East London NHS
NHS Foundation Trust

COMMUNITY ALCOHOL DETOXIFICATION GUIDELINES

Version number :	5.0
Consultation Groups	Service managers and consultants of ELC Specialist Addictions Services
Approved by (Sponsor Group)	Substance misuse clinical governance group, Medicines Committee, Healthcare Assurance Committee
Ratified by:	Medicines Committee
Date ratified:	9th November 2020
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Implementation Date :	November 2020
Last Review Date	November 2020
Next Review date:	November 2023

Services	Applicable
Trustwide	x
Mental Health and LD	
Community Health Services	

Version Control Summary

Version	Date	Author	Status	Comment
1.0	January 2012			
2.0	January 2014			Reviewed and updated whole document
3.0	May 2015			Document reviewed in light of new services.
4.0	April 2018			Reviewed and updated in line with current practice
5.0	November 2020			Reviewed and updated in light of current practice

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INTRODUCTION

This guideline provides an operational focus for the pharmacological management of alcohol withdrawal and pharmacological interventions in maintaining abstinence within community settings. This programme is provided in combination with appropriate psychosocial interventions to meet patient needs. More information on how the service is organised and delivered can be found in the operational policy.

ELIGIBILITY CRITERIA

Individuals eligible for this programme are those with alcohol dependence who request an alcohol detoxification and are suitable for a community (as opposed to an in-patient) detoxification. Below are inclusion / exclusion criteria to guide the assessment for suitability for community detoxification. They parallel recommended eligibility criteria specified within the *Review for the Effectiveness of Treatment for Alcohol Problems* (2). These criteria are not absolute and are intended to act as a guide in the clinical judgement process.

Inclusion Criteria

The community alcohol detoxification is indicated in dependent alcohol users who are:

- Aged 18 years or over.
- Moderately dependent drinkers, defined in the Alcohol Needs Assessment Research Project (4) as scoring 15 to 29 on the severity of alcohol dependence questionnaire (SADQ) (7) (See Appendix 1). These patients usually recognise they have a drink problem and have not developed severe dependence and are not at the stage of regular relief drinking but they will have developed tolerance, may have mild withdrawal symptoms and will have impaired control over their drinking. Their mild withdrawal symptoms are significant enough to impede alcohol withdrawal.
- Complex needs: Dependent individuals may have complex needs, including co-morbid psychiatric disorders. In this case the service must liaise with other services, such as, psychiatric services and / or the GP caring for the patient.
- Poly-substance users: The decision to offer community alcohol detoxification to a patient who is also using illicit substances must be taken carefully by the multidisciplinary team in the presence of the consultant. Issues around associated risk, safety and benefits need to be discussed in detail.
- Patient has tried to reduce alcohol use through a reduction programme and has been unsuccessful.

Exclusion Criteria

Community detoxification is not indicated in patients with evidence of severe alcohol dependence or evidence of potential complications during detoxification. Patients with severe dependence or a history of major complications during detoxification should be referred for an in-patient detox.

The following criteria indicate those for whom community alcohol detoxification is not likely to be successful. These patients will be directed to an appropriate service, such as an inpatient facility unless the community based team is able to compensate and safely work around the complication where possible.

- Patients unwilling or unable to consider post-detoxification plans. – Stand-alone detoxification has poor success rates.
- Patients who have experienced withdrawal fits, or delirium tremens whilst going through a detoxification in the past will not be suitable for a community based detoxification. They need to be in an inpatient setting.
- History of hallucinations, on withdrawal. They will need an in-patient setting.
- Severely dependent drinkers, defined in the Alcohol Needs Assessment Research Project (4) as scoring 30 or more on the SADQ. These drinkers will have severe dependence and serious alcohol

related problems. They will have severe withdrawal symptoms, high tolerance; will relief drink and may have experienced fits or delirium tremens. They will need an inpatient detoxification.

- Patients with active or severe psychiatric problems may need admission to an acute psychiatric ward for an alcohol detoxification, especially if deterioration in mental health is anticipated. Patients should be referred to the appropriate sector ward using the existing procedures. The service should offer advice and support to the ward around the detoxification if requested.

- Chaotic poly-substance users, for example, those who are using large amounts of opiates on top of an adequate methadone prescription; those using cocaine in large quantities; or those who regularly attend services intoxicated with drugs or alcohol, will need to be considered for an inpatient detox or an inpatient setting for stabilisation prior to initiation of alcohol detoxification.
- Unstable living environment such as street homeless. In some cases, it may be necessary to do the detox in the community despite the living conditions, especially if alcohol is causing severe health problems.
- Patients living alone or patients with no additional support (unless attending a daily programme). To aid success in the detoxification the patient should have someone sensible staying with them who will help them take any prescribed medication as prescribed; encourage them not to start drinking alcohol once the detox has started; request help from services, emergency or otherwise, when appropriate; and, facilitate their engagement with services as required.
- A history of previous failed community detox's with no change in environmental or perpetuating factors.

- Any patient whose assessment and risk assessment brings up issues that contraindicate a community detox.
- Presence or history of Wernicke's encephalopathy.
- Presence of physical co-morbidity requiring immediate medical or surgical attention or physical problems that are likely to worsen resulting in complications and a significant risk during detoxification – e.g. pyrexia > 38.5 ° C; dehydration; malnutrition; pneumonia and other infections; cardiovascular failure; liver decompensation.
- Recent head injury with loss of consciousness.

These criteria are not absolute - each case should be assessed and clinical judgement made considering the risks and benefits for each presentation.

Patients that are not suitable for a community detox should be considered for an inpatient detox. The level of expertise varies at these services and this should be considered when making the referral, attempting to match the expertise to the level of complexity of the patient. All patients considered for an inpatient programme must be discussed at the multidisciplinary team meeting and with the consultant.

ALCOHOL DETOXIFICATION: THE ROLE OF BENZODIAZEPINES

Introduction

- Heavy alcohol use for a prolonged period without any break or period of abstinence will result in changes in many of the receptor systems in the body, in particular the gamma amino butyric acid (GABA) inhibitory system and the N-methyl-d-aspartate (NMDA) glutamate excitatory system. Many of the symptoms of alcohol withdrawal stem from modulation of these two systems. It can take a number of weeks or longer for these receptor systems to return to normal. Essentially, the body has made changes to the receptor system than enable a heavy drinker to remain awake / conscious despite having high blood alcohol concentrations. As long as alcohol is present the "new settings" in the excitatory / inhibitory receptor system balance and the subject appears well. Generally, the more alert a person is on a high Blood Alcohol concentration (BAC or BAL) potentially the more dependent they are. If alcohol is removed they will display signs of excitatory receptor over activity (shakes, hallucinations in all sensory systems and seizures)

- In clinical practice this means the sudden withdrawal of alcohol following dependent use will result in withdrawal symptoms with the more severe symptoms becoming more of a risk.
- The pharmacological effect of the benzodiazepines is almost identical to that of alcohol but is easier to control. Hence benzodiazepines are currently the preferred drugs used in acute detoxification from alcohol.
- Longer acting benzodiazepines such as chlordiazepoxide or the very long-acting diazepam are the drugs of choice. Oxazepam is used if there is severe liver impairment. It is shorter acting and will not accumulate in the presence of severe liver impairment.

Prescribing for Detoxification

- The theory is to prescribe a benzodiazepine at doses high enough to prevent unpleasant withdrawal symptoms and complications for a period long enough to cover the peak withdrawals but not long enough to develop a dependence on benzodiazepines, or at too high a dose to cause sedation.
- There are three styles of detoxification programme. Fixed dose regimes, front loading and symptom triggered regimes.
- Fixed dose detoxification – in this case the initial dose is titrated to the severity of alcohol dependence / level of drinking / severity of withdrawals. Once started the patient's dose is reduced gradually over 5 to 10 days. The reduction regime is planned at the start and thereby fixed.
- Symptom triggered detoxification – in this case the detox is continually reviewed in light of the patient's severity of alcohol withdrawals or other complications. It requires regular monitoring by staff skilled in the assessment of alcohol withdrawal and its associated complications. This type of detox is less suited to the outpatient setting and should only be considered by experienced clinicians.
- Front loading – the patient is given a loading dose of diazepam and further doses are given every 90 minutes until light sedation is achieved. No further doses are given and the long half life of diazepam protects the patient during the high risk period following cessation of alcohol use. This methodology requires skilled supervision and monitoring particularly during the initial stages. It would not be suitable in the community setting.
- However, in fixed dose detoxification there should be regular review of the patient and if the patient was suffering withdrawals the dose would be reviewed accordingly.
- Chlordiazepoxide is the treatment of choice in the outpatient setting as it has a lower abuse potential.
- Chlordiazepoxide remains the treatment of choice in an inpatient setting. Diazepam is an acceptable alternative and has a quicker onset of action.
- Oxazepam is the choice drug where there is severe liver impairment as it has a shorter half life and is broken down into inactive metabolites.
- Prescribing is indicated where there is a history of alcohol dependence or consistent clinical features of withdrawal.
- Prescribing is not required if the BAC (Blood Alcohol Concentration) is 0 and there are no withdrawal signs or there is no history of withdrawals or relief drinking.
- The limit if blood alcohol is measured is 0.08g / 100ml of blood.
- The breathalysers in the service measure Breath Alcohol Content (BrAC). The limit here is the drink drive limit 0.35mg of alcohol per 1000mls of breath.
- Refer to appendix 5 for a chart which shows alcohol level (blood and breath) and the associated clinical presentation.

Steps in the detoxification process

Step 1

Assess the patient. Take a thorough history, look for physical signs and symptoms, breathalyse patient (if necessary), do any laboratory tests needed (through the GP). Use alcohol rating scales (like AUDIT and the Severity of Alcohol Dependence Questionnaire SADQ) to determine the presence of alcohol dependence and the severity of dependence. Assess to see if the

patient needs vitamin supplementation. Most dependent drinkers will need vitamin B supplements and may need a course of injectable vitamin B.

Step 2

Assess if the patient is alcohol dependent. If they are not, offer counselling sessions through the team or a partner agency.
If they are, assess the need for a medically assisted detox. Use the SADQ to gauge how dependent they are. The patient's narrative of how much they drink, how long for and their experience of withdrawal symptoms and their blood screen results will guide the decision as well. If the patient is moderately or severely alcohol dependent, then a community detox is an option. If they are very severely alcohol dependent, then an in-patient detox may be the best option. Refer to the table below for an idea of what constitutes the different levels of severity of alcohol dependence.

It is at the discretion of the clinical team to decide when a community medically assisted detox is indicated

Step 3

The treatment of choice in the community setting for a medically assisted detox is chlordiazepoxide. It has less abuse potential and is long acting enough to provide adequate cover of withdrawal symptoms. In the elderly or those with severe liver impairment a short acting benzodiazepine should be used. Oxazepam is the choice in this situation. Diazepam is often used in the inpatient setting. It is useful where a rapid effect is required however the clinical team must factor the abuse and dependence potential of diazepam in their decision to use it.

In community settings detoxes should usually be completed within 10 days. The length of the detox will depend on the amount of alcohol drunk in a week and the severity of dependence.

The patient will need a carer to support them through the detox for the length of the detox. If they do not have one, then other options may have to be considered.

The patient will need to attend the service on a Monday morning to start having not drunk alcohol for long enough for them to blow 0.00mg/L on a breathalyser. Maximum allowance on this is 0.10mg/L.

Patients can start detox on a Monday or Tuesday at the latest. Any later is not an option as that would mean them facing some of the high risk days (days 1-5) over the weekend without monitoring.

The morning of day one of the detox is the time of highest risk in the detox process as the patient will have no alcohol and no medicine. There is a strong possibility of a seizure or some other complication so factor this in to how the first day is managed.

Patients with very severe alcohol dependence or who are drinking more than 250 units of alcohol per week should be referred to an in-patient setting.

Refer to the table below to get a guide of the starting dose of chlordiazepoxide to use and how to reduce the dose over the period of the detox.

Patients should be seen daily during the detox to support them through the detox and to ensure they have not relapsed.

To enable the patient to get to the service each morning safely, prescribe the morning dose for the following day. For example, on a Monday prescribe the Tuesday morning dose so they can be reviewed late morning on a Tuesday.

If the patient starts drinking during the detox review the detox.

Step 4

Once the client has completed the detox consider post detox options. This will involve relapse prevention techniques and a range of recovery focussed treatments.

It may also be of use to consider abstinent based drug treatments. The treatments available are Acamprosate, Disulfiram and Naltrexone. All three are licensed for the maintenance of abstinence post detoxification from alcohol. (See later for description of how to use these medications)

Naltrexone and Acamprosate both reduce the urge to drink whereas Disulfiram works by causing aversion to alcohol if alcohol is used during Disulfiram treatment.

Treatment lengths vary.

Points to note regarding medically assisted detoxification

- The length of the detox will depend on the level of dependence. The detox will be planned over a period of about 5 - 10 days. Longer detoxifications are rarely necessary or helpful.
- The regime must be reviewed daily; if complications are developing or symptoms are still present then it may be necessary to increase the dose rather than giving prn doses or prolonging the detox.
- Withdrawals could peak on day two and three in which case it may be necessary to delay the reductions until day two.
- If using a short-acting benzodiazepine and the patient is still symptomatic, then it may be necessary to maintain the dose till day four.
- As a rule of thumb the dose reduces by 20% each day, however the clinical presentation may override this.
- Medication for alcohol detoxification should be prescribed on an FP10. If it is necessary to prescribe large quantities of benzodiazepines factor in contingencies to prevent overdose or diversion. This could be supervised doses, specifying the pick up days or prescribing one day at a time.
- If there is a suspicion that medication will be diverted or used incorrectly then an in patient detox should be considered as this might be the safest option.
- It may be necessary to review the prescription and alter the doses according to clinical need.
- The patient should be seen daily and the following observations taken: any physical signs of withdrawal, general orientation, fluctuating state of consciousness any relevant alcohol withdrawal scales, breath alcometer reading, pulse, blood pressure and the time of the last dose. The Clinical Institute Withdrawal Assessment – Alcohol Revised (CIWA-Ar) is a useful tool to help monitor the detox process (see appendix 2).

The following table gives a baseline starting regime based on SADQ score or units of alcohol consumed per week (if SADQ scores are not available). If it appears that the patient will require starting doses above 40mg qds, they should be referred to an in-patient setting. Refer to appendix 1 for a copy of the

SADQ. The detox in the table is an example of a fixed dose regimen. The table is a guide and it is at the discretion of the lead clinician / consultant to tailor the programme to the particular patient.

Approximate Weekly Alcohol Consumption	**150 – 200 units/week**		**200 – 250 units/week**	
Severity of Dependence	**MODERATE DEPENDENCY SADQ score 16-30**		**SEVERE DEPENDENCY SADQ score 30-40**	
Starting Dose of Chlordiazepoxide	10 – 15 mg qds		20 – 30 mg qds	
Day 1 (starting dose)	10 qds	15 qds	20 qds	30 qds
Day 2	10 tds	10 qds	15 qds	25 qds
Day 3	5 tds	10 tds	10 qds	20 qds
Day 4	5 bd	5 tds	10 tds	15 qds
Day 5	5 nocte	5 bd	5 tds	10 qds
Day 6	STOP	5 nocte	5 bd	10 tds
Day 7		STOP	5 nocte	5 tds
Day 8			STOP	5 bd
Day 9				5 nocte
Day 10				STOP
Day 11				
Day 12				

Special notes:

- Doses of Chlordiazepoxide in excess of 30 mg qds should only be prescribed in cases where severe withdrawal symptoms are expected and the patient's response to treatment must be regularly and closely monitored.
- Patients who score 40 – 60 on the SADQ should be referred for an inpatient detox, if that is a logical option.
- Doses in excess of 100 mg of chlordiazepoxide daily are above BNF guidelines and should only be prescribed following discussion with the Consultant or another senior doctor. In practice, patients requiring doses this high should be detoxed in a controlled environment.
- Doses in the elderly should be halved.
- Special caution is necessary in cases of severe liver impairment as the metabolism of benzodiazepines may be reduced and lead to over-sedation. Caution is also necessary in female patients.

ROLE OF VITAMIN REPLACEMENT THERAPY

- There is a great deal of debate over the usefulness of oral vitamin replacement therapy in the severely alcohol dependent patient.
- The alcohol dependent patient will develop syndromes due to reduced vitamin B absorption from the gastrointestinal tract secondary to prolonged heavy alcohol consumption, coupled with reduced intake (alcohol has a high calorific value so the dependent person is less likely to eat a balanced diet). There is doubt whether oral therapy, even in the patient undergoing, detoxification will able to overcome these abnormalities.
- Parenteral vitamins (High potency vitamin B – complex, manufactured under the trade name Pabrinex)) are the recognised treatment of choice for the patient suffering from Wernicke's encephalopathy and Korsakoff's psychosis. These are medical emergencies. IV high potency vitamin B is the treatment where the patient has a diagnosis of these conditions. The IM route is used for prophylaxis.
- Pabrinex is the only parenteral high potency vitamin B complex licensed in the UK.
- In an out patient setting the options are:
    - Give nothing (not recommended despite the above mentioned concerns)
    - Oral vitamin supplementation with Vitamin B compound strong one tablet three times a day and / or thiamine at least 300mg a day. This might be adequate in low risk drinkers who do not have any neuropsychiatric complications and eat an adequate diet.
    - Parenteral supplementation in a facility that has staff competent in dealing with anaphylaxis and who can administer IM adrenaline (Epinephrine).

    In practice the incidence of anaphylaxis following parental thiamine is very low and given the potential permanent damage these patients are at risk of developing; current thinking is that giving parental vitamin B the best option.
- The evidence base for treatment of vitamin B deficiency in alcohol dependency is based on uncontrolled trials, empirical practice and expert opinion.
- All patients with alcohol dependency should be offered oral thiamine. Doses will be in the upper end of the dose range – at least 300mg daily.
- See appendix 5 for a detailed description of the administration of Pabrinex in the community setting.

MAINTAINING ABSTINENCE: MEDICATIONS POST DETOXIFICATION

- There are a range of medications available to help maintain abstinence. Two are licensed in the UK.
- Again these are an adjunct therapy to on going psycho-social interventions.

- Patients who have developed severe problems (physical, psychological or social) should ideally aim for abstinence.
- Controlled drinking should be considered if the patient relapsed and returned to drinking at pre-detox levels and treatment with these medications had failed.
- These medications are intended to maintain abstinence

Acamprosate:

- Acamprosate is a taurine derivative that inhibits glutamate receptor function in vitro. Its in vivo mechanism of action is not clear.
- Clinically it appears to suppress the urge to drink in response to learned cues.
- Acamprosate may achieve this by enhancing GABA inhibitory neurotransmission and antagonising glutamate excitation (alcohol exerts similar effects but to a far greater extent than Acamprosate)
- RCTs show higher abstinence rates at 3, 6 and 12 months. Generally the abstinence rates in clinical trials were twice that seen in placebo. In most of these studies acamprosate was an adjunct to a psycho-social programme.
- It takes seven days to reach therapeutic levels so acamprosate must be started soon after detoxification has been completed or in the later stages of the detoxification.
- Continued regular alcohol use negates the therapeutic effect but the occasional lapse does not.
- It is licensed for use in the 18 to 65-year-old age group. Doses in adults 60kg and over is 666mg (two tablets) three times a day. In adults less than 60kg the doses are reduced to 666mg in the morning and 333mg at midday and at night time.
- In practice acamprosate is prescribed for 12 months
- Treatment should stop if drinking persists 4-6 weeks after starting the drug.
- Acamprosate patients need regular review whilst they are taking the medication.

Disulfiram:

- Disulfiram is an irreversible inhibitor of hepatic aldehyde–NAD reductase (ALDH), an enzyme necessary for the complete metabolism of alcohol. By blocking the metabolism disulfiram causes a build up of acetaldehyde in the body.
- It is licensed for use in the UK
- ***The Alcohol-Disulfiram Interaction "(Antabuse Reaction")***: The interaction results in a build up of acetaldehyde in the body which could be 5-10 times higher than usual levels. This causes an unpleasant physical reaction occurring within 10 minutes and potentially lasting several hours. Symptoms could include flushing, headache, increased heart rate and consequent palpitations, nausea and vomiting, and shortness of breath. With larger amounts of alcohol more serious reactions can occur such as arrhythmias, hypotension and circulatory collapse, as well as confusion and visual disturbance. The intensity of the reaction can vary with each individual.
- Disulfiram acts as a negative reinforcer for abstinence. Consumption of a **small** quantity of alcohol could trigger an adverse reaction.
- Disulfiram works best if it is supervised.
- It is usually given daily, there are other dosage regimes but these are unlicensed. The tablets are dispersible and can be given in a liquid to aid supervision.
- ***Adverse Drug Reactions:*** Drowsiness (usually of short duration); Nausea and Vomiting; Hepatotoxicity; Neurological (mainly peripheral neuritis); Cutaneous (mainly dermatitis); Psychiatric (mainly psychotic reactions); Halitosis; and, Reduced Libido.
- ***Caution:*** Disulfiram should be used with caution or avoided in those with cardiovascular disease, severe liver impairment (avoid if there is evidence of portal hypertension), chronic renal impairment, diabetes and epilepsy or idiopathic seizure disorder. It can cause life threatening idiosyncratic hepatotoxicity, so patients will need regular liver function tests for the first three months. It can cause peripheral neuropathy. It may exacerbate psychotic illnesses and should be used with caution in those with severe personality disorder or high suicidal risk. It is not recommended in children and

pregnant women because it can cause foetal abnormalities. Disulfiram should also be avoided in patients with impaired ability to understand the risks associated with use of the medication.

- ***Drug Interactions:*** Disulfiram affects the metabolism of medications metabolized by the cytochrome P450 system (cytochrome P450 2E1), hence increasing their plasma levels. Such medications include phenytoin, warfarin, benzodiazepines (except for lorazepam and oxazepam) and amitriptyline.
- Current advice is that treatment is reviewed after six months.
- ***Suitability:*** There are very few studies indicating which subgroup of patients would be most suitable for use of disulfiram, however, clinical experience indicates that unsupervised disulfiram may benefit the more stable, older, motivated individual, whereas supervised disulfiram is more suitable for the less motivated individual who is nevertheless eager to remain in abstinent and in treatment.
- Patient's need to be counselled on the impact of disulfiram on their life style. The small amounts of alcohol found in some over the counter medicines or aftershaves can trigger an adverse reaction.
- The sensitivity of the disulfiram patient to alcohol depends on the dose given. The standard regime is 200mg daily.
- Some clinicians give 400mg daily to ensure that any alcohol consumption triggers a reaction. If the dose given does not cause a reaction then it can be increased in consultation with the patient, however this is an off license use that the consultant must agree to.
- Disulfiram should be started at least 24 hours after the last alcoholic drink; the patient should have a BAC reading of 0.
- In some patients there is no reaction when they drink alcohol as the daily dose is too low.
- Patients should be reviewed every 2 weeks for the first 2 months then monthly for the next 4 months and have a medical review every 6 months at least.

Naltrexone:

- Naltrexone is an orally active opiate antagonist and is licensed in some countries for the treatment of alcohol dependence. It is now licensed in the UK for alcohol dependence. It has been used to help maintain abstinence.
- Alcohol is thought to exert effects on the mesolimbic dopamine system and cause the release of endogenous opiates and cannabinoids in the reward centre of the brain.
- Naltrexone is thought to block the effects of opioids released by alcohol that enhance dopamine in the mesolimbic pathway.
- Many RCTs have shown Naltrexone to be effective in reducing the number of drinking days, reducing craving and reducing relapse rates.
- In practice patients may sample drink ("lapse") but do not crave subsequent drinks (progress to a full "relapse").
- Doses are similar to those used in opiate dependence – start with 25 mg daily and increase to 50mg daily, which can be given daily or in a three days per week regimen with two or three days' doses given at once.
- Again efficacy is increased with supervision.
- It is contraindicated in those with acute hepatitis, liver failure or those actively dependent on opiates.
- A liver function test is required before and during treatment as Naltrexone is extensively metabolised in the liver and may be potentially hepatotoxic.
- Patients should be given a warning card alerting them to the effects Naltrexone will have on any prescribed opiate drugs in the event that they require strong pain relief.
- Treatment should continue for 6 months or longer if the patient is benefitting and wants to continue.
- Treatment should stop if the patient is still drinking after 4-6 weeks.
- Monitor the patient at least monthly for the 6 months of treatment and less frequently thereafter. In the long term there is no need for routine blood tests but consider them in the older aged patient and the obese patient.
- If during long term treatment the patient reports feeling unwell then advise them to stop naltrexone immediately.

APPENDIX 1

SEVERITY OF ALCOHOL DEPENDENCE QUESTIONNAIRE (SADQ)

Severity of Alcohol Dependence Questionnaire (SADQ)

The Severity of Alcohol Dependence Questionnaire was developed by the Addiction research Unit at the Maudsley Hospital. It is a measure of the severity of dependence. It is a 20 item self-administering scale that takes about 5 minutes to complete and does not require any special training for its use. Essentially it assesses the level of dependence prior to any intervention by assessing five domains:

- Physical withdrawal symptoms (such as sweating or shakes);
- Affective withdrawal symptoms (such as cravings);
- Relief drinking (drinking in order to treat or prevent withdrawal symptoms);
- Frequency of alcohol consumption;
- Speed of onset of withdrawal symptoms.

Scoring:

Answers to each question are rated on a four-point scale, with a maximum score of 60. A medication assisted detoxification regime is usually indicated for someone who scores 16 or over.

Almost never	0
Sometimes	1
Often	2
Nearly always	3

SADQ Score	< 16	16 - 30	31 – 60
Severity of Dependency	Mild Dependency	Moderate Dependency	Severe Dependency

Approximate Weekly Alcohol Consumption	**150 – 200 units/week**		**200 – 250 units/week**		**250 – 300 or more units/week**
Severity of Dependence	**MODERATE DEPENDENCY SADQ score 16-30**		**SEVERE DEPENDENCY SADQ score 30-40**		**VERY SEVERE DEPENDENCY SADQ score 40-60**
Starting Dose of Chlordiazepoxide	10 – 15 mg qds		20 – 30 mg qds		Detox in a controlled environment
Day 1 (starting dose)	10 qds	15 qds	20 qds	30 qds	
Day 2	10 tds	10 qds	15 qds	25 qds	
Day 3	5 tds	10 tds	10 qds	20 qds	
Day 4	5 bd	5 tds	10 tds	15 qds	
Day 5	5 nocte	5 bd	5 tds	10 qds	
Day 6	STOP	5 nocte	5 bd	10 tds	
Day 7		STOP	5 nocte	5 tds	
Day 8			STOP	5 bd	
Day 9				5 nocte	
Day 10				STOP	
Day 11					
Day 12					

Name Age No.

Date

Please recall a typical period of heavy drinking in the last six months.

When was this? Month Year

Please answer all the following questions about your drinking by circling the most appropriate response.

During that period of heavy drinking

1. The day after drinking alcohol, I woke up feeling sweaty.

Almost Never Sometimes Often Nearly Always

2. The day after drinking alcohol, my hands shook violently first thing in the morning.

Almost Never Sometimes Often Nearly Always

3. The day after drinking alcohol, my whole body shook violently first thing in the morning if I didn't have a drink.

Almost Never Sometimes Often Nearly Always

4. The day after drinking alcohol, I woke up absolutely drenched in sweat.

Almost Never Sometimes Often Nearly Always

5. The day after drinking alcohol, I dread waking up in the morning.

Almost Never Sometimes Often Nearly Always

6. The day after drinking alcohol, I was frightened of meeting people first thing in the morning.

Almost Never Sometimes Often Nearly Always

7. The day after drinking alcohol, I felt at the edge of despair when I awoke.

Almost Never Sometimes Often Nearly Always

8. The day after drinking alcohol, I felt very frightened when I awoke.

Almost Never Sometimes Often Nearly Always

9. The day after drinking alcohol, I liked to have an alcoholic drink in the morning.

Almost Never Sometimes Often Nearly Always

10. The day after drinking alcohol, I always gulped my first few alcoholic drinks down as quickly as possible.

Almost Never Sometimes Often Nearly Always

11. The day after drinking alcohol, I drank more alcohol to get rid of the shakes.

Almost Never Sometimes Often Nearly Always

12. The day after drinking alcohol, I had a very strong craving for a drink when I awoke.

Almost Never Sometimes Often Nearly Always

13. I drank more than a quarter of a bottle of spirits in a day (OR 1 bottle of wine OR 7 beers).

Almost Never Sometimes Often Nearly Always

14. I drank more than half a bottle of spirits per day (OR 2 bottles of wine OR 15 beers).

Almost Never Sometimes Often Nearly Always

15. I drank more than one bottle of spirits per day (OR 4 bottles of wine OR 30 beers).

Almost Never Sometimes Often Nearly Always

16. I drank more than two bottles of spirits per day (OR 8 bottles of wine OR 60 beers).

Almost Never Sometimes Often Nearly Always

Imagine the following situation

- You have been completely off drink for a few weeks
- You then drink very heavily for two days

How would you feel the morning after those two days of drinking?

17. I would start to sweat.

Not at all Slightly Moderately Quite a lot

18. My hands would shake.

Not at all Slightly Moderately Quite a lot

19. My body would shake.

Not at all Slightly Moderately Quite a lot

20. I would be craving for a drink.

Not at all Slightly Moderately Quite a lot

Score

Checked By:

APPENDIX 2
CLINICAL INSTITUTE WITHDRAWAL ASSESSMENT OF ALCOHOL SCALE – REVISED (CIWA-AR)

CLINICAL INSTITUTE WITHDRAWAL ASSESSMENT OF ALCOHOL SCALE – REVISED (CIWA-AR)

Patient:_____ Date:_____ Time:_____ (24hr)

Pulse of Heart Rate, taken for one minute:_____ Blood Pressure:_____

NAUSEA AND VOMITING – Ask "Do you feel sick to your stomach? Have you vomited?" Observation.

0 no nausea and no vomiting
1 mild nausea with no vomiting
2
3
4 intermittent nausea with dry heaves
5
6
7 constant nausea, frequent dry heaves and vomiting

TREMOR – Arms extended and fingers spread apart. Observation.
0 no tremor
1 not visible, but can be felt fingertip to fingertip
2
3
4 moderate, with patient's arms extended
5
6
7 severe, even with arms not extended

PAROXYSMAL SWEATS – Observation.
0 no sweat visible
1 barely perceptible sweating, palms moist
2
3
4 beads of sweat obvious on forehead
5
6
7 drenching sweats

ANXIETY – Ask "Do you feel nervous?" Observation.
0 no anxiety, at ease
1 mild anxious
2
3
4 moderately anxious, or guarded, so anxiety is inferred
5
6
7 equivalent to acute panic states as seen in severe delirium or acute schizophrenic reactions

AGITATION – Observation.
0 normal activity
1 somewhat more than normal activity
2
3
4 moderately fidgety and restless

TACTILE DISTURBANCES – Ask "Have you any itching, pins and needles sensations, any burning, any numbness, or do you feel bugs crawling on or under your skin?" Observation.
0 none
1 very mild itching, pins and needles, burning or numbness
2 mild itching, pins and needles, burning or numbness
3 moderate itching, pins and needles, burning or numbness
4 moderate itching, pins and needles, burning or numbness
5 moderately severe hallucinations
6 severe hallucinations
7 extremely severe hallucinations

AUDITORY DISTURBANCES – Ask "Are you more aware of sounds around you? Are they harsh? Do they frighten you? Are you hearing anything that is disturbing to you? Are you hearing things you know are not there?" Observation.
0 not present
1 very mild harshness or ability to frighten
2 mild harshness or ability to frighten
3 moderate harshness or ability to frighten
4 moderate harshness or ability to frighten
5 moderately severe hallucinations
6 severe hallucinations
7 extremely severe hallucinations

VISUAL DISTURBANCES – Ask "Does the light appear to be too bright? Is its color different? Does it hurt your eyes? Are you seeing anything that is disturbing to you? Are you seeing things you know are not there?" Observation.
0 not present
1 very mild sensitivity
2 mild sensitivity
3 moderate sensitivity
4 moderate sensitivity
5 moderately severe hallucinations
6 severe hallucinations
7 extremely severe hallucinations

HEADACHE, FULLNESS IN HEAD – Ask "Does your head feel different? Does it feel like there is a band around your head?" Do not rate for dizziness or lightheadedness. Otherwise, rate severity.
0 not present
1 very mild
2 mild
3 moderate
4 moderate
5 moderately severe
6 severe
7 very severe

ORIENTATION AND CLOUDING OF SENSORIUM – Ask "What day is this? Where are you? Who am I?"
0 oriented and can do serial additions
1 cannot do serial additions or is uncertain about date
2 disoriented for date by no more than 2 calendar days
3 disoriented for date by more than 2 calendar days
4 disoriented for place and/or person

BEHAVIOR – Observation.
0 behavior normal
1 somewhat more than normal activity
2
3
4 moderately fidgety and restless
5
6
7 paces back and forth during most of the interview, or constantly thrashes about

TOTAL CIWA-Ar Score:_____
Maximum possible Score 67

TACTILE DISTURBANCES – Ask "Have you any itching, pins and needles sensations, any burning, any numbness, or do you feel bugs crawling under you skin?" Observation.
0 none
1 very mild itching, pins and needles, burning or numbness
2 mild itching, pins and needles, burning or numbness
3 moderate itching, pins and needles, burning or numbness
4 moderately severe hallucinations
5 severe hallucinations
6 extremely severe hallucinations
7 continuous hallucinations

AUDITORY DISTURBANCES – Ask "Are you more aware of sounds around you? Are they harsh? Do they frighten you? Are you hearing anything that is disturbing to you? Are you hearing things you know are not there?" Observation.
0 not present
1 very mild harshness or ability to frighten
2 mild harshness or ability to frighten
3 moderate harshness or ability to frighten
4 moderately severe hallucinations
6 extremely severe hallucinations
7 continuous hallucinations

VISUAL DISTURBANCES - Ask "Does the light appear to be too bright? Is the colour different? Does it hurt your eyes? Are you seeing anything that is disturbing to you? Are you seeing things you know are not there?
0 not present
1 very mild sensitivity
2 mild sensitivity
3 moderate sensitivity
4 moderately severe hallucinations
5 severe hallucinations
6 extremely severe hallucinations
7 continuous hallucinations

HEADACHE, FULLNESS IN HEAD – Ask "Does your head feel different? Does it feel like there us a band around your head?" Do not rate for dizziness or light-headedness. Otherwise, rate severity.
0 not present
1 very mild
2 mild
3 moderate
4 moderately severe
5 severe
6 very severe
7 extremely severe

ORIENTATION AND CLOUDING OF SENSORIUM – Ask "What day is this? Where are you? Who am I?"
0 oriented and can do serial additions
1 cannot do serial additions or is uncertain about date
2 disoriented for date by no more than 2 calendar days
3 disoriented for date by more than 2 calendar days
4 disoriented for place/or person

Rater's Initials: _____

The CIWA-Ar is a validated tool to assess the severity of withdrawal during detoxification. It can be used as a guide to the administration of 'PRN' or 'as required' chlordiazepoxide and to alert clinicians to problems. It is not a substitute for clinical judgement but a guide to inform clinical decisions.

It is recommended that a baseline CIWA-Ar score is obtained prior to initiating chlordiazepoxide. The initial CIWA-Ar score should be used in conjunction with the severity of 'Alcohol Dependence Questionnaire' (SADQ) which provides a guide to the regime of chlordiazepoxide required, according to the severity of dependency. Further, CIWA-Ar scores should be obtained one hour after receiving each dose of chlordiazepoxide until 2 consecutive scores of 8 or less are obtained.

The following guidelines highlight the relationship between CIWA-AR and requirement for 'PRN' chlordiazepoxide.

CIWA-Ar Score AND SEVERITY OF ALCOHOL WITHDRAWAL	ACTION REQUIRED (IF MEDICATION IS GIVEN REPEAT CIWA-Ar IN ONE HOUR)
0-8 (mild)	None
8-10 (mild)	None. If hallucinations or disorientation present, give 10mg chlordiazepoxide
10-15 (mild)	10mg chlordiazepoxide
16-20 (moderate)	20mg chlordiazepoxide. Total of up to three "prn" doses can be given. Call doctor if CIWA-Ar remains above 10
>20 (severe)	20 mg chlordiazepoxide. Call doctor. May require treatment in general medical ward

- No additional intervention is required for a CIWA-Ar score of eight or less
- For scores of between eight and ten when the patient is Not experiencing hallucinations or disorientations, no action required
- Fro scores between eight and ten in the presence of hallucinations or disorientation, 10mg of chlordiazepoxide should be given and the score checked again after one hour.
- If the score is between ten and fifteen, 10mg chlordiazepoxide should be given and the score repeated in an hour
- If the score is between sixteen and twenty, give 20mg chlordiazepoxide and recheck the score in an hour. Up to three doses of chlordiazepoxide can be given at hourly intervals if necessary. However, if after the third dose the score remains above ten, seek medical advice if this has not already been done.
- Scores of twenty or more indicate severe alcohol withdrawal and a risk of Delirium Tremens and seizures. 20mg chlordiazepoxide should be administered and a doctor called. The patient is likely to need be seen to re-assess the diagnosis and may need to be treated in a general medical ward. The CIWA-Ar score should be repeated after an hour. If the score remains above ten, it is mandatory for a doctor to see the patient if this has not already happened.

  The objective is to obtain two consecutive scores of eight or less. This indicated safe withdrawal.

  If a total of 20mg or more chlordiazepoxide has been given as "PRN" doses in any one day, the regular regime of chlordiazepoxide will need to be re-written starting at a lighter dose to prevent re-emergence of symptoms of alcohol withdrawal to the large drop in the daily dose of benzodiazepine which would otherwise occur.

The CIWA-Ar is used to assess the severity of withdrawal during the detox. It can be used to guide doses and to alert clinicians to problems. Again experienced clinicians will be able to cover its domains in interview and will not feel they need the CIWA-Ar. However many more complex regimes found in many prescribing guidelines rely on the CIWA-Ar scores to guide dosing.

CIWA-Ar

Patient Name:……..

DOB: ……

NHS No: ……..

Year									
1 Nausea and vomiting (0-7)									
2 Tremor (0-7)									
3 Paroxysmal (0-7)									
4 Anxiety (0-7)									
5 Agitation (0-7)									
6 Tactile disturbances (0-7)									
7 Auditory disturbances (0-7)									
8 Visual disturbances (0-7)									
9 Headaches, fullness in head (0-7)									
10 Orientation and clouding of sensorium (0-4)									
Total (maximum possible = 67)									
Rater's Initials:									

Withdrawal severity:	**Mild = 0-15**	**Moderate = 16-20**	**Severe = >20**

APPENDIX 3
THE ALCOHOL WITHDRAWAL SYNDROME

Severity of withdrawal	Uncomplicated withdrawal	Alcohol withdrawal with seizures	Delirium Tremens (DTs)
Onset of withdrawal	4-12 hours after last alcoholic drink	6-48 hours after last alcoholic drink	1-7 days after last alcoholic drink, peak incidence 48 hour after last drink
Features	Coarse tremor, sweating, insomnia, tachycardia (pulse >100), nausea and vomiting, psychomotor agitation and generalised anxiety. Occasionally transient tactile, visual or auditory hallucinations or illusions.	As for uncomplicated but have the complication of Grand Mal (Generalised Tonic Clonic) seizures. If they occur only when withdrawing then they do not signify the development of idiopathic epilepsy.	Features of uncomplicated withdrawal plus clouding of consciousness, disorientation, amnesia for recent events, marked psychomotor agitation (possibly violence), visual, auditory and tactile hallucinations, marked fluctuations in severity by the hour. Severe cases: sweating raised temperature, fear, paranoid delusions, and sudden cardiovascular collapse.
Risk factors	Drinking excessively for more than a few weeks without any periods of reduced consumption or abstinence will result in some degree of the AWS	Previous history of withdrawal seizures, history of head injury, hypokalaemia, idiopathic epilepsy, drug use, long history of dependence, older age, sudden alcohol withdrawal.	Severe dependence, co-morbid infection or acute illness, pre-existing liver damage, previous history, severe withdrawal symptoms at presentation, older age
Prognosis	Symptoms increase in severity almost in proportion to the level of alcohol habitually consumed. Symptoms peak at 48 hours and last for 2 to 5 days, more severe symptoms are prolonged.	Occurs in 5 to 15% of cases. Occur due to adaption and down regulation of GABA and up regulation of NDMA, sudden withdrawal of alcohol causes hyperexcitability and seizures.	Mortality rate 5-10%. Most risky if it appears unexpectedly and its initial manifestations are misinterpreted. Differential diagnosis: hepatic encephalopathy, head injury, pneumonia, acute psychotic illness, acute confusional state with another primary cause.
Treatment	Can be treated in the community, CIWA-ar score can also be used to assess the appropriateness of the chosen setting	Patients who have a history of fitting will need to be treated in an in-patient setting. They may need prophylactic treatment (Diazepam loading or Carbamazepine). Patients who develop seizures during a detox may need to be held at a particular dose and a medical review undertaken.	Medical emergency requires treatment in hospital

APPENDIX 4
COMPLICATIONS OF ALCOHOL DEPENDENCE

Alcohol-related cognitive impairment:
50-60% of heavy drinkers will display some degree of cognitive impairment when sober. There is impairment in short term memory, long term memory recall, new skill acquisition and the ability to task shift.

Alcoholic Dementia:
A potentially reversible generalised dementia that progresses with continued drinking but with cessation of drinking ceases to progress and may improve.

Wernicke-Korsakoff Syndrome:
This syndrome comprises of two phases of a single disease process. Wernicke's encephalopathy is the acute phase and Korsakoff's' psychosis is the chronic phase. The syndrome is due to neuronal cell death in the central nervous system neuronal degeneration secondary to thiamine deficiency. There are other possible causes such as magnesium deficiency; carbon monoxide poisoning, tumour, anaesthesia. However, thiamine deficiency is commonly seen in heavy alcohol users. Patients displaying the initial symptoms need to be admitted to hospital for treatment of this condition.

Wernicke's encephalopathy and Korsakoff's psychosis are the acute and chronic phase of the same disease process referred to as Wernicke Korsakoff syndrome. The cause is as above neuronal degeneration due to thiamine deficiency and is most commonly seen in heavy drinkers.

Wernicke's Encephalopathy:
- This is a syndrome of global confusion, ataxia, and impaired eye movement (lateral gaze nystagmus and ophthalmoplegia).
- All three symptoms are rarely present so the diagnosis of Wernicke encephalopathy should be made for any patient undergoing detoxification who presents with
    - Ataxia
    - Ophthalmoplegia / nystagmus
    - Hypothermia & hypotension
    - Memory disturbance
    - Confusion
    - Coma / unconsciousness
    - There are also softer signs: loss of appetite, nausea and vomiting, fatigue, weakness, apathy, giddiness, insomnia, anxiety, poor concentration which must be taken into consideration.
- Heavy drinkers are at risk due to poor intake (alcohol has a high calorific value but little or no vitamins hence heavy drinkers will tend to have poor diets). They also have reduced absorption of B vitamins.
- There are other causes of thiamine deficiency that could result in Wernickes but these are comparatively rare, for example starvation, anorexia nervosa and hyperemesis gravidarum and wet and dry beri-beri from diet of polished rice

- Wernicke encephalopathy is a medical emergency.
- Untreated the acute phase lasts approximately two weeks with 84% of cases developing features of Korsakoff psychosis.
- There is approximately a 15% mortality rate in untreated cases.
- Treatment of Wernickes requires parenteral high potency vitamin B complex therapy (such as Pabrinex®), 2 ampoules given as an intramuscular injection twice daily for 3 to 7 days.
- Thiamine injection 200mg to 300mg can be used if Pabrinex® is unavailable.
- The parenteral route is associated with severe anaphylactic reactions so there must be adequate resuscitation facilities available. Anaphylaxis is more common with the IV route than with the IM route.
- With treatment the ophthalmoplegia and confusion resolve within days but the ataxia, nystagmus and neuropathy may be prolonged or permanent.

Korsakoff Psychosis

- Korsakoff psychosis is the confabulatory and amnesia component of the encephalopathy.
- There is significant impairment or a total absence of the ability to lay down new memories and a degree of retrograde amnesia.
- Working memory, procedural memory and emotional memory are not impaired.
- This condition is also due to thiamine deficiency following prolonged heavy alcohol use.
- Other less common causes are head trauma, post anaesthesia and thiamine deficiency secondary to other causes.
- Pathological changes in the brain are the same as in Wernicke encephalopathy.
- Treatment is to continue oral thiamine replacement for up to 2 years
- The prognosis is not good. 25% of cases show some degree of improvement in memory over time, 75% remain unchanged. The degree of impairment of the patient's life depends on the degree of impairment of memory.
- The memory impairment can be severe enough to hinder or even prevent independent living.

Differential diagnosis

- There are other causes of some symptoms of Wernicke – Korsakoff syndrome that are pertinent to the dependent alcohol drinker.
- **Confusion** may be caused by hepatic encephalopathy seen in liver failure. Ammonia and Gamma-aminobutyric acid are produced by the natural flora in the gut and usually are metabolised by the liver. In Cirrhosis these compounds enter the circulation in high concentrations causing confusion, disorientation and coma. Treatment includes lactulose and neomycin.
- **Cerebellar** degeneration independent from Wernicke encephalopathy can result in ataxia with a wide gait. Nutritional factors and the direct toxic effect of alcohol have been implicated as causes.
- **Peripheral neuropathy** can be the result of trauma or B vitamin deficiency. When the cause is nutritional deficiency lower extremity involvement is more common. Symptoms include pain, parasthesia and weakness. These symptoms are usually distal and symmetrical.

Alcoholic psychotic disorder, to include alcoholic hallucinosis, jealousy and paranoia

Appendix 5

High Potency B-Complex Vitamins (Pabrinex®) Prescribing Protocol

Pabrinex®- What is it?

- Pabrinex® is the trade name for a preparation of high-potency complex vitamins (including vitamins B1, B2, B6).
- It comes as an IM only version and an IV only version.
- Each dose is delivered in a pair of ampoules labelled 1 and 2 which make up the pair. Ampoule 1 is 5mls and ampoule 2 is 2mls.
- The IM 7ml preparation contains ascorbic acid 500mg, nicotinamide 160mg, pyridoxine hydrochloride 50mg, riboflavin 4mg and Thiamine hydrochloride 250mg.
- Ampoule 1 contains the thiamine, riboflavin and pyridoxine. Ampoule 2 contains the nicotinamide and ascorbic acid.

Why is it used?

- It is used to prevent / reduce the risk of Wernicke's encephalopathy (a condition which can develop in alcohol dependent clients who are also malnourished due to Thiamine deficiency).
- This leads to a classic triad of symptoms - confusion, ataxia and abnormal eye movements), however many patients who have a Wernicke's syndrome will not experience the full triad of symptoms, and any one of the above symptoms in a patient experiencing detoxification may be a sign of Wernicke's encephalopathy.
- Alcohol and benzodiazepines may cause ataxia and nystagmus which may be confused with a Wernicke's presentation.
- Pabrinex® is favoured over oral thiamine in alcohol dependant service users because the oral replacement is not adequately absorbed (not more than 10 %) in dependent drinkers.
- Pabrinex® is given prior to or during alcohol detoxifications taking place in either the community or as an in-patient detox.
- Pabrinex® can also be given to clients with severe alcohol dependence / harmful use even if they are not preparing for a detoxification.
- This group of patients may be suffering from the negative consequences of alcohol use and may be at risk of developing irreversible complications and thus Pabrinex® would still be indicated.
- Low risk drinkers without neuropsychiatric complications who have an adequate diet should be offered oral thiamine at a minimum dose of 300mg daily during assisted alcohol withdrawal and periods of

Risks associated with Pabrinex®

- The main concern is anaphylactic reactions following the administration of parenteral vitamin B.
- There is a special warning in the BNF regarding this however in practice the incidence of anaphylactic reactions with parenteral high potency vitamin B is far lower than for other preparations which do not carry a special warning,
- IM preparations have a lower incidence than the IV preparations at 1 per 5 million pairs of ampoules of Pabrinex®
- The BNF / CSM advice is that facilities for treating anaphylaxis should be available including staff trained in managing anaphylaxis and in the administration of IM adrenaline (epinephrine)

- Note – anaphylaxis can occur after one exposure to an antigen or after repeated exposure. Patients given parenteral high potency vitamin B complex will need observation after administration.

Criteria for Prescribing Pabrinex®

1. Current alcohol dependence
2. Current alcohol misuse / harmful use
3. Joint drug and alcohol dependence / harmful use
4. At risk of developing Wernicke's encephalopathy

Contra-Indications for prescribing Pabrinex®

1. History of anaphylaxis
2. History of severe allergic reaction / anaphylaxis to Pabrinex®
3. Patients requiring therapeutic treatment (as opposed to prophylactic treatment) of Wernickes encephalopathy. These cases should be dealt with in a general medical setting.
4. Patients who require urgent medical or surgical attention and will be referred for inpatient admission.

Before prescribing Pabrinex®

- Pabrinex can only be prescribed following a thorough medical assessment.
- The findings should be discussed with the consultant and / or Multidisciplinary Team
- This should be documented in the notes and the assessing doctor should complete the prescription chart well ahead of the Pabrinex administration.
- There should be discussion with the patient's general practitioner about the proposed treatment with particular focus on gaining a corroborative history of allergic reactions.
- The patient should be asked to attend when staff trained in dealing with anaphylaxis and the Intra-muscular administration of ephedrine are on site.
- Bear in mind the course of treatment could last from 3-5 days so these staff members need to be on site for the whole period.
- Allergy status needs to be carefully checked and documented.

How to Prescribe Pabrinex

Prophylactic treatment:
- **One pair IM ampoules** high potency B-complex vitamins (Pabrinex) **daily** for **3 to 5** days.
- Following the parenteral B vitamin course give oral thiamine at least 300mg daily and / or vitamin B compound strong.

Therapeutic Treatment (general hospital in patient only):
- At least **two Pairs of IV ampoules** (i.e. four ampoules) of high potency B complex vitamins **three times daily** for **two** days.
- If no response the discontinue treatment
- If signs / symptoms respond, continue 1 pair IV or IM ampoules daily for 5 days or longer if improvement continues.

Prescribing of Pabrinex – Practical issues

- Pabrinex for administration at one of the addiction sites should only be prescribed by, a prescriber from one of the specialist addiction services (ARC, THSAU, HSAU or SSMT).
- It is prescribed on a community prescription chart if available. Arrange supply from pharmacy either at Mile End Hospital or Hackney Centre for mental health.
- The administration of Pabrinex should be carried out by two trained nurses who are familiar with the procedure, associated risks and what to do in an emergency.
- The staff members must be trained in the administration of the IM injection, resuscitation and administration of IM epinephrine.
- The contents of one ampoule number 1 and one ampoule number 2 of Pabrinex Intramuscular High Potency (total 7ml) are drawn up into a syringe to mix them just before use, then injected slowly high into the gluteal muscle, 5cm below the iliac crest (in the backside about 5 cm below the hip bone).
- Service user should be advised to wait (in the waiting area) for at least 20 mins after each injection to ensure there is no allergic reaction before leaving the premises.

Nursing observations

Prior to the Pabrinex being administrated, one of the team nurses (who will administer the Pabrinex) should ensure the following is carried out:

1. Double-check allergies
2. Check Baseline observations to include blood pressure and pulse – it should be noted that blood pressure can often be high in clients who have alcohol problems
3. Breathalyse to make sure it is safe to proceed.
4. Make sure the adequate explanation has been given to the service user who should acknowledge they understand the procedure and risks and express that they wish to proceed with the treatment by signing the relevant consent form.
5. Any concerns should be discussed with a senior member of staff, the lead nurse or the team Doctor.

Frequency of Pabrinex courses

- A course of Pabrinex in the community setting is 3 to 5 Pabrinex injections (prescribing regimes will be different in the in-patient units).
- Patients can be reviewed every three months for another course of Pabrinex if so desired.

Communication with General Practitioner

- The Patient's GP should be informed of the administration of the course of Pabrinex, outcome and any complications which arise.

Appendix 6

Progressive effects of alcohol in relation to blood / breath alcohol level

(Note: the breath alcohol value is approximate.)

Blood Alcohol Level (BAC) g/100ml blood	Breath Alcohol Level (mg/L breath)	Behaviour	Impairment
0.010 – 0.029	0.05 – 0.14	Average person appears normal	Subtle effects can be detected with special tests
0.030 – 0.059	0.14 – 0.28	Mild euphoria Relaxation Joyousness Talkativeness Decreased inhibition	Concentration
0.060 – 0.090 (Drink Drive limit is 0.080 g/100ml blood)	0.29 – 0.43 (Drink Drive limit is 0.35mg / L breath)	Blunted Feelings Disinhibition Extraversion	Reasoning Depth perception Peripheral vision Glare recovery
0.100 – 0.190	0.48 – 0.90	Over expression Emotional swings / emotional instability Anger or sadness Boisterousness Decreased libido	Reflexes Reaction time Gross motor control Staggering Slurred speech
0.20 – 0.29	0.95 – 1.38	Stupor Loss of understanding Impaired sensations	Severe motor impairment Loss of consciousness Memory blackout
0.30-0.39	1.43 - 1.86	Severe Central Nervous system depression Unconsciousness Death is possible	Bladder function Breathing Heart rate
0.40 – 0.50	1.90 – 2.38	General lack of behaviour Unconsciousness Death is possible	Breathing Heart rate
> 0.50	>2.38	Death	Death from respiratory arrest

Appendix 7

East London NHS Foundation Trust

East London Specialist Addiction Services
Pabrinex patient information sheet and patient consent form

- You may have noticed problems with your memory and nerves as a result of your drinking.
- This damage is due to your body lacking vitamin B. Alcohol prevents your body from using vitamin B from your diet.
- In order to prevent these worsening the team has decided to offer you high potency vitamin b injection (also known as Pabrinex). This course of injections will boost your body's levels of vitamin B and help to prevent any further damage as long as you address your alcohol use.
- Once you have completed the course you will be given oral vitamin B to maintain your body's level.
- The injections are given as a course of a pair of injections injected into your gluteal muscle (backside) once a day for three to five days.
- Nurses and / or doctors from the team will administer the injection to you so you will have to attend everyday whilst this is going on.
- It is very important that you complete the course of treatment as the problems we are trying to avoid could become permanent and this will have a devastating effect on the quality of your life.
- The main risk with this injection is that it can cause severe allergic reactions (also known as anaphylaxis). This is a very rare event. It is estimated that for every 5 million pairs of Pabrinex used you see one allergic reaction.
- Allergic reactions tend to be more of a problem if the injection is given into vein, you will be given it in a muscle.
- Allergic reactions are unpredictable so you will have to wait for about half an hour after you are given each injection to be sure nothing happens.
- The doctors and nurses have been trained in what to do in case you were to have a bad reaction.
- We are offering this treatment to you as it is widely accepted that the risks from not taking this treatment are far greater than the risks of severe allergic reactions developing following its use.

In order for us to proceed we need you to sign that you have read and understood this leaflet and are fully aware of the treatment we are offering, the risks involved and are happy for us to proceed.
If anything is unclear, please ask your keyworker to explain **before** signing this form

Patient's Name:	Keyworker's name
Patients Signature	Signed
Date:	Date

Give one copy to the patient and put one copy in the notes

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