Irish College of General Practitioners
Colaiste Dhochtúirí Teaghligh Eireann

Working with Opiate
Users in Community Based
Primary Care
About The Guidelines

These guidelines were developed by General Practitioners for General Practitioners involved in treating drug dependent patients. Where possible all recommendations are based on existing evidence and are referenced in the document. Our recommendations are evidence based and consistent with those in the European Methadone Guidelines and the UK based, Drug Misuse and Dependence –Guidelines on Clinical Management. Current practice in the Irish context was also reflected by representation from GP specialists and the Psychiatrists specialising in Substance Abuse.

The guidelines are intended for use as an aid to Level 1 and Level 2 practitioners managing patients in the primary care setting. General practitioners working in Health Board treatment services may also find them useful. We would hope that doctors working in A/E departments and in psychiatric units may also find them a helpful guide.

The guidelines aim to facilitate General Practitioners in providing safe and effective care for drug dependent patients. As with all guidelines they are not absolute and allow for individual clinical decisions made in the best interest of clients. As it is intended as a desktop guide to treatment, the document is limited in how detailed it can be and the scope of the issues covered.

A special thank you to all those involved in devising the guidelines. The committee members were:

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Introduction

The epidemic of opiate use in the 1980’s through 1990’s has caused devastation for many families and communities. In turn this has led to increased demands on all sectors of healthcare including general practice.

At this time the Health Board services, which where initially commenced as a HIV prevention programme rapidly expanded to include the treatment of drug addiction. Increasing demand led to the expansion of services, and the government providing a large increase in capital expenditure.

With the rapid expansion in services a programme manager was appointed to the Drugs/Aids Service in 1996. This led to the sectorisation of the services dividing Dublin City into three areas, Northern, South Eastern and South Western. In each of the sectors an area operations manager, GP co-ordinator and consultant psychiatrist was appointed.

General Practitioner’s (GP) now found themselves treating opiate users, poly-drug users and recreational drug users. They also found themselves counselling their families, or the victims of opportunistic crime.

The Methadone Treatment Protocol - GP Services

It was recognised from early in the new developments that primary care has a pivotal role to play in the management of drug users. GP’s, with their unique knowledge of the patient and their extended family, can make a considerable contribution to the long-term management of drug using patients. Many GPs who manage drug users in practice have found this work to be a rewarding professional experience. In October 1998 a Methadone Treatment Protocol (MTP) for prescribing in General Practice was implemented. Under the terms of the protocol, training and ongoing education of GPs involved with the MTP has always been a requirement. A joint committee between the ERHA/ICGP was convened with the remit of providing GP training, continuing medical education, and an annual audit.

Level One Training

Level One training is provided in two modules over two separate evening meetings. Having completed this training a GP may accept up to fifteen stabilised patients for methadone maintenance treatment. Stabilisation usually takes place in a health board treatment centre but may also be offered by a suitably trained GP colleague.

Level Two Training

Level 2 GPs may initiate methadone treatment, stabilise a drug user and maintain treatment in the primary care setting. Inter GP referral of opiate dependent persons between Level 1 and Level 2 GPs is encouraged.
Quarterly CME meetings are provided by the ICGP and a wide range of issues relating to community based drug treatment are addressed.

**Annual Audit**

Regular audit with an audit nurse is provided by the ICGP.

A lot of effort has been made to ensure that this is a well supported programme and, while these initiatives are aimed at maintaining standards, they also provide a forum for GPs to seek advice and support with areas of difficulty.

The MTP has assisted in the expansion of drug treatment services across the health boards. In the Eastern Region Health Authority resources available to the GP include a GP Co-ordinator for support and advice and urine testing facilities. The option of referral to specialist services including addiction counselling, in-patient detoxification, and residential rehabilitation are also available.

Information on the training and accreditation criteria can be obtained at the ICGP.

**The E.R.H.A. Drug Treatment Services**

**Treatment Centres**

The treatment centres provide methadone treatment through a multidisciplinary team and are set up in geographical areas with a high prevalence of drug use. Typically they are large centres providing services to between 100 and 300 patients. Prescribing and dispensing of methadone takes place on site.

The doctors working in these centres are GPs specialising in substance misuse.

The Drug Treatment Centre Board at Trinity Court is the largest treatment centre. It is a tertiary specialist referral service as well as operating as a treatment centre for geographical areas with inadequate services. Consultant psychiatrists and non-consultant hospital doctors training in psychiatry staff this service.

**Satellite Clinics**

Satellite clinics were developed in partnership with local communities in response to resistance to the development of larger treatment centres. They are usually based on parish catchments area. There are approximately 45 satellite clinics in the country servicing 20 to 50 patients per day. The staffing arrangements are similar to those described above for treatment centres. Patients at these clinics are normally dispensed their methadone in community pharmacies.
Inpatient Detoxification

Inpatient detoxification services and stabilisation services for pregnant women are provided at a number of locations in the ERHA region. Patients may be referred from primary care following assessment by an addiction counsellor. Details of referral arrangements can be obtained through the GP co-ordinators.

Rehabilitation Programmes

A wide range of rehabilitation programmes, both inpatient and outpatient are available for patients wishing to avail of these services. These can be accessed through the drugs co-ordinator or your GP Co-ordinator in your Health Board.

Other Health Board Areas

Services have expanded outside the ERHA with each health board providing services for drug users under the direction of a regional drugs co-ordinator. Services range from counselling only in some health board areas to satellite clinics in areas where there is a need for methadone treatment.

Research and Development

A National Advisory Committee on Drugs was been established in 2000. Its role is to advise the government in relation to prevalence, prevention, treatment, rehabilitation and the consequence of drug use in the Irish and international context. It also has a remit to commission relevant research into drug use in Ireland.

The Drug Misuse Research Division (DMRD) of the Health Research Board collect annual statistics on all people presenting for or in treatment. The DMRD also provides a library facility, which is available to all GPs. The library has all relevant drug dependency journals as well as electronic data search.

For a complete list of local contacts in your area health boards, and GP Co-ordinators, see Appendix A.
Aims & Objectives of Treating Opiate Dependent Patients

To improve the physical, psychological and social health of individuals by:

❖ Improving the overall personal, family and social functioning of the individual

❖ Reducing the health risks associated with illicit drug use, particularly the risk of HIV, hepatitis B and C, and other blood-borne infections.

❖ Stopping or reducing the use of illicit or non-prescribed drugs by the individual.

❖ Facilitating and fully supporting patients in achieving a life free of drug dependency while recognising that this may not be achievable for all individuals.

❖ Prescribing safely, which helps reduce diversion of drugs into the illegal market.
Evidence for the effectiveness of Methadone

Methadone is well researched as a substitute treatment for opiate addiction. Methadone is currently the only licensed opiate substitute treatment available in Ireland. It has a long half-life – up to 36 hours and therefore can be prescribed on a once daily basis.

The use of methadone has a strong evidence base and a number of comprehensive literature reviews support the above findings (Farrell et al, 1994; Farrell et al 2000; Ward et all 1998; Dole and Nyswander, 1965). The 5-year follow up of the UK, National Treatment Outcome Research Study (NTORS), which is monitoring the progress of 1075 clients recruited into either residential or community treatment services over five years, also supports these findings (Gossop et all, 1998).

The benefits of substitute prescribing with methadone are:

- Improvement in health and social functioning.
- Reduction in opiate related deaths.
- Reduction in illicit heroin use.
- Better retention in treatment.
- Reduction in criminal activity.
- Reduction in transmission of HIV.
- It is cost effective.

Taken together over two decades, the randomised studies of methadone maintenance demonstrate consistent, positive results over vastly different cultural contexts. If practitioners are properly trained, methadone maintenance can be effectively and safely delivered in a wide range of settings, including primary care.

In 1993, the ACMD (Advisory Council on Misuse of Drugs, UK) concluded that:

"The benefit to be gained from oral methadone maintenance programmes both in terms of individual and public health and cost effectiveness has now been clearly demonstrated and we conclude that the development of structured programmes in the UK would represent a major improvement in this area of service delivery (ACMD, 1993)."
Initial Assessment of Opiate user

When a GP is approached by a patient who claims to be using illicit opiates it is important for the GP to assess the patient carefully before considering how to proceed. Management of the drug user begins at the initial consultation and a full assessment may need to take place over 2-3 consultations. Urine screening is an important part of this assessment; three urine screens over three separate consultations should be taken.

Having confirmed patient's identification the Key Points of assessment are:

1. Explore with patient realistic goals.
   - To reduce or stop frequency of injecting.
   - To stop or reduce illicit drug use.
   - If the patient continues to take drugs, encourage use for relief of withdrawal symptoms rather than to get intoxicated.
   - Review alcohol or other drug consumption if relevant.
   - Where possible patients should be encouraged to stop using benzodiazepines while cautioning against abrupt cessation of treatment.
   - To begin to tackle other problem areas e.g. legal, financial, accommodation and relationship problems.
   - Regularise lifestyle e.g. attending appointment on time.
   - Attend an addiction counsellor as appropriate.

2. Discuss practice policies

Drug users respond best to care and concern on the one hand and firm and consistent boundaries on the other. In order to provide such boundaries, practices may benefit from an agreed written policy about working with drug users. See sample agreement, Appendix B.

Using policies and agreements enhances the doctor/patient relationship. However, it can be inappropriate for the doctor to apply policies rigidly in all circumstances. 'Flexible rigidity' describes the approach that works best. It may be useful to indicate to the patient if there are any conditions where flexibility will not be exercised, such as acts of violence, abuse of staff etc.

Policies relating to appointments, prescriptions, medication and behaviour should be clearly stated in the practice agreement. It is useful to involve practice staff in discussions about the formulation of such a practice policy.
3. Take drug history including, medical, psychiatric, forensic and social history.

Making decisions about the treatment of individual patients has to be based as much as possible on a thorough assessment of what will work for that person. This assessment should include a detailed drug history, relevant medical, psychiatric, forensic and social aspects of the patient's history. An assessment should also include a relevant physical examination and urinalysis.

A sample assessment form detailing relevant history is available at Appendix C.

4. Assess the presence of dependence.

Before starting any type of methadone treatment it is necessary to determine whether the patient is taking opioids and to establish the presence and severity of opiate dependence. The ICD10 are the internationally accepted criteria for establishing dependence.

Quick Reference to ICD10 Criteria:

**Physical**
- **Withdrawal** manifested by the characteristic withdrawal syndrome or by the use of the substance to relieve or avoid withdrawal symptoms.
- **Tolerance** defined by either increased amounts used to achieve intoxication or other desired effect or diminished effects with continued use of the same amounts of the substance.

**Psychological**
- Difficulty in **controlling** substance use; unsuccessful attempts to cut down or taking the substance in larger amount over a longer period than intended.
- Continued substance use despite **awareness** of negative consequences of drug use

**Social**
- A **great deal of time spent** in obtaining the substance, using the substance, or recovering from the effects of substance use.
- Neglect of important social, occupational, or recreational activities.
5. Explore patient's expectations and their reasons for presenting at this time.

The patient may be:

- Motivated to change behaviour.
- Suffering from mental illness.
- Pregnant.
- Due in court.
- Referred from Drug Court.
- Referred by a social worker.
- Seeking advice about the effects of the drug they were taking.
- Have had a recent health risk or have anxieties over their drug taking.
- Brought for treatment by a concerned parent or friend.
- No longer be able to source their drugs.
- Referred from another Medical Practitioner.
Urine Screening

Patients are asked to provide a fresh (preferably supervised) specimen of urine as part of their initial assessment. Where supervision is not available temperature jars are a useful substitute.

- In normal circumstances 3 samples, separated by at least 3 day intervals should be done at the initial assessment.

- The doctor should be satisfied as far as is possible that the sample is from the patient being assessed.

Remember: Urine screening is not a substitute for clinical assessment of the patient.

A full drug screen through the laboratory is recommended prior to commencing methadone treatment. On the spot testing may be done with a dipstick test (available through your local treatment service). If drugs have been taken within the previous 48 hours, urine toxicology is always positive but does not indicate how much is being taken. Heroin may be detected up to 7 days in urine after ingestion.

See Excretion Times Appendix D
Management Options

Having made the initial assessment the doctor should decide on the most appropriate treatment option for the patient. Your practice circumstances may dictate the management options. A guide to management is as follows:

✧ If a patient has a small heroin habit:

- < 2 bags daily
- Smoking only
- < 3-6 months daily use

Then:

✧ Some patients may achieve abstinence without the need for substitution therapy.
✧ Encourage self detoxification unless this has already failed on previous occasions (see section on self detox)
✧ Consider methadone stabilisation initially and if possible followed by reduction.

✧ If a patient has an established heroin habit:

- >2 bags daily
- Smoking and/or injecting
- >6 months daily use

Then:

Consider methadone stabilisation initially followed by methadone maintenance and/or reduction as necessary.

Remember:

1. Not all patients are suitable for primary care. Caution should be exercised where a patient has:

- A history of violence
- Is cross addicted to alcohol, benzodiazepines or other substances
- A history of significant psychiatric illness.

2. Counselling and rehabilitation as an outpatient or inpatient should be offered and made available to all patients as appropriate.

3. It is recommended that benzodiazepines, codeine or morphine are not prescribed to opiate dependant persons.
Self Detoxification

Some people achieve abstinence through self-detox commonly known as going “cold turkey” or going through “sickness”. It is important to reassure the patient and their family that “cold turkey” is not in itself dangerous albeit very uncomfortable.

Withdrawal symptoms include:

- Flu like symptoms
- Myalgia
- Nausea and diarrhoea
- Piloerection
- Runny nose and sneezing
- Dilatation of pupils

The severity of withdrawal symptoms are not clearly related to the quantity of drugs previously consumed. The process can be assisted by the temporary prescription of other drugs to reduce withdrawal symptoms, for example NSAIDS, antidiarrhoea, anti-emetic, or non-benzodiazepine hypnotics for a short period of time. For some individuals, general support, encouragement and understanding of the symptomatology may suffice.

It is important to emphasise the risk of overdose should relapse occur following a period of abstinence. Opiate tolerance may be reduced in this situation.

See section on overdose
Commencing Treatment

It is important to note that commencing a methadone programme can be a risky time for patients as tolerance is uncertain at the early stage of treatment.

The commencement dose should aim to achieve an effective level of comfort, both physical and psychological, while minimising the risk of overdose. In deciding on a starting dose:

- Assess average daily intake of illicit drugs from drug history.
- Start on a low dose i.e. not greater than 30mg daily and work up. This minimises the risk of overdose.
- If tolerance is low, or uncertain e.g. adolescence, 10-20mg daily is more appropriate.
- Increments should be no greater that 5-10mg at a time. A total weekly increase should not exceed 20-30mg.
- Increments may be made until cravings are eliminated, there are no physical withdrawals and illicit drug use has ceased.

Induction may take up to 4-6 weeks
Stabilisation

Stabilisation doses must be determined individually because of differences in metabolism and body weight. Patients usually stabilise on doses between 60mg to 120mg. However some patients can stabilise on lower doses particularly if their habit is small. While lower doses may relieve signs and symptoms of withdrawal, higher doses may be required to obliterate cravings. Adequate doses of methadone will block the euphoric effects of heroin. Higher doses of methadone may be required in patients who are on concomitant medication which induce enzymes involved in methadone metabolism. Typically this includes anti-retroviral and anti-tuberculosis medication, which usually reduce serum methadone levels by 50% requiring a similar dose increase (Kurz, 2001).

- For doses > 80mg consider:
  - Consulting your GP co-ordinator for advice.

It is suggested that the maximum weekly ‘take home’ aliquot be 560mls where possible and feasible. There may be an additional risk of street diversion of methadone when dispensed in large amounts.

Is the methadone dose adequate?

- Ask the patient!
- Consider increasing the dose by small increments on a daily or weekly basis until the symptoms have subsided, cravings have disappeared and misuse of illegal drugs reduces or ceases.
- Do not continue to increase the dose if there are signs of intoxication.
- It may be that the patient continues illegal drug use because dose of the methadone is insufficient

Consider contacting your GP Co-ordinator for advice at any stage in the stabilisation period. Other experienced GP colleagues may also offer support and advice if asked.
Dispensing Instructions for Methadone

There are two considerations when methadone dispensing arrangements are being made:

- **The safety of patients and others.**
- **Avoiding street diversion of methadone.**

Supervised consumption of methadone dosing is recognized as an important element in the delivery of methadone treatment services because it:

- Reduces the risk of a patient ingesting in excess of one days dosage of methadone.
- Reduces the risk of the patient diverting their methadone to other persons or the illegal market.
- Ensures that the patient is ingesting their methadone as prescribed.

**In the initial stabilisation phase it is currently recommended that:**

- **Consumption of methadone should be supervised daily.**

It is important to know some pharmacist do not have the facility for supervised consumption. The GP should contact his GP co-ordinator or the liaison pharmacist if this is the case.

If a drug user is making satisfactory progress on the programme, dispensing intervals can be gradually increased to three times weekly, then twice weekly, then weekly. If the patient destabilises, return to more frequent dispensing is recommended.

**A general guide for relaxing the supervision requirement is, after a period of stabilisation, that for every two weeks of opiate free urines one day is taken off the supervision regime.**

Greater caution in allowing take home doses should be exercised where there is suspicion of alcohol abuse, benzodiazepines or other substance abuse. The rationale for this is a safety one. The co- abuse of alcohol or benzodiazepines increases the risk of fatal overdose by potentiating the respiratory depression side effects of methadone.

**Once stable, it is currently recommended that:**

- At least one dose per week is supervised in the chemist.
- No more than one week's methadone should be dispensed at one time except for holidays. (See section on special dispensing arrangements)

The rationale for this is that it minimizes the risk of the patient self-detoxing and diverting
methadone onto the black market. In these cases the patient loses their tolerance thereby exposing themselves to the risk of overdose on the day of supervision. This policy therefore needs to be carefully explained to the patient and it is advocated that the patient sign to say that it has been fully explained to them.

Exceptions to this may be:

- Stable patients on very low doses (e.g. <15mls) may not need supervision.
- Doses > 80 mls daily which may require increased supervision

Higher doses are potentially more dangerous if given in large take away doses. It may be prudent to have twice weekly supervision for such cases until the patient has been stable for more than a year and the clinician is confident that the patient can manage their dose safely.

Remember

It is necessary to specify on the methadone prescription what level of supervision is required i.e. every day, alternate days etc. There is a special section on the Methadone script where this can be specified. To minimise inconvenience for the patient, consumption should ideally be supervised on the day the patient attends the pharmacy with his/her script.

See Methadone Prescription Form Appendix E

The pharmacist is a valuable member of the primary care team. Pharmacists may often have a useful insight into patient's progress by virtue of the fact that they are seeing the patient every day.

Summary

- All doses supervised until patient stable.
- Minimum of one dose supervised weekly even if patient stable.
- Caution with doses > 80mls daily: consider twice weekly supervision.
- Maximum take away dose ideally not > 560mg/ml.
Methadone Reduction Regimes

Stability on methadone offers the opportunity to improve the overall personal, family and social functioning of the individual. It may take months or even years for a drug user to reach the stage where a reduction in their methadone can be considered. Treatment options should be regularly reviewed with the patient and realistic goals set, which will maximise the patient's health.

Reduction regimes should be negotiated with the individual drug user. Reductions in dose are unhelpful if imposed before the drug user is ready. If imposed too early it can lead to a return to street drugs, unsafe injecting and a sense of failure for the patient. It can often cause anxiety for the drug user therefore reassurance that treatment will be available if reduction is unsuccessful is important.

Reduction Plan

- Flexible, separately negotiated steps are best.
- Start with small reductions (large reductions are more likely to fail). See Figure 1. Pg 19.
- Further reduction can follow when the drug user feels confident and stable on the new dose.
- A return to the previous dose level may be necessary if the drug user does not cope.
- Reduction can be tried again, perhaps in smaller steps.

Advantages of this approach

- Reductions can be planned to take account of other circumstances in the drug user's life.
- Each successful small step will help to reinforce progress and boost the drug user's self esteem.
- The drug users will be able to focus on small reductions rather than feeling anxious about eventually having to cope without drugs.
- The drug user is more likely to succeed in eventually getting off drug and staying off.

Remember:

- If on more than one drug, reduce one drug at a time or alternate. Benzodiazepines ideally should be reduced first.
- It may be too difficult for the patient to try to reduce from both methadone and other drugs at the same time.
The dose reductions outlined here are for guidance only; negotiate individual reductions with the drug user. In general, reductions of between 5-10% of the current dose is recommended depending on the individual patient.

**Figure 1.**

**Methadone Reductions**

- If stable on more that 100mgs methadone
  - Reduce by 5-10 mgs at a time.

- If stable on 40 – 90mgs methadone
  - Reduce by 5mgs at a time

- If stable on 20 –40mgs methadone
  - Reduce by 2-5mgs at a time

- Below 20mgs methadone
  - Reduce by 1-2 mgs at a time

**Drug Reductions**

By Negotiation, One step at a time, One Drug at a time.

**Remember:**

- Detoxification over a 2-3 week period is associated with a high relapse rate (90%).
- Many patients may never be able to achieve total abstinence and it is important for prescribers to be aware of this fact.
On Going Monitoring and Review

Drug users on methadone should be seen regularly for review, and in general this is weekly. The frequency of this review will depend on the stage of their drug problem:

- During the initiation period the patient should be seen more frequently, if possible twice weekly.
- When stable, weekly review including a urine sample may be appropriate.
- Patients stable on methadone for a period of one year with urine samples free from illicit drugs may be seen fortnightly.

It is recommended that if using urine testing kits, one urine sample per month is sent to the laboratory for testing.

More frequent review may be appropriate if drug user is:

- Coping with other active problems.
- Being chaotic e.g. running out of medication early, missing appointments.
- Destabilised.
- Ready to reduce their medication.
**Destabilisation**

It is not uncommon for patients who have been doing well on methadone treatment to have relapses to illicit drug use. Often this will involve isolated incidents. If relapse continues for any length of time and increases in intensity, the patient may experience difficulties associated with chaotic drug use.

This process of “destabilisation” may occur quickly as a result of some trauma or may be a gradual deterioration with no obvious cause.

Destabilisation can be caused by a number of factors:

- The perceived boredom of sobriety may cause patients to relapse.
- Stressful life events such as bereavement, court cases and relationship problems.
- Sometimes changes in treatment location may lead to the return to drug use.
- Onset or relapse of a psychiatric problem or illness.

Risks associated with destabilisation include:

- Re-exposure to the risk of viral diseases.
- Reversion to criminal activity.
- Chaotic lifestyle.
- Deterioration in family relationships.

**Managing a patient who has destabilised**

A doctor who is seeing a patient weekly may notice a change in that patient if they are destabilising. The early signs of destabilisation may include:

- Opiate positive urinalysis.
- Missed appointments or late attendance at appointments.
- A change in mood or demeanour.

There are a number of strategies, which offer the patient increased support during a period of destabilisation. It is important to explain to the patient that any changes in their management should be seen as supportive rather than punitive.
Methadone dosage may need to be increased if the patient has been using heroin on top of their normal methadone dosage.

Increase the surgery attendance. To encourage attendance, prescriptions can be written twice weekly during a period of instability.

Review mental health and consider appropriate medication.

Urine testing may be increased in frequency to give a more accurate picture of the patient’s drug taking.

A period of destabilisation may, once resolved, present an opportunity to encourage the patient to consider the “bigger picture” of their addiction and accept referral to counselling or rehabilitation services. The prospect of transfer may motivate a destabilised patient to get their drug use under control.

**Remember**

It may be helpful to share case histories of difficult clients with other colleagues. Even the most experienced GP’s may have difficulties in managing individual clients. If a GP feels that it is becoming either too behaviourally difficult or clinically unsafe to continue treatment of a patient in a community setting, they should contact their GP Coordinator to arrange transfer of the patient to a treatment centre. Under the Methadone Protocol health boards agree to transfer difficult or abusive patients from the community to treatment centres immediately if necessary.
Special Groups and Substitute Prescribing

Substitute Prescribing should be given special consideration in:

1. Adolescents
2. Pregnant Women
3. Psychiatric co-morbidity

1. Adolescents

Only Level II GP’s who have access to adequate psychosocial supports should initiate treatment in adolescents.

Methadone maintenance is unlikely to be first line treatment for adolescents with opiate misuse problems. However, where there is a clearly defined opiate dependence and if other interventions have failed, substitute prescribing may be appropriate. Treatment for adolescents needs to be provided in conjunction with:

- Adequate psychosocial interventions. These are defined as counselling, access to a psychologist or family therapist.
- Family involvement as appropriate.

A balance needs to be struck between continuing treatment and the risks of ongoing drug misuse. Substitute prescribing in adolescents should be for as brief a time as possible with the aim, where practicable, being to reduce or detoxify once the adolescent is stabilised and is no longer involved in harmful drug use.

Parental Consent

The Offences against the Person’s Act 1997, empowers 16 years old and older adolescents to give consent to medical treatment. This however is modified by the Constitution, which enshrines the right of moral guardianship of an adolescent, (under the age 18) to the parents and is further modified by the ability of the adolescent to understand the nature of the treatment and the risks involved. Therefore even if an adolescent is capable of consent it is strongly advised that parental consent is obtained before substitute prescribing is commenced in 16-18 year olds. Without such consent a second opinion of a GP Co-ordinator should be sought.

Induction is taken more slowly with adolescents than with adults because tolerance is usually lower.
2. Pregnancy in Opiate Dependant Women

Treatment of opiate dependent pregnant women has been shown to have positive influences on pregnancy outcomes (Finnegan, 2000). Women attending treatment services have better antenatal care and better outcomes in terms of childbirth and child development (Boghdadi et al, 1997). Attracting and maintaining pregnant women into treatment is therefore important and their treatment should be prioritised.

Liaison midwives, appointed by the health boards, work in the maternity hospitals linking patients with drug treatment services, maternity services and hospital social services. It is important to link the patient with the liaison midwife as early as possible.

Stability on treatment is important in terms of pregnancy outcomes. Patients who continue to use heroin and fail to stabilise should be offered admission to an inpatient unit for stabilisation. If a woman wishes to detoxify during her pregnancy this can be offered on an out-patient or in-patient basis. It is recommended that detoxification in the middle trimester is best as there is a higher risk of miscarriage in the first trimester and premature labour in the third trimester.

As with all pregnant women, prescribed medication should be reviewed at the earliest opportunity. Nicotine, alcohol and benzodiazepine consumption should be given special consideration in opiate dependent pregnant women.

Most mothers remain stable during pregnancy and are very capable parents. Some mothers who use drugs chaotically during pregnancy however may have difficulty in parenting. Social supports may need to be put in place and the situation monitored by social services. These responsibilities are clearly outlined under ‘Children First’ (Department of Health, Ireland, 1999).

Excessive benzodiazepine and cocaine use during pregnancy have been known to cause teratogenic effects (Boghdadi et al, 1997). Cardiac defects and other congenital abnormalities have also been described. There is also evidence of increased risk of abortion, stillbirth, placental abruption, and premature rupture of the membranes.

Breast-feeding

Breast Feeding should be encouraged in the usual way even if a mother is taking methadone. Breast-feeding is contraindicated in HIV positive patients but is not contraindicated in Hepatitis C positive people or patients with any other form of hepatitis.

Blood borne viruses in Pregnancy

- Pregnant women who use drugs intravenously are more at risk of HIV. Early diagnosis and treatment of HIV is essential. Appropriate use of antivirals in pregnancy can significantly reduce vertical transmission from 15% to 1% (St. James Hospital, Dublin). The rate of vertical transmission of Hepatitis C is 5% or less (St. James Hospital, Dublin).
Hep B vaccine is generally contraindicated in pregnant patients but should be considered where there is a high risk of infection.

**Neonatal Abstinence Syndrome**

Neonatal Abstinence Syndrome (NAS) occurs to some extent in most babies born to opiate dependant women. It is characterised by:

- Irritability, poor sucking reflex.
- Gastrointestinal symptoms, respiratory difficulties.
- Treatment includes supportive swaddling, frequent small feeds and no sudden movement. Pharmacological treatment, when indicated is usually with oral morphine or in rare severe cases with phenobarbitone.

There is no evidence of a direct correlation between methadone dose and NAS. There is a suggestion however that with doses less than 40mg the risk of NAS is reduced as long as no other substances are being abused.

The use of benzodiazepines during pregnancy may cause neonatal withdrawals. Their use can cause delayed onset and prolongation of neonatal withdrawals. Symptoms of abstinence may occur at 7-14 days sometimes after the baby has been discharged from hospital.
3. Psychiatric Co-morbidity

There is a significant incidence of mental health problems in opiate dependent patients particularly symptoms of anxiety and depression. Significant improvements in psychological well-being have been shown when patients engage in drug treatment. A higher percentage of patients have suicidal or self-harm risk at initial presentation (Verster and Bunin, 2000). Patients with a history of suicidal ideation or a previous history of suicide should be prioritised for treatment.

Depression

Depression is common in the drug using population and this should be assessed and monitored closely. Patients who require antidepressants should be prescribed S.S.R.I.s where possible. Tricyclic antidepressants (particularly Dothiepin) should be avoided, as there is a high incidence of abuse in the Irish context.

Cross-addiction with benzodiazepines and alcohol are a significant problem with patients in drug treatment. These issues are dealt with in the next section.

Managing drug dependent patients who have concomitant severe mental health problems can be very challenging in the primary care setting. It may be appropriate to refer such patients to a treatment centre where there is access to regular psychiatric evaluation. Hospital admission is sometimes required where a patient is very disturbed.

A small percentage of patients continue to have ongoing mental health problems (10%), which will require psychiatric intervention (Marsden et al, 2000).

Anxiety/Paranoia

Consider possible cocaine or cannabis use if patients appear paranoid.
**Problem Section**

1. **Overdose**
2. **Missing the Chemist**
3. **False Urines**
4. **Special Dispensing Arrangements**
5. **Needle-stick injuries**

1. **Overdose**

Signs of toxicity from overdose range from slight drowsiness to respiratory depression, coma and death.

**Fatal overdose in methadone maintained patients most commonly occur when other drugs such as benzodiazepines and alcohol are being abused** (Humenuik et al, 2000). **Tricyclic antidepressants, cocaine and heroin are also implicated in overdose if being abused.**

Methadone users are at particular risk of fatal overdose in the following situations:

- Opiate naïve persons may acquire methadone for occasional recreational use and are at serious risk of fatal overdose.
- Patients being initiated on methadone treatment are at particular risks of overdose due to the cumulative effects of methadone, ongoing use of heroin and low tolerance.
- Post detox or discharge from prison. As tolerance may be reduced some patients may take quantities of heroin, which they had previously used when their tolerance was higher. This may precipitate a fatal overdose.
- Patients whose health is compromised by other serious illness

To minimise the risks of overdose:

- Educate patients on the risks of overdose.
- By incrementing the dose slowly ensure that the prescribed methadone dosage does not exceed the tolerance level, particularly when other drugs such as benzodiazepines and alcohol are being abused.
- Minimise diversion of prescribed methadone by supervising consumption.
- Take away doses should ideally not be provided until the patient is stable.
- Instruct patients in the safe keeping of methadone i.e. out of reach of children and others
2. Missing the Chemist

Patients miss their dose at the chemist for many reasons. If there are practical reasons why a patient is missing the chemist e.g. opening hours or distance to travel, this should be addressed as soon as possible with the patient with a view to making alternative arrangements for dispensing.

Missing the chemist may also be a sign of chaos or destabilisation.

A patient who misses 1 day of methadone may not feel any withdrawals due to the long half-life of methadone. By the second day most patients will be experiencing withdrawals and in some cases will resort to heroin to deal with this.

The pharmacist should always inform the GP if a patient misses a dose.

If a patient has missed 2 consecutive days at the chemist it is recommended to:

- Review a patient’s dose of methadone.
- To reduce their dose to 30mg or half their previous dose to minimise the risk of overdose.
- After restarting the patient at a lower dose their dose should be titrated upwards, increasing at no more than 10mg methadone every day.
- The community pharmacists should be made aware of this policy in advance.

It may be acceptable to discuss the patient’s condition with the pharmacist over the telephone if it is not practical to review the patient in person.
3. False Urines

A patient may give a urine which is not their own for a variety of reasons:

- They may be taking another substance and may not wish to disclose this.
- They may not want to disappoint the doctor.
- They may not be taking methadone as prescribed.
- To maintain a good urine record for the purposes of court.

It can be difficult to know when someone is giving a false urine. It may be suspected if the urine is cold. A green colour may indicate that methadone has been added to the sample. Usually supervising the urine or using temperature bottles overcomes this.

By far the commonest reason for the false urine is heroin or other unacceptable drug use. While this may be disappointing for the client and the doctor, it needs to be dealt with appropriately.

More difficult is the person who provides a false urine because they have not been taking their methadone dose as prescribed. They may be diverting or selling it. It would be appropriate to discuss this with the GP co-ordinator, as the management of each case may be individual.
4. Special Dispensing Arrangements

All efforts should be made to ensure that a patient on a maintenance script does not have their treatment interrupted unnecessarily. Circumstances, which may cause a change to normal arrangements, are:

**Public Holidays and Bank Holidays**

Special provision for Christmas, Easter and bank holidays may be required depending on local dispensing arrangements.

Take-away doses may be provided for a holiday period provided a patient is stable and capable of managing a take away dose safely. The patient should provide proof of travel in advance. Caution should be exercised if the travel period is in excess of 2 weeks and if take away doses are in excess of 560mls.

**Prison**

As there are maintenance programmes in some of the prisons, a patient can now statutorily continue their treatment if they find themselves admitted. Ideally there should be no interruption to treatment on admission or discharge from prison. In practice this is not always the case and strenuous efforts are being made to improve the system. A letter from the treating GP outlining current clinical and immunological status can be helpful to the prison services.

**Hospital**

Patients should be continued on their methadone treatment while in hospital unless there are medical grounds for stopping it. It is more common for patients to be admitted to hospital with complications of their drug use when they are not complying with their treatment programme. In most cases treatment will be re-commenced in this situation and the patient discharged to the relevant methadone agency for continuation of treatment.
5. **Needle-Stick Injuries**

Needle stick injuries are rare but can happen as a result of any of the following:

- Accidental injury during phlebotomy or disposal of sharps.
- Assault/mugging with a syringe and needle.
- Inoculation of an open wound.

The risk is dependent on the degree of penetration and the amount of blood inoculated.

The risk of transmission for blood borne viruses following a needlestick injury:

- **Hepatitis B** = 30%
- **Hepatitis C** = 1.8%
- **HIV** = 0.3%

**Hepatitis B**

Hepatitis B has the highest risk of transmission following needlestick injury but is eminently preventable. All health care workers should be fully vaccinated. The risk to a fully immunised worker who has shown an adequate immune response is virtually zero.

Any non-immune person exposed to hepatitis B virus should be given hepatitis B immunoglobulin prophylaxis as soon as possible. This should be done preferably within 48 hours but not later than one week. An accelerated hepatitis B vaccination programme should then be commenced.

**Hepatitis C**

The risk of hepatitis C is increasingly problematic. There is currently no vaccine or immunoglobulin available.

**HIV**

Higher transmissions rates are likely if the:

- Needle has been used intravenously
- Source person has a high viral load
- Penetrating injury is deep
- Needle is visibly contaminated with blood

**Remember:**

- Re-sheathing needles remains a common and avoidable cause of needle stick injury.
- Universal precautions should be adopted in all situations where blood spillage may be likely.
- In the case of needlestick injury all patients should present to the nearest hospital with an infectious diseases department for appropriate management. The viral status of the source person should be ascertained. Follow-up blood samples should be taken at 6 weeks and 6 months.
Management of other Drugs of Misuse

Many patients who are addicted to heroin also dabble or regularly use other drugs. If not currently using them they may well have used them in the past.

The use of other chemical substances may become apparent due to:

- Patient disclosure
- Patient behaviour
- On urinalysis

Drugs commonly misused are:

- Alcohol
- Benzodiazepines
- Cannabis
- Cocaine
- Amphetamines/ecstasy
- Tricyclics

General principles of management include:

- Taking a full history.
- Assessing whether the drug user acknowledges a problem.
- Asking them to keep a drug diary.
- Giving information about the effects and dangers of drugs.
- Encouraging them to reduce their intake by setting realistic goals together.
- Exploring any underlying problems.

Alcohol

Patients on methadone treatment commonly abuse alcohol. The general principles of managing patients with an alcohol problem remain the same. The option of transferring a patient to a treatment centre should be considered if the problem is unmanageable in the community. For most patients inpatient detoxification for alcohol is not routinely required; outpatient or home detoxification is often sufficient. For patients physically dependent on alcohol, planned detoxification may be appropriate.

Benzodiazepines

This best practice committee endorses the Benzodiazepine Report (DOH, 2001) and the Good Practice Guidelines for Clinicians (DOH, August 2000).

Benzodiazepine misuse is common in opiate users with one report suggesting 70% of patients in treatment had benzodiazepine positive urine during the past month (Farrell Report, 2000).
Prescribing benzodiazepines for known opiate users should only be considered if:

- Benzodiazepines are being taken daily – verified by presence in the urine.
- There is convincing evidence of dependence following clinical evaluation (use ICD10 criteria).

When prescribing benzodiazepines, special consideration should be given to patients on methadone treatment:

- Consider daily dispensing of benzodiazepines if there are any concerns re patient stability.
- If a patient is detoxing from their benzodiazepines, the methadone dose should be kept stable throughout the reduction period.
- Concurrent detoxification in the community of both drugs is not recommended.

Diazepam is the drug of choice for benzodiazepine maintenance or detoxification. It is a good idea to convert all benzodiazepines to diazepam using the following conversion chart:

<table>
<thead>
<tr>
<th>DRUG</th>
<th>DOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloridiazepoxide</td>
<td>15mg</td>
</tr>
<tr>
<td>Diazepam</td>
<td>5mg</td>
</tr>
<tr>
<td>Alprazolam</td>
<td>500 microgram</td>
</tr>
<tr>
<td>Lorazepam</td>
<td>500 microgram</td>
</tr>
<tr>
<td>Oxazepam</td>
<td>15mg</td>
</tr>
<tr>
<td>Temazepam</td>
<td>10mg</td>
</tr>
<tr>
<td>Nitrazepam</td>
<td>5mg</td>
</tr>
</tbody>
</table>

The advantage of Diazepam is that it has a relatively long half-life and is available in different strength tablets. The dose needs to be adjusted relative to withdrawal symptoms. Commencement doses should not exceed recommended therapeutic dose. There is no single best detoxification regime for benzodiazepines; discussion and negotiation with the patient is imperative. Goals should be simple and attainable for the patient.

In line with the recommendations of the Benzodiazepine Report patients on benzodiazepine prescriptions should be regularly reviewed on at least a monthly basis because of the long-term dependency effects. Regular communication between prescribers for opiate users is essential (e.g. between treatment clinics and community GPs) to avoid duplicate prescribing.

Cannabis

This is used extensively, especially in young people. It is not physically addictive (no physical withdrawal symptoms) but patients may have a psychological dependence. Regular and extensive use, especially if used throughout the day, may be associated with lethargy, low motivation, depression and paranoia. Treatment is through counselling.
Ecstasy

Ecstasy is a stimulant, which is not physically addictive. If used extensively at the weekends it may reduce performance during the week. Regular misusers sometimes use heroin, methadone or benzodiazepines as a means to “come down” from ecstasy and hence risk becoming addicted to these substances. Rarely ecstasy can precipitate psychosis. It may be associated with heat exhaustion, DIC, renal failure, coma and death. This may not be related to the amount ingested; it may be an idiosyncratic response to the drug. There is an increased level of clinical depression in people who use ecstasy due to the interference in serotonin metabolism.

Cocaine

Cocaine is a stimulant, which may cause psychological dependence, but when used in a prolonged and substantial way may cause physical dependence. The user may experience euphoria, increased energy, heightened sexual pleasure and alertness.

Negative effects also experienced are – agitation, anxiety, panic attacks, loss of libido, insomnia, labile mood, paranoia and hallucinations.

Cocaine is commonly snorted, smoked as crack, freebased or injected intravenously. Cocaine use can be confirmed by urinalysis. Counselling, the12 step AA model, or behaviour modification using contingency management (e.g. no take away methadone doses) may be useful. Depressed mood is common in users coming off cocaine and clinical depression should be looked for and treated as appropriate.

Peak blood concentrations are reached after 5 to 20 minutes when cocaine is inhaled intra-nasally and within seconds when smoked or injected. Intoxication is noted by dilated pupils, tachycardia, tachypnoea and hypertension.

Medical complications include:

- Cardiac: arrhythmia, arrest and infarction.
- CNS: seizures, stroke and subarachnoid haemorrhage.
- Deep vein thrombosis.
- Vasculitis and vascular spasm
- Complications in pregnancy

When inhaled as ”crack” or freebased, pneumothorax or pulmonary oedema may occur. Necrosis of the nasal cartilage and septal perforation may occur when cocaine is snorted.

Amphetamines

Amphetamines are often used recreationally e.g. at weekends and may be mixed with other drugs such as ecstasy. They are not physically addictive but psychological dependence is severe.
Blood Borne Viruses in Opiate Users

1. Hepatitis C

Hepatitis C (HCV) is the most common cause of chronic viral infection in the western world. First described in 1989, HCV is a single stranded RNA virus. At least six genotypes have been identified worldwide but genotype 1 and 3 are commonest in Ireland. Genotype 3 is more amenable to treatment while genotype 1 is the more aggressive form and less responsive to treatment.

All patients receiving drug treatment should have screening for Hepatitis C. and should be referred if appropriate.

- Diagnosis of HCV infection is by Enzyme Linked Immunoabsorbent Assay (ELISA) testing, confirmed by Recombinant Immunoblot Assay (RIBA). Active viraemia and thence infectiousness is documented by the presence in the serum of HCV-RNA, as measured by Polymerase Chain Reaction (PCR). This test must reach the laboratory within 4 hours of testing to be spun down and frozen (check with your local laboratory for details).

- The mode of transmission has been shown to be primarily through intravenous drug use, with needle or paraphernalia sharing. Sexual and vertical transmissions are thought to account for less than 1% and 5% respectively. The infection rate following a high-risk occupational exposure is estimated at 5%.

- HCV infection in the drug using community in the Dublin area is widespread with as many as 62 – 80% of intravenous drug users believed to be infected.

- Chronic HCV infection is often silent and is frequently discovered only at routine serological testing. Overt clinical illness at sero-conversion occurs in less than 20% as evidenced by a mild viral illness, nausea, shivering or anorexia. Jaundice is reported in less than 10% of those acutely infected and fulminant hepatitis with rash and arthrophy is unusual.

- Patients who clear the virus do not have life long immunity against hepatitis C as there are many variant strains and therefore vulnerable to re infection.

- PCR negative patients may be retested annually if appropriate. HCV-RNA positive patients should be referred for liver biopsy to determine the extent of liver damage. Treatment is offered to those with chronic active disease (persistent viraemia). It is recommended that it only be offered to those patients who are either drug free or stabilised on methadone maintenance programmes for a minimum of six months. Alcohol consumption is contraindicated in HCV infected patients.

- HCV infection is self-limiting in a percentage of infected individuals. The prognosis in
chronic infection varies greatly but it would appear that 30% of patients ultimately
develop cirrhosis and disability from end stage liver disease within 30 years. Factors
affecting prognosis include age at time of infection, cross addiction with alcohol, co-
existing HIV and/or HBV infection and genotype. IVDU are most commonly infected
with genotype 1 and this carries the worse prognosis.

- Currently, dual therapy with interferon alpha, covalently attached to polyethylene glycol
  (pegylated interferon alpha) and ribavirin, appears to be the most clinically relevant
disease modifying agents available. The pegylated interferon is administered
subcutaneously once a week and ribavirin is taken orally twice a day. Treatment lasts six
months. A sustained viral response is documented by a negative HCV-RNA six months
after treatment completion. The response rate to treatment with genotype 3 is as high as
80%, approximately twice as effective as with genotype 1.

- The most frequently reported side effects of treatment with interferon are ‘flu-like’
symptoms. Alopecia, insomnia, nausea, diarrhoea and psychiatric disorders in particular
depression and irritability are also commonly reported. Antidepressants are sometimes
used prophylactically. Neutropenia, thrombocytopenia and altered thyroid function may
also be experienced. Ribavirin treatment can result in a severe haemolytic anaemia.

- The depression associated with interferon may lead to relapse in drug use for some
patients hence appropriate selection is critical.

<table>
<thead>
<tr>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>◆ Patients who are opiate free for 6 months and PCR positive should be referred to a Hepatologist.</td>
</tr>
<tr>
<td>◆ Present in up to 80% of drug users – including ‘heroin smokers’</td>
</tr>
<tr>
<td>◆ 80% of patients who acquire hepatitis C don’t clear the virus spontaneously.</td>
</tr>
<tr>
<td>◆ PRC test identifies the 80% who have not cleared the virus.</td>
</tr>
<tr>
<td>◆ Up to 80% respond to treatment depending on genotype</td>
</tr>
<tr>
<td>◆ Alcohol consumption has a critical influence on outcome and patients should be advised to consume alcohol very moderately or to abstain entirely.</td>
</tr>
</tbody>
</table>
2. **Hepatitis B**

- Hepatitis B is transmitted sexually and through blood to blood contact. Intravenous drug users are at high risk due to sharing needles or other drug using equipment. The incubation period can be between 6 weeks and 6 months.

- Many cases of hepatitis B infection go undetected with minor symptoms only while about 30% of cases present with jaundice and/or severe fulminating hepatic necrosis.

- On laboratory testing hepatitis B surface antigen (HbsAG) is found in individuals who have a current infection either acute or chronic. Antibodies to hepatitis B surface antigen (anti-HBs) are found in patients who have had a previous resolved infection or following immunisation with Hepatitis B vaccine. Antibodies to Hepatitis B core antigens are found in patients with current or resolved infections.

- Some 5% of infected patients remain chronic carriers of the virus. Patients who also have hepatitis e antigen detected are most infectious. Chronic carriers can develop chronic liver disease; these patients are at increased risk of developing hepatocellular carcinoma.

List of blood to be drawn, **Appendix F**
3. HIV

As current treatment regimes improve there is now a degree of optimism regarding the survival and decreased morbidity for Human Immunodeficiency Virus (HIV) positive patients. Researchers are by no means claiming a cure but suppression or elimination of the virus has become possible with the new combination of drugs. This is in contrast to the undeniable stigma and probable death sentence that surrounded a diagnosis of HIV in the past.

Prevalence

Recent statistics from the National Virus Reference Laboratory in Dublin indicate the following:

H.I.V. positive tests

- 42% intravenous drug users
- 23% homosexuals
- 18% heterosexuals/risk unknown
- 17% haemophiliacs/children and others

Cases of HIV Related Illness

- 41% are intravenous drug users
- 34.4% are homosexuals/bisexual
- 12.8% are heterosexual
- 11.8% are haemophiliac/children and other

It is clear from these findings that intra-venous drug users (IVDUs) are at the greatest risk of HIV infection and policies around drug treatment and harm minimisation must take this into account.

HIV Testing

Some at risk individuals self-refer for HIV testing. Others (particularly the IVDUs) should be offered an opportunity to test. There was a reluctance to test, in the past, because of the limited treatment options and the poor outcomes of treatment. With the advances in treatment modalities, this is no longer valid. The initial screening test is an Elisa test. If positive this is followed by an immunoblot line assay.
There are certain issues, which should be discussed with a patient before a HIV test is taken. Pre-test discussion should include:

- The likelihood of a positive result
- Financial implications of testing and/or a positive result
- Identifying their support network
- What treatments are now available
- Confidentiality issues
- Results should be given by the person who organised the test

**Following the test result**

- If negative, reassure and advise about minimising future risk taking behaviour
- If positive, clear directives and appropriate referral including contact tracing.

A period of three months should elapse from the time of the risk behaviour and the testing time. This will allow for an accurate result in 99% of cases.

**Treatment Regimens**

Many treatment regimens are in trial phases at present and are frequently modified and updated.

When assessing a patient for treatment, the current markers are the **viral load** and the **CD4 lymphocyte** count. The viral load indicates the amount of replicating viral particles and the CD4 count measures the amount of lymphocytes in the immune system. Current guidelines suggest that therapy be considered in asymptomatic patients with a moderately depressed CD4 count (<350-500x10⁶/ml) or a moderately elevated viral load (>5000-30,000 copies/ml). These levels are predictors of greater risk of progression to AIDS (Hearst and Hulley, 1998). Antiretroviral therapy is also of proven benefit in the early stages of infection e.g. following a needle stick injury or in the seroconversion stage of the illness.

Highly active antiretroviral therapy (HAART) consists of a combination of at least 3 antiretroviral agents. There are currently three approved classes (FDA) (Hearst and Hulley, 1998).
Vaccination Schedules

Current recommendations suggest that all drug users, irrespective of their Hepatitis C status, should be vaccinated for Hepatitis A and Hepatitis B. If a patient is Hepatitis A antibody positive they will not require Hepatitis A vaccine and in these cases Hepatitis B vaccine alone should be offered. The combined HepA/HepB vaccine, and the Hepatitis B vaccine should be available to all GPs managing patients on the MTP.

The recommended schedule for either vaccine:

- Hep A/Hep B combined vaccine at entry to treatment.
- Hep A/Hep B combined vaccine at one month.
- Hep A/Hep B combined vaccine five months later (six months after the start of the program).

Post vaccination titres should be performed eight weeks after the last vaccine.

Titre (Miu/ml) less than 10 – patient deemed to be a “non- responder” and should receive a full course of another brand vaccine, a double dose of a vaccine 9one injection into each arm) or both.

Titre (Miu/ml) less than 100 – patient is termed a “poor responder” and needs a booster of hepatitis B vaccine and a titre recheck at two months.

Titre greater than 100 – patient is immune for life. A single booster against hepatitis A should be offered at ten years.

We need to ensure that all patients are offered vaccination as soon as they enter treatment.
Non-Methadone Alternative Therapies

While methadone treatment remains the mainstay of our treatment services there is an increasing evidence base surrounding some alternative treatments.

Buprenorphine

Buprenorphine as a substitute treatment in opiate addiction has a considerable evidence base in its favour. Its current license in Ireland is for use by specialists in substance misuse only. However there is evidence to support its use in primary care in the U.S. the U.K., France and Australia in particular. A recent report commissioned by the National Advisory Committee on Drugs (NACD, 2002) provided a literature search on its use. The evidence suggests that Buprenorphine is:

- As effective as methadone when given in equivalent doses
- Safer in overdose than methadone
- Easier withdrawal syndrome

In the context of a well-supervised programme there is good evidence that Buprenorphine is an effective substitute treatment and may be particularly useful in patients who wish to ultimately detoxify. It may also be useful in patients who have difficulty in detoxifying from a low methadone dose. As there are concerns regarding abuse of the drug by injecting it, it should be administered under strict supervision especially in the early stages of treatment. As in treatment with methadone, caution needs to be exercised in patients who are also abusing alcohol and benzodiazepines as there is a risk of overdose from respiratory depression.

Lofexidine

Lofexidine does not have a full license in this country at present and can be prescribed on a named patient basis only. It is similar pharmacologically to Clonidine but does not have the significant hypotensive effects. It has been found to be effective in patients wishing to gain abstinence from heroin or from methadone and is useful in managing the withdrawal syndrome. It can be used in the outpatient setting safely.
# Appendix A

## Treatments Centres & Local Co-ordinators

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>Telephone No.</th>
<th>HB Co-ordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aisling Clinic</td>
<td>Cherry Orchard Hospital</td>
<td>01 - 6206010</td>
<td>Dr. John O' Grady</td>
</tr>
<tr>
<td></td>
<td>Ballyfermot</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dublin 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Athlone Drug Treatment Clinic</td>
<td>St. Martins Centre</td>
<td>0902 – 83100</td>
<td>Dr. Phil Jennings</td>
</tr>
<tr>
<td></td>
<td>St. Vincent's Hospital</td>
<td>Tuesday - pm</td>
<td>Arden Road, Tullamore</td>
</tr>
<tr>
<td></td>
<td>Athlone</td>
<td>Thursday - pm</td>
<td>Co. Offaly</td>
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<td>Co. Meath</td>
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<tr>
<td>Baggot Street Clinic</td>
<td>19 Haddington Road</td>
<td>01 - 6681577</td>
<td>Dr. Cathal O’ Sullivan</td>
</tr>
<tr>
<td></td>
<td>Dublin 4</td>
<td></td>
<td></td>
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<tr>
<td>Castle Street Clinic</td>
<td>37 Castle Street</td>
<td>01 - 4785574</td>
<td>Dr. Margaret Bourke</td>
</tr>
<tr>
<td></td>
<td>Dublin 2</td>
<td></td>
<td></td>
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<tr>
<td>Cork Street Clinic</td>
<td>Cork Street</td>
<td>01 - 4544933</td>
<td>Dr. Margaret Bourke</td>
</tr>
<tr>
<td></td>
<td>Dublin 8</td>
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<td></td>
</tr>
<tr>
<td>City Clinic</td>
<td>108 – 109 Amiens Street</td>
<td>01 – 8555313</td>
<td>Dr. Des Crowley</td>
</tr>
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<td></td>
<td>Dublin 1</td>
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<td>Darndale Clinic</td>
<td>Beldale View</td>
<td>01 - 8488985</td>
<td>Dr. Ide Delargy</td>
</tr>
<tr>
<td></td>
<td>Belcamp</td>
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<td></td>
<td>Dublin 17</td>
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<tr>
<td>Domville House HIV &amp; drugs Service</td>
<td>St. Pappins Ballymun Road</td>
<td>01 – 8620111</td>
<td>Dr. Ide Delargy</td>
</tr>
<tr>
<td></td>
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<tr>
<td>Drug Treatment Centre Board</td>
<td>Trinity Court</td>
<td>01 – 6488600</td>
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<td></td>
<td>30/31 Pearse Street</td>
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<tr>
<td>Galway Drug Treatment Clinic</td>
<td>The Annex</td>
<td>091 – 523122</td>
<td>Ms. Fiona Walsh</td>
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<tr>
<td></td>
<td>West City Centre</td>
<td>Ext. 6404</td>
<td>Drugs Co-ordinator</td>
</tr>
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<td>Co. Galway</td>
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<td>Merlin Park Hospital</td>
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<tr>
<td></td>
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<td></td>
<td>Galway 091 - 751131</td>
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<tr>
<td>Limerick Drug Clinic</td>
<td>Mid Western Health Board 57 O' Connell Street Limerick</td>
<td>061 – 310899</td>
<td>Ms. Maria McCully 57 O' Connell Street Limerick 061 – 310899</td>
</tr>
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<tr>
<td>Merchants Quay</td>
<td>4 Merchants Quay Dublin 8</td>
<td>01 - 6790044</td>
<td>Dr. Margaret Bourke</td>
</tr>
<tr>
<td>Patrick Street Clinic</td>
<td>Patrick Street, DunLaoghaire</td>
<td>01 – 2808472</td>
<td>Dr. Cathal O' Sullivan</td>
</tr>
<tr>
<td>The Mews Clinic</td>
<td>224 North Circular Road Dublin 7</td>
<td>01 - 8383852</td>
<td>Dr Des Crowley</td>
</tr>
<tr>
<td>Waterford Drug Treatment Clinic</td>
<td>Community Care Centre The Cork Road Waterford Co. Waterford</td>
<td>051 – 842800 Tuesday - pm Friday - pm</td>
<td>Dr. Neville deSouza Lacken Dublin Road Kilkenny 056 – 51702</td>
</tr>
<tr>
<td>Wellmount Clinic</td>
<td>Wellmount Health Centre Finglas West Dublin 11</td>
<td>01 - 8643859</td>
<td>Dr. Des Crowley</td>
</tr>
</tbody>
</table>

**GP Co-Ordinators**

**National GP Co-ordinator**

Dr. Ide Delargy, ICGP, 4-5 Lincoln Place, Dublin 2

Phone: 01 6763705 Fax: 01 6765850 E-mail: Yvette@icgp.ie

**ERHA GP Co-ordinator**

Dr. Ide Delargy  Phone: 01 2302659

Dr. Des Crowley  Phone: 01 8601174

**South West Area Health Board**

Dr. Margaret Bourke  Phone: 01 4788574

Dr. John o' Grady  Phone: 01 6232200

**East Coast Area Health Board**

Dr. Cathal O' Sullivan  Phone: 01 2803335
### Appendix B

#### Sample Agreement

Name: ___________________________  Date: ___________________________

You are now receiving a regular prescription for addictive medication and we ask you to accept the following conditions and behave respectfully towards practice staff.

1. I agree to attend appointments promptly and quietly.
2. I agreed to attend my appointments unaccompanied whenever possible.
3. I agree not to upset the Receptionist or other patients in the waiting room.

Behaviour outside these limits may result in the Receptionist or Doctors asking you to leave the Surgery premises.

**Prescription, Medication and Appointment:**

1. I agree to be responsible for making my appointments and checking that my appointment is correct in our appointment book.
2. I accept responsibility for turning up for my appointment on time.
3. I agree to attend on the Doctors mentioned below, on this form, and to discuss my prescription on with them.
4. I agree to use emergency appointments or housecalls to discuss my prescription.
5. I agree to be responsible for my prescription and medication and recognise that these cannot be replaced.
6. I agree that no alteration will be made to my prescription without my own Doctor's permission.

My Doctor is Dr. ________________  his/her half day is: ____________________

In his/her absence I will consult Dr. ____________________

I have read the above conditions, I understand what they mean and I agree to abide by them. If I do not abide by these rules then I understand that certain sanctions may be imposed. I understand that these sanctions are at the discretion of the Doctor man may include:

1. Withdrawal of privilege e.g. take-away medication, supervision of medication ingestion.
2. Transfer to another Doctor/Treatment Centre.

Signature: ___________________________  (Patient)  Date: ____________________

Signature: ___________________________  (Doctor)  Date: ____________________
## Addiction Assessment Form

<table>
<thead>
<tr>
<th>First Name:</th>
<th>Address:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last Name:</td>
<td></td>
</tr>
<tr>
<td>Male □  Female □</td>
<td>Tel:</td>
</tr>
<tr>
<td>D.O.B. □ □ □</td>
<td>Date of Assessment □ □ □</td>
</tr>
<tr>
<td>Community General Practitioner</td>
<td></td>
</tr>
</tbody>
</table>

### Age first took drugs: ____________

### First Drug: ______________________

### Age first took opioids: __________

### First Opiate: ____________________

### Current Opiate: __________________

### Route: __________________________

### How Long: ________________________

### How Much: ________________________

### How often in the past Month

- Daily □
- Every 2nd Day □
- 2-3 Days □
- Weekends Only □

### If not daily, are you getting withdrawals

- Yes/No

### Are you currently injecting

- Yes/No

### Ever Shared

- Yes/No

### Currently Sharing

- Yes/No

## Substance Use

<table>
<thead>
<tr>
<th>Substance</th>
<th>Previous Mth</th>
<th>Past</th>
<th>Route</th>
<th>Frequency</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heroin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methadone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morphine Tabs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cocaine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tricyclic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amphetamines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ecstasy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cannabis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nicotine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Addictions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gambling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eating Disorder</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**ICD 10 Criteria**  Compulsion to take heroin

<table>
<thead>
<tr>
<th>Description</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty in controlling heroin intake</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has experienced withdrawal symptoms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evidence of tolerance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neglect of commitments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persistent heroin misuse in spite of evidence of harmful effects</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Currently in treatment**

- Yes [ ]
- No [ ]

## Social History

- Married [ ]
- Single [ ]
- Separated/Divorced [ ]
- Stable Relationship [ ]
- Lone Parent [ ]

**Living With:**

- Partner [ ]
- Partner Taking Drugs [ ]
- Parents [ ]
- Parents Taking Drugs [ ]
- Siblings [ ]
- Siblings taking drugs [ ]
- Living Alone [ ]
- Living with children [ ]
- Homeless [ ]
- Living with other drug users [ ]

**Family History of Alcohol**

- Yes/No [ ]

---

**Education**

- Still at school  
  - Yes/No [ ]
- Age left school [ ]
- Examinations Passed [ ]

**Post School**

- Rehabilitation Course [ ]
- Fas [ ]
- Apprenticeship [ ]
- CE Schemes [ ]
- Third Level [ ]
- Pre employment [ ]
- Other [ ]

**Employment Status**

- Full Time [ ]
- Part Time [ ]
- Unemployed [ ]
- Student [ ]
<table>
<thead>
<tr>
<th>SOURCE OF INCOME</th>
<th>SOURCE OF FUNDING HABIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>Employment Partner</td>
</tr>
<tr>
<td>Unemployment Benefit</td>
<td>Shop Lifting</td>
</tr>
<tr>
<td>Unemployment Assistance</td>
<td>Serious Robbery</td>
</tr>
<tr>
<td>Lone Parent Allowance</td>
<td>Drug Dealing</td>
</tr>
<tr>
<td>Disability Benefit</td>
<td>Sex Worker</td>
</tr>
<tr>
<td>Supplementary Welfare</td>
<td>Other</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

**FORENSIC HISTORY**

- **Every in prison:** Yes/No
- **On Probation:** Yes/No
- **Case Pending:** Yes/No
- **Outstanding Warrant:** Yes/No

**HISTORY (PAST & PRESENT) OF PHYSICAL ILLNESS**

- **General Health:** Yes/No
- **Pregnant:** Yes/No
- **HIV status if known:** Never Tested, Positive, Negative
- **Hepatitis A status if known:** Never Tested, Positive, Negative
- **Hepatitis B status if known:** Never Tested, Positive, Negative
- **Hepatitis C status if known:** Never Tested, Positive, Negative
PSYCHIATRIC EVALUATION:

During the past 3 months you have felt:

<table>
<thead>
<tr>
<th></th>
<th>Yes/ No</th>
<th></th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sad</td>
<td>Yes/ No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxious</td>
<td>Yes/ No</td>
<td></td>
<td>Yes/No</td>
</tr>
<tr>
<td>Frightened</td>
<td>Yes/No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guilty</td>
<td>Yes/No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Interest</td>
<td>Yes/No</td>
<td></td>
<td>If yes, have you planned to take your life Yes/No</td>
</tr>
<tr>
<td>Worthless</td>
<td>Yes/No</td>
<td></td>
<td>If yes, have you attempted to take your life Yes/No</td>
</tr>
</tbody>
</table>

Hopeless Yes/No

Do you think life is worth living Yes/No

Do you think about suicide Yes/No

URINE INVESTIGATION

<table>
<thead>
<tr>
<th>Opiates</th>
<th>Benzodiazepine</th>
<th>Methadone</th>
<th>Cocaine</th>
<th>Amphetamines</th>
<th>Tricyclic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PATIENTS GOALS & AIMS

Motivation on a scale of 1-5

MANAGEMENT PLAN

Refer to Central Services Yes/No

Treatment Yes/No

*Stabilisation

Detox in Patient

Detox out Patient

Slow reduction

Maintenance
### Excretion Times

*Trinity Court Drug Treatment Centres Board, Dublin, 2003*

<table>
<thead>
<tr>
<th>Substance</th>
<th>Duration of Detectability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amphetamines</td>
<td>3 days</td>
</tr>
<tr>
<td>Methamphetamine</td>
<td>3 days</td>
</tr>
<tr>
<td><strong>Benzodiazepines</strong></td>
<td></td>
</tr>
<tr>
<td>Ultra-short-acting (half-life 2hrs) (Eg Midazolam)</td>
<td>2-28 days, 12 Hours</td>
</tr>
<tr>
<td>Short-acting (half-life 2-6 hrs) (Eg Triazolam)</td>
<td>24 Hours</td>
</tr>
<tr>
<td>Intermediate-acting (half-life 6-24hrs) (Eg Temazepam/Chlordiazepoxide)</td>
<td>40-80hrs</td>
</tr>
<tr>
<td>Long-acting (half-life 24hrs) (Eg Diazepam/Nitrazepam) Dalmane</td>
<td>7 days</td>
</tr>
<tr>
<td><strong>Cocaine Metabolites</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2-3 days</td>
</tr>
<tr>
<td><strong>Methadone (maintenance dosing)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 days</td>
</tr>
<tr>
<td><strong>Codeine/Morphine/Propoxyphene</strong></td>
<td></td>
</tr>
<tr>
<td>(Heroin is detected in urine as the metabolite morphine)</td>
<td>48 Hours, (May be detected up to 7 days)</td>
</tr>
<tr>
<td><strong>Cannabinoids (Marijuana)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3-8 days (up to 4 weeks)</td>
</tr>
</tbody>
</table>
Appendix F

GP – Laboratory Request Form

Date:

Re:
Thank you for the following Blood Test

**Hepatitis A:**

IgG  
IgG  

**Hepatitis B:**

Anti-HBs  
HbsAG  
Anti-HBc  

**Hepatitis C**

Ant-HCV  
PCR  
HIV  

**Clinical Details**

Intravenous drug Use

With Best Wishes

Signed
Further Appendices you may find useful

Appendix G

Glossary of Terms

**Charge:**
Once a Garda decides that he has sufficient evidence to prosecute (he may take advice from the DPP) he formally reads the charge to the client.

**Warrant:**
If a person fails to turn up at court whilst on bail the judge issues a bench warrant, which orders the Garda to arrest, and bring the person directly to court.

**TR; Temporary Release:**
An institution may release a person on license with instructions to present back to the institution at a given time, usually weekly. Proof that the person is legally out of prison is his TR form.

**At large:**
The person has failed to return to prison on time and can be arrested on sight and returned to the institution.

**Strung Out/or”sick”**
Physically addicted but withdrawing

**Bang Up, Shoot, Use**
Inject IV

**Skin Pop**
Inject subcutaneously

**Needle Buzz, Smac, H**
Addicted to act of injection rather than the drug

**Gear, Smac, H**
Heroin

**Roche (Yellas, Blueys)**
Diazepam

**Spike**
Needle

**Barrel**
Syringe

**Works**
Paraphernalia, spoon, filters, etc

**Snow**
Cocaine

**Bag**
1/8 ounce of Heroine
### Appendix H

#### Conversion Table

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>Methadone equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street Heroin</td>
<td>Cannot accurately be estimated because street drugs vary in purity, though 1g of heroin are roughly equivalent to 50-80-mg oral methadone. Titrate dose against withdrawal symptoms.</td>
<td></td>
</tr>
<tr>
<td>Morphine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MST</td>
<td>10mg ampoule</td>
<td>10mg</td>
</tr>
<tr>
<td>Dihydrocodeine (DF118)</td>
<td>30mg tablet</td>
<td>3mg</td>
</tr>
<tr>
<td>Pethidine</td>
<td>50mg tablet</td>
<td>5mg</td>
</tr>
<tr>
<td></td>
<td>50mg ampoule</td>
<td>5mg</td>
</tr>
<tr>
<td>Buprenorphine hydrochloride (Temgesic or Subutex)</td>
<td>200 microgram sublingual tablet</td>
<td>5mg</td>
</tr>
<tr>
<td></td>
<td>400 microgram sublingual tablet</td>
<td>10mg</td>
</tr>
<tr>
<td></td>
<td>300 microgram ampoule</td>
<td>8mg</td>
</tr>
<tr>
<td></td>
<td>New formulations – 2mg and 8mg sublingual tablets</td>
<td>Methadone equivalents are not currently available</td>
</tr>
<tr>
<td>Codeine linctus 100ml</td>
<td>300mg codeine phosphate</td>
<td>20mg</td>
</tr>
<tr>
<td>Codeine phosphate</td>
<td>15mg tablet</td>
<td>1mg</td>
</tr>
<tr>
<td></td>
<td>30mg tablet</td>
<td>2mg</td>
</tr>
<tr>
<td></td>
<td>60mg tablet</td>
<td>4mg</td>
</tr>
</tbody>
</table>

These conversions do not necessarily suffice for daily requirements because of the different half-lives of drugs.
Appendix I

Recommended Reading List


Department of Health UK; The Scottish Office Department of Health; Welsh Office; Department of Health and Social Services, Northern Ireland: (1999) Drug Misuse and Dependence Guidelines on Clinical Management, London, HMSO.

References


Department of Health UK; The Scottish Office Department of Health; Welsh Office; Department of Health and Social Services, Northern Ireland: (1999) Drug Misuse and Dependence Guidelines on Clinical Management, London, HMSO.


Gossop, M; Marsden, J; Stewart, D: (1998) ‘The National Treatment Outcome research Study. Changes in Substance Use, Health and Criminal Behaviour One Year after Intake,’ NTORS- At One year.


Kurz, Xavier: (2001) ‘Benefit-risk evaluation of methadone and buprenorphine,’ be-h_pharmacovigilance@be-h.eudra.org


Recommendations for prevention and control of hepatitis C virus (HCV) infection and HCV-related chronic disease. MMWR, October 16, 1998;47:No. RR-19


St. James Hospital, Verbal Report from St. James Hospital, Dublin, Ireland.
