PATHWAYS AND GUIDELINES DEVELOPMENT SUBGROUP

Shared Care Protocol

Shared Care Protocol for **Disulfiram in the treatment of alcohol dependence**		Reference Number
Version: 2.0	**Replaces: 1.1**	**Issue date:**
Author(s)/Originator(s): (please state author name and department) Greater Manchester Mental Health NHS Foundation Trust Pennine Care NHS Foundation Trust North West Boroughs Healthcare NHS Foundation Trust Addacation on behalf of NHS Wigan CCG		**To be read in conjunction with the following documents:** Current Summary of Product characteristics (http://www.medicines.org.uk OR http://www.mhra.gov.uk/spc-pil/) BNF
Date approved by Pathways & Guidelines Development Subgroup:	**Date approved by Greater Manchester Medicines Management Group:**	
Date approved by Commissioners: *dd/mm/yyyy*	**Review Date:**	

Please complete all sections

1. Name of Drug, Brand Name, Form and Strength	Disulfiram 200mg tablets (Antabuse®)
2. Licensed Indications	Maintenance of abstinence in alcohol dependence
3. Criteria for shared care	Prescribing responsibility will only be transferred when • Patient has been identified as alcohol dependent and successfully withdrawn from alcohol, and wants to achieve abstinence. • Treatment is for a specified indication and duration. • Treatment has been initiated and established by the hospital or specialised clinic. • The GP has agreed in writing in each individual case that shared care is appropriate. • The patient's general physical, mental and social circumstances are such that he/she would benefit from shared care arrangements
4. Patients excluded from shared care	• Unstable disease state • Patient does not consent to shared care • Patient does not meet criteria for shared care

	• Patient is still drinking • Patients under the age of 18 years old
5. Therapeutic use & background	Disulfiram is licensed as an adjuvant for maintaining abstinence in those with chronic alcohol dependence. Disulfiram prevents the breakdown of alcohol by irreversibly blocking the enzyme acetaldehyde dehydrogenase. Within 10 minutes of consuming alcohol patients experience an unpleasant reaction mediated by facial flushing, headache, palpitations, tachycardia, dyspnoea, nausea and vomiting. The severity of the reaction varies between individuals and may occasionally become life threatening with hypotension, arrhythmias and collapse. The reaction can last for several hours with peak levels occurring at 8-12 hours. The action of disulfiram lasts at least for 7 days after the last dose and patients must be warned of this. Patients must be advised to avoid alcohol including low alcohol or non-alcohol beers and wines. They also need to be aware that some medicines, food, toiletries, perfumes, aerosol sprays and alcohol hand gels may contain enough alcohol to elicit a reaction. Disulfiram works by changing the expectancy of the effects of alcohol from positive to negative and aversive. In a 1992 study by Chick et al which examined supervised consumption of disulfiram against placebo showed 100 v 69 days abstinent in 6 months and reduced alcohol use 80% v 50% as well as an improvement in GGT levels. Response to treatment is better in those with a supervisor. It is not a standalone treatment it is essential that the patient is actively engaged with psychosocial interventions aimed at relapse prevention. Some patients find that they have no reaction at standard dose and may require a higher dose of up to 600mg. For these people and those who drink through the reaction they should be informed of the risk of repeated acetaldehyde toxicity leading to brain damage, liver damage and cardiac problems. NICE Guideline 115 (Alcohol-use disorders) recommends the use of disulfiram in combination with a psychological intervention for patients who have successfully withdrawn from moderate to severe alcohol dependence and want to achieve abstinence, and for whom acamprosate or naltrexone are not suitable or prefer disulfiram and understand the relative risks of taking the drug. Disulfiram does not prevent the harmful effects of continuous alcohol abuse. Disulfiram does not constitute treatment for the symptoms of alcohol withdrawal. Disulfiram is to be used only when total abstinence is the goal. It is inappropriate for patients who wish merely to attenuate their drinking. NICE Guidelines recommend if possible a family member or carer should oversee the administration of the drug.
6. Contraindications (please note this does not replace the SPC or BNF and should be read in conjunction with it).	<16 years old Consumed alcohol in the last 24hrs Recent MI, angina, cardiac failure and uncontrolled hypertension History of CVA Avoid in first trimester of pregnancy Breastfeeding Severely deranged LFTs: - GGT>3x normal reference limit (normal reference range: female = <40U/L, male = <60U/L) - Bilirubin >30µmol/l - Albumin: Globulin reversal - ALT >150U/L Known hypersensitivity to drug or excipients

	Cautions Psychosis not absolute contra-indication but should be reviewed by specialist before decision to treat. Severe personality disorder with associated risk of impulsivity and self harm. Not absolute contra-indication but should be reviewed by specialist before decision to treat. Suicide risk not absolute contra-indication but should be reviewed by specialist before decision to treat. The risk of suicide may be associated with intoxication and continued drinking and may therefore be reduced by successful treatment with disulfiram
7. Prescribing in pregnancy and lactation	*Pregnancy:* The use of disulfiram in the first trimester of pregnancy is not advised. The risk/benefit ratio in assessing adverse effects of alcoholism in pregnancy should be taken into account when considering the use of Disulfiram in pregnant patients. There have been rare reports of congenital abnormalities in infants whose mothers have received Disulfiram in conjunction with other medicines. *Lactation:* Should not be used. No information is available on whether disulfiram is excreted in breast milk. Its use during breast feeding is not advised especially where there is a possibility of interaction with medicines that the baby may be taking.
8. Dosage regimen for continuing care	***Route of administration*** Oral
	Preparations available: Scored White tablets of 200mg which can be partially dissolved in water
	Please prescribe: After initiated by specialist prescribe 200mg once daily or 400mg on alternate days (unlicensed) this should be supervised by a nominated person on these occasions. It must be started at least 24 hours after the last alcoholic drink was consumed.
	Is titration required **Yes**
	Titrate dosage as follows: 800mg day1 600mg day2 400mg day3 200mg onwards A loading dose may not always be required and the specialist will often just commence the patient on 200mg daily. Thereafter, dosage may continue at 1 or half a tablet (200mg or 100mg) daily, for no longer than 6 months without review. For people who continue to drink, if 200mg taken regularly for at least a week does not cause a sufficiently unpleasant reaction to deter drinking, an increase in dosage may be considered by some specialists in consultation with the person. (N.B. some specialists will stop the disulfiram if the patient continues drinking rather than increasing the dose.)
	Adjunctive treatment regime: Psychosocial interventions active involvement with an evidence based intervention e.g. Motivational Enhancement, CBT
	Conditions requiring dose reduction: Over-sedation on previous use Skin reactions related to commencement of disulfiram

	Usual response time : Starting at the above titration the patient should be informed the disulfiram alcohol effect will be present immediately and alcohol (and alcohol containing products) should be avoided from commencement on this medication.
	Duration of treatment: Treatment should be continued for 6-12 months
	Treatment to be terminated by: Either GP or the specialist. If relapse occurs, disulfiram treatment should be discontinued; however, a disulfiram reaction can occur up to 14 days after discontinuation of the drug.
	NB. All dose adjustments will be the responsibility of the initiating specialist care unless directions have been specified in the medical letter to the GP.
9.Drug Interactions ***For a comprehensive list consult the BNF or Summary of Product Characteristics***	The following drugs must <u>not</u> be prescribed without consultation with the specialist: Paraldehyde
	The following drugs may be prescribed with caution: Disulfiram inhibits hepatic microsomal enzymes leading to interference of the metabolism of a variety of prescribed drugs: ▪ Warfarin – enhanced effect therefore careful monitoring of INR required ▪ Tricyclics – Disulfiram increases the plasma concentration of tricyclics by 50% risk of toxicity may need to reduce dose or use alternative antidepressant. ▪ Amitryptiline – increased disulfiram reaction. ▪ Phenytoin – metabolism inhibited increasing risk of toxicity ▪ Benzodiazepines – metabolism is inhibited so increased sedative effects can be used and is often commenced during detoxification ▪ Theophylline – metabolism is inhibited so increased risk of toxicity. ▪ Metronidazole, isoniazid and paraldehyde interact with Disulfiram increasing the risk of psychotic reaction.
10. Adverse drug reactions *For a comprehensive list (including rare and very rare adverse effects), or if significance of possible adverse event uncertain, consult Summary of Product Characteristics or BNF*	**Specialist to detail below the action to be taken upon occurrence of a particular adverse event as appropriate. Most serious toxicity is seen with long-term use and may therefore present first to GPs.**

Adverse event System – symptom/sign	**Action to be taken** Include whether drug should be stopped prior to contacting secondary care specialist	**By whom**
Drowsiness, sweatiness, halitosis, alteration in taste, reduced libido, dizziness and headache.	Generally mild and transient if severe may require a reduction in dose.	GP or Specialist
Hypertension	Generally mild and transient but if persists may require reduction in dose or cessation of the drug	GP or Specialist

Dermatological reactions including acneiform eruptions, allergic dermatitis	Generally only during the first two weeks of treatment, if persists then may require reduction or cessation of the drug Treat dermatitis as per usual protocols	GP or specialist
Allergic reaction including anaphylaxis	Generally within the first few doses treat allergy, if not confirmed consider re-challenge with specialist	Accident and Emergency
Optic Neuritis, peripheral neuritis, polyneuritis	Late onset at 6-9 months and is progressive, disulfiram should be stopped. It may be reversible on cessation of disulfiram but there may be permanent changes.	GP or specialist
Cholestatic and Fulminant Hepatitis	Hepatotoxicity is very rare and risk peaks between 6-12 weeks but can occur anytime and may be fatal. Risk is higher with co-existent liver disease. Stop medication and refer to medical specialist. If acutely unwell advise patient to attend emergency services If confirmed will need careful monitoring and not for re-challenge unless risk benefit review by specialist	Accident and Emergency or GP
Psychotic reactions (inc persecutory, depressive and manic presentations +/- hallucinations)	Stop medication, start antipsychotic medication if necessary and seek the advice of addiction or general adult psychiatrist	GP or specialist
The patient should be advised to report any of the following signs or symptoms to their GP without delay: Symptoms of allergic reaction, disulfiram reaction, severe hepatotoxicity or overdose should be reported to Accident and Emergency. Symptoms of neuritis or hepatotoxicity if mild report to GP. Advise service users that if they feel unwell or develop a fever or jaundice that they should stop taking disulfiram and seek urgent medical attention.		
Other important co morbidities: Caution should be exercised in the presence of renal failure, hepatic or respiratory disease, diabetes mellitus, hypothyroidism, cerebral damage and epilepsy.		

	Any adverse reaction to a black triangle drug or serious reaction to an established drug should be reported to the MHRA via the "Yellow Card" scheme.
11.Baseline investigations	*List of investigations / monitoring undertaken by secondary care* Baseline BP and pulse rate Baseline U+E, LFT, GGT, FBC Baseline ECG if indicated by possibility of cardiac disease Specialist to continue care of the patient performing the required assessments (e.g. LFTs) until dose and patient stable (e.g. 6 weeks after initiation).
12. Ongoing monitoring requirements to be undertaken by GP (Local commissioning arrangements may vary between CCGs)	***Is monitoring required?*** **Yes -** After initiation, patients should be monitored every two weeks for the first two months, then monthly for the following four months, thereafter every 6 months as recommended by NICE CG115.

Monitoring	Frequency	Results	Action	By whom
LFT and GGT	6 weeks after initiation then 3 monthly from initiation.(unless advised more frequently by specialist)	If significantly elevated compared to initial bloods. If mildly elevated compared to initial bloods	Stop medication and seek expert opinion Continue medication but obtain advice from specialist Increase frequency of LFT/ GGT to 2-4 weeks	GP
Physical state	As appropriate		As indicated by physical findings	GP
Mental Health	monthly		As indicated by assessment findings	CAT worker or Specialist

13. Pharmaceutical aspects	No special considerations required.
14. Responsibilities of specialist team (Local commissioning arrangements may vary between CCGs)	• To make a diagnosis, and assess the suitability of the patient for disulfiram treatment. • Undertake baseline monitoring (LFTs, renal function, U&Es) • To arrange complementary psychological treatment. • Arrange any alcohol withdrawal which is required prior to commencing disulfiram. • To initiate treatment with disulfiram. • Monitor patient's initial reaction to and progress on the drug. • Ensure that the patient has an adequate supply of medication until GP supply can be arranged. • Patients will be considered suitable for transfer to GP prescribing ONLY when they meet the criteria listed in section 3 above. • The initiating specialist will write formally to the GP to request shared care using the GMMMG agreed process. Failure to supply all the required information will result in the refusal of the request until all information has been supplied

	• Patients will only be transferred to the GP once the GP has agreed. • Continue to monitor and supervise the patient according to this protocol, while the patient remains on this drug, and agree to review the patient promptly if contacted by the GP • Provide GP with diagnosis, relevant clinical information and baseline results, treatment to date and treatment plan, duration of treatment before consultant review. • Provide GP with details of outpatient consultations, ideally within 14 days of seeing the patient or inform GP if the patient does not attend appointment. • Make sure that service users taking disulfiram: o stay under supervision, at least every 2 weeks for the first 2 months, then monthly for the following 4 months o if possible, have a family member or carer, who is properly informed about the use of disulfiram, oversee the administration of the drug o are medically monitored at least every 6 months after the initial 6 months of treatment and monitoring. • Advise GP if patient fails to attend for psychosocial interventions so treatment can be stopped. • Specialist team to review patient at 6 months to see if ongoing treatment is necessary. • Provide GP with advice on when to stop this drug. • Act upon communication from the GP in a timely manner. • Provide patient with relevant drug information to enable Informed consent to therapy. • Provide patient with relevant drug information to enable understanding of potential side effects and appropriate action. In particular to ensure the patient/carer is aware of the rare complication of hepatotoxicity and recognises the symptoms which would indicate a need to stop disulfiram and seek urgent medical attention. • Provide patient with relevant drug information to enable understanding of the role of monitoring. • Be available to provide patient specific advice and support to GPs as necessary.
15. Responsibilities of the GP (Local commissioning arrangements may vary between CCGs)	• Continue treatment as directed by the specialist. • Act upon communication from the specialist in a timely manner. • Ensure no drug interactions with concomitant medicines. • To monitor and prescribe in collaboration with the specialist according to this protocol. • Symptoms or results are appropriately actioned, recorded and communicated to secondary care when necessary. • GPs should reply to request for shared care to either accept or decline within 14 days. A form is available on the GMMMG website to facilitate this, if you so wish. (N.B.Local commissioning arrangements may vary between CCGs – check with local CCG for local mechanism for transferring patients under shared care) • If the GP does not feel it is appropriate to take on the prescribing then the prescribing responsibilities will remain with the specialist. The GP should indicate the reason for declining. • Enter a READ code (e.g. 8BM5.00) on to the patient record to highlight the existence of shared care for the patient. • Undertake more frequent tests if there is evidence of clinical deterioration, abnormal results, or other risk factors. Contact consultant team for advice on monitoring in these circumstances if required. • Check all monitoring results prior to issuing a repeat prescription to ensure it is safe to do so. • Review treatment if patient repeatedly fails to collect prescription or participate in

	psychosocial support. • Review continued treatment at 6 to 12 months. GPs can liaise with specialists for advice/support in reviewing prescribing. • Monitor the patient's general wellbeing. • Inform the consultant immediately if a patient has become pregnant or is planning to become pregnant for treatment options to be considered • Notify the consultant of any circumstances that may preclude the use of disulfiram for example, the use of illicit drugs or contraindications to treatment. • Seek urgent advice from secondary care if: ➢ Patient recommences drinking ➢ Toxicity is suspected ➢ Non-compliance is suspected ➢ The GP feels a dose change is required ➢ There is marked deterioration in the patient's condition ➢ The GP feels the patient is not benefiting from the treatment • The shared care agreement will cease to exist, and prescribing responsibility will return to secondary care, where: ➢ The clinical situation deteriorates such that the shared care criterion of stability is not achieved. ➢ The clinical situation requires a major change in therapy. ➢ The patient is a risk to self or others ➢ GP feels it to be in the best stated clinical interest of the patient for prescribing responsibility to transfer back to the Consultant. The Consultant will accept such a transfer within a timeframe appropriate to the clinical circumstances. There must be discussion between the consultant team and GP on this matter and agreement from the consultant team to take back full prescribing responsibility for the treatment of the patient. The consultant team should be given 14 days' notice in which to take back prescribing responsibilities from primary care.
16. Responsibilities of the patient	• To take medication as directed by the prescriber, or to contact the GP if not taking medication • To attend hospital, Community Alcohol Team (CAT), and GP clinic appointments • Failure to attend may result in medication being stopped (on specialist advice). • To report adverse effects to their Specialist or GP. • Must be alcohol free for 24hrs before taking the medication • To avoid alcohol, alcohol containing products and others advised by specialists • To engage in psychosocial interventions

17. Additional Responsibilities e.g. Failure of patient to attend for monitoring, Intolerance of drugs, Monitoring parameters outside acceptable range, Treatment failure, Communication failure	**List any special considerations**	**Action required**	**By whom**	**Date**
	Nominated supervisor	CAT team / Specialist help patient identify supervisor and give information Supervisor to review the information and watch the patient take the medication ideally everyday but at least 3x per week	CAT Specialist Nominated supervisor	

18. Supporting documentation	The SCG must be accompanied by a patient information leaflet. (Available from http://www.medicines.org.uk/emc OR http://www.mhra.gov.uk/spc-pil/)
19. Patient monitoring booklet (may not be applicable for all drugs)	Non-applicable
20. Contact details	See Appendix 1

Appendix 1 – Local Contact Details

Lead author contact information	**Name:** *[insert text here]*
	Email: *[insert text here]*
	Contact number: *[insert text here]*
	Organisation: *[insert text here]*

Commissioner contact information	**Name:** *[insert text here]*
	Email: *[insert text here]*
	Contact number: *[insert text here]*
	Organisation: *[insert text here]*

Secondary care contact information	**If stopping medication or needing advice please contact:**
	Dr *[insert text here]*
	Contact number: *[insert text here]*
	Fax:*[insert text here]*
	Hospital: *[insert text here]*

Appendix 2

Insert Trust Logo, address and contact details

INFORMATION FOR SUPERVISION OF DISULFIRAM

Name …….. ……..Date of Birth…..…….

Address……

……

The above named person has been started on a medication Disulfiram / Antabuse to help them achieve abstinence from alcohol. They have identified you as a suitable person to supervise them taking this medication.

Enclosed is an information sheet answering common questions regarding Disulfiram, which is given to individuals, taking the medication, which will be useful for you as well.

The supervisor's role is important in enhancing the chance that an individual will take the medication regularly, which is essential in making the treatment effective.

Disulfiram / Antabuse works by blocking the ability of the body to breakdown alcohol. If an individual takes a drink of alcohol whilst on the medication they will have a severe reaction, which can be dangerous. This effect can last for up to one week after the last dose of Disulfiram / Antabuse.

The medication should be taken every day / alternate days (***delete as appropriate***) at a dose of **……**

Your role as supervisor is to observe the individual taking the medication preferably dispersed in a glass of water. To give them positive encouragement for having done so and to encourage them to keep going and to attend for treatment.

If they refuse / neglect to take Disulfiram / Antabuse you should ask them why and if they are planning to have a drink. If so try to persuade them not to maybe by helping them think about the reasons they stopped drinking in the first place. If this is not working contact their worker (***enter name***)**……..(*enter telephone number*)……**

Remember they cannot drink safely for up to one week after stopping Disulfiram / Antabuse.
If they miss a dose take a double dose i.e**. ……**the following day. The treatment is directed by the doctor and usually continues for six to twelve months.

Side Effects

1 **If they drink alcohol**

A reaction is likely to occur e.g. flushing, itching, dizziness, palpitations. This can be severe and life threatening. Encourage them to stop drinking immediately and

go to see the doctor if symptoms are severe. A milder reaction can occur with certain foods, medicines, toiletries which contain alcohol. These should be avoided.

2 Sedation advice to take medication at night

3 Rash, itching usually subsides stop medication if severe

4 Nausea and vomiting take with food

5 Bad breath beware some mouthwashes contain alcohol

6 Rare but significant side effects

i. Liver damage – a severe reaction with jaundice, fever and severe nausea and vomiting usually occurring in the first 6 – 8 weeks.

If these symptoms occur please encourage them to attend the GP or if severe A & E department.

ii. Damage to nerves in feet and fingers after 6 – 9 months. Tingling numbness and pain. Stop medication usually reversible.

iii. Psychotic reactions – Behaving bizarrely,

Hearing voices
Becoming paranoid
Depressed

If you are have any questions contact

.....

Insert Trust Logo, address and contact details

Disulfiram Patient information Sheet

Disulfiram / Antabuse works by blocking the ability of the body to breakdown alcohol. If an individual takes a drink of alcohol whilst on the medication they will have a severe reaction, which can be dangerous. This effect can last for up to one week after the last dose of Disulfiram / Antabuse.
Disulfiram is used to deter a person from drinking alcohol. If you have taken this medication you cannot drink alcohol for at least a week. If you do you may get a severe and sometimes fatal reaction.

The medication should be taken every day / alternate days (***delete as appropriate***) at a dose of **……**
If you miss a dose take a double dose i.e**. ……**the following day. The treatment is directed by the doctor and usually continues for six to twelve months.
To help you take the tablet it can be dispersed in a glass of water
For the medication to be effective you need to be involved in talking treatment for your alcohol problem to help prevent you relapse. It is also very important to have someone you trust to supervise you taking the medication at least 3 times per week You also give this person permission to question you if you stop taking the medication and if necessary to contact your worker
I nominate **……**
Relationship
……

You must not take this medication if you
1 have had a previous allergic reaction to disulfiram/ antabuse
2 have severe heart disease, hypertension, stroke
3 are pregnant or planning to get pregnant

Please tell your doctor if you suffer with epilepsy, diabetes, liver, lung or kidney disease
Side Effects

7 **If you drink alcohol**

A reaction is likely to occur e.g. flushing, itching, dizziness, palpitations. This can be severe and life threatening. **You must stop drinking immediately** and go to see the doctor if symptoms are severe. A milder reaction can occur with certain foods, medicines, toiletries and even alcohol free beers and wines which contain alcohol. These should be avoided.(see information sheet)

8 Sedation you may feel drowsy please take the medication at night if this is a problem

9 Rash, itching usually subsides stop medication if severe

10 Nausea and vomiting take with food

11 Bad breath beware some mouthwashes contain alcohol side effects

12 Headaches take usual analgesia

13 Rare but significant

i. Liver damage – a severe reaction with jaundice, fever and severe nausea and vomiting usually occurring in the first 6 – 8 weeks.

   If these symptoms occur please stop the medication immediately and visit your GP or if severe the A & E department. The risk of developing this side effect is very low approximately 1 in 25,000.

ii. Damage to nerves in feet and fingers after 6 – 9 months. You may experience numbness tingling and pain. This is usually reversible if you stop the medication

iii. Psychotic reactions behaving bizarrely, hearing voices, becoming paranoid/ suspicious or depressed. If you develop these symptoms please see your doctor

If you are have any questions contact

……

I have read and understood the information in this sheet/ I give permission for my nominated supervisor to be contacted

Signature……

Date……..

Shared Care Protocol Summary:
DISULFIRAM for the treatment of *ALCOHOL DEPENDENCE*

Drug	Disulfiram 200mg tablets
Indication	Maintenance of abstinence in alcohol dependence
Overview	NICE Guideline 115 (Alcohol-use disorders) recommends the use of disulfiram in combination with a psychological intervention for patients who have successfully withdrawn from moderate to severe alcohol dependence and want to achieve abstinence, and for whom acamprosate or naltrexone are not suitable or preferred. Disulfiram does not prevent the harmful effects of continuous alcohol abuse. Disulfiram does not constitute treatment for the symptoms of alcohol withdrawal. Disulfiram is to be used only when total abstinence is the goal. It is inappropriate for patients who wish merely to attenuate their drinking. NICE Guidelines recommend if possible a family member or carer should oversee the administration of the drug.
Specialist's Responsibilities (Local commissioning arrangements may vary between CCGs)	**Initial investigations:** Assessment of the patient and diagnosis of Alcohol dependence Assess suitability of patient for treatment. Discuss benefits and side-effects of treatment with the patient. Renal function tests, U&Es and Liver function tests. **Initial regimen:** Initiate treatment with disulfiram. Thereafter, dosage may continue at 1 or half a tablet (200mg or 100mg) daily, for no longer than 6 months without review. **Clinical & Safety monitoring:** Monitoring for response and adverse drug reactions (ADRs) during initiation period. Evaluating ADRs raised by the GP and evaluating any concerns arising from reviews undertaken by GP. **Prescribing details:** Initiate treatment. To stop the drug or provide GP with advice on when to stop this drug. **Documentation:** The consultant team will write formally to the GP to request shared care using the GMMMG agreed process. Patients will only be transferred to the GP once the GP has agreed. Provide GP with diagnosis, relevant clinical information, treatment plan, duration of treatment with 14 days of seeing the patient or inform GP if the patient does not attend appointment**.**
GP's Responsibilities (Local commissioning arrangements may vary between CCGs)	**Maintenance prescription:** Prescribe disulfiram in accordance with the specialist's recommendations. Maximum recommended dose as per BNF. **Clinical monitoring:** To report to and seek advice from the specialist on any aspect of patient care which is of concern to the GP and may affect treatment. **Safety monitoring:**

Efficacy and side effects	Monthly for first 6 months, then 6 weekly (as per NICE)
LFT and GGT	6 weeks after initiation then 3 monthly from initiation.(unless advised more frequently by specialist)
Physical state	As appropriate
Mental Health	Monthly

Duration of treatment: Stop treatment on advice of specialist. Treatment usually continued for 6 -12 months.

Re-referral criteria: Seek urgent advice from secondary care if:

- Patient recommences drinking
- Toxicity is suspected
- The patient becomes pregnant

- Non-compliance is suspected
- The GP feels a dose change is required
- There is marked deterioration in the patient's condition
- The GP feels the patient is not benefiting from the treatment

Documentation: GPs should reply to request for shared care to either accept or decline within 14 days. A form is available on the GMMMG website to facilitate this, if you so wish.

Adverse Events

Adverse events	Action
Drowsiness, sweatiness, halitosis, alteration in taste, impotence, dizziness and headache.	Generally mild and transient if severe may require a reduction in dose.
Hypertension	Generally mild and transient but if persists may require reduction in dose or cessation of the drug
Dermatological reactions including acneiform eruptions, allergic dermatitis	Generally only during the first two weeks of treatment, if persists then may require reduction or cessation of the drug Treat dermatitis as per usual protocols
Allergic reaction including anaphylaxis	Generally within the first few doses treat allergy, if not confirmed consider re-challenge with specialist
Optic Neuritis, peripheral neuritis, polyneuritis	Late onset at 6-9 months and is progressive, disulfiram should be stopped It may be reversible on cessation of disulfiram but there may be permanent changes.
Cholestatic and Fulminant Hepatitis	Hepatotoxicity is very rare and risk peaks between 6-12 weeks but can occur anytime and may be fatal. Risk is higher with co-existent liver disease. Stop medication and refer to medical specialist. If acutely unwell advise patient to attend emergency services If confirmed will need careful monitoring and not for re-challenge unless risk benefit review by specialist
Psychotic reactions (inc persecutory, depressive and manic presentations +/- hallucinations)	Stop medication, start antipsychotic medication if necessary and seek the advice of addiction or general adult psychiatrist

Contra-indications Cautions Drug Interactions

Please refer to the BNF and/or SPC for information

Other Information

Adjunctive psychosocial intervention required.

Contact Details

Name: *[insert text here]*.
Address: *[insert text here]*.
Telephone: *[insert text here]*.