Greater Glasgow and Clyde Alcohol and Drug Recovery Services

Prescribing Guidelines for Medication Assisted Treatment with Opioid Substitution Therapy

Authors:	GGC ADRS Medication Assisted Treatment Substitute Prescribing Management Group (MAT SPMG)
Contact:	Trina Ritchie, chair MAT SPMG Catriona.ritchie@ggc.scot.nhs.uk
Approved by:	MAT SPMG GGC ADRS Care Governance Committee (CGC)
Date of approval:	MAT SPMG 27.03.2023 CGC 06.06.2023
Date for review:	June 2024
Replaces previous version:	GG&C Addiction Services Prescribing Guidelines for Medication Assisted Recovery with Opioid Replacement Therapy 17th February 2017
Version:	1.2

Contents

1.0 Introduction

This guidance is aimed at all independent prescribers, doctors and staff involved in the community care of individuals who use opioid drugs and in particular new and inexperienced prescribers.

More experienced prescribers will be faced with complex situations where a balance of risk may necessitate prescribing outwith these recommendations.

It is essential to record the reasons for decisions taken in individual cases, especially and in particular, if they deviate from this and national guidance.

Prescribers, especially those with less experience, should have a low threshold to discuss any prescribing outwith these recommendations with a senior specialist clinician. This will be the Senior Medical Officer or Addiction Psychiatry Consultant depending on the local community medical workforce model.

The focus of this guidance is on Opioid Substitution Therapy (OST). It does not attempt to cover the whole spectrum of treatment options for people experiencing problem drug use. It recognises that prescribing is an important but small part of the treatment of individuals who use drugs and that it can help support individuals in their recovery.

It should be read in conjunction with national guidelines[1], strategy documents[2 3], other resources[4] and in particular in conjunction with the Medication Assisted Treatment (MAT) Standards[5] published by government in May 2021 as part of a response to extremely high numbers of drug related deaths nationally.

1.1 Medication Assisted Treatment Standards 2021

The treatment standards provide a framework to ensure that OST is sufficiently safe, effective, acceptable, accessible and person centred to enable people to benefit from treatment as soon and for as long as they need.

The standards aim to improve access and retention in OST, enable people to make an informed choice about care, include family members or nominated person(s) wherever appropriate, and to strengthen accountability and leadership so that the necessary governance and resource is in place to implement them effectively.

The ethos of the MAT standards for OST are as follows:

- Individuals can get OST treatment and support on the day they present to any part of the service.
- Individuals have the right to involve others, such as a family member or nominated person(s) to support them in their journey throughout their care.
- Individuals are aware that treatment is not conditional on abstinence from substances or uptake of other interventions.
- Individuals can have treatment and care for as long as they want.
- Individuals who have stopped accessing OST or who have undergone detox are supported to easily come back into services for the care they need. If individuals miss appointments, services do not discharge them and actively get in touch to find out what individuals need to continue in treatment.
- Individuals are made aware that abstinence is offered as a choice along with other treatment options.

1 Drug misuse and dependence: UK guidelines on clinical management
2 National Drugs Mission Plan: 2022-2026
3 Final Report | Drug Deaths Taskforce
4 Trauma Informed Practice: a Toolkit for Scotland
5 Medication Assisted Treatment Standards 2021

- Individuals will be given information and advice on recovery opportunities within their community.
- Individuals are clear about what choices are available to them throughout their journey through services and are aware of their right to make their own decisions about their care plan.
- Individuals feel listened to and involved in all decisions. They understand the different medication options available, including appropriate dose options.
- Individuals are treated in trauma informed services under the principles of safety, trust, choice, collaboration and empowerment.

2.0 Initiation of OST

MAT 1: All individuals accessing services have the option to start OST from the same day of presentation as clinically appropriate.

MAT 2: Evidence should be documented through review and care planning demonstrating that the individual's views and choices have been sought, documented and acted on.

The purpose of initiation and titration with OST is to establish the individual on a therapeutic dose in a safe manner and as quickly as possible, on a dose of OST that:

- Eliminates withdrawal symptoms
- Reduces the need to take additional street opioids
- Keeps side effects to a minimum

2.1 Assessment for OST

National guidance[6] recommends that services should avoid unnecessary steps in the assessment process, particularly to reduce the risk of harm for individuals who need to stabilise on opioid substitution therapy.

Each service will have an operational policy which details the local assessment pathway which should include the option of assertive outreach. The focus of the initial response by all staff in the pathway should be to address associated tasks promptly, to minimise delays and barriers to engagement. Services should ensure that individuals are informed of independent advocacy and that their family member or nominated person(s) can be included from the start in care planning.

OST is not contingent on uptake of other interventions or abstinence from drugs. The aim is to develop person centred, low threshold access to OST with the immediate goals being to offer a "same day response" to referrals, reducing barriers to accessing care and treatment.

It is usually possible to make a diagnosis of dependence by establishing sufficient information for a prescribing decision to be made at the first appointment. This will follow thorough history taking, clinical examination, individual toxicology testing and communication with primary care.

6 Drug misuse and dependence: UK guidelines on clinical management

Observing objective opioid withdrawals and being told of subjective opioid withdrawals is the "gold standard" of diagnosis of dependence however it should be remembered that the use of prescribed or street benzodiazepines can often mask opioid withdrawals. Withdrawal screening tools[7] [8] can be useful for those who are not experienced in the clinical assessment of withdrawal severity.

In those presenting with a less clear history of dependence, a more prolonged period of careful assessment and consideration of the aims of treatment may be prudent, for example where people report using opioid analgesia rather than heroin. If there is a less clear history, less obvious risk or doubt of the diagnosis of opioid dependence associated with drug use, consider consulting with a senior specialist clinician.

Reasons for delay in commencing OST should be clearly documented due to the associated risks.

The medical / non-medical prescriber role in OST initiation assessment includes:

- Establishing opioid dependence and current tolerance
- Assessment of other drug and or alcohol use
- Detail of previous OST episodes of care and experience of medication(s)
- Physical and mental health examination and identification of problems
- Identification of pregnancy or risk of pregnancy
- Detail of concurrent prescribed medications and potential interactions
- Check of clinical portal for additional clinical information and current Emergency Care Summary prescribing
- Identification of need for further clinical investigations such as ECG or blood tests
- Gaining informed consent for treatment medication

Other tasks which require to be completed but may not require medical / non-medical prescribers depending on resources include:

- Opt out blood borne virus[9] (BBV) screening
- Hepatitis A&B immunisation
- Injection site monitoring and wound care
- Provision of injecting equipment[10], foils, naloxone, condoms
- Harm reduction and overdose prevention[11] advice
- Discussion about sexual health, fertility, contraception
- Identification of children with which the individual has contact and any potential risks
- Identification of individuals that require access to appropriate and timely expertise for child protection or adult protection.
- Identification of social issues, including housing, financial, employment, domestic violence and justice issues
- Ensure DVLA fitness to drive information has been given and understood

7 Appendix 1 SOWS
8 Appendix 2 COWS
9 GGC BBV Testing, Diagnosis and Referral Guidance
10 Where to find IEP in GGC
11 Take Home Naloxone Staff Pack

All staff involved in OST initiation assessment should contribute to formal risk assessment by completion of the ADRS RAG assessment which is category RED for all OST starts, and MHS Clinical Risk Assessment for Teams (CRAFT) assessment.

In any intervening period between assessment and entering into treatment, ADRS services should maintain contact with the individual by assertive outreach to deliver harm reduction work, including documentation and provision of overdose prevention advice, naloxone supplies, injection equipment provision (IEP), foil provision, safer injecting advice etc.

2.2 Choice of OST

A particular focus of the MAT Standards is to ensure that all people are supported to make an informed choice regarding their preferred OST medication and dose. In order to make a fully informed choice, individuals must understand the options available and the effects and potential side effects. Involving individuals in decisions regarding their drug treatment is good practice and is associated with better outcomes. A discussion should be undertaken about the risks and benefits of the different treatment options so individuals can be actively involved in choosing a treatment which will suit their needs.

The formulary OST options[14] currently available in GGC ADRS services are:

- Methadone solution
- Trans-mucosal buprenorphine wafer (brand name Espranor®)
- Trans-mucosal buprenorphine sublingual tablets
- Long-acting injectable buprenorphine (LAB) (brand name Buvidal®)

Diamorphine injectable treatment is currently available only in Glasgow HSCP. Due to its restricted specialist use is not included in the GGC Formulary.

Other opioid formulations such as morphine or dihydrocodeine tablets are not licensed or usually indicated for community prescribing in this context. Occasionally a complex clinical situation may indicate the off-label use of an alternative opioid substitute. Senior clinical advice should be sought in these cases.

Methadone and buprenorphine are both approved by NICE[15] for maintenance and detoxification in opioid dependence. They continue to conclude that there remains insufficient evidence to justify recommending one drug over the other and recommend that clinicians should discuss the complex choice issues with individuals while obtaining informed consent for their treatment. They note that there is no simple formula that can be recommended to determine the suitable clinical choice of methadone or buprenorphine and that both medications have a very substantial evidence base for effectiveness.

OST is not contingent on uptake of other interventions or abstinence from other drugs but in addition to individual preference, a number of factors should be taken into consideration when deciding which drug to use:

- Level and type of opioid use
- Safety e.g. risk of overdose
- Individual experience with both street and prescribed medications
- Retention and treatment compliance

It should also be considered that the transfer from buprenorphine to methadone is more straightforward and less uncomfortable than the reverse, so if an individual is unsure which OST they would prefer, a trial of buprenorphine (transmucosal or LAB) should be suggested with methadone transfer as the alternative option.

Buprenorphine may be more suitable for individuals with:

- Risk of prolonged QTc e.g. co-prescribed medication or other cardiac risk factors
- Prescribed medications that interact with methadone e.g. HIV treatment

- Harmful or dependant alcohol intake
- Poly drug use, particularly street benzodiazepines
- Previous negative experience of methadone
- Need for mental clarity
- Pregnancy or those who may soon become pregnant

Methadone may be more suitable for individuals with:

- Negative experience of buprenorphine
- High levels of distress / dysphoria – individuals seeking sedative effect
- Chronic medical conditions requiring opioid analgesia

Individuals who are not responding well to adequate doses of the chosen medication, or who are experiencing persistent unwanted effects, may benefit from transfer to another medication. It is important to have a robust understanding of the similarities and differences between methadone and buprenorphine before considering the individual products available.

12 ADRS RAG SOP
13 GGC Clinical Risk Screening and Management Policy
14 GGC Formulary: 4.10.3 Opioid dependence
15 NICE TA114 Methadone and buprenorphine for the management of opioid dependence

Table 1: Summary of pharmacology of methadone and buprenorphine

	Methadone	Buprenorphine
Pharmacology	Full opioid receptor agonist	Partial mu-opioid agonist
Mechanism of action	Activates all opioid receptors with full effect	Partial mixed opioid agonist at the mu receptor and antagonist on the kappa receptor. It has a high affinity and low intrinsic activity at the mu receptor and will displace morphine, methadone and most other opioids which can precipitate withdrawal during initiation.
Overdose risks	Respiratory depression	Risk of respiratory depression lower than with full agonists because of the partial agonist effect and ceiling effect on respiratory depression.
QTc risk for Torsades de Pointes arrhythmia	May cause QTc prolongation in particular with doses in excess of 100mg and in combination with medications that prolong QTc	Minimal risk of prolonged QTc
Interactions	**BNF** Specific medications to highlight: citalopram, clarithromycin, clozapine, lithium, phenytoin, rifampicin, risperidone, sildenafil, venlafaxine, CNS depressant medication	**BNF** Specific medications to highlight: clarithromycin, antiretrovirals, CNS depressant medication
Side effects – all opioids	Side effects for all opioids	
Common side effects – specific	Asthma exacerbation; dry eye; dysuria; galactorrhoea; hyperprolactinaemia; hypothermia; menstrual cycle irregularities; mood alteration; nasal dryness; postural hypotension.	Anxiety; depression; diarrhoea; tremor; fatigue; headache nausea; postural hypotension; sleep disorders.
Cautions – all opioids	Adrenocortical insufficiency; hepatic impairment; obstructive respiratory disease; raised intracranial pressure; renal impairment; respiratory depression; severe hypothyroidism; sleep apnoea.	
Cautions – specific	Phaeochromocytoma; QTc prolongation risk factors.	
Sedative effect	Due to anxiolytic/blunting effect, individuals with comorbid mental health symptoms may benefit from the greater sedative effect	Gives clear headedness and less sedation, useful if undertaking tasks that require-concentration. May be less suitable for those with mental distress and complex trauma.

Table 2: Summary of GGC ADRS formulary OST formulations

	Methadone solution	Buprenorphine wafer	Buprenorphine tablet	LAB weekly injection	LAB monthly injection
Initiation Dose	30mg	8mg	8mg	24mg	96mg
Time taken to dissolve orally	n/a	Approx 15 seconds	5 to 10 minutes	n/a	n/a
Time to peak plasma	1 to 5 hours	70 mins	90 mins	24 hours	6 to 10 hours
Mean Half Life	25 hours	33 hours	33 hours	3 to 5 days	19 to 25 days
Induction Duration	2 to 4 weeks	2 to 3 days	2 to 3 days	3 weeks	3 months
Induction Regime	5 to 10mg dose increases every three days or less frequently	Usually 8mg day 1, 16mg day 2.	Usually 8mg day 1, 16mg day 2.	Weekly injections on days 1, 8 and 15 then monthly on day 22	Monthly injections
Time to optimal treatment dose	3 to 4 weeks	within 48 to 72 hours	within 48 to 72 hours	24 hours to 1 week	12 hours to 1 week (if top up dose used)
Treatment Dose	60 to 120mg daily	16 to 24 mg daily (>18mg off label)	16 to 32mg daily	24 to 32mg weekly	96 to 160mg monthly
Steady State	10 days	7 days	7 days	4th dose (day 22)	4th dose (3 months)

2.3 Informed Consent

Like any other medical treatment, informed consent for OST must be obtained and documented. Considerable judgement will be required in terms of balancing the need to inform individuals of all possible risks of OST with the need to ensure that sometimes the extreme risks individuals are exposed to are addressed by prompt initiation of, and retention in, treatment. Although there is good evidence in regard to particular side effects of OST, e.g. QTc interval prolongation associated with methadone, firm evidence as to the magnitude of that risk is lacking. It is clear that being on a therapeutic dose of OST is associated with a large global reduction in risk compared to being out of treatment.

Clinicians will need to carefully address factors specific to particular individuals, e.g. pre-existing heart or respiratory disease, or repeated unsuccessful attempts at detox when supporting individuals coming to a decision in regard to their own treatment.

Individuals presenting for OST may be in crisis and desperate for help or continually impaired by street drug use and again judgement should be exercised in terms of balancing benefits of treatment initiation with providing sufficient information to allow an informed choice regarding treatment.

Appropriate verbal and written information[16] should be provided to enable individuals to make an informed choice.

The following topics should be discussed in the context of the individual's health and circumstances:

- Purpose of OST
- Requirements of OST
- Possible side effects
- Respiratory, cardiovascular and liver disease risks
- Potential issues in pregnancy
- Medication interactions
- Safe storage and disposal
- Driving and DVLA licensing regulations

Informed consent should be agreed and recorded before commencing treatment. Consent forms can be completed verbally if circumstances are such that an individual is unable to sign a paper copy e.g. during a pandemic. Complete consent forms[17] should be uploaded to the electronic record.

It is important to continually return to informed consent and revisit discussions around treatment in particular at times when judgement may be impaired. Consider involving family/ nominated persons.

16 Patient Information Leaflet – Link awaited

17 Appendix 3 consent forms

2.4 Commencing OST

Prior to commencing treatment it is the prescriber's responsibility to ensure to the best of their knowledge that the individual is not already prescribed OST elsewhere and that the GP practice and other clinicians involved in the individual's care are informed of commencement of OST.

It is the responsibility of the prescriber to inform the GP practice by telephone or clinical email[18] at the point of starting OST and to follow up timeously with a letter detailing the assessment and treatment plan.

The practice should be asked to record the OST medication in their electronic patient record as "prescribed outwith practice".

In keeping with MAT Standard 5, prior to commencing OST, an anticipatory plan should be agreed with the person in advance, describing actions which will be taken in response to disengagement from treatment. It should incorporate the responses from all partners, including the person's family member or nominated person(s).

2.5 OST Methadone Initiation and Titration

Methadone[19] is a Schedule 2 controlled drug[20]. It is an effective evidence based medication for use in the treatment of opioid dependence. It is an opioid agonist, its primary function being to reduce street opioid use. It is most effective when used as a maintenance agent at optimal dosing.

The time to reach peak clinical effect is 1 to 5 hours after each dose. An optimal dose will exert clinical effects for 24 to 36 hours but lower doses may exert clinical effects for a much shorter time. Methadone takes between 4 and 5 days for plasma levels to stabilise and can take up to 10 days to reach steady state. Repeated dosing leads to accumulation and therefore initiation should be started cautiously. Once stabilised, the half-life is usually 20 to 37 hours.

i. OST Methadone – preparations available:

Methadone Oral Solution 1mg:1ml

- Methadone Oral Solution 1mg:1ml is available in standard[21] (sugar containing) or sugar free[22] preparations.
- Prescribing of the sugar free preparation can be considered taking into consideration individual choice and or clinical indications such as dental health.
- There should be no barrier to choice of formulation.

Methadone Concentrated Oral Solution 10mg:1ml

- Methadone concentrate may be used in exceptional circumstances when clinically indicated due to the associated risks.
- Any take home doses must be carefully risk assessed including consideration of the use of 1mg:1ml for take home doses.
- The clinical decision and risk assessment must be clearly documented.
- A suitable pharmacy should be identified that holds the necessary Standard Operating Procedure to allow safe dispensing of methadone concentrate and communication clearly recorded confirming the treatment plan.

18 Appendix 4 Primary care clinical email
19 Methadone hydrochloride | Drugs | BNF | NICE
20 Controlled drugs and drug dependence | Medicines guidance | BNF | NICE
21 Methadone 1mg/1ml oral solution – Summary of Product Characteristics
22 Methadone 1mg/ml oral solution sugar-free – Summary of Product Characteristics

Methadone 5mg tablets

Methadone is available as 5mg tablets[23] however these are not licenced for use for drug treatment. Off-label prescribing[24] may be considered for travel as a lower risk and more convenient alternative to the liquid preparation. Clinical decisions, risk assessment and risk mitigation must be clearly documented.

ii. OST Methadone – starting treatment

A starting dose is decided after consideration of the individual's opioid tolerance, frequency of use, route of administration, use of other drugs and alcohol, and previous OST history.

There is an increased risk of death during methadone induction and titration and a consistent finding is that multiple drugs, particularly benzodiazepines, gabapentinoids and alcohol are also involved. Opioids induce respiratory depression and hypoventilation and sedative drugs (including alcohol) potentiate this effect. Methadone toxicity is delayed at least several hours after exposure and this may only become apparent after several days of treatment due to its long half-life. Time to achieve an adequate dose to reduce harm related to street drug use must be balanced against the risks of too high a starting dose and too rapid titration. The titration process and the reasons for being cautious should be explained to the individual and clearly documented.

Particular caution must be taken when:

- Treatment naïve
- Low or uncertain tolerance
- Poly drug use (prescribed and or street)
- Alcohol use
- Young age
- Respiratory disease
- Pregnant

iii. OST Methadone – drug interactions

Methadone is generally well tolerated. The main drug interactions are associated with CNS depressants and liver metabolism:

- Combination with benzodiazepines may enhance sedative effects
- Alcohol may alter metabolism and increase CNS depression
- Antidepressants may cause enhanced sedation
- SSRIs may raise methadone levels
- Citalopram and escitalopram are contraindicated due to risk of prolonged QTc
- Antipsychotics and other medicines which prolong the QTc should be used with caution

It is important to note that other medications can influence the expression of cytochrome P450 enzymes resulting in an alteration of the methadone half-life and the optimal dose. This is important in practice when methadone is co-prescribed with rifampicin, some antiretrovirals (e.g. nevirapine and ritonavir) and antiepileptic drugs (phenytoin and carbamazepine) which induce these enzymes and thus accelerate the metabolism of methadone. In such cases the dose of methadone may need to be significantly increased. Particular care should be paid to compliance with, and cessation of, the co-prescribed medication as the dose of methadone may then need to be reduced again to avoid overdose. Over sedation should be monitored and assessed throughout if co-prescribing these drugs with methadone.

23 Methadone 5mg Tablets – Summary of Product Characteristics

24 MHS MRG 25 Guidance on off-label and unlicensed prescribing in mental health services

iv. OST Methadone – side effects

There are few side effects with methadone and most can be managed with support and advice. Some individuals perspire more, particularly around the face, but this usually gets better with time. Constipation and dry mouth can also occur as the more commonly reported side effects.

Check the individuals understanding of the side effects of methadone. If excessive perspiration is a problem, provide reassurance that it may be transient. If constipation is a problem, advise on fluid intake and dietary fruit and fibre. Promote good oral hygiene, especially if dry mouth is a problem. Individuals can be signposted to their community pharmacy to access treatment via Pharmacy First.

v. OST Methadone – starting dose

- Usual starting methadone dose is 30mgs
- If tolerance is low or uncertain then 10 to 20mg is more appropriate
- 40mgs can be cautiously used as a starting dose in individuals with very high level use (usually intravenously) however this starting dose should not be exceeded

Methadone doses should be prescribed in instalments and supervised daily in a community pharmacy for at least the first 12 weeks of treatment.

vi. OST Methadone – dose titration

In the community, doses can be increased by 5 to 10mgs with a minimum of 3 days between increases (maximum 20mg increase per week).

The individual should be assessed regularly during treatment induction, ideally face to face for most appointments. Sequential prescriptions of numerous increasing doses should not be issued.

A usual maintenance dose is between 60 to 120mg daily. Maintenance treatment ensures opioid tolerance which reduces the risk of overdose. Maintenance on an optimal treatment dose contributes to longer term recovery and abstinence.

Evidence shows at least 80mg is usually required to achieve abstinence from street drug use in addition to harm reduction.

2.6 OST Buprenorphine Initiation and Titration

Buprenorphine[25] is a Schedule 3[26] controlled drug. It is an effective evidence-based medication for use in the treatment of opioid dependence.

Buprenorphine undergoes extensive first-pass hepatic metabolism therefore the oral route is inappropriate. (Buprenorphine which is swallowed will be metabolised and excreted with minimal effect.) Available preparations are either transmucosal or injectable.

i. OST Transmucosal Buprenorphine

Peak plasma concentrations are achieved 90 minutes after sublingual administration but most individuals experience the effects at around 2 to 4 hours. Its clinical effects peak at 1 to 4 hours post dose. The duration of effect may last for 6 to12 hours at low dose and 24 to 72 hours at higher dose. Steady state is reached within 7 days.

a. OST Transmucosal Buprenorphine – preparations available

Buprenorphine generic sublingual tablets

- sublingual tablets are available in 8mg, 2mg and 0.4mg strengths
- generic formulation so taste may vary between brands
- placed under the tongue until dissolved which may take 5 to 10 minutes
- the 0.4mg strength can be useful in detox

Buprenorphine lyophilisate wafer Espranor®

- oral lyophilisate wafer Espranor is available in 8mg and 2mg strengths
- consistency of preparation as single brand
- placed whole on the tongue and absorbed through the oromucosa in approximately 15 seconds
- contains Halal approved bovine derived gelatine which may not be suitable for some individuals

Espranor lyophilisate wafer is the recommended formulary preparation due to the advantage of quick time to dissolve and consistency of non-generic formulation. There should be no barrier to choice of formulation but there should be documented rationale for prescribing of buprenorphine sublingual tablets.

b. OST Transmucosal Buprenorphine – starting treatment

Initiation of buprenorphine is not associated with the same level of risk as initiation of methadone. An optimal treatment dose can be reached within 2 to 3 days and this rapid induction has been shown to prevent dropout from treatment. Every effort should be made to ensure safe and rapid inductions are prescribed.

Buprenorphine has a long half-life. At therapeutic doses it can exert its effects for up to 24 to 72 hours.

c. OST Transmucosal Buprenorphine – drug interactions

Buprenorphine should not be co-administered with the opioid antagonists naltrexone or nalmefene.

Buprenorphine should be used with caution if co-administered with:

- Clarithromycin antibiotic
- Sedatives such as benzodiazepines, gabapentinoids, and alcohol
- CNS depressants
- Opioid analgesics
- Monoamine oxidase inhibitors
- CYP3A4 inhibitors and inducers

Buprenorphine is metabolised by cytochrome P450 3A4 so any medication that induces or inhibits this enzyme could theoretically affect buprenorphine levels in the body. Some of the HIV antiretroviral drugs induce this particular enzyme and other anti-HIV drugs inhibit it.

The antibiotic clarithromycin can increase exposure to buprenorphine. The manufacturer therefore advises monitoring for the need to adjust dose during and after treatment.

There is an increased risk of overdose if buprenorphine is taken with other CNS depressants (like alcohol or benzodiazepines). Individuals requiring opioids for pain relief who are considering OST buprenorphine will require a review of their pain management.

d. OST Transmucosal Buprenorphine – side effects

There are few side effects with buprenorphine and most can be managed with support and advice. Some patients experience headaches or insomnia but this usually gets better with time. Constipation and dry mouth can occur as the more commonly reported side effects.

Check the individual's understanding of the side effects of buprenorphine. If headaches or insomnia is a problem, provide reassurance that it may be transient. If constipation is a problem, advise on fluid intake and dietary fruit and fibre. Promote good oral hygiene, especially if dry

25 Buprenorphine | Drugs | BNF | NICE
26 Controlled drugs and drug dependence | Medicines guidance | BNF | NICE

mouth is a problem. Individuals can be signposted to their community pharmacy to access treatment via Pharmacy First.

e. OST Transmucosal Buprenorphine – starting dose

Almost all individuals start on the standard initial dose of 8mg on day 1. It may occasionally be necessary to reduce this dose due to concerns regarding tolerance.

Due to buprenorphine's high affinity but low intrinsic activity at the mu opioid receptor, it displaces most agonist opioids from the mu receptors, without activating the receptor to an equivalent degree. This results in a net decrease in agonist effect, thus precipitating a withdrawal syndrome.

The best way to avoid precipitated withdrawal is to minimise the presence of other opioids at the mu receptors at the time of initiation. Individual education is the key to this, ensuring robust understanding of the risk and how it is avoided.

The timing of the first dose is important to avoid precipitated withdrawals. The individual should be displaying mild to moderate opioid withdrawal symptoms prior to the first dose. This tends to be about eight hours after the last dose of heroin and longer after the last dose of methadone or other opioids.

If precipitated withdrawals occur, they are typically 1 to 3 hours after the first transmucosal buprenorphine dose and peak over 3 to 6 hours before subsiding.

Precipitated withdrawals put the individual at risk of concluding that buprenorphine is ineffective and reduces successful treatment outcomes. If the individual experiences precipitated withdrawal they should be reassured that further doses of buprenorphine will be helpful and the titration process continued or accelerated.

The clinical assessment of withdrawals informs the timing of the first dose of transmucosal buprenorphine.

The use of benzodiazepines will often mask opioid withdrawals and the use of a subjective (SOWS)[27] or objective opioid withdrawal scale (COWS)[28] will likely show falsely low scores.

If withdrawal symptoms are not evident, a clear discussion should be had with the individual about the timescales for last use of opioids and the risk of precipitated withdrawals. A robust clinical assessment of opioid use should be recorded and consent obtained from the individual that they understand the potential risks of precipitated withdrawal based on self-reported last opioid and benzodiazepine use.

Any decision to delay initiation should be clearly documented, balancing risks of precipitated withdrawal versus engagement in treatment and if in doubt, should be discussed with a senior clinician.

f. OST Transmucosal Buprenorphine – dose titration

Table 3: Titration schedule for transmucosal buprenorphine

Day 1	8mg as a single dose
Day 2	16mg
Day 3	Up to 24mg if required
Day 4	Up to 32mg if required (unlikely due to pharmacokinetics)

A usual maintenance dose is between 16 to 24mg daily. Maintenance on an optimal treatment dose contributes to longer term recovery and abstinence. Maintenance treatment also ensures opioid tolerance which reduces the risk of overdose.

Evidence shows 16mg is usually required to achieve abstinence from street drug use in addition to harm reduction.

The maximum licensed dose of Espranor is 18mg, however doses of up to 32mg can be prescribed off-label if required.

If opioid tolerance is thought to be low, lower starting and titration doses may be used. The aim would still be to rapidly reach an optimal maintenance dose.

The individual should be assessed regularly during treatment induction, ideally face to face for most appointments.

g. OST Transmucosal Buprenorphine – conversion between Espranor and generic tablets

Caution should be taken when forward planning and checking prescriptions to ensure individuals are consistently prescribed their chosen preparation.

The bioavailability of Espranor may be slightly higher than generic sublingual buprenorphine however we find they are usually largely clinically interchangeable.

Plans to change from generic sublingual buprenorphine to Espranor should consider the recommended conversions below (Table 4) particularly if there is any concern re loss of tolerance.

Table 4: Generic sublingual buprenorphine to Espranor conversion

Buprenorphine 2mg to 18mg	Use same dose of Espranor
Buprenorphine 20mg to 24mg	Consider reducing to Espranor 18mg and re-titrating upwards if required
Buprenorphine 26mg to 32mg	Consider reducing to Espranor 24mg and re-titrating upwards if required

ii. OST Long Acting Injectable Buprenorphine (LAB)

The only LAB product currently recommended in GGC ADRS is Buvidal® and as these prescribing guidelines are specific to its summary of product characteristics, it is referred to by brand name. It is a long acting subcutaneous formulation of buprenorphine available in weekly and monthly depot-type preparations. The mean half-life of monthly Buvidal is 22 days and steady state is reached after the 4th injection. Weekly doses reach peak plasma levels after 24 hours, monthly doses reach peak plasma levels after 6 to 10 hours.

a. OST Buvidal[29] – preparations available

Buvidal[30] is available in three weekly strengths, four monthly strengths and one "top up" 8mg strength. It is helpful to consider the preparations as their approximate transmucosal buprenorphine daily equivalents.

Table 5: Equivalent Buvidal doses

Equivalent transmucosal buprenorphine daily dose	Dose of weekly Buvidal	Dose of monthly Buvidal
8 to 10mg	16mg weekly	64mg monthly
12 to 16mg	24mg weekly	96mg monthly
18 to 24mg	32mg weekly	128mg monthly
24 to 32mg	160mg monthly	

27 Appendix 1 SOWS
28 Appendix 2 COWS

b. OST Buvidal – starting treatment

A starting dose is decided after consideration of the individual's opioid tolerance, frequency of use, route of administration, use of other drugs and alcohol, and previous OST history.

Similarly to transmucosal buprenorphine, there are no particular contraindications for Buvidal treatment outwith those for other opioid treatments. It is not associated with high risk of QTc prolongation or overdose risk during the initial induction period.

Inclusion criteria may include:

- New individuals seeking OST
- Individuals requiring re-start OST
- Individuals released from prison already established on Buvidal
- Individuals established on buprenorphine or low dose methadone who request Buvidal
- Individuals who have children in the house
- Individuals who are frequently missing days at pharmacy, losing medication or requiring restart of OST

Exclusion criteria:

- Hypersensitivity to the active substance or to any excipients:
  - » Buprenorphine
  - » Soybean phosphatidylcholine
  - » Glycerol dioleate
  - » Alcohol anhydrous
- Severe hepatic impairment
- Severe uncontrolled alcohol dependence or delirium tremens
- Allergy to latex (latex is possible component in needle guard (not syringe – low risk)

Caution may be required for individuals with:

- Moderate hepatic impairment (regular monitoring recommended)
- Severe renal impairment (creatinine clearance < 30 ml/min)
- Pregnancy and breastfeeding
- Individuals being treated with disulfiram – caution re use of weekly injections due to alcohol excipients
- Individuals who usually benefit from community pharmacy attendance to collect other instalment dispensed medication such as supervised disulfiram or anti-retroviral HIV medication (if still supervised/instalment dispensed)[31]

c. OST Buvidal – drug interactions

Interactions between Buvidal and other medications are the same as for transmucosal buprenorphine. Individuals with concomitant medicinal products and/or comorbidities should be monitored for signs and symptoms of toxicity, overdose or withdrawal caused by increased or decreased levels of buprenorphine.

Buprenorphine should not be co-administered with the opioid antagonists naltrexone or nalmefene.

Buprenorphine should be used with caution if co-administered with:

- Sedatives such as benzodiazepines, gabapentinoids, and alcohol
- CNS depressants
- Opioid analgesics
- Monoamine oxidase inhibitors

- CYP3A4 inhibitors and inducers

Buprenorphine is metabolised by cytochrome P450 3A4 so any medication that induces or inhibits this enzyme could theoretically affect buprenorphine levels in the body. Some of the HIV antiretroviral drugs induce this particular enzyme and other anti-HIV drugs inhibit it.

There is an increased risk of overdose if buprenorphine is taken with other CNS depressants (like alcohol or benzodiazepines). Individuals requiring opioids for pain relief who are considering OST Buvidal will require review of pain management.

d. OST Buvidal – side effects

Studies have shown that side effects of Buvidal are identical to buprenorphine. The only difference with Buvidal is the potential for injection site reactions which may include transient pain, pruritus or injection site erythema.

e. OST Buvidal – administration

In addition to the usual OST informed consent,[32] all individuals prescribed "named patient" Buvidal are required to complete a consent to collect medication form[33].

In addition to the usual OST record keeping standards, a patient warning[34] should be added to Emis MH to optimise information available to acute and mental health colleagues.

Buvidal treatment is either prescribed and dispensed via community pharmacy or issued from controlled drug (CD) stock as per the named patient[35] or CD stock[36] SOPs.

A specific Emis MH template[37] has been developed for recording of Buvidal administration. As it is newly implemented, services are continuing to also use paper Buvidal Checklist and Administration Charts[38].

f. OST Buvidal – starting dose

The principles of starting Buvidal combine guidance for transmucosal buprenorphine with the pharmacological properties of the Buvidal preparations and the presence or absence of opioid withdrawals.

Steady state Buvidal is achieved after the fourth injection. The fastest way to achieve steady state is therefore to administer three weekly injections and then a monthly injection for the fourth injection. This should be the titration schedule unless there is a reason to progress to monthly sooner.

As the weekly preparation takes up to 24 hours to take full effect and lasts for a week, and the aim is to ensure a treatment dose is reached after 24 hours similar to transmucosal buprenorphine, Buvidal 24mg weekly is the usual starting dose for most individuals as it is equivalent to buprenorphine 12-16mg daily.

Some individuals will require treatment with transmucosal buprenorphine prior to Buvidal. It is simplest to consider the scenarios of individuals who are being commenced directly onto Buvidal and those being treated first with transmucosal buprenorphine separately.

g. OST Buvidal – starting directly on Buvidal

Individuals who have previously been treated with buprenorphine or who give a robust report of street buprenorphine experience will usually benefit from direct treatment with Buvidal when starting or re-starting OST. This delivers long-acting treatment, removes the need for daily community pharmacy attendance and if the weekly preparation is utilised reduces the risk of precipitated withdrawal (as the weekly preparation takes up to 24 hours to full effect).

Direct starts onto weekly Buvidal 24mg should be the default treatment plan for those with previous buprenorphine experience.

29 Medicinal forms | Buprenorphine | Drugs | BNF | NICE
30 Buvidal prolonged-release solution for injection – Summary of Product Characteristics
31 Appendix 9 BBV team contact info

We have increasing clinical experience of commencing directly onto Buvidal weekly treatment for individuals who do not have previous experience of buprenorphine (buprenorphine naïve). This is particularly useful when starting individuals who are unable to reach a state of opioid withdrawal, often due to use of street benzodiazepines. Particular attention should be taken to ensure informed consent.

It remains valid for Buvidal treatment that observing opioid withdrawals (in addition to other clinical assessment) is the gold standard for diagnosis of opioid dependence and individuals being started on Buvidal should still be encouraged to present in mild opioid withdrawals if opioid dependence is unconfirmed.

Anyone who is uncomfortable in moderate to severe opioid withdrawal will require immediate relief. The quickest way of providing relief is with a dose of transmucosal buprenorphine which has an onset of effect at around 70 to 90 minutes, as weekly long acting buprenorphine onset of effect is 24 hours. This can either be as the Buvidal SmPC recommends (Table 6) or as a transmucosal buprenorphine OST start (2.6 i.). Transfer from transmucosal buprenorphine to Buvidal would then be as section 5.2.

Table 6: Starting Buvidal if moderate opioid withdrawals present

Day 1	Transmucosal buprenorphine 4mg dose
Day 1 – one hour later	Buvidal 24mg weekly injection
Day 8	Buvidal 24mg weekly injection

h. OST Buvidal – starting on transmucosal buprenorphine prior to Buvidal

Individuals who have no previous experience of buprenorphine and prefer initiation onto transmucosal buprenorphine, or for whom it is clinically indicated, should be started as per OST Transmucosal Buprenorphine – starting dose. The number of days on transmucosal treatment should be minimised as much as possible allowing rapid access to the treatment of choice.

Transfer from transmucosal buprenorphine to Buvidal should follow the corresponding section in OST transfers.

i. OST Buvidal – titration

Following subcutaneous injection, Buvidal begins to release buprenorphine and within hours, suppresses withdrawal and cravings associated with opioid dependence.

The fastest way to achieve steady state Buvidal treatment is to give at least three weekly injections before moving to monthly injections. This should be the administration schedule unless there is a reason to progress to monthly sooner.

Table 7: Example titration schedule for direct Buvidal start (no dose increases)

Day 1	Buvidal 24mg weekly
Day 8	Buvidal 24mg weekly
Day 15	Buvidal 24mg weekly
Day 22	Buvidal 96mg monthly

32 Appendix 3c Buvidal informed consent
33 Buvidal Named Patient SOP Appendix 2
34 Emis MH Buvidal Warning Guidance
35 GGC ADRS Named Patient SOP
36 GGC ADRS Buprenorphine Stock Handling Community SOP
37 Emis Buvidal Template Guidance
38 Appendix 5 Buvidal checklist and administration chart

Table 8: Example titration schedule for direct Buvidal start (dose increase at week 2)

Day 1	Buvidal 24mg weekly
Day 8	Buvidal 32mg weekly
Day 15	Buvidal 32mg weekly
Day 22	Buvidal 128mg monthly

2.7 OST Diamorphine

Diamorphine injectable treatment is available within the Glasgow City HSCP area via the Enhanced Drug Treatment Service (EDTS). The EDTS is designed to engage in treatment those individuals who have continued to inject street heroin despite the widespread availability of conventional OST. Its implementation followed recommendations of the "Taking away the chaos"[39] health needs assessment of individuals who inject drugs in public places in Glasgow. The primary target population are individuals currently injecting heroin and other drugs in the city centre area, with particular focus on those engaged in public injecting, who are homeless and at high risk of a wide range of drug related harms, including BBV transmission.

Diamorphine injectable treatment should be considered for individuals who continue to inject street drugs and are experiencing or are at risk of experiencing significant drug related harm. This will include people who are currently on OST or those who have not engaged or dropped out of treatment. Drug related harm and a lack of response to conventional treatment is not confined to the city centre and the service is also available to individuals from other areas of the city.

Individuals recruited to the EDTS will receive a prescription of diamorphine (pharmaceutical heroin), which they will self-administer by injection under close supervision within the EDTS premises. Under usual circumstances the diamorphine injections will be supplemented by administration of a suitable oral opioid, methadone oral solution or an appropriate long acting oral morphine preparation. The focus of EDTS is harm reduction and experience within the service is that many people so far recruited have multiple co morbidities and disadvantage and have little or no recovery or social capital. Many are not in a position where abstinence from street drugs and engagement in conventional recovery journeys are realistic expectations in the short or medium term. Nonetheless many in this category have made significant progress with treatment in terms of reduction in drug use and associated high risk behaviours and engagement with a broader range of supports with consequent reduction in harm and improvement in quality of life.

EDTS diamorphine prescribing guidelines are currently being updated and will be referenced here once approved.

3.0 OST Maintenance

3.1 OST Maintenance – ethos and aims

MAT Standard 3: all people at high risk of drug related harm are proactively identified and offered support to commence or continue OST

MAT Standard 5: all people will receive support to remain in treatment for as long as requested.

There are benefits of OST (e.g. opportunities to participate in psychosocial interventions, general medical care, hepatitis B, C and HIV treatment, welfare benefits, housing and peer support) that accrue over time and which may be of greater importance to the patient than the cessation of street drugs.

Initial goals of maintenance treatment are of harm reduction and enhanced lifestyle stability. There is considerable evidence that maintenance is a key step towards detoxification and abstinence if this is the individual's treatment goal.

Long term or maintenance OST is also an appropriate treatment for those who do not wish to, or cannot refrain from, using heroin or other street drugs. In this situation there will still be benefits of partial substitution. It is vitally important in these circumstances to maintain the individual on a therapeutic dose thereby maintaining a high opioid tolerance and protecting against overdose.

OST maintenance treatment will be the usual service response for individuals presenting to drug services with heroin dependence. Maintenance OST will support the recovery journey by providing enhanced safety and stability whilst allowing time to address other drug and alcohol use along with psychological, health and social needs. Services will offer a range of flexible intensity support packages for maintenance treatment.

An individual is given support to stay in treatment for as long as requested and supported to maintain treatment at key transition times such as leaving hospital or prison. Individuals are not put out of treatment, there should be no unplanned discharges. When individuals do wish to leave treatment they can discuss this with the service, and the service will provide support to ensure individuals leave treatment safely.

Individuals in OST should not be discriminated against or stigmatised. The system that provides OST is psychologically informed, routinely delivers evidence based low intensity psychosocial intervention and supports individuals to grow social networks.

Dose reduction or punitive actions due to ongoing substance use actively discourages engagement and retention in treatment. Combined peer outreach and treatment interventions, that target out-of-treatment individuals, have been shown to support people into OST, optimise care and prevent people dropping out.

OST is not contingent on uptake of other interventions or abstinence from other drugs. If other drug and or alcohol use is reported this should be incorporated into an individual's care plan and retention in treatment is all the more important.

In Glasgow city, individuals who continue to inject heroin should be considered for heroin assisted treatment via the EDTS.

3.2 OST Maintenance – dose optimisation

MAT 2: All people are supported to make an informed choice on what medication to use for OST and the appropriate dose.

It is extremely important for individuals to be on an optimal dose of their chosen OST. In the presence of ongoing street drug use and/or challenges progressing care plans, OST should be maintained or increased. Sub-optimal dosing is a risk factor for drug deaths and generally poorer outcomes. There is a clear relationship between dose of OST and street opioid use.

Remaining on an optimal dose of OST will maintain a high opioid tolerance and therefore reduce the risk of overdose. The period during and after cessation of OST, with resulting loss of

opioid tolerance, is associated with an increased mortality. This means that the margin of safety with opioid use on top is increased with higher OST doses. It is therefore vital that every effort is made to keep individuals engaged with the service on optimal doses of OST.

Ensuring an individual understands the reasons for optimal dosing and ensuring service staff understand the reasons an individual may not wish a clinically optimal dose is crux to the delivery of person-centred care.

3.3 OST Maintenance – methadone

i. Methadone maintenance – optimal dosing

The minimum likely effective dose of methadone is 60mgs which should be incrementally increased toward 120mgs in those who continue to use opioids.

The usual dose of methadone should be 60 to 120mgs.

Where doses higher than 150mg methadone are felt to be clinically indicated this should be discussed with a senior specialist clinician.

Individuals who continue to use opioids should have robust shared treatment plans documented.

ii. Methadone maintenance – split doses

Given the long half-life of methadone, once daily administration will provide a steady serum level for the vast majority of individuals once an adequate dose has been established. Occasionally individuals may experience withdrawal symptoms some hours before the next administration is due. The more common causes of this will be too low a dose of OST. However, some individuals have a genetically modulated rapid metabolism of methadone. Rapid metabolism may also be evident in late stages of pregnancy or with co-administration of enzyme inducing drugs such as treatments for epilepsy and tuberculosis. In such cases individuals may feel more comfortable with "split" (twice or three times daily) dosing which could be achieved by twice daily visits to pharmacy but more often by prescribing take home of all or part of each daily dose, dependent on risk assessment.

iii. Methadone maintenance – QTc and ECGs

Methadone is one of a number of drugs associated with prolonged QT interval and potentially associated with cardiac arrhythmias and Torsade de Pointe. The clinical significance of this risk in everyday practice is not well understood. There is overwhelming evidence that methadone, at therapeutic doses, significantly decreases risks in opioid dependant individuals. Any decision to alter methadone dosage on the basis of ECG results must be carefully considered with early redress to seeking appropriate senior ADRS specialist advice.

Factors suggesting increased risk:

- Higher doses of methadone – likely to be greater than 100mg
- Anyone on methadone that has any of the following additional risk factors:
  - » Concurrent use of other medications (citalopram and escitalopram are specifically contraindicated in people being prescribed other QTc prolonging drugs)
  - » Structural cardiac disease
  - » Cocaine, amphetamine or other stimulant use
  - » Bradycardia
  - » History of familial congenital prolonged QTc
  - » Electrolyte disturbance
  - » Other relevant medical factors – alcohol dependence; anorexia nervosa; HIV; hypothyroidism; liver disease; malnourishment

Clinicians must make a balanced judgement for each individual . ECGs should be considered for individuals at increased risk. The risk assessment and discussion should be clearly recorded and risks discussed with the individual.

Table 9: QTc Interval

	Normal	Borderline prolonged	High risk prolonged
Men	<450ms	>450ms	>500ms
Women	<460ms	>460ms	

If the ECG is normal, consider repeating it 6 to 12 monthly if the risk remains high.

If QTc is found to be borderline or high risk prolonged:

- Repeat the ECG
- Discuss with the individual the risks of borderline or high risk QTc prolongation and potential treatment options including advice on alternative medications, stimulant use and alcohol.
- Consider referral to Cardiology for further investigation.
- Review of OST – consider reduction in methadone dose but take into consideration other risks of reducing OST dose. If risk felt to be substantial consider a planned transfer to buprenorphine.
- Discuss complex cases with a senior specialist clinician, especially if buprenorphine is not an option and off-label long-acting morphine may be required
- Document clearly all discussions, individuals' views, risk assessments and decisions

3.4 OST Maintenance – transmucosal buprenorphine

The optimal dose for buprenorphine is less well established than methadone but is likely to be 16mg and above.

For maintenance treatment, transmucosal buprenorphine can be taken on a less than daily basis although due to licenced dosing this may require off-label Friday dosing to cover the weekend and/or a Sunday take home dose. This may be useful for individuals where take home doses are best avoided although with the availability of Buvidal this dispensing has become unusual.

Table 10: Transmucosal buprenorphine – 16mg three times weekly dosing example

Monday	32mg supervised in pharmacy, no take home dose
Wednesday	32mg supervised in pharmacy, no take home dose
Friday	32mg supervised in pharmacy, 16mg take home dose for Sunday

3.5 OST Maintenance – Buvidal

Buvidal maintenance is usually considered to start after the 4th injection when steady state is reached. During maintenance, doses may be increased (or decreased) and individuals can be switched between weekly and monthly products according to the individual's needs and clinical judgement.

Changing between weekly and monthly dosing should occur when the next dose is due. Following dose change or switching between weekly and monthly frequency, individuals may benefit from closer monitoring.

i. OST Buvidal – supplemental dosing

With doses of Buvidal of 24mg and above, a maximum of one supplemental Buvidal 8mg top up dose may be administered between regular weekly and monthly doses, based on the individual's temporary needs. This is especially useful when an individual requests an increase dose part way through a month of treatment. An additional 8mg top up dose can be administered then the next monthly dose increased. The exception to this is individuals already on Buvidal 160mg monthly who cannot have a top up dose.

If a top up dose of 8mg has been administered within the week or month, a higher weekly or monthly dose can be given within the maximum dose range at the next administration date.

The other option available to increase the dose, rather than administering an additional 8mg top up, is to give the next (same or increased) weekly dose up to 2 days early or monthly dose up to a week early. Although it should be noted that this should not be done repeatedly i.e. monthly dose given regularly every 3 weeks due to the potential for accumulation.

Combining doses in any way is not recommended. For example, 2 x weekly 32mg Buvidal is NOT equivalent to Buvidal 64mg.

3.6 OST Maintenance – community pharmacy supervised self-administration

For OST methadone and transmucosal buprenorphine, daily supervised self-administration at community pharmacy is required for the safe initiation of treatment. National guidance recommends at least 3 months of daily supervision after which, frequency of pharmacy attendance for supervision and take home dispensing should be individually risk assessed.

The potential benefits of frequent pharmacy dose supervision include: stability and routine, minimised risk of toxicity and overdose, reduced sharing/selling of medication and regular contact with a healthcare professional. However, continuation of supervision when not clinically required can be stigmatising and a barrier to treatment, can cause difficulties for people in employment or with caring responsibilities and can prevent a recovery focussed lifestyle.

UK guidelines are clear that unsupervised take home dose prescribing should only start after careful individual risk assessments. A risk assessment for reduction of frequency of supervision should include:

- Assessment of drug and alcohol use
- Individual risk assessment – mental health, impulsivity, overdoses
- Home environment and vulnerable person's risk assessment
- Safe storage facilities in the home

In most cases, minimum supervision frequency would be one day per week. For those in employment this could be a Saturday. Supervision frequency should be regularly reviewed and risk assessed.

Decisions around any changes to frequency of supervision should be clearly documented.

Where supervision is reinstated after a period of take home medication, the return to supervised dosing requires careful consideration of tolerance, particularly for methadone treatment. Individuals on methadone 40mg daily or less can usually be returned to supervision with no need for phased return. For individuals on doses of methadone higher than 40mg, it is suggested that supervision is reintroduced gradually e.g. 40mg supervised daily with remainder of dose take home, increasing the supervised part of the dose by 10mg per week until the full dose is supervised.

Table 11: Example of dosing to revert from unsupervised consumption to supervised

Methadone mg/ml dose	Week 1 daily doses	Week 2 daily doses	Week 3 daily doses	Week 4 daily doses
40mg daily	40mg supervised	40mg supervised	40mg supervised	40mg supervised
50mg daily	40mg supervised 10mg take home	50mg supervised	50mg supervised	50mg supervised
70mg daily	40mg supervised 30mg take home	50mg supervised 20mg take home	60mg supervised 10mg take home	70mg supervised

It may be necessary for a responsible carer to be involved in the collection and storage of doses for individuals who are having difficulty accessing supervised doses. Such arrangements should be made on a case by case basis. The decision should, wherever possible, be taken as part of multidisciplinary care plan review taking account of completed risk assessment and including discussion with family/carer and the community pharmacist.

In situations where the pharmacist considers the individual to be intoxicated they may use their professional judgement to withhold the dose and provide the prescriber with an update. It is important that the risks of withholding a dose(s) are considered in terms of individual safety (intoxication risks vs loss of continuity of treatment / loss of tolerance).

3.7 OST Maintenance – Reviews, Recovery Planning and Goal Setting

OST treatment services should have operational procedures outlining different flexible packages that range from low intensity for individuals not requiring or wanting more involvement, to intensive recovery focused packages for others. These packages should be agreed with each individual in the context of individual clinical risk. They must not be arbitrary and must respect peoples' personal circumstances. There should be flexible arrangements for appointments, particularly for people who are homeless and with co-morbidities or social issues that affect their ability to organise their time. Offering people only fixed appointment times is a barrier to access and is an unnecessary waste of resources.

Minimum contact would usually be monthly with the key worker/care manager and 6 monthly with medical/non-medical prescribing staff.

OST treatment reviews

Every one-to-one appointment provides an opportunity for the ongoing monitoring of progress on OST in terms of harm reduction and journey towards recovery.

Planned OST treatment reviews provide an opportunity to reflect on overall progress and update all domains of the recovery care plan. It also provides an opportunity to consider whether the current balance of pharmacological, psychological and social interventions is meeting identified needs and progressing recovery.

OST treatment reviews should be timeously communicated to all professionals involved in the patients care.

OST goal setting

Short and long term OST treatment goals should be set and updated at treatment reviews. They should be led by the priorities of the individual and informed by clinical assessment e.g. harm reduction if using street drugs.

It is important that prescribing goals and goals of any psychosocial interventions provided are integrated so that there is no inconsistency or lack of coherence.

4.0 OST Missed Doses

4.1 OST Missed Doses – methadone and transmucosal buprenorphine

Optimum opioid tolerance is achieved when an individual gets to steady state OST. Regular or serial missed OST doses can be associated with reduced opioid tolerance.

Every effort should be made to limit the potentially harmful impact on the individual of being without prescribed medication. If there is concern re potential reduced tolerance, the dose of OST may be reduced and then increased over coming days, this should be done as quickly as is clinically safe, with a low threshold for review prior to dose increases. Sequential prescriptions of numerous increasing doses should not be issued.

It should be noted that reducing OST may be as harmful as misjudging tolerance. Complex circumstances can be discussed with a senior specialist clinician.

A new prescription is required for any dose change.

Pharmacies are required to notify the service when an individual presents in the pharmacy having missed three or more doses to trigger review of the individual and advice from the prescriber on how to proceed. Most community pharmacies are using the NEO Missed Dose Module to report by email. Community pharmacies[41] and ADRS services[42] have local operational policies[43] in place for this process. If an individual has not taken their regular prescribed dose of opioid, there is the possibility that their tolerance has reduced, increasing the risk of overdose if the usual dose is then taken.

Each episode or repeated episodes of missed doses should be assessed individually taking into account the medication half-life and time to dose steady state in table 12 and the following questions:

- Is the individual at steady state or induction / titration phase?
- Pharmacy confirmed date of last supervised dose and any take home doses on that date?
- How many "missed days" from last take home until yesterday?
- Is it one episode or repeated missed dose episodes?
- Any recent non-fatal overdoses noted by self-report, clinical portal or review of Emis notes?
- How long after usual OST dose would the individual usually experience withdrawals?
- Reported drug use, alcohol use, prescribed medications, OTC medications. In particular anything that may affect their metabolism of OST and the use of any sedative substances?
- Any relevant physical health comorbidities? In particular respiratory and liver function. A decision about an individual with advanced liver disease and COPD will be different to an individual that is young fit and healthy.

In particular, individuals who have missed 4 or more methadone doses and who have respiratory issues and use other sedative drugs require a more cautious approach to risk assessment and treatment dose decisions.

41 Pharmacy NEO process
42 ADRS NEO guidance
43 ADRS NEO SOP

Table 12 OST mean half-life and time to dose steady state

	Mean Half Life	Steady state
Methadone	25 hours	10 days
Buprenorphine	33 hours	7 days
Buvidal weekly	7 to 10 days	22 days
Buvidal monthly	19 to 25 days	3 months

4.2 OST Missed Doses – Buvidal

When an individual misses their Buvidal administration, consideration must be given to whether the individual is at steady state which is achieved after the 4th injection (of weekly and or monthly dosing) before administration.

Individuals who have reached steady state can be administered their dose within 28 days of the missed dose date.

If an individual presents outside the 28 days (more than 57 days since last injection), a person-centred decision is required regarding dose and treatment plan. For example, on risk benefit balance, the same dose may be given at day 33 if someone has been in Buvidal treatment for 2 years where as a reduced strength weekly dose may be given if the person has been in treatment for only 4 months. All clinical reasoning and decisions must be clearly documented.

For individuals who have not yet reached steady state:

Weekly Buvidal: dose can be administered within two days after a scheduled due date. After this administration window has passed, clinical guidance should be sought from medical / prescribing staff before any dose is administered as this would be viewed as a restart and should be risk assessed, RAG reviewed and documented as treatment re-start.

Monthly Buvidal: dose can be administered within seven days after a scheduled due date. After this administration window has passed, clinical guidance should be sought from prescribing staff to determine whether the dose should be returned to the pharmacy or a plan made for administration.

All named-patient scheduled doses that have not been administered due to non-attendance can be held in locally agreed secure storage for 28 days for further attempts at administration (including by proactive outreach approach).

Doses which have not been administered by day 28 should be returned to the community pharmacy where they will be destroyed.

If individuals drop out from treatment, Buvidal slowly 'wears off'. Buvidal is likely to take between one week and 3 to 6 months to 'wear off' depending on the last dose and previous amount taken. If the service user has had only one weekly dose, it 'wears off' after between 7 to 10 days whereas after 3 monthly injections, it may take up 3 months to slowly 'wear off', in effect providing a gradual detoxification.

4.3 Anticipatory planning for missed contacts

In keeping with MAT Standard 5, prior to commencing OST, an anticipatory plan should be agreed with the person in advance describing actions which will be taken in response to disengagement from treatment. It should incorporate the responses from all partners, including if agreed, the person's family member or nominated person(s).

This should be recorded in the Family Inclusive Practice section of the Emis ADRS template.

i. Managing individuals who miss OST clinic appointments

During the Covid-19 pandemic, many services moved away from clinic appointments where OST prescriptions are issued to the individual, with prescriptions being posted or delivered in

advance. With recent service recovery, more OST linked appointments are happening again, sometimes in the context of individuals being asked to attend clinics when they have been seen on outreach or contacted by telephone for most appointments in the last 3 years.

Any missed appointment must be carefully considered and a plan of response agreed with those involved, usually the care manager/key worker and prescriber, however other staff members may also be involved. The response plan should follow any pre-agreed anticipatory plan and all attempts at contact / information gained must be clearly documented in the clinical record.

A clinical decision with regards to the prescription must be made. This will be a balance between harm reduction and the benefit of retaining the individual in treatment and should always consider the risks of interruption to OST. The usual options for prescription management being to drop the prescription at the pharmacy, or wait until the individual can be reviewed face to face. All the factors noted above should be considered to make this decision, ideally through discussion with the prescriber and care manager.

In the absence of an anticipatory plan:

- Attempts should be made to contact the individual by telephone
- Pharmacy should be contacted to check last supervised dose, recent attendance and any concerns noted
- Known relatives / friends should be contacted (if consent to share information documented)
- Other services involved should be contacted for information i.e. supported accommodation / community recovery supports / GP practice
- Clinical portal should be checked for admission or contact with A&E etc.
- Criminal justice colleagues can advise if in custody

If the individual's welfare or whereabouts cannot be assured, a risk assessment should be undertaken / updated to ascertain the level of concern for the individual. Factors to consider:

- Current drug and alcohol use
- Mental and physical health
- Dependent children or adults
- Vulnerability
- Social situation

If there are significant concerns then assertive outreach should be undertaken which would include home visits / hand delivered note to home address.

If there is still no contact consider reporting to local police as a missing person.

4.4 Procedures for lost paper prescriptions or lost OST medication

The processes for managing lost OST prescriptions[44] or OST medication[45] are outlined in the GGC ADRS Prescription Management manual.

44 Lost paper prescription guidance
45 Lost medication guidance

5.0 OST Transfer

All medication switches should be viewed as points of treatment transition and the associated risks acknowledged and mitigated where possible.

Informed consent must be obtained for the new treatment medication or preparation.

The relevant community pharmacy should be contacted, informed of transfer (especially to Buvidal where they may stop attending the pharmacy altogether) and any existing OST doses cancelled.

5.1 Transfer transmucosal buprenorphine to methadone

The first dose of methadone should be given the day after the last buprenorphine dose and should follow methadone new induction guidance. Due to the long half-life of buprenorphine, any risk of withdrawal effects should be minimal whilst the methadone is titrated up to towards a therapeutic level.

5.2 Transfer transmucosal buprenorphine to Buvidal

Table 13: Equivalent Buvidal doses

Equivalent transmucosal buprenorphine daily dose	Dose of weekly Buvidal	Dose of monthly Buvidal
8 to 10mg	16mg weekly	64mg monthly
12 to 16mg	24mg weekly	96mg monthly
18 to 24mg	32mg weekly	128mg monthly

Individuals already established on transmucosal buprenorphine should be switched directly to Buvidal starting on the day after the last daily buprenorphine dose and following the dose equivalents in table 13.

As the aim is to reach steady state as quickly as possible, the default transfer would be to give 3 weekly Buvidal doses before changing to monthly unless a different schedule is clinically indicated.

Table 14: Example titration schedule for transfer from Espranor to Buvidal

Day 1	Espranor 16mg (last dose of transmucosal buprenorphine)
Day 2	Buvidal 24mg weekly
Day 9	Buvidal 24mg weekly
Day 16	Buvidal 24mg weekly
Day 23	Buvidal 96mg monthly

If required, an additional supplemental dose of Buvidal 8mg can be administered during a treatment week. The next week's injection dosage would then be increased to the next strength as per table 15.

Table 15: Example titration schedule for transfer from Espranor to Buvidal with top up dose

Day 1	Espranor 16mg (last dose)
Day 2	Buvidal 24mg weekly
Day 9	Buvidal 24mg weekly
Day 14	Buvidal 8mg top up dose
Day 16	Buvidal 32mg weekly
Day 23	Buvidal 128mg monthly

5.3 Transfer methadone to buprenorphine

In this guidance, for the purposes of transfer to buprenorphine, low dose methadone is considered to be a daily dose of less than 50mg, based on clinical experience. The licenced dose for transfer is methadone 30mg or less so transfer above 30mg is off-label.

i. Transfer low dose methadone to buprenorphine

Individuals should miss doses of methadone to establish opioid withdrawals. If individuals are in steady state methadone treatment they will require a longer period without methadone to develop withdrawals, especially if they have taken their daily dose regularly for a long time. Withdrawals from steady state methadone are described as starting within 24 to 48 hours and peaking at day 7 to 10 for most people.

There are no prescriptive timescales for medication transfer, it is case by case dependent on clinical assessment and individual tolerance as to when onset of withdrawals may start. Most individuals will have a very accurate knowledge of when their withdrawals will start if they miss doses of methadone.

There should also be a discussion around any short acting opioids that may be used in this interim period and for how long they should be avoided prior to attending for buprenorphine transfer.

The individual should also be reminded that as street benzodiazepines can mask opioid withdrawals and complicate assessment of safety of transfer, they should also be avoided if possible.

a. Transfer low dose methadone to transmucosal buprenorphine

If the individual wishes to transfer to transmucosal buprenorphine, once they are in established opioid withdrawals they should be commenced as per section 2.6i. As transmucosal buprenorphine has a quick onset of effect and time to peak plasma combined with high receptor affinity, there can be a significant risk of precipitated withdrawals.

b. Transfer low dose methadone to Buvidal

If the individual wishes to transfer to Buvidal, we would recommend most people consider transferring directly to weekly Buvidal as this reduces the risk of precipitated withdrawal due to its longer time to peak plasma (24 hours). This can be easily agreed if the individual has previous experience (prescribed or street) of buprenorphine. As per new starts on Buvidal, 24mg weekly would be the preferred starting dose with 3 weekly injections then transfer to monthly. If
an individual has no previous experience of buprenorphine, they can still transfer directly to Buvidal if they have no contraindications and consent to the weekly dose.

ii. Transfer high dose methadone to buprenorphine

In this guidance, for the purposes of transfer to buprenorphine, high dose methadone is considered to be a daily dose of 50mg or higher.

High dose methadone transfer follows the same principles as low dose transfer however time to withdrawal will be longer from higher doses and risk of precipitated withdrawal is higher.

Methadone doses can be reduced for a few days before being stopped to assist in achieving opioid withdrawals, for example: methadone usual daily dose 100mg daily, might be reduced to 50mg daily for 3 days then stopped for 2 or 3 days as agreed with the individual as likely timescale to develop withdrawals from steady state 100mg daily.

a. Transfer high dose methadone to transmucosal buprenorphine

Because of the risks of precipitated withdrawal, high dose transfer to transmucosal buprenorphine in particular should be avoided unless very robust understanding, consent and withdrawal timescale planning is in place. If transfer to transmucosal buprenorphine is agreed, there should be a low threshold for discussion with a senior specialist clinician. The usual dose schedule once withdrawals are established would be Espranor 8mg in the morning with a

further 8mg later the same day and up to 24mg if required on day 2.

b. Transfer high dose methadone to Buvidal

Buvidal 24mg or 32mg weekly are the preferred starting doses for high dose transfer depending on the previous methadone treatment dose.

5.4 Transfer Buvidal to transmucosal buprenorphine

If individuals are to switch from Buvidal to transmucosal buprenorphine, this should be done at least one week after the last weekly dose or at least one month after the last monthly dose of Buvidal, at a dose corresponding to the recommendations in table 16. Individuals in steady state Buvidal treatment may have long-acting buprenorphine present for months so cautious timing of transmucosal dosing should be balanced with the ability of the individual to tolerate a longer cross-over period.

Table 16: Recommended equivalent doses for transfer to transmucosal buprenorphine

Dose of weekly Buvidal	Dose of monthly Buvidal	Equivalent transmucosal buprenorphine daily dose
16mg weekly	64mg monthly	12mg
24mg weekly	96mg monthly	16mg
32mg weekly	128mg monthly	18 to 24mg
	160mg monthly	24mg

5.5 Transfer Buvidal to methadone

Transfer of Buvidal to methadone has no direct dose equivalent and must take into account the cumulative effect of methadone dosing and the long plasma half-life of Buvidal, especially if at steady state. All transfers should be discussed with a senior specialist clinician. Factors to consider include:

Has steady state been reached?

If so:

- Important to consider half-life (19 to 25 days) and buprenorphine's high affinity for mu opioid receptor
- Risk assess and delay initiation as long as risk allows in agreement with individual
- 1st dose a minimum of 28 days after last monthly dose or 7 days after weekly injection
- Start low (consider 10 to 20mls) and titrate very slowly as Buvidal gradually reduces
- Approach should be individualised with regular review of individual's symptoms to manage any withdrawals and reduce risk of non-prescribed drug use

If an individual is in steady state Buvidal treatment and requests transfer to methadone, it is likely that methadone will be introduced long before plasma Buvidal has significantly reduced. Methadone should therefore be introduced at a low dose and titrated with caution. We do not have enough clinical experience of this yet to make expert recommendation.

If steady state Buvidal has not yet been reached, the standard methadone titration guidance should be followed.

6.0 OST Detoxification

MAT Standard 5: All people will receive support to remain in treatment for as long as requested. A person is given support to stay in treatment for as long as they like. When people do wish to leave treatment they can discuss this with the service, and the service will provide support to ensure people leave treatment safely.

Evidence shows that the health of individuals with opioid dependence is safeguarded while in substitution treatment for at least twelve months and that there are significantly elevated mortality risks during the first four weeks after leaving OST treatment. To minimise this risk, detoxification and aftercare should be robustly planned following the evidence base for improved outcomes.[46]

6.1 OST detox – planning

Detoxification should be planned and agreed with the individual as an integral part of a recovery plan.

A detox plan[47] should include:

- evidence of a considerable period of stability from all non-prescribed drug and alcohol use and sustained lifestyle and other changes in recovery plan
- information on and referral to a range of recovery resources
- identified vulnerable situations and alternative coping strategies
- naloxone training and (re)supply
- communication with other care providers
- discussion involving families
- stable housing arrangements
- lifestyle advice including balanced diet, adequate hydration, sleep hygiene and regular physical exercise

The individual will make an active decision to transfer from maintenance to detoxification[48] and there should be a clear distinction. Informed consent to detox should always include the following discussions:

- Physical and psychological aspects of opioid withdrawal including duration and intensity of symptoms and how these may be managed.
- Use of non-pharmacological approaches to cope with withdrawals.
- Loss of tolerance leading to increased risk of overdose and death.
- Importance of continued support to maintain abstinence.

6.2 OST detox – unstable drug use

If an individual requests detoxification when then they continue to use street drugs they should be encouraged to remain on a therapeutic OST dose (even if their main drug use is a non-opioid drug) with an intensive recovery plan to address the street drug use before commencing OST detox.

If an individual understands the risks of OST detox while continuing to use street drugs and still voices a wish to detox, their reasons must be fully understood. All alternatives to OST detox should be explored (for example transfer to Buvidal if feeling restricted by pharmacy attendance). They should be supported in their choice and if they still wish to detox, the plan should adhere to the above principles as far as possible. All risk discussions should be documented and RAG and CRAFT updated. As a plan is agreed to support the individual in

46 NICE clinical guidance 52: opioid detoxification
47 Appendix 7 detox planner
48 Drug misuse and dependence: UK guidelines on clinical management

their choice while minimising risk as much as possible, the detox should not be "against medical advice".

6.3 OST detox – medication

Detoxification will usually be undertaken with the same drug as the individual has been using for OST, i.e. it would not be routine practice to change from methadone to buprenorphine.

The rate of reduction should be agreed with the individual. The rate should not reduce so rapidly that it would make the individual uncomfortable and experience withdrawal or so slowly that it results in the individual remaining on sub-therapeutic doses of OST for long periods.

i. OST detox – methadone

A methadone community detox plan should recognise that during maintenance treatment, methadone has a long steady state of around 10 days. Fortnightly reductions of 10% of the methadone dose may be appropriate initially however as a detox progresses this speed of reduction may result in increasing withdrawal symptoms and monthly reductions may be better tolerated.

ii. OST detox – transmucosal buprenorphine

Transmucosal buprenorphine detox is generally better tolerated than methadone. Dose reductions of 2mg per fortnight are recommended.

From the daily dose of 2mg there are 3 options for detox planning depending on the individual's preference:

- Stop detox at 2mg and begin abstinence support
- Step down to 2mg alternate days for a fortnight, then less frequently than alternate days then stop
- Use of buprenorphine tablets 0.4mg strength to provide 0.8mg and 0.4mg step down doses

iii. OST detox – Buvidal

Buvidal monthly treatment is an ideal detox medication providing a slow and gentle taper detox with few reported withdrawal symptoms due to its prolonged release characteristics, long half-life and gradual "wear off" time of up to 6 months.

The preferred detox schedule is 3 months at each step down dose as per table 17 example. This may be too long for some individuals in which case a quicker step down can be planned.

Table 17: Buvidal example detox schedule from 128mg

At least 3 months treatment	Buvidal 128mg
Decision and plan to start detox (detox planner completed)	
Then 3 months step down treatment	Buvidal 96mg
Then 3 months step down treatment	Buvidal 64mg
Then 6 months (estimated) gradual Buvidal taper to zero	
Possibility of withdrawal symptoms and highest risk opioid naïve time. 12 months after detox starts.	

Individuals should understand the timescale for estimated completion of Buvidal detox and that this time, even if months after last injection, remains a risk period requiring support. They should understand the risk of opioid naïve overdose once Buvidal has reduced in their system, should they return to opioid use.

An alternative to a stepped Buvidal reduction schedule would be to stop treatment and use the slow taper of plasma buprenorphine as a gradual detox over 6 months.

In either scenario, individuals should not be moved from monthly to weekly Buvidal nor transferred to transmucosal buprenorphine to complete detoxification.

6.4 OST detox – aftercare

Aftercare should include:

- Six months of non-prescription based treatment, psychosocial support and monitoring designed to maintain abstinence
- Access to a range of abstinence based recovery support services and resources
- Supply and training in use of emergency naloxone emphasised to individual and family
- Seamless, non-judgemental return to OST treatment if required in the case of relapse to opioid use
- Naltrexone

7.0 Drug Screening

Testing, monitoring and reporting of drug use is essential for appropriate individual care and is a component of service delivery.

Community ADRS services have access to a range of drug screens including point of care oral and urine screens, laboratory urine screens for standard street drugs and enhanced specialist laboratory urine screening for breakdown of benzodiazepines and gabapentinoids.

New drug screening guidance is currently in development within GGC ADRS. In the meantime, the section below is some of the detail from the 2017 prescribing guideline:

Purpose of drug screening:

- initial assessment and confirmation of drug use when considering substitute prescribing
- confirming treatment compliance – that a client is taking a prescribed medication
- corroborating and reinforcing self-reported progress and monitoring street drug use
- assessment for alcohol treatment and care

Different services use different methods of testing. Staff should use the method which is recommended locally.

When to take a drug test:

- Assessment for substitute prescribing
- Maintenance and detoxification
- Optimal OST dose discussion
- Assessment for alcohol treatment and care
- If required for drug treatment order

When NOT to take a drug test:

- If a random test is positive it should NOT be repeated at the next appointment as this is not random and so is likely to be influenced by pre-sample abstinence.
- Decisions regarding holiday take home or reducing supervision should be based on the holistic care plan of the individual and any previous random drug tests

Interpreting drug tests:

Drug screening is an aid to diagnosis, not an absolute binary result. Like all other tests or investigations, drug screens should not be used in isolation but should be part of a full clinical assessment.

Drug screen results show both a presence of street and prescribed drugs. They do not measure dependence, nor tell us frequency or level of use. They do not measure intoxication. A positive sample for drug or metabolite invariably means that the drug has been consumed. A negative sample, given variables such as potential substitution samples, mistakes in labs and thresholds for detection, may not be absolute.

We do not closely supervise urine gathering nor do we have a safe chain of custody. Samples should not under any circumstances be used as stand-alone factors in coming to any important decisions in terms of treatment, childcare or legal proceedings.

Street heroin is broken down to 6-MAM then morphine. 6-MAM is only found in the urine for a very short time, very soon after using. Opioid pain killers are broken down to codeine and morphine then morphine.

"Window of detection" timescales are affected by many factors including dose, body mass, hydration, other medication and liver and renal function so should be interpreted with caution.

Problems with drug tests:

Drug test samples can be prone to problems including adulteration, substitution, non-compliance and pre-sample abstinence.

A false negative can be achieved by:

- taking some over the counter medications
- drinking large volumes of fluid
- adding chemicals to the specimen
- diluting the specimen
- direct substitution with another sample

Pre-sample abstinence may also produce a falsely misleading negative result while ingestion of prescribed drugs may mask illicit drug use.

Approximately 1:10 point of care tests are currently negative when enhanced screening shows the presence of street benzodiazepines so negative tests results should be interpreted in this context.

A positive drug test result should prompt review of progress and recovery plan and increased treatment support or enhanced safety measures where appropriate. Motivational interviewing skills can be useful in exploring any difference between reported drug use and drug screen results.

8.0 Special circumstances for consideration in OST

8.1 OST and travel

The ethos of OST maintenance treatment is that an individual should continue treatment for as long as required and treatment should be as normalised and destigmatised as possible. This should be the context in which requests for increased take home to accommodate travel and other life events are viewed, although clinical risk assessment is also required. Balancing the risk of increased take home with the risk of the individual missing a period of OST or leaving treatment is sometimes challenging and these cases should be discussed at MDT meetings.

Requests to continue OST away from normal dispensing for short periods e.g. holidays or family visits, should be subject to similar risk assessment as for permanent change. Travel documents verifying travel arrangements should be noted in the clinical record where possible. Individuals should be encouraged to make others travelling aware of medicines in their possession. Safe storage should be carefully agreed and documented and lockbox offered if no suitable storage arrangements noted.

If travelling in the UK, if necessary, use can be made of a local pharmacy in the holiday area – either for supervised dispensing or instalment dispensing to reduce risk. The individual's usual

local pharmacist should be informed of this temporary arrangement and a purple PC70 should be issued by the ADRS team with the GP10 prescription. PC70 forms can be obtained from any community pharmacy and teams should consider keeping a small supply. Prescriptions to be dispensed in other parts of the UK should be doctor signed GP10s or NMP handwrites on own stationery rather than NMP batch GP10 with NMP stamp.

Although not licenced for drug treatment, in certain circumstances methadone tablets may be considered safer than liquid with regard to the transport and storage of larger quantities e.g. flights / foreign holidays.

If travelling abroad, the individual should be advised to investigate import regulations for their country of travel prior to confirming their arrangements. International rules vary and the individual should contact the embassy[49] for each country being visited.

A personal export licence for controlled drugs is not required for persons travelling for less than 3 months. Some countries (including the UK) require a letter of proof[50] for import of controlled drugs. The letter should confirm the individual's name, travel itinerary, names of prescribed controlled drugs, dosages, total amounts being carried and signature of prescriber.

If a holiday prescription is cancelled the individual should inform the service, dispensed drugs should be returned to the pharmacy and pre-existing dispensing resumed.

8.2 OST and concurrent use of benzodiazepines

In recent years, there has been a sharp rise in benzodiazepine related harms among individuals who use drugs in Scotland[51] leading to consideration of a harm reduction approach being recommended[52] with a risk benefit decision regarding benzodiazepine prescribing[53] being made for each individual based on the estimated harms experienced from street benzodiazepine use. This approach requires robust assessment and description of the harms[54] to inform the decision. Any prescribing intervention must be accompanied by a robust care plan and delivery of psychosocial interventions.

8.3 OST and concurrent use of cocaine

Individuals and services are reporting more poly drug use involving cocaine than ever before and it has been implicated in more than a third of drug related deaths nationally. Unlike OST for individuals using heroin, there is no replacement medication available, although research is continuing to explore possible treatments. Psycho-social interventions remain the corner stone of treatment and the GGC ADRS Cocaine Toolkit[55] provides an assessment and intervention toolkit to support non-prescribing work with people using cocaine.

There is evidence that participation in treatment and commencement of OST can be associated with reduced cocaine use in individuals with opioid dependence also using cocaine. It would therefore not be advisable to delay OST in an attempt to stabilise cocaine use first.

Cocaine use should not prevent an increase in OST if this is indicated. Stabilising an optimal dose of OST may not only make it easier for the individual to reduce and stop using non-prescribed opioids but also other drugs such as cocaine. Literature suggests that OST doses at the higher end of treatment range are associated with reduced cocaine use.

49 Foreign embassies in the UK
50 Bringing medicine containing a controlled drug into the UK
51 Benzodiazepine use – current trends: evidence review
52 Interim Guidance on Benzodiazepine Prescribing | Drug Deaths Taskforce
53 GGC Guidance on the Principles of Benzodiazepine Prescribing with Concomitant Opiate Dependence
54 GGC ADRS Working with people at harm from street benzos

8.4 OST and concurrent use of gabapentinoids

In 2021, just over one third of Scottish drug-related deaths involved gabapentinoids. Gabapentinoids are GABA analogues although their mechanism of action remains unclear. They increase respiratory depression when used with opioids and have been shown to reduce opioid tolerance[56] to some opioids including morphine. Their effect on opioid tolerance conferred by OST remains unclear. Gabapentinoid prescribing should be avoided in people who use or are at risk of using opioids. Individuals who are prescribed gabapentinoids should be robustly consented regarding the risk of loss of tolerance to opioids. Individuals who report street gabapentinoid use should be made aware of the risk of loss of opioid tolerance and encouraged to reduce and stop. Occasionally in-patient or residential detoxification from high use gabapentinoids is required, usually via fixed dose benzodiazepine reduction regimes.

8.5 OST and concurrent problem alcohol use

Screening for alcohol problems should occur prior to starting OST and continue as part of care planning and review during treatment. Approximately one third of individuals receiving OST also have an alcohol use disorder with 1 in 5 of them likely being alcohol dependant.

Clinicians must have an understanding that alcohol problems are not separate from other drug problems and have the competencies to deliver a range of clinical responses.

Concurrent alcohol dependence carries increased risks to health and substantially increases the risk of death. It should be actively addressed as an integral part of the care plan. Management should usually take place in a specialist service and proceed along the normal pathway for alcohol dependence[57].

If alcohol dependent, the goal of treatment should be abstinence from alcohol. If this proves impossible a harm reduction strategy should be taken.

There is some evidence that achieving optimal treatment for OST will positively impact on alcohol issues. There is no evidence to date to indicate preferential outcomes with either methadone or buprenorphine for OST.

The normal course would be to maintain OST dose to keep opioid tolerance and discourage heroin use in addition to alcohol use. Clinical judgement needs to be used to balance this with the risks associated with reduced methadone metabolism and health difficulties associated with impaired liver function and the risks of the cumulative depressant and impairing effects of combinations of alcohol and methadone and any other drugs used.

For individuals with alcohol dependency, alcohol diaries with a gradual reduction plan should be commenced as part of their care plan along with vitamin replacement. Severely dependent individuals can be referred for inpatient alcohol detoxification[58], however, if an individual is able to safely reduce their drinking to moderate levels and is not also using other drugs, such individuals can be assessed for home supported alcohol detoxification. Individuals should be encouraged to use protective medication pharmacotherapies[59] to maintain abstinence, particularly disulfiram, consumption of which can be supervised along with an alcohol free preparation of OST.

In those who continue to drink, regular contact and monitoring of risks and progress against reasonable goals should be undertaken.

If extreme intoxication or other concerns become a regular feature, careful review of the case looking at risks, benefits and level of OST should take place. Suspension or cessation of OST is a grave step carrying risks associated with potential further instability and loss of opioid tolerance and should only be taken after careful multidisciplinary assessment of the case and in discussion with an experienced senior doctor and MDT complex case discussion.

55 GGC ADRS Cocaine Toolkit

56 Risk to heroin users of polydrug use of pregabalin or gabapentin – PubMed

If an individual presents to pharmacy and seems to be impaired due to alcohol and / or drugs the pharmacist should seek advice from the prescriber. The individual should be reviewed and a clinical decision made balancing current level of impairment with risk of encouraging further drug use if OST is withheld.

8.6 Pregnancy

Pregnant women using street drugs are likely to present a range of challenges and concerns and should be viewed as at high risk during pregnancy. They therefore require intensive multidisciplinary management, with particular importance placed on communication between all professionals involved. A broad assessment of risk needs to be undertaken including drug and alcohol use, mental and physical health, and social issues. Multidisciplinary planning meetings involving the relevant health and social work staff are important to assess these risks and needs, and monitor and respond to change in risk. Ideally they should begin early in the pregnancy. Local social work and child protection procedures must be followed as directed by local HSCP Child Protection committees. In GGC, all drug using pregnant women, including those on OST are referred to the Special Needs in Pregnancy (SNIPs) service as the best way to ensure that they receive the appropriate care during and following their pregnancy.

Delivery of OST should usually take place within specialist services as agreed by local protocols. OST treatment and care should be undertaken by practitioners and care workers who are experienced in this field and are aware of the need to participate in joint working with SNIPs and social work services.

Choice of OST should be made in discussion with the individual after considering all the risks. If the individual is already on OST, remaining on the same treatment would normally be appropriate. If the individual is not in treatment, they should be assessed and treatment choice determined in the usual way following previously detailed guidance.

Available evidence would not suggest trying to make changes in the OST agent. Treatment should aim to optimise OST and engagement with antenatal care.

There is some evidence to suggest, that successful treatment with buprenorphine may result in improved outcomes. It would also be important to discuss analgesia in labour, as choices may be reduced depending on dose. If an individual is not in treatment and their treatment choice is transmucosal buprenorphine or Buvidal, consider discussing this with a local senior clinician. Transmucosal buprenorphine may be preferable due to the shorter half-life if analgesia is required during or after birth.

Despite optimal treatment, the evidence is that children born to mothers using drugs or those on OST tend to have poorer global outcomes. It is likely that these outcomes are a combination of factors directly related to drugs but also other factors including mental health issues, stress, smoking and deprivation.

Drug screening should be carried out as per the non-pregnant individual, i.e. at initiation of treatment and if and when clinically indicated.

Special considerations in pregnancy

As the maternal circulating blood volume is increased in the third trimester an increased OST dose may theoretically be required, however there is little evidence to support this. Advice is to monitor for signs of withdrawal and if necessary consider either making small increases or split dosing.

If during pregnancy, women achieve abstinence from street drugs and evidence good engagement and social stability, it may be considered prudent to proceed with small reductions in OST to minimise foetal exposure.

57 GGC ADRS Alcohol Recovery Pathway
58 GGC ADRS Guidance to Support Service Delivery of Detoxification from alcohol
59 GGC ADRS Guideline for the use of alcohol protective medication

The immediate postnatal period is one of significant bio-psychosocial change and it may well be prudent to review and optimise the OST dose in the weeks after delivery. It is suggested that women are encouraged to thereafter maintain their OST dose during the initial 6 to 12 months post-delivery given the high risks associated with relapse and the high rates of post-natal depression. At this stage, involving the Health Visitor in plans for mother and baby is advised.

The Impact of Parental Substance Use (IPSU) assessment should be shared with the Health Visitor and/or Children and Families Social work staff if appropriate.

8.7 Children and Parents or Carers

National Child Protection Guidance[60] relates to all unborn babies, children and young people up to the age of 18 years and is based on a commitment to implement the United Nations Convention on Rights of the Child[61].

The Promise[62] is a commitment to all children and young people who may require support from the care system, that they will have a voice and will grow to be loved, safe and respected. The overarching ambition is to keep families together, where that is safe, and give them the right scaffolding to do this. All services are required to work together to build the scaffolding to support families.

Significant harm is not an inevitable consequence of parental alcohol and drug use. The probability of significant harm will relate to the extent to which each child's needs are met, blocked or disrupted by the causes, cycle, circumstances and consequences of seeking, paying for, using and experiencing substances by the parent(s).

Sharing relevant information is an essential part of protecting children from harm.

Child Protection concerns about children should be addressed through immediate information sharing, assessment and intervention. This will normally require initial liaison with the local Social Work Children and Families team and submitting a completed notification of concern form (NOC)[63].

Child protection is part of a continuum of collaborative duties within Getting it right for every child (GIRFEC)[64]. As such, it is important that staff respond to wellbeing concerns regarding children and not wait until child protection concerns become evident. Rather, all professionals involved in delivering OST should take active steps to identify individuals, particularly but not exclusively parents, who have responsibility for children, even where those children do not live with the parents. Staff should work with families to facilitate support and information sharing with the named person (i.e. health visitor or education professional) to prevent escalation of concerns.

NHS GGC has a dedicated Public Protection Service intended to support staff and offer advice about child protection concerns including information sharing. Regarding alcohol and drug services, this unit emphasises the importance of early assessment of parents and sharing of relevant information with appropriate services.

Specialist ADRS clinic workers are required to identify where children are cared for by adults with substance use problems or are present in households frequented by adults with substance use problems. Where such children have been identified it then becomes a professional and legal obligation to ensure that they are not at risk of harm.

When children have been identified, all specialist service staff must follow local protocols and complete the locally agreed assessment tool e.g. Impact of Parental Substance Use (IPSU) tool.

ADRS staff should be equipped to provide information to parents about the impacts on children of their alcohol and/or drug use, including unborn babies.

Information gathering by services is not a one-off event. All services should be alert to any new changes or concerns in a family's circumstances and consider any detrimental impacts on their ability to look after children and review the IPSU accordingly.

8.8 Fitness to Drive

Chapter 5 of the Driving and Vehicle Licensing Agency (DVLA)'s "Assessing fitness to drive" publication[65] states that people who persistently use or are dependent on opioids must not drive and must inform the DVLA. The driver is legally responsible for informing the DVLA about a condition which may impair their fitness to drive. The DVLA is legally responsible for deciding if an individual is medically unfit to drive.

As part of the informed consent process, the OST prescriber should explain[66] and document that an individual should not drive and that they are legally obliged to inform the DVLA. People who do not inform the DVLA / continue to drive may be fined and if they are involved in an accident may face criminal prosecution.

Individuals who are stable on OST for over 12 months and can evidence abstinence from street drugs can apply for return of their licence.

The GGC ADRS Partnership Safety Group is developing ADRS fitness to drive guidance which will be linked to here once it is finalised.

8.9 Opioid Analgesic Dependence (OAD)

There is now increased prevalence of use and dependence on some prescription-only-medication (POM) and over-the-counter (OTC) medicines containing opioids:

- Co-codamol 8/500mg (Solpadeine®)OTC
- Paracetamol 500mg / dihydrocodeine 7.46mg (Paramol®) OTC
- Ibuprofen 200mg / codeine 12.8mg (Nurofen Plus®) OTC
- Co-codamol 30/500mg POM
- Dihydrocodeine 30mg POM

As detailed in the Royal College of General Practitioner's guidance[67] [68], cases without significant risk or complexity should be managed within primary care[69] with support from the multidisciplinary primary care team. Detail of self-reduction attempts and outcomes should be available from primary care colleagues.

Only if management in primary care is unsuccessful or significant risk factors are identified, should the case undergo assessment within ADRS[70]. It is often appropriate for a more prolonged period of assessment to take place to ensure a safe and appropriate treatment plan. The following additional information should be gathered:

- Any ongoing need for opioid analgesia
- Start date and indication for opioid prescribing
- Review of clinical portal
- Discussion with GP to explore options
- Recent bloods (U&E, LFTs, FBC)

The conclusion of the assessment may be that ADRS treatment is not appropriate, for example either if the level of opioid use is low and a step down regime supported by a recovery worker (i.e. recovery hub in Glasgow) would be appropriate or if the individual requires ongoing opioid pain management.

It is important to ensure that the individual fully understands their treatment plan and the services provided by ADRS.

60 National Guidance for Child Protection in Scotland 2021
61 UN Convention on the Rights of the Child – UNICEF UK
62 The Promise Scotland, 2020
63 Notification of Concern Form (NHSGGC Staffnet)
64 Getting it right for every child (GIRFEC)
65 Assessing fitness to drive: a guide for medical professionals
66 Appendix 8 DVLA information leaflet

Individuals who have been ingesting large quantities of paracetamol containing tablets may require medical intervention[71] with each case being judged according to amount taken, when taken, person's weight and presence of other health issues. Staggered excess paracetamol ingestion can be discussed with the local acute medical on-call team. Hepatotoxicity is unlikely if an individual is asymptomatic, has a paracetamol level <10mg/L, has a normal ALT and an INR <1.3.

OST prescribing and detoxification may be indicated where the individual is subject to significant harm from their drug use or sometimes where supported graded reductions have been unsuccessful. Informed consent for OST should include robust understanding that OST will replace OAD and include detail of shared understanding of alternative analgesia in those with continued pain. Returning to informed consent throughout this process is key to successful outcomes and balancing the risks of prescribing versus harms of ongoing opioid use. Establishing dependence would follow similar principles for heroin use i.e. consistent history, drug screens and presence of objective opioid withdrawal symptoms. Particular attention should be paid to co-morbid physical and mental health problems as well as social problems and child safety.

Buprenorphine should be considered first line treatment and initial doses and titration should be cautious due to lower opioid tolerance. There should be a low threshold for case discussion with a local senior clinician when considering methadone for OAD treatment.

Opioid Dose Conversions

Table 18: Examples of approximate opioid conversions (BNF and expert opinion)

	Morphine equivalent	Methadone maintenance equivalent
Dihydrocodeine 30mg	3mg	2.5mg to 3mg
Co-codamol 30/500mg x 2 tabs = 60mg	6mg	5mg to 6 mg
Tramadol 100mg	10mg	8mg to 10mg
Morphine sulphate 30mg bd = 60mg	60mg	50mg to 60mg

Equivalent opioid dose knowledge may be helpful in complex scenarios for example where an individual has been in acute hospital and missed a number of days of methadone maintenance, although dose reduction and titration may still be required due to differences in relative potency and individual metabolism. Although various specialist pain resources[72 73] may be helpful, they give approximate equi-analgesic doses which are generally lower than OST treatment conversions.

8.10 Pain Management

Management of chronic pain for an individual in OST treatment lies with primary care however due to complexities it will often require collaboration between the GP, the individual, the ADRS treatment service and in some cases pain specialists.

OST "replaces" opioids to prevent withdrawals and craving. It does not provide analgesia and due to a number of factors, individuals on OST may feel undertreated and be left experiencing chronic pain. Long term opioid use and resulting tolerance may cause changes in the way the body perceives pain, modifications in neuronal tone which lead to a reduced pain threshold and problems managing pain. Individuals on OST can experience stigmatised care where they are judged to be "drug seeking" if in pain.

67 RCGP POM OTC medicines misuse and dependence Factsheet 1
68 RCGP POM OTC medicines misuse and dependence Factsheet 2
69 RCGP POM OTC medicines misuse and dependence Factsheet 3
70 RCGP POM OTC medicines misuse and dependence Factsheet 4
71 GGC Medicines – Treatment of Paracetamol Overdose

The evidence for use of opioids is mainly from use in acute pain and pain at the end of life, there is little evidence of benefit in long term use for chronic pain regardless of diagnosis.

Opioids hyperpolarize and reduce calcium entry into nerve cells, decreasing neurotransmitter release and nociceptive transmission. However, the nervous system develops a tolerance to opioids, requiring increased dosage for adequate pain relief. Evidence supports the short-term efficacy of opioids for neuropathic and musculoskeletal pain but use for chronic pain conditions remains questionable, in part due to tolerance and opioid-induced pain sensitivity.

Managing individuals understanding and expectations is key to more successful treatment outcomes.

The aim is to achieve a shared understanding that medications play only a partial role in pain management and are only part of a wider plan to support self-management of symptoms.

Concerns should be sensitively addressed and symptom control should be assessed on an individual basis. Multidisciplinary case discussion is encouraged, to agree a joint treatment plan and outcome goals. Clinical risk assessment should include that under treatment of pain can lead to relapse to street drug use.

As chronic pain can be of mixed origin, individuals should be assessed to identify the causes of the pain and its key features in order to support the patient in the most appropriate way. Medical and non-medical prescribers are encouraged to use a holistic view of pain, taking into account patient circumstances, goals and values to ensure person centred approach in the management of their chronic pain.

There should be discussions around risks of long term opioids for pain relief, side effects and risks of strong opioids and lack of efficacy for chronic pain[74] Empathic communication with the individual and reassurance that pain will be managed optimally should form part of the discussion. Discuss the potential for Opioid Induced Hyperalgesia manifesting as a paradoxical worsening of pain with increasing opioid dose.

There is concern about opioid prescribing and opioid associated harms which include, lack of efficacy, side-effects, dependence, tolerance, withdrawal and death. The main focus is to support the patient with other pain management strategies and use non-opioid interventions where possible:

- The goal is self-management of symptoms and a reduction in pain intensity in which medication plays only a small part.
- Physical rehabilitation, exercise and psychological treatments are usually essential parts of a pain management plan.

Part of the treatment plan should ensure that OST is optimised and it is the appropriate treatment of choice for the individual. Aim to stabilise and optimise OST and use the opportunity for review of treatment choice and discuss differences between methadone, trans-mucosal buprenorphine and long acting injectable buprenorphine.

For individuals on methadone:

- Split the dose and administer twice or three times daily
- Titrate additional analgesia to effect

For individuals on transmucosal buprenorphine:

- Split the dose and administer twice or three times daily
- Titrate additional analgesia or
- Discontinue buprenorphine and provide alternative analgesia
- Change to methadone

Higher than normal doses of additional opioids are typically needed.

72 Dose equivalents and changing opioids | Faculty of Pain Medicine
73 Pain Management Opioid Dose Converter

Individuals on buprenorphine may require particularly high doses initially which will then need to be tapered down.

8.11 End of Life Care

People currently or previously prescribed OST can have particularly complex needs when faced with a palliative diagnosis. Recent national palliative care guidelines[75] emphasise the need for individual care plans and joint working between drug treatment services and palliative care. OST should be continued as substitution therapy and additional medication including opioids added in for symptom control.

8.12 Comorbidity with Physical Health

There are no absolute contraindications to OST as in almost all circumstances, the risks of being on OST will be less than those associated with ongoing uncontrolled drug use. It does appear however that compromised physical health can increase the risks associated with OST. Careful assessment and, where possible, management of risk factors is important.

Risks associated with respiratory disease

Medications used for OST, particularly methadone will cause reduced respiratory drive and all individuals must be made aware of this. Individuals suffering from conditions that may cause hypoxia are at particular risk, this of course being further exacerbated by consumption of other depressant drugs including benzodiazepines, other opioids and alcohol. Those with asthma, COPD and emphysema should be encouraged and supported to actively manage their condition and to seek urgent medical attention at first signs of exacerbation. Sleep apnoea can cause significant hypoxia at night and if suspected should be investigated. For individuals who suffer exacerbations of chronic chest conditions or have chronic poor lung function, consideration should be given to treatment with or transfer to buprenorphine given its lesser potential to cause respiratory depression.

Many individuals in drug treatment services smoke tobacco. Community pharmacies are well placed to support smoking cessation and this should be actively encouraged.

Risks associated with respiratory disease

Medications used for OST, particularly methadone will cause reduced respiratory drive and all individuals must be made aware of this. Individuals suffering from conditions that may cause hypoxia are at particular risk, this of course being further exacerbated by consumption of other depressant drugs including benzodiazepines, other opioids and alcohol. Those with asthma, COPD and emphysema should be encouraged and supported to actively manage their condition and to seek urgent medical attention at first signs of exacerbation. Sleep apnoea can cause significant hypoxia at night and if suspected should be investigated. For individuals who suffer exacerbations of chronic chest conditions or have chronic poor lung function, consideration should be given to treatment with or transfer to buprenorphine given its lesser potential to cause respiratory depression.

Many individuals in drug treatment services smoke tobacco. Community pharmacies are well placed to support smoking cessation and this should be actively encouraged.

Risks associated with cardiovascular disease

Methadone is thought to increase the risk of cardiac arrhythmias, particularly so in those with pre-existing risk factors. Individuals with cardiovascular disease or significant cardiovascular risk should be monitored and consideration given to the potential risks and benefits of transferring from methadone to buprenorphine.

Risks associated with liver disease

Methadone and buprenorphine are both metabolised in the liver. Compromised liver function, particularly with evidence of synthetic failure, may be associated with increased serum levels of methadone or buprenorphine and potential toxicity. Individuals with known liver disease should be monitored and OST doses adjusted accordingly. As with most other serious medical conditions, risks associated with drug use are likely to outweigh those associated with OST. Both methadone and buprenorphine are safe to use in individuals with chronic hepatitis C, however care should be exercised and advice sought if liver function has significantly deteriorated. There may be interactions between methadone and some drugs used to treat HCV, advice should be sought from the specialist BBV treatment service.

Sepsis

Sepsis is a common and potentially serious complication of injecting drug use and practitioners should always be alert for this in those who continue to inject. Sepsis may take the form of local infection around injection sites but may also present as septicaemia, or more rarely botulism or tetanus. It is prudent to continue to monitor for signs of injecting in individuals on OST, even those who appear stable.

8.13 Comorbidity with Mental Health

MAT 9: All people with co-occurring drug use and mental health difficulties can receive mental health care at the point of OST delivery

Individuals on OST will encounter problems with their mental wellbeing, particularly mood related, far more commonly than the general population. Practitioners will encounter a wide range of presentations in working with this group and need to be alert to the possibility of a significant mental health problem or mental illness. Investigation of significant adverse events has demonstrated that co-morbid substance use and mental illness considerably heightens the risk of adverse incidents and outcomes.

Psychological symptoms in those on OST are often multi-factorial in origin and are frequently associated with:

- Stress, loss and other adverse life events, isolation, lack of structure and routine, unhelpful and unsupportive relationships, poor diet, pain, physical health problems and other factors directly related to lifestyle.
- Underlying or co-existent psychiatric disorders commonly including PTSD and complex trauma, disorders of adult personality, depression, anxiety and less commonly psychotic illness and adult manifestations of conditions arising in childhood such as ADHD and neurodevelopmental disorders.
- Pharmacological effects of the drugs consumed. Regular use of benzodiazepines and or alcohol commonly induces profound and pervasive depressive symptoms, stimulants and hallucinogenic drugs including cannabinoids are more associated with anxiety and psychotic symptoms. Regular use of opioid drugs on top of methadone can result in feelings of dysphoria and insomnia by competitive binding of opioid agonist drugs at receptor sites causing displacement of methadone and protracted low grade withdrawal symptoms.

A history of complex trauma is particularly common amongst those accessing OST. As noted above, the distress and other difficulty associated with this may well be exacerbated by other factors, commonly unhelpful relationships and the impact of depressant drug use. Staff must retain a high awareness of the complex and all-encompassing range of emotional and cognitive difficulties that many individuals suffer. These are often un-recognised or mis-interpreted and difficulties in engagement wrongly attributed to lack of motivation or wilfully difficult behaviour.

Many individuals will have had a negative experience of past contact with health and social services re-enforcing low self-esteem and low expectation of positive outcomes. Difficulties will be evident throughout an individual's journey and impact on initial engagement and ongoing progress. It is vital therefore that all staff at all times adopt a trauma informed approach to all care provided. This extends to prescribers, care managers, key workers and others who may have even brief interaction on the phone or in other situations.

The majority of individuals accessing OST services are likely to have extensive histories of complex trauma, the consequences of which may be intrinsically linked to the individual's drug use. Unaddressed trauma related issues are a significant barrier to people accessing, and benefitting, from OST. Providing trauma-informed services can promote recovery and improve outcomes for individuals, their families, staff and services.

Psychological trauma is everyone's business. We all have a part to play in understanding and responding to people recovering from trauma. Trauma informed care reflects a model that is grounded in, and directed by, a complete understanding of how trauma affects an individual's neurological, biological, psychological and social development. Five key principles underlie trauma informed care: safety, trust, choice, collaboration and empowerment. Service delivery and the care provided should align with these principles, and drive change when necessary. Trauma informed care can only be delivered as part of a wider system of psychologically informed care. Local substance use psychology services can support implementation of this standard.

Drug use may also mask underlying psychiatric illness and this may only become evident with detox or stabilisation resulting in an exacerbation of symptoms rather than the more usual improvement. The worsening of symptoms with reduction of drug use should always warrant further assessment.

As well as complaints relating to mood disturbance, individuals with a history of drug use have a high incidence of perceptual disturbance ranging from mild persecutory hallucinations or thoughts to frank delusions and psychosis. Chronic low grade paranoid thinking is very commonly associated with drug use and lifestyle, and does not necessarily indicate underlying illness. Psychotic symptoms of hallucinations and or delusions can be due to intoxication with stimulant drugs or withdrawal from depressant drugs but should only be present in that context and for short periods of a few days. Well-formed persistent delusions or chronic persistent and pervasive hallucinations should be assumed to be a symptom of co-existent mental illness rather than simply drug related even in the presence of ongoing drug use.

When assessing and managing mental illness in an OST setting:

- Past psychiatric history is important as recurrence of illness is common. Past attempts at suicide and self-harm indicate a marked increase in risk of further attempts. Risk assessment should be completed at initial assessment and regularly thereafter, particularly if increase in symptoms and in line with current partnerships policy.
- Ongoing drug use increases severity of symptoms, increases risk and makes management more difficult, heightening the need for careful assessment and consideration of referral to and joint management with mental health services.
- Enquiry should always be made into feelings of distress, hopelessness and thoughts of suicide. Individuals presenting with distress or thoughts of self-harm or new symptoms should always be seen and assessed and appropriate onward referral made following local pathways if necessary.

In general psychological symptoms tend to improve with stabilisation of drug use and lifestyle that comes about with OST. This would be the normal initial approach in most cases with chronic low grade symptoms.

In cases that require input from mental health services or psychotropic medication in addition to OST, care must be taken with communication between all involved in regard to treatment plans, responsibility for ongoing management and crisis management, potential drug interactions and potential misuse of psychotropic medication. For individuals attending pharmacy for interval dispensing of OST, opportunity exists for other psychotropic medication to be similarly dispensed.

The mental health services and ADRS interface working guidance[76] should be used to inform care planning and service responses for individuals who have both alcohol and or drug problems and require mental health care and treatment.

8.14 Significant Adverse Events

Incidents, near misses and events of concern occur to individuals who are receiving OST.

All incidents should be recorded on Datix which is the GGC incident reporting system and managed under the GGC Significant Adverse Event policy and toolkit. Local ADRS services will also have local operational guidance.

Controlled Drug incidents in ADRS are investigated by the ADRS Central Pharmacy Team and if necessary concerns will be raised with the GGC Controlled Drugs Accountable Officer.

Incidents of challenging behaviour should be managed via board and ADRS policies and guidance. It is important to acknowledge the impact of previous trauma experiences and explore the antecedent treatment period to understand all aspects of the individual responses and service delivery. Individuals who cannot be safely managed in core service will require MDT discussion and a plan for a period of limited access treatment.

Any individual who dies during OST treatment or having recently been prescribed OST should have the following information recorded in the electronic record and briefing note:

Table 19: Briefing note OST prescribing information.

What service prescribes? ADRS? Shared care?	
Which OST is prescribed? i.e. methadone	
What dose is prescribed?	
What are instalment and supervision arrangements?	
Date of last OST in pharmacy or last administered Buvidal	
Detail of any take home doses on that date	
Summary of any risk factors identified: i.e. restart, recent NFOD, transfer of care etc	

76 MHS 03 GGC Adult MH & ADRS Shared Guidance & Specification for Interface Working
77 DATIX Incident Form
78 SAE Policy & Toolkit
79 GGC Partnerships Standards of Behaviour Protocol
80 GGC Partnerships Management and Reduction of Violence and Aggression
81 GGC ADRS Violence and Aggression reduction guidelines

9.0 Appendices

This document must be saved/downloaded to open the embedded documents, they cannot be opened within the browser.

1	Subjective Opioid Withdrawal Scale	
2	Objective Opioid Withdrawal Scale	
3a	Consent to Opioid Substitution Treatment – Methadone	
3b	Consent to Opioid Substitution Treatment – Transmucosal Buprenorphine	
3c	Consent to Opioid Substitution Treatment – Buvidal	
4	How to use the Primary Care clinical practice email	
5	Buvidal Checklist and Administration Chart	
6	GGC ADRS Travel Letter template	
7	OST Detoxification Planner (requires updating)	
8	Fitness to Drive – patient information leaflet (requires updating)	
9	Contact details for GGC Blood Borne Virus clinical teams