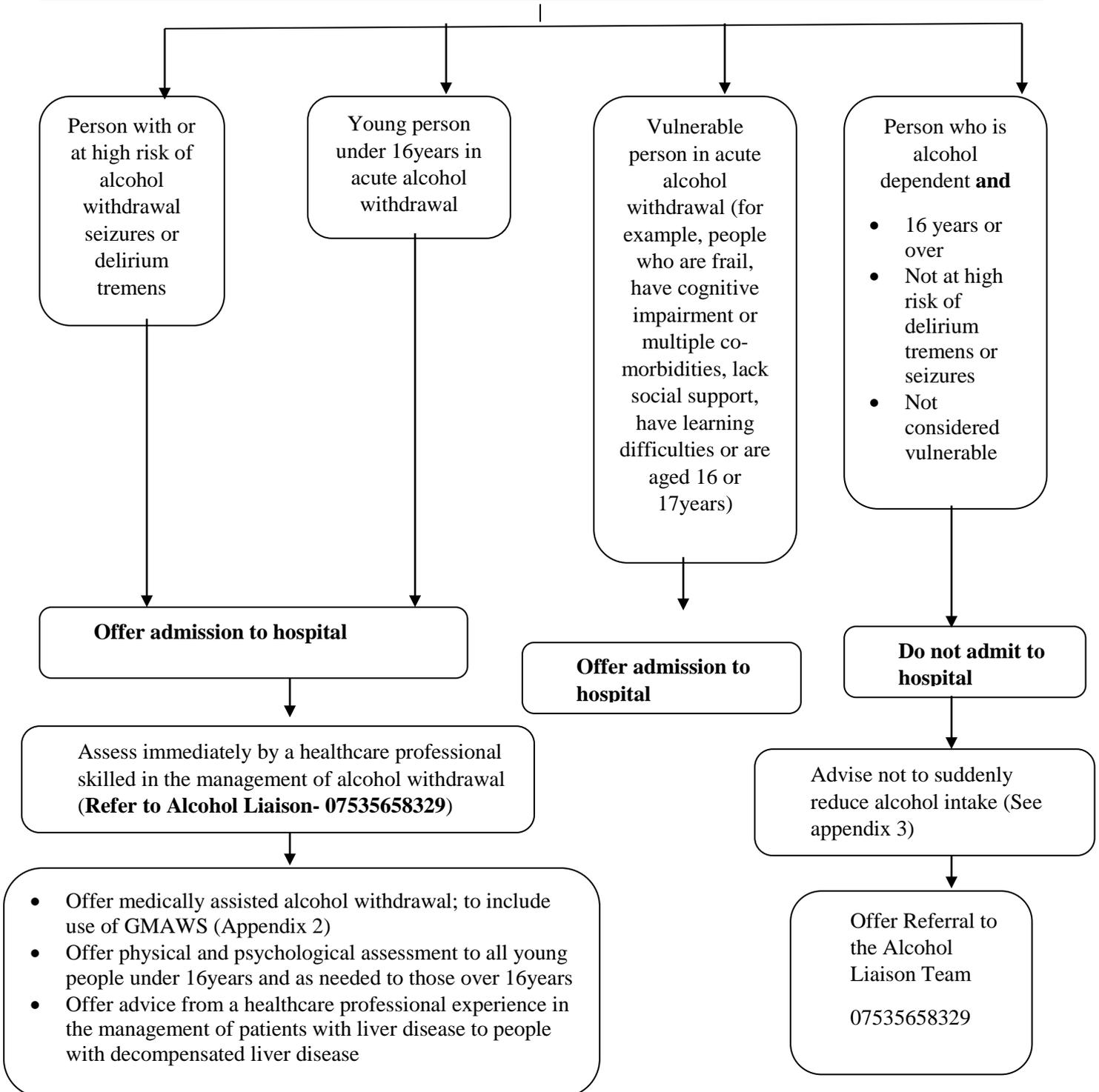
Time after cessation of alcohol use	Symptoms
6- 12 hours	<u>Minor Withdrawal Symptoms:</u> tremulousness (hand, tongue, eyelids), diaphoresis, fever (with or without infection), anxiety, agitation, nausea, vomiting and retching.
12- 24 hours	<u>Alcoholic hallucinosis:</u> visual and auditory (usually accusatory or derogatory voices) hallucinations, tactile disturbances. These occur in otherwise clear sensorium.
12- 48 hours	<u>Withdrawal seizures:</u> these can manifest as early as 2hours after cessation of alcohol consumption and even before the blood alcohol level has fallen to zero. Fits are rare beyond 48 hours following cessation of alcohol consumption.
48- 72 hours	<u>Delirium Tremens (DTs):</u> auditory and visual hallucinations, confusion and disorientation, hypertension, agitation, tachycardia >100/min, fever (with or without infection), severe tremor in hands and body. DTs represent a medical emergency. DTs occur in only about 5% of patients undergoing alcohol withdrawal but have a mortality rate of 15-20%. If a patient presents with DTs consider admission for 24 hours minimum to treat withdrawals and monitor. Patient may need observation for 72 hours after cessation of drinking. Risk factors of developing DTs: concurrent acute medical illness, heavy daily alcohol use (60+ units), history of DTs and alcohol withdrawal symptoms, older age and abnormal LFTs. (May require Diazemuls see Appendix 2, box 3)

Appendix 4:

Alcohol withdrawal algorithm based on the NICE Clinical Guideline 100.

Person in acute alcohol withdrawal:

- Initial assessment including risk of developing delirium tremens or seizures
- Offer thiamine for the prevention or treatment of Wernicke's encephalopathy (see section 5)



Appendix 5:

Glasgow Modified Alcohol Withdrawal Scale

Caring at its best

Patient ID Label
or write name and number

Unit No.:

Name:

Address:

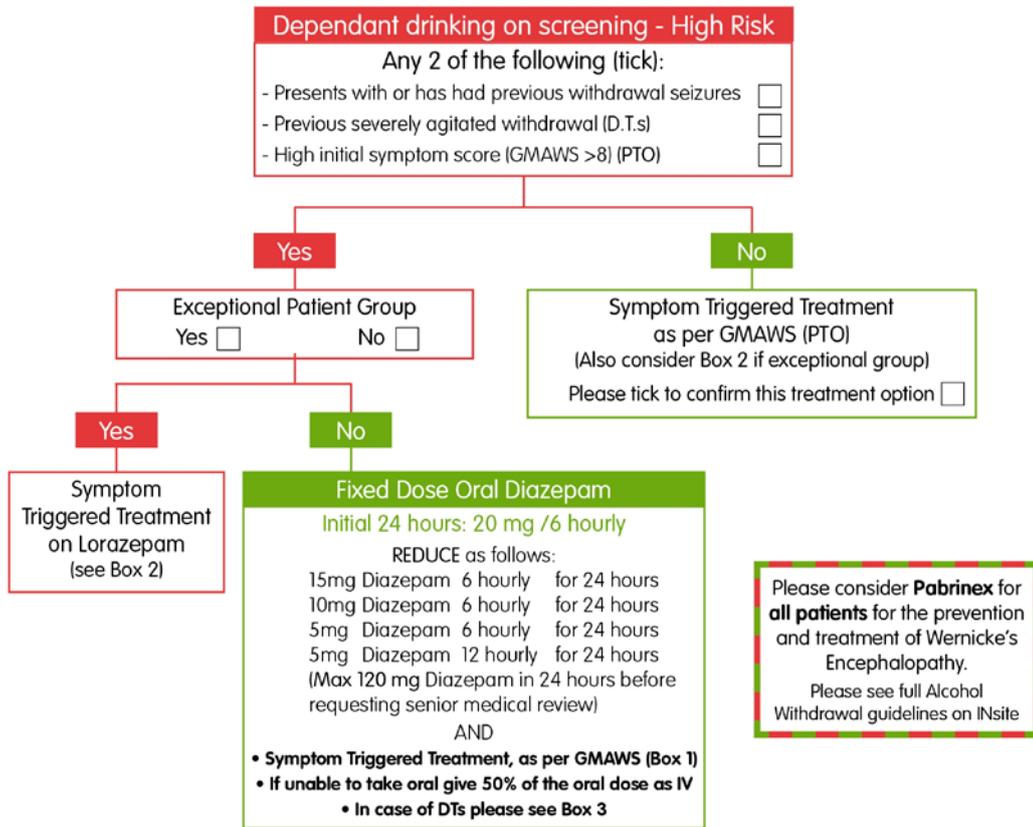
D.O.B.:

Ward:

Alcohol by volume and units

Strong Lager (9%)	- 440 ml	= 4 units
Beer / Lager (4.5%)	- 500 ml	= 2.2 units
Wine (12%)	- 175 ml	= 2.1 units
Spirits (40%)	- 25 ml	= 1 unit
Cider (4%) Litre		= 4 units
Strong White Cider (8%) Litre		= 8 units

Management of Alcohol Withdrawal Syndrome



10 mg Diazepam = 1 mg Lorazepam = 30 mg Chlordiazepoxide

<p>Box 1 GMAWS</p> <p>Tremor Sweating Hallucination Orientation Agitation</p> <p>(GMAWS PTO)</p>	<p>Box 2 Exceptional Patient Group:</p> <ol style="list-style-type: none"> 1. Elderly >80 Y 2. Head injury 3. Encephalopathy 4. Jaundice 5. COPD / pneumonia 6. Low GCS <p>Consider use of Lorazepam in a symptom-triggered fashion 1-2 mg (to a max of 12 mg/24hr period before senior review)</p>	<p>Box 3 Special Circumstances: Severe Withdrawal</p> <p>(Delirium Tremens) with (agitation/aggression)</p> <ul style="list-style-type: none"> - Give 5-10 mg IV diazemuls initially followed by a maximum of 10 mg every 5 mins, increasing to a maximum of 40 mg diazepam over 30 mins (assessing response) only to be given by FY2/higher grade or trained nurse - Adjunct Haloperidol 2-10 mg PO/IM up to 18 mg in 24 hrs at 2 hourly intervals - Flumazenil should be available on ward - Seek senior review
---	--	--

Completed by: Signature: Date:

Glasgow Modified Alcohol Withdrawal Scale (GMAWS)

		Treatment options:				GMAWS only <input type="checkbox"/>				GMAWS & Fixed Dose <input type="checkbox"/>			
Date	Time												
Tremor		0	No tremor										
1	On movement												
2	At rest												
Sweating		0	No sweat visible										
1	Moist												
2	Drenching sweats												
Hallucination		0	Not present										
1	Dissuadable												
2	Not dissuadable												
Orientation		0	Orientated										
1	Vague, detached												
2	Disorientated, no contact												
Agitation		0	Calm										
1	Anxious												
2	Panicky												
Score													
Treatment													
Staff Signature													

Score: (Do not use scoring tool if patient intoxicated, must be at least 8 hours since last drink)
 0 Repeat score in 2 hours (discontinue after scoring on 4 consecutive occasions, except if less than 48hrs after last drink)
 1-3 Give 10mg Diazepam: Repeat score in 2 hours
 4-8 Give 20mg Diazepam: Repeat score in 1 hour
 9-10 Give 20mg Diazepam: Repeat score in 1 hour and discuss with medical staff regarding management of severe withdrawal as per guideline

All patients should have regular observations documented. Patients receiving high doses of Diazepam should be assessed regularly for over-sedation Regular MEWS/SEWS - Frequency 1-4 hrs (GCS, Respiration Rate, Oxygen Saturation, Pulse, Blood Pressure)

Patients may require to be woken for continuing assessment
Co-existing illness may affect score: seek medical advice if in doubt
Fixed dosing and symptom triggered dosing must be no less than 1 hour apart

Developed by the Alcohol Screening and Withdrawal Management Guideline Group. Chaired by Dr Ewan Forrest, Consultant Physician and Gastroenterologist, Glasgow Royal Infirmary. Copyright: This is the property of NHS Greater Glasgow and Clyde

Appendix 6:

Guidelines for vitamin supplementation and prevention and/or treatment for Wernicke's Encephalopathy

Every patient who appears to have signs of alcohol withdrawal and/or who is prescribed benzodiazepines should be assessed for Wernicke's encephalopathy



ARE ANY ONE OR MORE FROM THE LIST BELOW PRESENT?

<ul style="list-style-type: none"> Acute confusion 	<ul style="list-style-type: none"> Decreased consciousness level 	<ul style="list-style-type: none"> Memory disturbance
<ul style="list-style-type: none"> Ataxia / unsteadiness 	<ul style="list-style-type: none"> Ophthalmoplegia 	<ul style="list-style-type: none"> Nystagmus
<ul style="list-style-type: none"> Unexplained hypotension with hypothermia 		



YES



Presume Wernicke's encephalopathy



- Give Pabrinex® HP amps 2- 3 pairs (6 ampoules) IV TDS for 3 days, then 1pair OD for 5days. If remains symptomatic to continue with IV Pabrinex until no further improvement. If symptoms have resolved then switch to Thiamine oral 100mg TDS and give Vitamin



NO



Are there any further Risk Factors that suggest Wernicke's Encephalopathy?

Intercurrent Illness	Peripheral neuropathy
DTs/Treatment for DTs	Drinking > 20units daily
<i>Alcohol related seizures</i>	<i>Recent diarrhoea/vomiting</i>
IV Glucose infusion	Signs of malnutrition
Significant weight loss	Poor diet / Nil by Mouth



YES



Risk of Wernicke's encephalopathy
or Nil by Mouth



- Pabrinex® HP 2 pairs (4 ampoules) IV TDS for up to 3 days (or until situation has resolved)
- Then Thiamine 100mg BD
- Vitamin B Co Strong 1 tablet BD



NO



- Thiamine 100mg BD
- Vitamin B Co Strong 1 tablet BD

Appendix 7: Gradual Reduction of Alcohol Intake

How to Reduce Your Daily Drinking Safely

- The rate you reduce your drinking is up to you as you are in control. It's important to try to strike a balance between not cutting down so quickly that you get severe withdrawal symptoms and not so slowly that you never actually stop!
- Work out how many units you normally drink a day. This is your starting point.
- From your starting point, a sensible approach is to try to reduce by **2-5** units per day.
- Remember, you are drinking to control withdrawal symptoms, not to get intoxicated
- Do not assume you have to have a drink straight away after waking up. Try delaying drinking until you notice withdrawal symptoms.
- Try to drink only when you start to feel yourself withdraw and then drink approximately 2 units at a time. Wait 20-30 minutes for the alcohol to take effect and repeat this process each time you get withdrawal symptoms.
- If you experience disturbed or disrupted sleep due to withdrawal symptoms, you could try a double dose before bed.
- Remember, as you successfully reduce your daily alcohol intake, you should find your withdrawal symptoms become less severe.
- Keep a daily record of what and when you drink and what withdrawal symptoms you get. This will help you keep track of your progress and give you a guide to how much you should reduce the next day (see sample diary in Alcohol Advice Leaflet)
- If you are having withdrawal symptoms which are making you feel unwell, you may have cut down too quickly. If this is the case, you should discuss this with a health professional as soon as possible.

Disclaimer

This leaflet cannot replace professional advice. Alcohol withdrawal can make physical demands on the body which may put some people at increased risk. If you are unsure, you should discuss your general health and plans for cutting down with an alcohol worker or your GP.

