NHS Grampian

Guidance For The Medical Management Of Acute Alcohol Withdrawal (Including Vitamin Replacement) In Adult Inpatient Settings Within NHS Grampian

Author:	Consultation Group:	Approver:
Gastroenterology and Specialist Mental Health Pharmacists	See Page 2	Medicines Guidelines and Polices Group

Signature:		Signature:

Identifier:	Review Date:	Date Approved:
MGPG/Guide/AlcoholW/ 1731	September 2028	September 2025

Policy Statement:

It is the responsibility of all staff to ensure that they are working to the most up to date and relevant guideline, policies, protocols and procedures.

Version 1

This controlled document shall not be copied in part or whole without the express permission of the author or the author's representative.

Executive Sign-Off

This document has been endorsed by the Director of Pharmacy and Medicines Management

Signature: _____

Replaces: NHSG/Guide/Acute_Alcohol/MGPG1104, Version 1.1, NHSG/Guide/VitSupMHl/MGPG1060, Version 5 and NHSG/Guide/ThiamineAD/1531, Version 1

Document application: NHS Grampian Inpatient Settings

Revision History:

Revision Date	Summary of Changes	Changes Made
May 2025	Documents amalgamated. NHSG Guidance Management of Acute Alcohol Withdrawal and Medically Assisted Withdrawal in Those at Risk, For Adults Admitted in Acute Hospitals Along with Guidance for Vitamin Replacement [MGPG1104 Version 1.1], NHSG Guidance for Mental Health Service Staff For the Prescribing of Vitamin Supplementation During Inpatient Admission (Mental Health) in Patients Identified as Being Alcohol Dependent [MGPG1060 version 5] and Guidance for the Use of Unlicensed Parenteral Thiamine in Alcohol Dependence in Acute Hospitals [1531 version 1]	Documents amalgamated to NHSG Guidance Medical Management Of Acute Alcohol Withdrawal (Including Vitamin Replacement) In Adult Inpatient Settings.
May 2025	Title Change.	Throughout document
May 2025	Grammatical changes which do not impact on the clinical intention to clarify statements.	Throughout document
May 2025	Throughout document. Amended “acute” hospital references to broaden coverage to wider inpatient settings.	Throughout document
May 2025	Update of introduction in line with latest data.	Section 1
May 2025	Updated definitions in line with WHO ICD-11 (2022).	Section 1.2
May 2025	Simplification of screening criteria and update of tool using accredited sources.	Section 2.1
May 2025	Significant update to Vitamin Supplementation section following discontinuation of Pabrinex. Change of oral dosing in anticipation of upcoming national guidance.	Section 2.2
May 2025	Update of Inpatient Chlordiazepoxide Symptom-Triggered Treatment of Alcohol Withdrawal Prescription and Administration Record (version 2).	Appendix 2 – version 2 now supersedes version 1
May 2025	Update of Inpatient Lorazepam Symptom-Triggered Treatment of Alcohol Withdrawal Prescription and Administration Record (version 2).	Appendix 3 – version 2 now supersedes version 1

Consultative Group

Name:	Title:
Dr Roberto Cotroneo	Consultant Psychiatrist, Integrated Alcohol Service
Evelyn Finn	Gastroenterology Pharmacist, ARI
Ruth Hills	Gastroenterology Pharmacist, ARI
Anne Montgomery	Clinical Nurse Specialist, ARI Alcohol Care Team
Tong (Reeve) Ng	Specialist Pharmacist, RCH
Sarah O'Beirne	Lead Pharmacist, Grampian Information Service
Fiona Raeburn	Principal Pharmacist, NHSG Mental and Learning Disability Services, RCH
Kirsty Regan	Advanced Substance Use and Mental Health Pharmacist, Dr Gray's Hospital
Victoria Russell	Clinical Pharmacist – HEPMA and Unscheduled Care, ARI
Allison Whyte	Advanced Pharmacist, RCH
Mental Health Operational Medicines Management Group	

Guidance For The Medical Management Of Acute Alcohol Withdrawal (Including Vitamin Replacement) In Adult Inpatient Settings Within NHS Grampian

Contents **Page No**

Guidance For The Medical Management Of Acute Alcohol Withdrawal (Including Vitamin Replacement) In Adult Inpatient Settings Within NHS Grampian

1 Introduction

Harmful drinking (high risk drinking) is associated with multiple physical, psychological and psychiatric health problems. In the longer term, harmful drinkers may go on to develop high blood pressure, cirrhosis, heart disease and some types of cancer.

In 2021, it was reported that around 1 in 4 people (23%) drink at hazardous or harmful levels, defined as drinking more than 14 units per week, in Scotland and that 9.4 litres of pure alcohol were sold per adult which is equivalent to 18 units per adult per week. This resulted in 35,187 alcohol related hospital admissions in Scotland in financial year 2021/22. In 2023, there were 1,277 alcohol specific deaths registered in Scotland, but the true figure of alcohol deaths is estimated to be over 3 times higher than this when including conditions such as cancer and cardiovascular disease.

Abrupt reduction in alcohol intake in those who have developed alcohol dependence may lead to acute symptoms of alcohol withdrawal.

Patients admitted to inpatient settings who are already experiencing, or who are identified as being at risk of developing, symptoms of acute alcohol withdrawal are at risk of complications including alcohol withdrawal seizures or delirium tremens. They may therefore need medical management of their withdrawal.

Planned alcohol detoxification is not within the scope of this policy. NHS guidance for undertaking alcohol detoxification in community or outpatient settings is available.

1.1 Objectives

- To provide best management for acute alcohol withdrawal and reduce the risk of alcohol withdrawal seizures and delirium tremens in adult inpatient settings.
- To prevent the development of alcohol withdrawal in those at risk who are admitted for other reasons.

1.2 Definitions

Acute Alcohol Withdrawal - The physical and psychological symptoms that people can experience when they suddenly reduce the amount of alcohol they drink following periods of prolonged and heavy drinking. In heavy drinkers, acute alcohol withdrawal can occur when still intoxicated due to fluctuating alcohol levels.

Delirium Tremens (DTs) - Symptoms of severe alcohol withdrawal with profound confusion, autonomic hyperactivity, sometimes including cardiovascular collapse. This is the most severe form of alcohol induced delirium and lesser cases of delirium may still be seen.

International Classification of Diseases (ICD 11) Alcohol Dependence Diagnostic Essential (Required) Features:

A pattern of recurrent episodic or continuous use of alcohol with evidence of impaired regulation of alcohol use that is manifested by two or more of the following:

a. Impaired control over alcohol use (i.e., onset, frequency, intensity, duration, termination, context);
b. Increasing precedence of alcohol use over other aspects of life, including maintenance of health, and daily activities and responsibilities, such that alcohol use continues or escalates despite the occurrence of harm or negative consequences (e.g. repeated relationship disruption, occupational or scholastic consequences, negative impact on health);
c. Physiological features indicative of neuroadaptation to the substance, including:
   - tolerance to the effects of alcohol or a need to use increasing amounts of alcohol to achieve the same effect;
   - withdrawal symptoms following cessation or reduction in use of alcohol (see Alcohol Withdrawal),
   - OR repeated use of alcohol or pharmacologically similar substances to prevent or alleviate withdrawal symptoms.

The features of dependence are usually evident over a period of at least 12 months but the diagnosis may be made if use is continuous (daily or almost daily) for at least 3 months.

Harmful Drinking - drinking that causes detrimental health and social consequences for the drinker.

Hazardous Drinking - patterns of drinking that are associated with increased risk of adverse health outcomes.

1.3 Clinical Situations

- Patients presenting to inpatient settings exhibiting symptoms of alcohol withdrawal, having recently and suddenly decreased their alcohol consumption.
- Patients assessed as being at risk of developing alcohol withdrawal due to the sudden cessation of alcohol consumption experienced following admission.

1.4 Patient Groups to Which This Document Applies

- Patients who are 18 years and over.
- Patients who have established alcohol withdrawal syndrome requiring medical treatment.
- Patients admitted to hospital identified as being at risk of developing alcohol withdrawal.

1.5 Patient Groups to Which This Document Does Not Apply

- Patients under the age of 18 years.
- Patients who are electively trying to give up alcohol, either in the community or as an “elective inpatient detoxification” programme.
- Patients assessed as having mild symptoms of alcohol withdrawal.

2 Recommendations

2.1 Identifying Patients who are at Risk of Acute Alcohol Withdrawal

For those without an evident diagnosis but for whom there is concern, an initial Fast Alcohol Screening Tool (FAST) should be carried out. Printable copies can be accessed here:

Questions	Scoring system					Your score
	0	1	2	3	4	
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	
Only answer the following questions if the answer above is Less than monthly (1) or Monthly (2). Stop here if the answer is Never (0), Weekly (3) or Daily (4).						
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 been unable to remember what happened the night before because you had been drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
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	

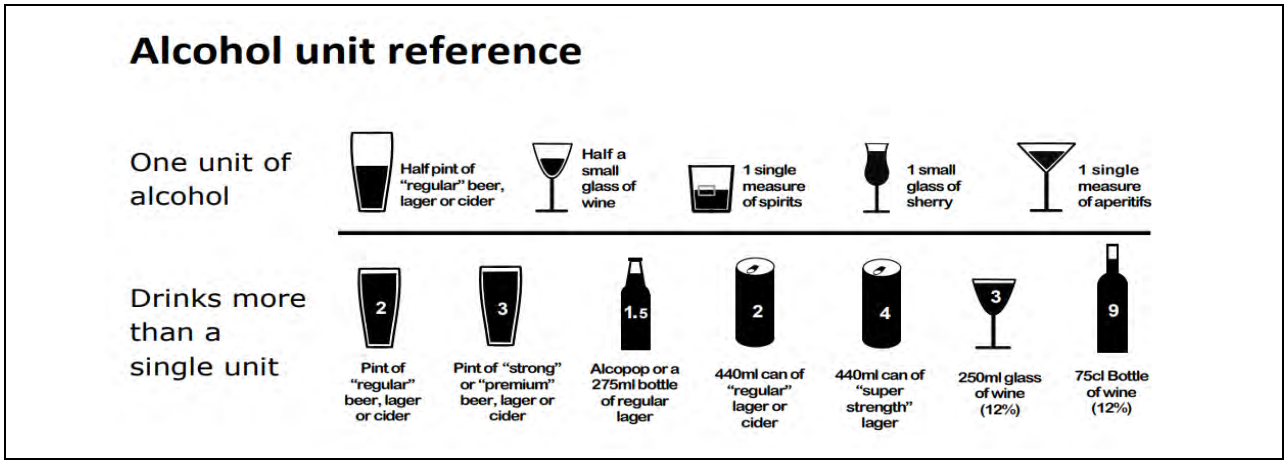
A score of 3 or more on the first question alone, or the sum of all 4 questions, is FAST positive and would suggest harmful drinking. If a patient is FAST positive, the remaining Adult Use Disorder Identification Test (AUDIT) questions should be completed. This may include the three remaining questions above as well as the six questions below.

Questions	Scoring system					Your score
	0	1	2	3	4	
How often do you have a drink containing alcohol?	Never	Monthly or less	2 to 4 times per month	2 to 3 times per week	4 times or more per week	
How many units of alcohol do you drink on a typical day when you are drinking?	0 to 2	3 to 4	5 to 6	7 to 8	10 or more	
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 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	
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	

Scoring:

- 0 to 7 indicates low risk
- 8 to 15 indicates increasing risk
- 16 to 19 indicates higher risk
- 20 or more indicates possible dependence.

Those with an AUDIT score of 20 or above, indicative of possible alcohol dependence, have a significant risk of developing alcohol withdrawal, and are therefore more likely to need medically assisted withdrawal, if they have drank alcohol in the last week, and are being admitted to hospital for reasons not related to alcohol withdrawal (i.e. will be reducing their consumption suddenly).



2.2 Vitamin Supplementation with Thiamine

Wernicke's Encephalopathy (WE) is an acute neurological disorder associated with thiamine (vitamin B1) deficiency. Early recognition and treatment are important to prevent irreversible Korsakoff's Syndrome and, in some cases, death. Patients who are alcohol dependent are at higher risk of developing WE. Those who are malnourished, at risk of malnourishment or who have decompensated liver disease are at increased risk. Recent weight loss, diarrhoea, vomiting or peripheral neuropathy should be noted.

The "classic" triad of symptoms (ataxia, confusion and ophthalmoplegia) are observed in only 20% of cases, therefore a diagnosis of WE should be considered in patients with any of the following symptoms:

- Confusion
- Ataxia (loss of co-ordination)
- Nystagmus (involuntary eye movements)
- Ophthalmoplegia (eye paralysis)
- Hypothermia
- Decreased Glasgow Coma Scale (GCS) Score.

Product Selection

Until recently, Pabrinex®, which contains thiamine, was the primary product available for the prophylaxis and treatment of WE in the UK. Intramuscular Pabrinex® is discontinued and final stocks are likely to be exhausted by early 2026. Intravenous Pabrinex ® has also been discontinued and a generic vitamin B and C high potency intravenous solution for infusion is now available. NHS Grampian pharmacy services will continue to proactively source available products (see Table 1). Product literature specific to the product being used should be used to prepare and administer thiamine equivalent to the following dosages informed by current product availability.

Table 1 – Parenteral Products containing Thiamine

Product	Thiamine Content	Route	Note
Recommended products for intramuscular (IM) use			
Pabrinex® Intramuscular High Potency (whilst stock remains)	250mg per Pair	IM	Each 7mL pair also contains 4mg Riboflavin 50mg Pyridoxine 500mg Ascorbic Acid 160mg Nicotinamide
Thiamine (generic)	50mg per 1mL	IV/IM	5mL vial = 250mg in 5mL
Recommended products for intravenous (IV) use			
Vitamin B and C intravenous High Potency (generic)	250mg per Pair	IV	Each 10mL pair also contains 4mg Riboflavin 50mg Pyridoxine 500mg Ascorbic Acid 160mg Nicotinamide 1000mg Glucose Monohydrate
Thiamine (generic)	50mg per 1mL	IV/IM	5mL vial = 250mg in 5mL

Treatment of Confirmed or Suspected Wernicke's Encephalopathy (WE)

i. Give intravenous thiamine 500mg three times a day for 3 to 5 days with daily review.
   a. All efforts should be made to ensure intravenous thiamine is administered, however, if intravenous route is not available 200mg to 250mg of IM thiamine once daily for 3 to 5 days should be administered.

ii. If the person is still symptomatic after 5 days of treatment, then give intravenous thiamine 500mg once daily for a further 3 to 5 days for as long as clinical improvement continues.
   a. All efforts should be made to ensure intravenous thiamine is administered, however, if intravenous route is not available 200mg to 250mg of IM thiamine once daily for 3 to 5 days should be administered.

iii. Treatment should then be switched to oral thiamine, 100mg three times daily or 50mg four times daily. Prescribing decision should be based on the regimen that the patient is most likely to adhere to.

iv. If the patient does not respond to high dose thiamine, stop parenteral treatment and consider switching to oral thiamine if the patient drinks to dependant or harmful levels (see flow chart Appendix 1).
   a. If confusion persists other causes should also be explored.

Treatment of Patients at High Risk of developing Wernicke's Encephalopathy (WE)

Patients who drink to harmful or dependant levels who have none of the above signs or symptoms may be deemed at high risk of developing WE if they have any of the following symptoms;

- Malnutrition
- MUST score >2 (see local policy)
- Significant weight loss
- Diarrhoea
- Vomiting
- Current or previous delirium tremens
- Previous Wernicke's Encephalopathy
- Decompensated liver disease
- Jaundice
- Peripheral neuropathy
- Hypoglycaemia
- Memory disturbances

i. Give intravenous thiamine or intramuscular thiamine 200mg to 250mg once daily for 3 to 5 days with daily review and monitoring for emergent signs of Wernicke's encephalopathy.
ii. Following this, oral thiamine, 100mg three times daily or 50mg four times daily should be prescribed. Prescribing decision should be based on the regimen that the patient is most likely to adhere to (flow chart Appendix 1).
iii. Patients should have their magnesium levels checked and replaced if deficient to ensure sufficient thiamine absorption.

Oral Thiamine

Where parenteral thiamine is not a viable option oral thiamine 100mg three times daily or 50mg four times daily should be prescribed. Prescribing decision should be based on the regimen that the patient is most likely to adhere to. This should be continued on discharge for 3 months if abstinence is maintained, or continuously if not.

3 Management of Symptoms of Withdrawal

3.1 Selecting a Prescribing Regimen

Chlordiazepoxide (longer acting) is the benzodiazepine of choice in NHS Grampian for most patients.

Lorazepam (shorter acting) is recommended for patients:

- With established delirium tremens (a more severe syndrome with profound confusion, psychomotor agitation and autonomic hyperactivity)
- With significant liver disease (defined as any of ascites, encephalopathy, albumin <30g/L, bilirubin >50umol/Lor INR >1.3 in the absence of anticoagulation)
- Who are 65 years or older
- Who would be at additional risk from over-sedation (recent head injury requiring neurological observations or risk of severe respiratory depression)
- Patients with other comorbidities (i.e. pneumonia, cerebrovascular disease, reduced GCS).

Symptoms of alcohol withdrawal can be managed by prescribing the benzodiazepine in a symptom-triggered regimen or fixed dosage regimen.

Fixed dose regimens should be considered where the patient has:

- Presented with or has had previous withdrawal seizures
- Previously had severely agitated withdrawal
- Previously had Deliriums Tremens (DTs)
- Co-morbidities which could complicate symptom-triggered scoring, e.g. essential tremor, generalised anxiety disorder, sepsis
- A high-scoring screening tool (FAST≥12)
- A FAST score of ≥8 and a high initial symptom score (GMAWS≥4).

Fixed dose regimens should also be considered in clinical areas where staff are not trained in the symptom-triggered approach or do not have capacity to undertake the required assessments.

Please note that peak symptoms of alcohol withdrawal may not arise until 48 to 72 hours after alcohol consumption has stopped.

Symptom-Triggered Regimen

These regimens adjust doses based on assessment of individual symptoms and severity of alcohol withdrawal prior to administering each dose. This flexible approach enables dosing tailored to the patient's current needs. To be effective, the symptom-triggered approach needs appropriate levels of suitably skilled staff with capacity to undertake assessment of patients prior to each dose being agreed and administered. In Grampian, the recommended scoring scale is the Glasgow Modified Alcohol Withdrawal Scale (GMAWS). Staff should familiarise themselves with the tool, and training to use it should be cascaded to ward staff with regular updates. It is the responsibility of the ward manager (or appropriate equivalent) to ensure staff are suitably skilled in using the symptom-triggered regimen and undertaking relevant monitoring. Advice on delivering a symptom-triggered approach is available from the Alcohol Liaison Nurse Service (ALNS) - see section 3.3 for contact details.

The decision to commence symptom-triggered treatment should be documented and either a Chlordiazepoxide Prescription and Administration Record (Appendix 2) or Lorazepam Prescription and Administration Record (Appendix 3) should be prescribed. The scoring intervals outlined in the prescription chart **must** be adhered to, including overnight, even if this requires briefly waking the patient to perform. Patients remain at risk of complications whilst sleeping.

Fixed Dosage Regimen

Medication doses are given at fixed specified intervals and tapered off gradually. Additional doses can be prescribed "as required". See Appendix 4 and Appendix 5 for examples, which should be personalised to the patient's estimated requirements.

As a general rule of thumb, the starting dose of chlordiazepoxide can be estimated from current alcohol consumption. For example, if 20 units/day are being consumed, an appropriate starting dose would be around 20mg four times a day with the dose tapered to zero over a period of 5 to 10 days.

For patients drinking in the region of 30 units daily the suggested dose for the first day is estimated to be chlordiazepoxide 30mg four times a day. Further doses of chlordiazepoxide 5mg "as required" may be prescribed up to a maximum of 30mg in 24 hours on days 1 and 2 if required for continued symptoms of withdrawal which are not adequately controlled by the fixed dose prescribed. Subsequent doses on the fixed dose regimen should be recalculated based on the total daily dose used.

500micrograms to 1mg lorazepam is approximately equivalent to 12.5mg of chlordiazepoxide.

A patient consuming 30 units per day could be calculated to receive 1.2mg lorazepam, rounded up to 1.5mg for ease of dosing, four times daily initially with the dose tapered to zero over a period of 5 to 10 days. Further doses of lorazepam 500micrograms may be prescribed "as required" on days 1 and 2 if required for continued symptoms of withdrawal which are not adequately controlled by the fixed dose regimen. Subsequent doses on the fixed dose regimen should be recalculated based on the total daily dose used.

Maximum recommended dose of lorazepam is 10mg in 24 hours.

- Fixed dose regimens along with "as required" dosing should be prescribed on HEPMA.
- The initial dose (calculated as above) should be prescribed and reviewed daily in line with a review of the patients' symptoms and additional "as required" doses that were required for the previous 24 hours.
- After patient's initial response is assessed and dose of fixed regimen established the remainder of the fixed dose regimen can be prescribed on HEPMA using start and stop dates.

Patients who Score Highly on GMAWS

A small minority of patients may still exhibit symptoms despite having reached their "maximum daily dose" outlined in the protocol below. Where possible these patients should be identified during core working hours prior to reaching the maximum daily dose, to allow early discussions with medical staff. Such patients will require an individual risk-benefit assessment by a senior member of their medical team, taking the information below into account.

- Ensure that the diagnosis is correct, and that the patient is not suffering from another condition that could be confused for alcohol withdrawal such as hepatic encephalopathy, encephalitis, meningitis or infection.
- Assess the reliability of the scoring system to ensure that this reflects the patient's symptoms due to alcohol withdrawal, and not any other conditions.
- Assess side effects which may be associated with the prescribed benzodiazepine, paying attention to sedation, respiratory depression and hypotension.
- Consider if a fixed dosing regimen may be more appropriate.

At this point, if the patient is assessed to have significant symptoms related to their alcohol withdrawal, an increase in the maximum daily dose by up to 50% may be considered. Monitor for side effects and consider whether escalation to an area able to offer such monitoring is necessary (i.e. critical care).

- In patients with severe agitation, the rapid tranquilisation protocol might be more appropriate and the relevant psychiatric team should be contacted for advice on the prescribing of additional therapies such as antipsychotics (In hours – 18 to 64 years Liaison Psychiatry, 65 years and above Older Adult Liaison Psychiatry, out of hours - Unscheduled Care Team) as well as relevant legislation.

3.2 Prescribing Guidance for Symptom-Triggered Regimens

Hospital Electronic Prescribing and Medicines Administration (HEPMA)

a. A placeholder should be added to the patients HEPMA file to indicate they are receiving Chlordiazepoxide or Lorazepam “AS PER PAPER CHART”.

b. Prescribe thiamine as per the Inpatient Adult Alcohol Decision Aid (Appendix 1).

Inpatient Chlordiazepoxide and Lorazepam Symptom-Triggered Treatment of Alcohol Withdrawal Prescription and Administration Records

See Appendix 2 for an example of a Chlordiazepoxide Prescription and Administration Record and Appendix 3 for Lorazepam.

Both the Chlordiazepoxide and Lorazepam Prescription and Administration Records are 4-page charts available on PECOS.

3.3 Alcohol Liaison Nurse Service

The Alcohol Liaison Nurse Service (ALNS) is currently operational in specific areas within ARI. The ALNS is available to carry out specialist assessment of patients presenting with alcohol related issues within these areas only, however, the ALNS can provide patient specific advice via telephone for areas not currently covered by the service. Contact telephone number for the ALNS is (5)54505 or email gram.alns@nhs.scot

4 References

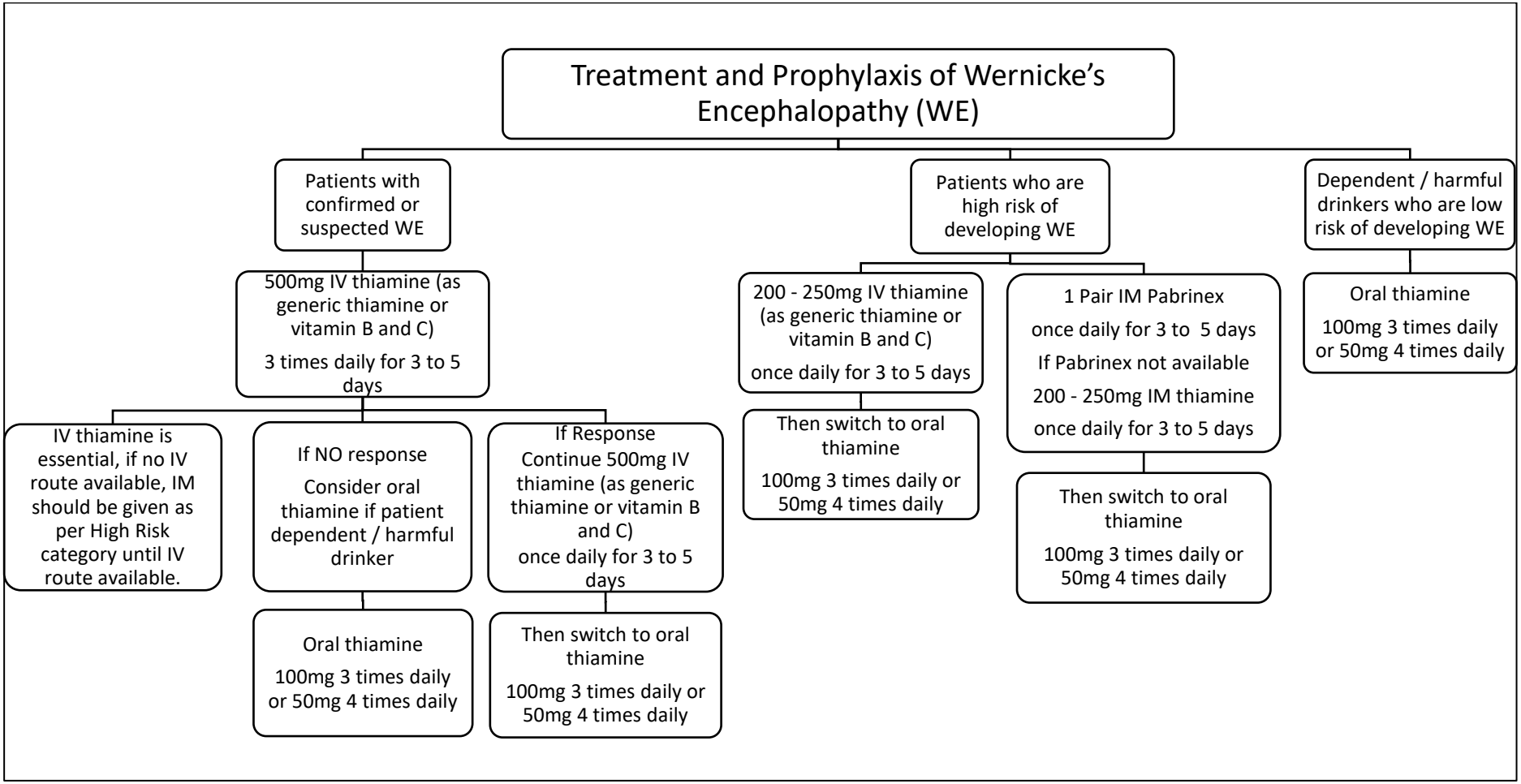
1. Alcohol-specific deaths 2023, report. Available at: Alcohol-specific deaths 2023, Report
2. Alcohol-use disorders: diagnosis, assessment and management of harmful drinking (high-risk drinking) and alcohol dependence | Guidance | NICE [Internet]. Nice.org.uk. Available from: https://www.nice.org.uk/guidance/CG115
3. Alcohol Framework 2018 - gov.scot [Internet]. Gov.scot. Available from: https://www.gov.scot/publications/alcohol-framework-2018-preventing-harm-next-steps-changing-relationship-alcohol/

4. World Health Organisation (2022). International Classification of Diseases, 11th Revision (ICD-11) [online], Available from: https://icd.who.int/browse/2025-01/mms/en
5. Benson G e 2012. An alcohol withdrawal tool for use in hospitals. - PubMed - NCBI [Internet]. Ncbi.nlm.nih.gov. Available from: https://www.ncbi.nlm.nih.gov/pubmed/22866483
6. McPherson A e 2012. Appraisal of the Glasgow assessment and management of alcohol guideline: a comprehensive alcohol management protocol for use in general hospitals. - PubMed - NCBI [Internet]. Ncbi.nlm.nih.gov. Available from: https://www.ncbi.nlm.nih.gov/pubmed/22328545
7. Taylor D, Barnes T, Young A 2025. The Maudsley Prescribing Guidelines in Psychiatry 15th ed. Bognor Regis: Wiley Blackwell.
8. Alcohol: Health harm *ScotPHO*. Available at: https://www.scotpho.org.uk/risk-factors/alcohol/data/health-harm/
9. Working to reduce alcohol harm (no date) Alcohol Focus Scotland. Available at: https://www.alcohol-focus-scotland.org.uk/
10. Specialist Pharmacy Service (2024, last updated 11 March 2025). Using and prescribing thiamine in alcohol dependence. Available at: https://www.sps.nhs.uk/articles/using-and-prescribing-thiamine-in-alcohol-dependence/
11. UK clinical guidelines for alcohol treatment: core elements of alcohol treatment [closed consultation] [Oct 2023]. gov.uk [internet] - Available at: UK clinical guidelines for alcohol treatment - GOV.UK
12. NHS Grampian. Guidance for Use of Unlicensed Parenteral Thiamine in Alcohol Dependence in Acute Hospitals, 2024]. Available at: Unlicensed parenteral thiamine in alcohol dependence in acute hospitals

5 Responsibilities for Implementation

Organisational:	Chief Executive and Management Teams
Corporate:	Senior Managers
Departmental:	Heads of Service/Clinical Leads
Area:	Line Managers
Hospital/Interface services:	Group Clinical Directors

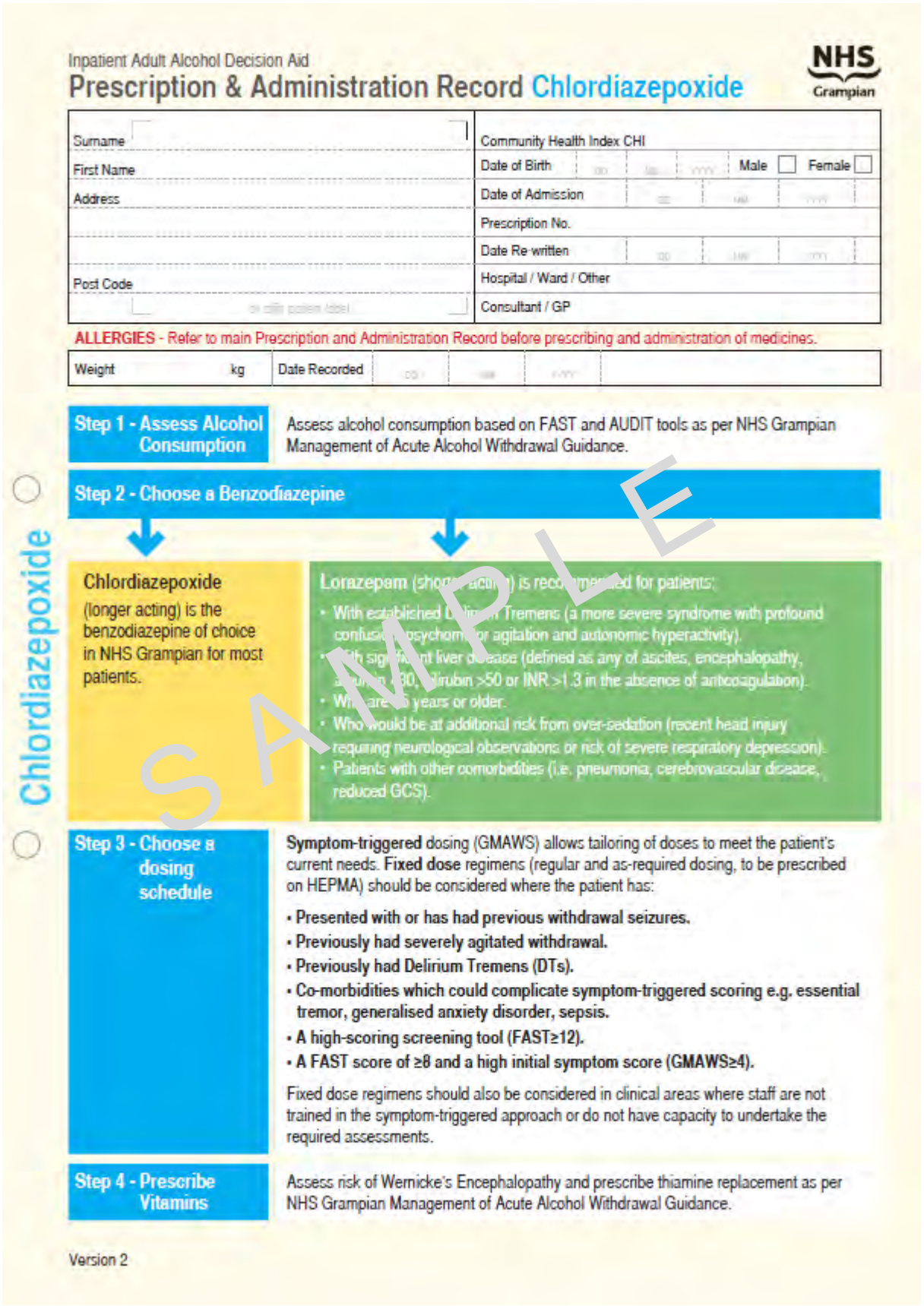
Appendix 1 - Treatment And Prophylaxis Of Wernicke's Encephalopathy



Please refer to section 2.2 for further information on oral and intravenous vitamin supplementation with thiamine

For IV administration information refer to Medusa, NHS Injectable Medicines Guide.
For IM administration of pabrinex, refer to Medusa, NHS Injectable Medicines Guide.
For IM administration of thiamine, draw up the 200mg of thiamine into a syringe, then slowly inject into a large muscle group such as dorsogluteal, rectus femoris or vastus lateralis.

Appendix 2 - Inpatient Chlordiazepoxide Prescription And Administration Record



Inpatient Adult Alcohol Decision Aid

Prescription & Administration Record Chlordiazepoxide

NHS Grampian

Surname	Community Health Index CHI
First Name	Date of Birth Male ☐ Female ☐
Address	Date of Admission
	Prescription No.
	Date Re-written
Post Code	Hospital / Ward / Other
	Consultant / GP

ALLERGIES - Refer to main Prescription and Administration Record before prescribing and administration of medicines.

Weight	kg	Date Recorded	

Step 1 - Assess Alcohol Consumption

Assess alcohol consumption based on FAST and AUDIT tools as per NHS Grampian Management of Acute Alcohol Withdrawal Guidance.

Step 2 - Choose a Benzodiazepine

Chlordiazepoxide

Chlordiazepoxide
(longer acting) is the benzodiazepine of choice in NHS Grampian for most patients.

Lorazepam (short acting) is recommended for patients:

- With established Delirium Tremens (a more severe syndrome with profound confusion, psychomotor agitation and autonomic hyperactivity).
- With significant liver disease (defined as any of ascites, encephalopathy, albumin <30, bilirubin >50 or INR >1.3 in the absence of anticoagulation).
- Who are 70 years or older.
- Who would be at additional risk from over-sedation (recent head injury requiring neurological observations or risk of severe respiratory depression).
- Patients with other comorbidities (i.e. pneumonia, cerebrovascular disease, reduced GCS).

Step 3 - Choose a dosing schedule

Symptom-triggered dosing (GMAWS) allows tailoring of doses to meet the patient's current needs. **Fixed dose** regimens (regular and as-required dosing, to be prescribed on HEPMA) should be considered where the patient has:

- **Presented with or has had previous withdrawal seizures.**
- **Previously had severely agitated withdrawal.**
- **Previously had Delirium Tremens (DTs).**
- **Co-morbidities which could complicate symptom-triggered scoring e.g. essential tremor, generalised anxiety disorder, sepsis.**
- **A high-scoring screening tool (FAST≥12).**
- **A FAST score of ≥8 and a high initial symptom score (GMAWS≥4).**

Fixed dose regimens should also be considered in clinical areas where staff are not trained in the symptom-triggered approach or do not have capacity to undertake the required assessments.

Step 4 - Prescribe Vitamins

Assess risk of Wernicke's Encephalopathy and prescribe thiamine replacement as per NHS Grampian Management of Acute Alcohol Withdrawal Guidance.

Version 2

SAMPLE

In-patient Chlordiazepoxide Symptom Triggered Treatment of Alcohol Withdrawal

NHS Grampian

Surname	Community Health Index CHI
First Name	Date of Birth Male ☐ Female ☐
Address	Date of Admission
	Prescription No.
	Date Re-written
Post Code	Hospital / Ward / Other
	Consultant / GP

ALLERGIES - Refer to main Prescription and Administration Record before prescribing and administration of medicines.

Weight	kg	Date Recorded	

Prescription

Medication: Chlordiazepoxide	Dose: As per GMAW Score Maximum 250mg in 24 hours	Route: Oral
Prescriber's signature	Print Name	Date
	Contact	Time (24 hour) :

SAMPLE

Step One - Calculate GMAW Score

	+ 0	+ 1	+ 2
Tremor	None	On Movement	At Rest
Sweating	None	Moist	Drenching
Hallucinations	None	Dissuadable	Not Dissuadable
Orientation	Orientated	Vague or Detached	Disorientated
Agitation	Calm	Anxious	Panicky

Step Two - Calculate Oral dose and when to repeat GMAW Score

GMAW Score	Dose	Interval until next GMAW Score
0	None	2 hours, stop if zero on 4 consecutive occasions
1 - 3	20mg	2 hours
4 - 8	30mg	1 hour
9 - 10	40mg	1 hour AND inform medical staff

Chlordiazepoxide Administration Sheet	
Patient Name	CHI No.

Maximum Dose per 24 hours = 250mg

Date DD	MM	YYYY	Time (24:00)	GMAW Score	Chlordiazepoxide dose (mg)	Given by (initials)	Time next score due (24:00)	Comments
			:				:	

SAMPLE

Chlordiazepoxide Administration Sheet	
Patient Name	CHI No.

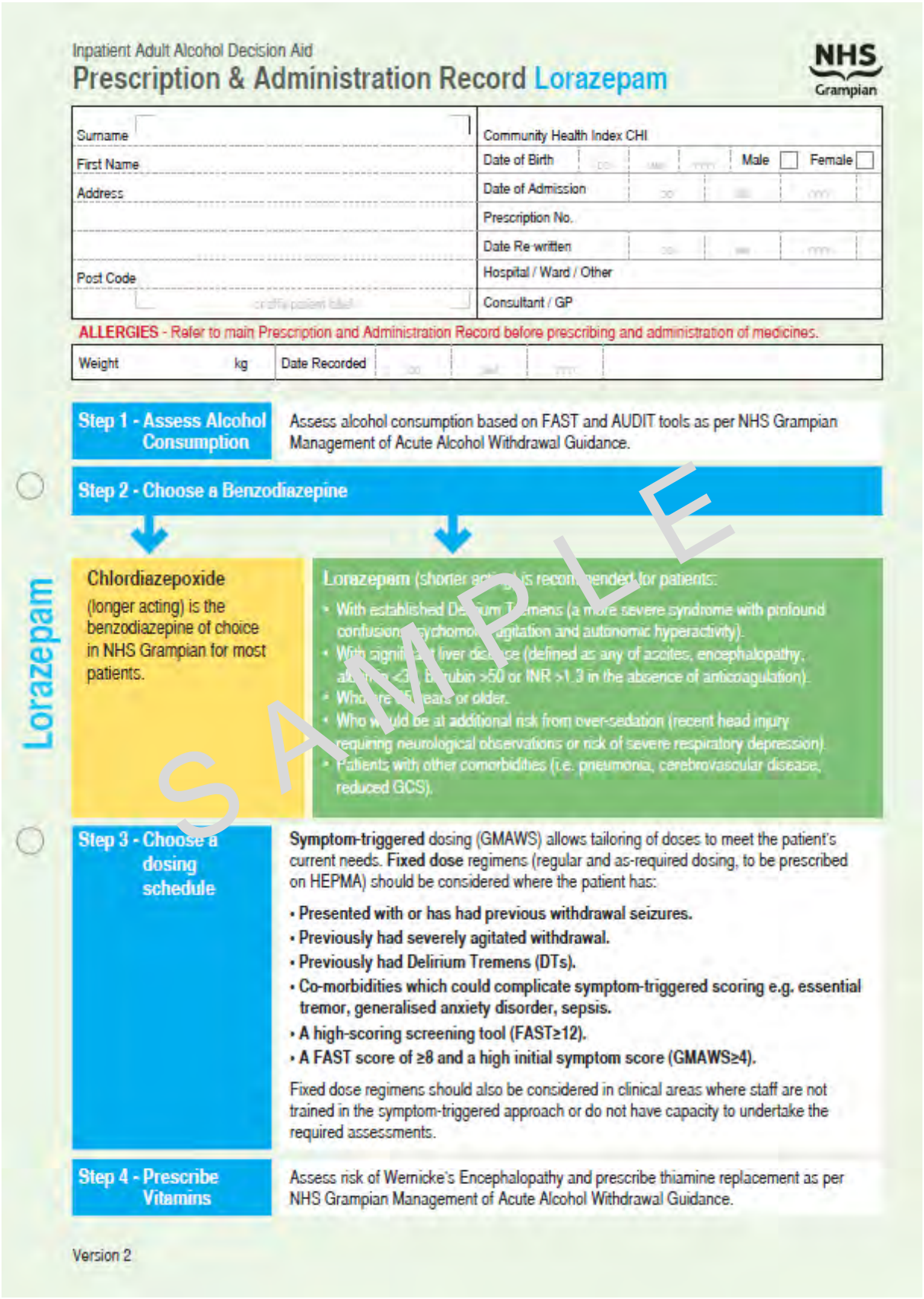
Maximum Dose per 24 hours = 250mg

Date DD	Date MM	Date YYYY	Time (24:00)	GMAW Score	Chlordiazepoxide dose (mg)	Given by (initials)	Time next score due (24:00)	Comments
			:				:	

SAMPLE

PECOS ZOP601 MVC 250029

Appendix 3 - Inpatient Lorazepam Prescription And Administration Record



Inpatient Adult Alcohol Decision Aid

Prescription & Administration Record Lorazepam

NHS Grampian

Surname	Community Health Index CHI
First Name	Date of Birth DD MM YYYY Male ☐ Female ☐
Address	Date of Admission DD MM YYYY
	Prescription No.
	Date Re-written DD MM YYYY
Post Code	Hospital / Ward / Other
	Consultant / GP

ALLERGIES - Refer to main Prescription and Administration Record before prescribing and administration of medicines.

Weight	kg	Date Recorded	DD MM YYYY

Step 1 - Assess Alcohol Consumption

Assess alcohol consumption based on FAST and AUDIT tools as per NHS Grampian Management of Acute Alcohol Withdrawal Guidance.

Step 2 - Choose a Benzodiazepine

Lorazepam

Chlordiazepoxide (longer acting) is the benzodiazepine of choice in NHS Grampian for most patients.

Lorazepam (shorter acting) is recommended for patients:

- With established Delirium Tremens (a more severe syndrome with profound confusion, psychomotor agitation and autonomic hyperactivity).
- With significant liver disease (defined as any of ascites, encephalopathy, albumin <35, Bilirubin >50 or INR >1.3 in the absence of anticoagulation).
- Who are 75 years or older.
- Who would be at additional risk from over-sedation (recent head injury requiring neurological observations or risk of severe respiratory depression).
- Patients with other comorbidities (i.e. pneumonia, cerebrovascular disease, reduced GCS).

Step 3 - Choose a dosing schedule

Symptom-triggered dosing (GMAWS) allows tailoring of doses to meet the patient's current needs. **Fixed dose** regimens (regular and as-required dosing, to be prescribed on HEPMA) should be considered where the patient has:

- **Presented with or has had previous withdrawal seizures.**
- **Previously had severely agitated withdrawal.**
- **Previously had Delirium Tremens (DTs).**
- **Co-morbidities which could complicate symptom-triggered scoring e.g. essential tremor, generalised anxiety disorder, sepsis.**
- **A high-scoring screening tool (FAST≥12).**
- **A FAST score of ≥8 and a high initial symptom score (GMAWS≥4).**

Fixed dose regimens should also be considered in clinical areas where staff are not trained in the symptom-triggered approach or do not have capacity to undertake the required assessments.

Step 4 - Prescribe Vitamins

Assess risk of Wernicke's Encephalopathy and prescribe thiamine replacement as per NHS Grampian Management of Acute Alcohol Withdrawal Guidance.

Version 2

SAMPLE

In-patient Lorazepam Symptom Triggered Treatment of Alcohol Withdrawal

NHS Grampian

Surname	Community Health Index CHI
First Name	Date of Birth DD MM YYYY Male ☐ Female ☐
Address	Date of Admission DD MM YYYY
	Prescription No.
	Date Re-written DD MM YYYY
Post Code	Hospital / Ward / Other
or affix patient label	Consultant / GP

ALLERGIES - Refer to main Prescription and Administration Record before prescribing and administration of medicines.

Weight	kg	Date Recorded	DD	MM	YYYY

Prescription

Medication: Lorazepam	Dose: As per GMAW Score Maximum 10mg in 24 hours	Route: Oral
Prescriber's signature	Print Name	Date
	Contact	DD MM YYYY
		Time (24 hour) :

SAMPLE

Step One - Calculate GMAW Score

Score	+ 0	+ 1	+ 2
Tremor	None	On Movement	At Rest
Sweating	None	Moist	Drenching
Hallucinations	None	Dissuadable	Not Dissuadable
Orientation	Orientated	Vague or Detached	Disorientated
Agitation	Calm	Anxious	Panicky

Step Two - Calculate Oral dose and when to repeat GMAW Score

GMAW Score	Dose	Interval until next GMAW Score
0	None	2 hours, stop if zero on 4 consecutive occasions
1 - 3	500 micrograms	2 hours
4 - 8	1mg	1 hour
9 - 10	2mg	1 hour AND inform medical staff

Lorazepam Administration Sheet	
Patient Name	CHI No.

Maximum Dose per 24 hours = 10mg

Date DD	MM	YYYY	Time (24:00)	GMAW Score	Lorazepam dose (mg)	Given by (initials)	Time next score due (24:00)	Comments
			:				:	

SAMPLE

Lorazepam Administration Sheet	
Patient Name	CHI No.

Maximum Dose per 24 hours = 10mg

Date DD	MM	YYYY	Time (24:00)	GMAW Score	Lorazepam dose (mg)	Given by (initials)	Time next score due (24:00)	Comments
			:				:	

SAMPLE

PECOS ZOP600 MVC 250030

Appendix 4 - Example Of Chlordiazepoxide Fixed Dosing Regimen

CHLORDIAZEPOXIDE EXAMPLE – Fixed dose regimen for Days 1 to 2
(Note - initial dosing must be tailored to daily alcohol intake as per Section 3.1)

Day No.	Dose at 08:00	Dose at 12:00	Dose at 18:00	Dose at 22:00	Comments
1	30mg	30mg	30mg	30mg	As required doses prescribed
2	30mg	30mg	30mg	30mg	As required doses prescribed

CHLORDIAZEPOXIDE EXAMPLE - Fixed dose continuation from day 3 – As required doses **have not** been needed. Can be adjusted in response to day 1 and day 2 total daily dose administered.

Day No.	Dose at 08:00	Dose at 12:00	Dose at 18:00	Dose at 22:00	Comments
3	30mg	20mg	20mg	20mg	
4	15mg	15mg	15mg	15mg	
5	10mg	10mg	10mg	10mg	
6	5mg	5mg	5mg	5mg	
7	5mg	-	-	5mg	
8	-	-	-	-	

CHLORDIAZEPOXIDE EXAMPLE - Fixed dose continuation from day 3 – As required doses **have** been used. (Note – should be tailored to patient's needs)

Day No.	Dose at 08:00	Dose at 12:00	Dose at 18:00	Dose at 22:00	Comments
3	30mg	30mg	30mg	30mg	
4	20mg	20mg	20mg	20mg	
5	15mg	15mg	15mg	15mg	
6	10mg	10mg	10mg	10mg	
7	5mg	5mg	5mg	5mg	
8	5mg	-	-	5mg	
9	-	-	-	-	

Appendix 5 - Example Of Lorazepam Fixed Dosing Regimen

LORAZEPAM EXAMPLE - Fixed dose regimen for Days 1 to 2
(Note - initial dosing must be tailored to daily alcohol intake as per Section 3.1)

Day No.	Dose at 08:00	Dose at 12:00	Dose at 18:00	Dose at 22:00	Comments
1	1.5mg	1.5mg	1.5mg	1.5mg	As required doses prescribed
2	1.5mg	1.5mg	1.5mg	1.5mg	As required doses prescribed

LORAZEPAM EXAMPLE - Fixed dose continuation from day 3 – As required doses **have not** been needed. Can adjust in response to day 1 and day 2 total daily dose administered.

Day No.	Dose at 08:00	Dose at 12:00	Dose at 18:00	Dose at 22:00	Comments
3	1.5mg	1mg	1mg	1.5mg	
4	1mg	1mg	1mg	1.5mg	
5	1mg	1mg	1mg	1mg	
6	1mg	500micrograms	500micrograms	1mg	
7	500micrograms	500micrograms	500micrograms	500micrograms	
8	500micrograms	-	-	500micrograms	

LORAZEPAM EXAMPLE - Fixed dose continuation from day 3 – As required doses **have** been needed. (Note – should be tailored to patient's needs)

Day No.	Dose at 08:00	Dose at 12:00	Dose at 18:00	Dose at 22:00	Comments
3	2mg	2mg	2mg	2mg	
4	1.5mg	1.5mg	1.5mg	1.5mg	
5	1mg	1mg	1mg	1mg	
6	1mg	1mg	1mg	1mg	
7	1mg	500micrograms	500micrograms	1mg	
8	500micrograms	500micrograms	500micrograms	500micrograms	
9	500micrograms	-	-	500micrograms	

Appendix 6 - Guidance On Completion Of Symptom - Triggered Prescription Administration Record

a. Complete the biographical details at the top of the 'In-patient Chlordiazepoxide/Lorazepam Prescription and Administration Record'.

- Patient's name: Full name in BLOCK CAPITALS
- Date of Birth: Written as, e.g. 01.01.80
- CHI number in full: 0101801000
- A printed patient demographic label may be used for the above
- Ward: Ward name/number
- Hospital: Abbreviations can be used, e.g. ARI
- Consultant: Surname should be written in full
- Date of admission
- Prescription number – record chronologically.

b. Prescriber name should be printed and signed, along with date prescribed and contact number.

c. Complete patient name and CHI number on reverse of PAR.

d. Calculate GMAW score using Step 1 on 'In-patient Chlordiazepoxide/Lorazepam Prescription and Administration Record' (Example 4).

Example 4: Step 1 – Calculate GMAW Score

Step One - Calculate GMAW Score			
Score	+ 0	+ 1	+ 2
Tremor	None	On Movement	At Rest
Sweating	None	Moist	Drenching
Hallucinations	None	Dissuadable	Not Dissuadable
Orientation	Orientated	Vague or Detached	Disorientated
Agitation	Calm	Anxious	Panicky

e. Calculate the dose of chlordiazepoxide or lorazepam using Step 2 on 'In-patient Chlordiazepoxide/Lorazepam Prescription and Administration Record' (Example 5 and 6).

Example 5: Step 2 – Calculate Chlordiazepoxide Dose and When to Repeat GMAW Score

Step Two - Calculate Oral dose and when to repeat GMAW Score		
GMAW Score	Dose	Interval until next GMAW Score
0	None	2 hours, stop if zero on 4 consecutive occasions
1 - 3	20mg	2 hours
4 - 8	30mg	1 hour
9 - 10	40mg	1 hour AND inform medical staff

Example 6: Step 2 – Calculate Lorazepam Dose and When to Repeat GMAW Score

Step Two - Calculate Oral dose and when to repeat GMAW Score		
GMAW Score	Dose	Interval until next GMAW Score
0	None	2 hours, stop if zero on 4 consecutive occasions
1 - 3	500 micrograms	2 hours
4 - 8	1mg	1 hour
9 - 10	2mg	1 hour AND inform medical staff

f. Record administration of chlordiazepoxide/lorazepam on the reverse of the 'Inpatient Chlordiazepoxide/Lorazepam Prescription and Administration Record' detailing:
- Date and time of scoring
- GMAW score calculated
- Dose given to the patient
- Time the next scoring is due
- Initials of the person administering the medicine
- Any additional comments should be noted in the Comments' section (Example 7 and 8).

Example 7: Recording Administration of Chlordiazepoxide Using 'In-patient Chlordiazepoxide Prescription and Administration Record'

Chlordiazepoxide Administration Sheet

Patient Name Jane Smith | CHI No. 1010801000

Maximum Dose per 24 hours = 250mg

Date DD	Date MM	Date YYYY	Time (24:00)	GMAW Score	Chlordiazepoxide dose (mg)	Given by (initials)	Time next score due (24:00)	Comments
01	03	25	09 : 10	9	40mg	CD	10 : 10	Medical staff informed
01	03	25	10:10	7	30mg	CD	11:10	

Example 8: Recording Administration of Lorazepam using 'In-patient Lorazepam Prescription and Administration Record'

Lorazepam Administration Sheet

Patient Name: John Smith | CHI No. 0101801010

Maximum Dose per 24 hours = 10mg

Date DD	Date MM	Date YYYY	Time (24:00)	GMAW Score	Lorazepam dose (mg)	Given by (initials)	Time next score due (24:00)	Comments
01	03	25	11:20	3	500 micrograms	AB	13:20	
01	03	25	13 : 20	0	None	AB	15 : 20	

g. The scoring intervals outlined must be adhered to, even throughout the night as the patient will still be withdrawing whilst asleep, to reduce the risk of withdrawal seizures and delirium.

h. If the patient is scoring 9 to 10 on the GMAWS calculator, medical staff should be informed.

i. If patient dosing indicates they are likely to reach the maximum daily dose (250mg of chlordiazepoxide or 10mg of lorazepam), medical staff should be contacted at the earliest opportunity and a senior review carried out to decide how to proceed.

j. If the patient has scored 0 on the GMAW score 4 consecutive times, medical staff should be informed and the GMAWS prescription can be withdrawn by a prescriber by scoring through the chart and adding the prescriber's signature, printed name and date. The corresponding placeholder should be discontinued on HEPMA.