SASKATCHEWAN

METHADONE GUIDELINES

FOR THE TREATMENT OF

OPIOID ADDICTION/DEPENDENCE

Saskatchewan, June 2008

College of Physicians and Surgeons of Saskatchewan

Saskatchewan Health
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METHADONE ASSISTED RECOVERY

Methadone is a long acting, synthetic opioid that has been used in the treatment of opioid addiction for over forty years. Developed in Germany as a painkiller during the WWII, it was first used to treat addiction by Dr. Robert Halliday in BC in 1963 and a year later in New York City by Drs Vincent Dole and Marie Nyswander.

Methadone is a potent opioid agonist that has good oral bioavailability, a slow onset of action and a long half life. It binds strongly to the mu receptor, rendering the receptor inaccessible to most other opioids. Methadone also binds to other receptors. Methadone prevents withdrawal, decreases craving and blocks euphoria produced by short acting opioids.

In the absence of pharmacological intervention, an opioid addicted person has roughly a 15% chance of succeeding in recovery. Once stabilized on methadone, an addicted person can live a normal productive life. The risk of relapse to the addictive lifestyle increases sharply if methadone maintenance is discontinued. Since opioid addiction is a life-long process, methadone maintenance may be considered a life-long treatment. Many patients who discontinue methadone relapse within a year of stopping treatment.

As with any opioid, methadone can cause respiratory depression and arrest. Because of the slow onset of action, the progression of respiratory depression in a person taking methadone is insidious, and can go unnoticed by the patient’s companions. An added risk factor is methadone’s long half-life of 24 hours or more. Methadone blood level will increase with each successive dose until it reaches steady state (this take four to five half lives). During early induction, the new patient is at risk of overdose and death. Taken together, these factors make methadone a medication that has to be handled with respect, by clinicians who understand its properties, and its dangers.

Managed properly, the benefits of Methadone Maintenance Therapy far outweighs the risks. Patients who are stable on methadone are less likely to inject opioid drugs, hence not as apt to share needles. They are less at risk of contracting HIV, Hep B or Hep C. If they have already been infected with a blood born pathogen, they pose less of a risk of transmitting their infection through needle sharing. They are much better candidates for treatment. The addictive lifestyle does not lend itself to the degree of treatment compliance necessary to achieve a sustained viral response. Methadone frees the former addict from the need to engage in criminal activity in order to support an expensive drug habit.

Opioid addiction is a multifaceted disease. Addiction is a disease of youth. Most addicts started using in their formative years. Addiction becomes a full-time pursuit. The addict spends much or most of his or her time acquiring, using and recovering from the drug - time that should have been spent acquiring the skills necessary to succeed in today’s world.

Many of the patients entering methadone maintenance have few coping, life, parenting, or employment skills. Some are addicted to stimulants as well as to opioids. For a significant number of patient’s methadone, in and of itself, is not adequate treatment.
The term Methadone Assisted Recovery is used to describe case-managed, community-based programs. Patients not only receive methadone but, with the help of a case manager/counselor, can access the resources of the community to help fill the void left by years of addiction. These services may include counseling, upgrading of education, job skills training and employment placement, as well as parenting and anger management classes. Some may need outpatient or residential treatment for stimulant addiction. Although ideal, these services are not yet available to every Methadone Maintenance Program. Because of its proven benefits, patients should not be denied Methadone Maintenance in areas where case management is not yet available.

In Canada, methadone is a controlled substance. Any physician wishing to prescribe methadone must receive an exemption from the Federal Office of Controlled Substances Health Canada. The exemption is granted on the recommendation of the province’s College of Physicians and Surgeons. In Saskatchewan, a physician must spend time with an experienced methadone prescriber. An initial level 1 exemption, which allows the new prescriber to manage stable patients, is granted. He or she must consult with an experienced colleague before making any significant changes in the patient’s treatment plan. After a probationary period of about six months and after having completed a Methadone 101 course the College can, upon reviewing the practitioner’s cases, allow the physician to initiate patients on methadone.
In Canada methadone is available as a $d,l$ racemic mixture. The $d$ isomer has very little mu agonist activity but is a modest NMDA receptor antagonist, and has some utility in the management of chronic pain and “opioid resistance”. The $l$ isomer is strong mu receptor agonist and has high affinity for that receptor. It will displace other opioids from the receptor. Once methadone has bound to a mu receptor it will prevent most other opioids from occupying that receptor. Buprenorphine and Naloxone have greater mu receptor affinity than does methadone. They can displace methadone from the mu receptor, thus precipitating withdrawal. Methadone also has significant delta receptor agonist activity.

Methadone is rapidly absorbed from the gastrointestinal tract. Blood levels peek at 2-4 hours after ingestion. It is highly lipophilic and has a high volume of distribution (mean: 6.7 L/kg).\footnote{Fishman Scott M, et al, Methadone Reincarnated: Novel Clinical Applications with Related Concerns, Pain Medicine Vol 3, N0 4, pp 339-349 (2003) – introduction pharmacology} Practically, this means that methadone concentrations in urine, bile and many tissues will be significantly higher (3-5 fold) than blood concentrations. Methadone has a biphasic metabolism. The or Redistribution phase lasts 8-12 hours. The or elimination phase lasts about 60 hours. The mean half life of Methadone in the blood is 26.8 hours. Methadone has significant analgesic properties only during the phase of its metabolism.

Methadone is biotransformed in the liver to inactive metabolites via the Cyp 3A4 system, and to a lesser extent the 2D6 and 1A2. Cyp 3A4 activity is variable. The enzyme system is induced by a number of drugs and is autoinducible even in the absence of medications. The rate metabolism of methadone - hence the half life - is highly variable.

Methadone and its inactive metabolites are excreted through the urine. In the presence of renal failure methadone is almost entirely cleared by the gut.\footnote{Borg Lisa, Kreek Mary Jeanne, The Pharmacology of Methadone, Principles of Addiction Medicine 3rd Edition, Chapter 4, (2003)} Less than 1% of methadone is removed by dialysis.

Methadone clearance is not markedly affected by mild to moderate liver disease. Because of decreased liver size and metabolism in long standing severe liver disease, hepatic reservoirs of methadone are decreased and blood levels are lower than expected.\footnote{Givertz Clifford, Methadone’s Role in Pain Management: New danger revealed, Topics in Pain Management:Dec 2007, 23:5 pp1-6}

Little if any dosage adjustment is typically required in hepatic disease.\footnote{Givertz Clifford, Methadone’s Role in Pain Management: New danger revealed, Topics in Pain Management:Dec 2007, 23:5 pp1-6}

Methadone is known to prolong the Q-T interval, rendering the heart susceptible to torsades de points (TdP). TdP is most likely to occur when methadone is taken in conjunction with other medications that prolong the QTc (refer to \url{www.qtdrugs.org} for an updated list).\footnote{Givertz Clifford, Methadone’s Role in Pain Management: New danger revealed, Topics in Pain Management:Dec 2007, 23:5 pp1-6}
02. TERMINOLOGY

**ADDICTION:** A primary, chronic disease, characterised by impaired control over the use of a psychoactive substance and/or behaviour. Clinically, the manifestations occur along biological, psychological, sociological and spiritual dimensions. Common features are change in mood, relief from negative emotions, provision of pleasure, pre-occupation with the use of substance(s) or ritualistic behaviour(s); and continued use of the substance(s) and/or engagement in behaviour(s) despite adverse physical, psychological and/or social consequences. Like other chronic diseases, it can be progressive, relapsing and fatal.

**CRAVING:** A bio-psychological arousal and urge to return to addictive behaviour, characterized by a strong desire, pre-occupation and possible impulsivity.

**SUBSTANCE DEPENDENCE:** A collection of cognitive, behavioural and physiological features that together signify continued use despite significant substance-related problems. It is a pattern of repeated self-administration that can result in tolerance, withdrawal and compulsive drug taking behaviour. In order to cross the threshold of Substance Dependence the client must exhibit three or more behaviours from a set of seven criteria (Appendix 01.) over a 12-month period.

**HARM REDUCTION:** Health promotion, prevention, assessment and intervention options that aim to decrease the health and socio-economic consequences of drug use and addictive behaviour, without necessarily requiring abstinence. Abstinence-based strategies are valid and are an integral component of comprehensive harm reduction where achievable.

**NARCOTIC:** Substances which produce sedation, sleep, or stupor, applied particularly to the opioids. There is also a "legal" definition which includes all banned substances such as cannabis and cocaine. For the purposes of this Guideline the term is used in the medical sense throughout.

**OPIATE:** A substance derived from or containing opium. All opiates are opioids.

**OPIOID:** An all-inclusive term which describes drugs with morphine-like activity, whether natural products of opium, semi-synthetic like heroin, or entirely synthetic like Demerol and Methadone.

**PEAK TO TROUGH RATIO FOR SINGLE DOSE METHADONE:** Measures the amount of drug at its projected highest blood level, about 3 hours after ingestion, with that at an earlier period, just before a dose, and compares the numbers.

**OPIOID DEPENDENCE DISORDER:** DSM-IV-TR term for physical and psychological dependence on opioids, or “opioid addiction”. Note: physical dependence on opioids due to long-term inappropriate use for pain management does not constitute a disorder or addiction.

**RECOVERY:** Recovery is the RETURN or establishment OF BEST ACHIEVABLE FUNCTION, which may or may not include abstinence from drugs.

**TOLERANCE:** State in which an increased dosage of a substance is needed to produce a desired effect.

**PIP VIEWER:** Pharmacy Information Program Viewer. PIP electronically provides authorized health care providers in Saskatchewan confidential access to patient medication histories. You can sign up by calling 306-787-9833 or email: pipinformation@shin.sk.ca.
03. CRITERIA FOR ADMISSION

1. NEW PATIENTS

(1) The patient must want to be treated.
(2) Addiction must be established.
(3) There should be evidence of extensive past and current opiate/opioid use,
(4) No age limit.
(5) Previous unsuccessful Methadone treatment does not exclude a patient from another attempt at Methadone treatment.
(6) Absence of opioids in the urine during assessment does not preclude admission to a methadone recovery program if psychosocial assessment confirms that methadone maintenance treatment is appropriate.

2. EXISTING PATIENTS - TRANSFERS FROM OTHER METHADONE PRESCRIBERS

(1) Request all the transfer information from the previous clinic.
(2) Continue methadone as before.
(3) Develop a Treatment Plan

3. PREVIOUS PATIENTS and / or RESTARTS FROM OTHER METHADONE PRESCRIBERS

(1) Request all the transfer information from the previous clinic.
(2) Note difficulties the patient, other Clinic(s) or pharmacies may have had. (Check with the College of Physicians and Surgeons)
(3) Restart methadone according to the Guidelines in Dosing section.
(4) Develop a Treatment Plan

For all of the above obtain:

(1) Past medical history from their family physician.
(2) Their Prescription Review Program information from the College of Physicians and Surgeons of Saskatchewan.
(3) PIP Viewers are strongly recommended.

See Section for Transfers Between Clinics
04. PATIENT ASSESSMENT AND AGREEMENT

(1) Informed Consent

Informed consent must be obtained prior to initiating treatment.

(2) Medical Assessment

Prior to starting a patient on methadone – the initial assessment:

a) Will determine a patient’s suitability for methadone treatment (i.e. establish a diagnosis of opiate/opioid dependence)

b) Will determine a patient’s fitness for Methadone treatment, in particular no current respiratory contraindications at the time of initial dosing.

At a future visit (if necessary):

a) Arrange screening for medical complications associated with drug use (e.g. liver function tests, Hep B, Hep C, HIV, TB) including informed consent and pre- and post-test counselling procedures

b) Identify factors that put the individual at further risk for harm (e.g., unsafe sexual practices, emotional or physical abuse, lack of birth control, suicidal ideation, etc.)

c) Recommend a treatment plan to the patient.

(3) Psychosocial Assessment

Psychosocial assessment by an addiction counsellor would be the most complete and comprehensive, however it may not be immediately available. The physician’s psychosocial assessment may therefore be the first to take place and would then be the one relied upon initially. Pharmacists, having the most regular contact with patients, would be in a position to conduct an informal psychosocial assessment. All parties are encouraged to work together to share information for the benefit of patients. Prospective patients should be informed of this co-operative approach, with its inherent limits to confidentiality.

Psychosocial assessments should be ongoing, with the initial addiction counsellor’s assessment done as proximal to the medical assessment as possible. It should be repeated as often as necessary during the course of treatment. The use of a well-validated instrument is recommended. The purpose of the psychosocial assessment is to:

- gain an overview of problems in life functioning and establish baseline data across various areas (drug and alcohol use, medical, psychiatric, social/family/employment, legal).
- identify psychosocial issues that require the assistance of other professionals.
- to assist the physician in developing a treatment plan, outlining objectives and conditions/expectations.
Patient Assessment and Agreement - cont’d

The assessment process should be viewed as an opportunity to provide patients with feedback in order to motivate them to support lifestyle changes and avoid high-risk behaviours. Individual assessments should be carried out by the physician, addiction worker, and pharmacist.

(4) Treatment Agreement

In order to ensure all patients receiving Methadone treatment have a clear understanding of their responsibilities and obligations as partners in the treatment process, patients should sign a program treatment agreement prior to receiving their first dose of Methadone. It is recommended that treatment agreements be reviewed after the patient is stabilised and annually thereafter. This agreement outlines the expectations, rules and roles for both patient and doctor.

The treatment agreement should be signed by the patient and physician in duplicate - original to be placed in the patient’s health record and one copy to be retained by the patient.

Full comprehensive care for opioid addicted patients includes Methadone and such other health, pregnancy, social, and legal services etc. as the patient may require. Clinics vary in the range of services they provide, from full comprehensive, to various partial services, to Methadone alone.

The Treatment Agreement should specify the range of services offered, and in particular if the facility does not offer full comprehensive care the Treatment Agreement should specify that the physician will prescribe Methadone for them but will not provide other services. It is the patient's responsibility to arrange to have a family physician to cover other health care services. The agreement must indicate that FP / GP and other physicians involved in care will be informed about the Methadone treatment. A typical model agreement is appended.

Inform patient of PIP viewer access.

(5) Treatment Plan

This plan is recommended by the physician. It is a road map for the patient and physician. It assists an auditor in assessing the thinking of the physician in arriving at therapeutic decisions. The plan should be evident in reviewing a physician’s record.

(6) Patient Orientation

The patient should receive an orientation to the program including information about Methadone. The patient should be given an opportunity to ask questions about Methadone or any other currently prescribed drug. Relevant written information about the clinic, appointments, Methadone, other drugs, health matters like Hepatitis C, HIV, etc. should be made available.
Before treatment is started, and in particular before the first prescription for Methadone is issued, all patients should sign, and receive a copy of, the treatment agreement and receive information about:

1. The Clinic hours, processes, personnel, etc.
2. Methadone
3. Available drugstores dispensing Methadone.

See Appendix for sources of information or examples.
05. METHADONE DOSING ISSUES

1. New Patients - Induction on Methadone

The induction phase may take up to six (6) weeks to achieve control of opioid withdrawal and craving; control of needle craving may take much longer. Oral 24 hour acting morphine, such as Kadian, may be needed to control withdrawal over the first few weeks, the dose diminishing as Methadone becomes effective.

It is agreed by addiction physicians that the initial doses of 30 mg (or less) will not control withdrawal symptoms or craving in patients, often for several weeks, if not receiving prescribed opioids. These patients therefore supplement the Methadone by continuing to use drugs intravenously or orally.

In Saskatchewan since 1997 many patients have had their Methadone dose supplemented with the oral use of a long acting opioid (Kadian) until the Methadone dose has reached a level which controls withdrawal symptoms and craving. In the majority of patients this has resulted in the immediate discontinuation of their illegal drug use and also results in a considerable decrease in illegal activity necessary to obtain drugs. The Kadian is given daily, witnessed in the drugstore with the Methadone, and does not allow for diversion.

Opioid Dependency can be treated by use of methadone, an atypical opioid. Dependency can arise by continued exposure to opioids by any route, particularly in susceptible people. Time to tolerance to regular opioids is very short; time to dependency is longer but varies from a few weeks of daily exposure to several months. Long term dependency is often irreversible unless treated.

Most regular opioids are of rapid action and short duration, so dependents take them daily and when opioids are not available they experience significant withdrawal symptoms and often craving.

By contrast methadone is very slow acting; its course is long; while the immediate intent is simply to control withdrawal effects, later craving, the real long term real effect is to improve the patient’s function in life, which usually takes many months. The drug has powerful early side effects to which tolerance develops rapidly (about one week) even with low dosing. For this reason initial dosing is lower than needed for withdrawal control, but safe enough to start without significant risk of cardio-respiratory problems typical of the first week on methadone.

It takes about six weeks on methadone to control opioid withdrawal symptoms on its own. During this time as the methadone is slowly increased patients still need regular opioids, albeit in reducing doses. Thus the process involves:

1. Starting methadone at a safe low dose. Discontinue all short acting opioids.
2. Continuing other 24 hour long acting regular opioid initially.
3. Slowly increasing methadone while decreasing regular opioid.
4. Entire process taking about the six / seven weeks to no other opioids.
Methadone Dosing Issues (Stabilisation) - cont’d

To determine the dose of supplemental opioid obtain a history of the patient's range of use, particularly the minimum amount required to avoid withdrawal. Divide this by two. This dose can be administered safely in an oral preparation, such as Kadian, and is effectively 25% of the minimum in morphine equivalence that the patient reported. Do not exceed 300 mg. Taper by 50 mg. per week, or faster if the patient complains of excess nodding or somnolence.

Decrease further or do not supplement if the patient has any respiratory symptoms; is engaged in work or other activity where somnolence may be a problem; or you doubt the veracity of their reporting. Tapers can be prolonged, if necessary, but only until the methadone induction catches up with the withdrawal symptoms.

For example: a minimum requirement of 400mg IV morphine would equate to supplemental Kadian at 200mg po for the first week, 150 mg the second week and tapered by 50 mg per week until discontinued.

TYPICAL EXAMPLE, suitable for inpatients or outpatients, patients being seen weeks 1, 2, 4, 6, 8. Experience will allow a physician to modify this:

<table>
<thead>
<tr>
<th>Week</th>
<th>Days</th>
<th>Meth</th>
<th>Kadian</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1-3</td>
<td>30</td>
<td>200</td>
<td>Safe and low, developing cardio-resp tolerance.</td>
</tr>
<tr>
<td>1</td>
<td>4-5</td>
<td>40</td>
<td>200</td>
<td>Safe and low, developing cardio-resp tolerance.</td>
</tr>
<tr>
<td>1</td>
<td>6-7</td>
<td>50</td>
<td>200</td>
<td>Safe and low, developing cardio-resp tolerance.</td>
</tr>
<tr>
<td>2</td>
<td>1-7</td>
<td>50</td>
<td>200</td>
<td>Stable week on fixed 50 mg + K200.</td>
</tr>
<tr>
<td>3</td>
<td>1-7</td>
<td>60</td>
<td>200</td>
<td>First of two weeks at M60, with K200.</td>
</tr>
<tr>
<td>4</td>
<td>1-7</td>
<td>60</td>
<td>100</td>
<td>Second of two weeks at M60, now K100.</td>
</tr>
<tr>
<td>5</td>
<td>1-7</td>
<td>70</td>
<td>100</td>
<td>First of two weeks at M70, with K100.</td>
</tr>
<tr>
<td>6</td>
<td>1-7</td>
<td>70</td>
<td>50</td>
<td>Second of two weeks at M70, now K50.</td>
</tr>
<tr>
<td>7</td>
<td>1-7</td>
<td>80</td>
<td>50</td>
<td>Getting to stable dosing now. K50 for one week.</td>
</tr>
<tr>
<td>8</td>
<td>1-7</td>
<td>80</td>
<td>zero</td>
<td>Stable at M80, zero Kadian.</td>
</tr>
</tbody>
</table>

All of this is daily witnessed ingestion. Week 1 can be started at Meth 20 mg if this seems preferable.

Technique is anecdotal, based entirely on experience, and has been performed safely and effectively in hundreds of cases, with no deaths. There is as yet no literature support for this process.

The respiratory depressant effect of Methadone is significant and can be quickly apparent, particularly for new patients; in other respects Methadone is slow to become effective, and the drug accumulates in the body. This cumulative effect can be deceptive, and can cause a respiratory depressant effect which may not become apparent up to ten days after starting Methadone.

Outpatient therapy. The following protocol is suggested:

The initial dose should not exceed 30 mg of Methadone per day for at least three days.
Methadone Dosing Issues (Stabilisation) - cont’d

Thereafter, if the patient has had no significant respiratory problems, the dose may be adjusted upward by 10 mg every second day, until a daily dose of 60 mg has been reached, at which time the patient should be re-evaluated. Remember it requires 5 doses to achieve a steady state due to the long half-life of Methadone.

After 60 mg, dose changes (5-10 mg) should only be made every 7 - 14 days or longer as needed. The individual dose at stability varies, but the majority of patients will settle between 60 and 100 mgs. If the patient is receiving 80 mg of Methadone or more and continues to use drugs, or complains of withdrawal and/or urges to use, the physician may increase the dose. After several stable months many patients find daily Methadone needs may diminish with continued good effect, and dose reductions may be possible.

Inpatient therapy.

These patients should start Methadone at the same level and time frame up to 60 mgs; but subsequent increases could potentially be at a faster rate provided the patient can be observed for the respiratory depressant effect.

2. Stabilisation Phase - Maintenance Dosing

Once a patient has been stabilised on Methadone, dose increases or decreases may be made only after the physician has reassessed the patient.

Although maintenance doses of Methadone should be individualised to suit each patient, research evidence shows that higher doses of Methadone (>60 mg) are associated with better retention rates in treatment and less illicit opioid use. Doses over 100 mg are not often needed.

A maximum of 120 mg is suggested for most patients. Consultation for patients who appear to need more than 120 mg per day is recommended.

Criteria for dose increases include:

1. signs and symptoms of withdrawal (objective and subjective)
2. amount and/or frequency of opioid drug use not decreasing
3. persistent cravings for opioids

Once stable, fast metabolizers may need split doses:

3. Rapid Metabolizers – Split Dosing

The half life of methadone is said to be between 24 and 36 hours. This is an average and as with all other biological processes there are outliers – individuals for whom the half life is longer, or shorter. For rare individuals the half life of methadone may be as short as eighteen or twenty hours. Furthermore, Methadone is metabolized extensively by the CYP 3A4 system. Anything that induces this enzyme may shorten the half life of methadone. (See Drug Interactions, Chapter 15) The half life of methadone may also be reduced during the later stages of pregnancy.

Rapid metabolizers may complain of withdrawal symptoms before they are due for their next dose of methadone. The symptoms are relieved by methadone. Often, their daily dose of methadone is increased. They then complain of somnolence or nodding three to six hours after ingesting methadone and still experience withdrawal before the end of the 24 hour dosing cycle. Preterm pregnant patients may complain of fetal hyperactivity before the morning dose of methadone. Rapid metabolism is best managed, if logistics permit, by splitting the dose.
Methadone Dosing Issues (Stabilisation) - cont’d

In many cases the decision to split the dose can be made on clinical grounds alone. This is true for patients on medications known to shorten half life and in patients nearing the end of pregnancy. In some cases the clinician may wish to confirm his or her clinical impression of a rapid metabolism of methadone. This is done by determining the Peak/Trough ration. The trough is considered to be at 24 hours after ingesting the last dose or just before taking the next dose.

Blood should be drawn at this time and once again three to four hours after consumption of methadone for a peak level. A peak/trough ratio of greater than 2 suggests rapid metabolism.

Because the patient has a methadone deficit (blood levels are subtherapeutic) near the end of the 24 hour dosing cycle, on the first day of dose splitting the patient should receive his full dose of in the morning and a half dose in the late afternoon. Thereafter the patient can receive a half dose twice daily. The dose may have to be titrated slightly.

For example: A patient who has pre dose withdrawal on Methadone 120mg/day would receive on:

Day 1 - Methadone 120 mg in AM and 60mg PM
Day 2 - Methadone 60mg AM and 60 mg PM.

4. Missed Doses / Restart Dosing Schedule

Methadone is a respiratory depressant. Patients on daily dosing become tolerant to this effect, but on missing doses there is variable and unpredictable loss of this tolerance. Missed doses are fairly common in outpatient therapy for many reasons. After 3 missed doses the prescribing physician should review the situation and determine the correct dose for this process.

For safety reasons, the following system is suggested for restarting a previously stable patient after missing consecutive days of Methadone.

miss 1 - 2 days - restart at the full stable dose.
miss 3 - 5 days - restart 50% am, 50% pm, then full dose next day if OK.
miss 6 - 9 days - restart 50% then gradual increase to previous full dose.
miss 10 + days - restart from the beginning at 30 mg.

5. Medication deferral

Patients should not receive Methadone if they appear to be intoxicated, particularly with alcohol; patients may be asked to wait to be reassessed some hours later prior to administration of Methadone.

6. Replacement of vomited doses

A physician or pharmacist may replace a vomited dose under the following situations:

1. the vomiting was observed by a responsible individual e.g.: pharmacist or nurse
2. the vomiting occurred less than 15 minutes after ingestion, full replacement
3. between 15 and 30 minutes, ½ the dose would be replaced
4. after 30 minutes no replacement is given
06. URINE TESTING

Urine drug tests are one of the ongoing means of assessing progress on Methadone, providing an informative window on issues around continued drug use, and on patients' behaviour generally. They can be used constructively to assist forward movement to good control of drug use and behaviour with the well documented benefits. They should only be used punitively as a last resort.

A Urine Drug Screen is a panel of several tests done at one time. This can include stimulants like amphetamines, methylphenidate, or cocaine; depressants like barbiturates, benzodiazepines, opioids, Methadone (or it’s metabolite); others like PCP, ethyl alcohol, and cannabinoids.

1. Urine drug screens are done to ensure that patients are ingesting the Methadone that is prescribed for them and to detect whether they are taking any other non-prescribed drugs. The validity of the urine screen results increases if the collection is done randomly under supervision.

2. A minimum of one urine drug screen is advised prior to initiation of Methadone treatment.

3. Randomly collected urine samples ideally in an observed manner are the most useful in assessing patient progress in a treatment program. Testing should occur at least two times per month during the stabilisation period.

4. The sample should be 50-60 ml, ideally collected in a bathroom with no hot water, then temperature tested, to reduce the possibility of tampering.

5. For functionally stable long term patients it is recommended that random urine screens should be tested at least four times annually. The presence of illicit drugs and/or the unexplained absence of Methadone metabolites should be discussed with the patient and appropriate action taken; a more frequent testing schedule may well be necessary.

6. The physician has the right to request additional urine samples at any time. This should be clearly stated in the program treatment agreement.

Point of care tests with immediate results is preferable.

Testing for "drugs of abuse" is performed by The Saskatchewan Provincial Laboratory in Regina. It is important to understand how they test, and how to interpret the results. Laboratory procedures are changing rapidly and are occasionally subject to error; care is recommended in confronting patients with lab test reports.

Ideally the lab tests for a combination of parent and/or metabolites of drugs, i.e. substances already altered by body metabolism and excreted in altered form in the urine. Currently (October, 2002) the Provincial Laboratory tests are shown on the following page.

Laboratory tests also have a minimum test level (the "cut-off") below which the results are reported as “negative”, whether or not the substance is present in smaller amounts. (See Table on the following page).
Urine Testing - cont’d

There are two different test procedures, a fairly simple ELISA/EMIT (enzyme linked immunoassay) and the more complex Gas Liquid Chromatography / Mass Spectrometry ("GC/MS") confirmatory test. Most samples are tested by the ELISA/EMIT procedure. Gas Liquid Chromatography is done infrequently, and the GC/MS procedure is done only if absolutely essential, usually in medico-legal cases.

The current tests and cut-off levels for drugs are listed in the Table below (Waiting for update):

<table>
<thead>
<tr>
<th>Drug</th>
<th>Cut-off</th>
<th>Time detectable after last dose</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amphetamines</td>
<td>1000 ng/ml</td>
<td>1 - 2 days</td>
<td>parent/metabolite</td>
</tr>
<tr>
<td>Barbiturates</td>
<td>200 ng/ml</td>
<td>variable, hours to weeks</td>
<td>parent</td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td>200 ng/ml</td>
<td>3 days to six weeks.</td>
<td>parent/metabolite</td>
</tr>
<tr>
<td>Cannabinoids (THC)</td>
<td>50 ng/ml</td>
<td>1 to 4 weeks</td>
<td>parent/metabolite</td>
</tr>
<tr>
<td>Cocaine</td>
<td>300 ng/ml</td>
<td>2 - 4 days</td>
<td>BEG/metabolite</td>
</tr>
<tr>
<td>Methadone</td>
<td>300 ng/ml</td>
<td>1 - 3 days</td>
<td>EDDP and/or parent</td>
</tr>
<tr>
<td>Opioids</td>
<td>300 ng/ml</td>
<td>1 - 2 days</td>
<td>parent/metabolite</td>
</tr>
<tr>
<td>Phencyclidine</td>
<td>25 ng/ml</td>
<td>1 - 30 days</td>
<td>parent/metabolite</td>
</tr>
<tr>
<td>Alcohol</td>
<td>&gt;10 mmo/L</td>
<td>2 - 14 hours</td>
<td>parent</td>
</tr>
<tr>
<td>Meperidine</td>
<td>300 ng/ml</td>
<td>1-2 days</td>
<td>parent</td>
</tr>
<tr>
<td>Methaqualone</td>
<td>300 ng/ml</td>
<td>1 - 7 days</td>
<td>parent</td>
</tr>
<tr>
<td>Propoxyphene</td>
<td>300 ng/ml</td>
<td>1-2 days</td>
<td>parent</td>
</tr>
<tr>
<td>Methylphenidate</td>
<td>50 nmol/L</td>
<td>1 - 2 days</td>
<td>parent</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>25 ng/ml</td>
<td>2-3 days</td>
<td>parent/metabolite</td>
</tr>
</tbody>
</table>

(The following drugs are not part of the routine drug screen, they are measured by GLC, and are done only by special request).

(Methylphenidate is measured by ELISA method. It is not part of the routine drug screen, it must be requested separately. The measurement of methylphenidate is not very specific, about 5% of samples tested give a false positive result. Confirmation of a positive result is done only for medico-legal purposes or other compelling reasons and must be requested separately).
There is strong evidence of improved treatment outcomes when Methadone Maintenance includes counselling services. Close communication and collaboration with counselling services is advised.

Opioid addiction and dependence generally, is a complex process involving many biological, psychological, social and spiritual factors. Many individuals may lack necessary coping strategies and other life skills that allow them to function successfully. Many will benefit from counselling in this area.

Counselling services are to be driven by the needs and motivation of the patient, and should be encouraged. MMT patients have a high frequency of psychiatric comorbidity and will need additional psychosocial services. The physician may have to educate the patient on the benefits of counselling.

Counsellors can be variously involved in several key areas, such as the initial patient assessment, direct interventions with the patient, interventions on behalf of the patient, and case management and outcome assessments. Numerous skills are therefore required depending on the areas involved. In addition to empathy the counsellor would need to be knowledgeable about dependency and addiction in general, opioids in particular, the various aspects of opioid addiction, and of course the science and use of Methadone and any other drugs used by these patients. Relapse prevention coaching is a vital role for counsellors.

**Provincial Counsellors Guidelines are available.**
08. PRESCRIBING AND DISPENSING ISSUES

1. Authority to Prescribe Methadone

Prescribing is restricted to doctors specifically exempted by Health Canada under section 56 of the Controlled Drugs and Substances Act. Methadone exemptions are issued for Pain Control or Addiction; or for both when appropriate and requested.

Exempted practitioners are subject to Provincial College jurisdiction; can prescribe for patients residing in their own Province; and on an interim basis for those who move away from or to the Province.

A temporary exemption maybe issued to a physician responsible for the patient’s treatment at the hospital or other institution. It must be noted that only practitioners are eligible to receive a temporary exemption (e.g. medical residents may not receive an exemption). The exemption is granted for the period of the patient’s hospitalization (up to 60 days) and expires on the earlier of the date on which the patient is discharged from the hospital or a maximum of 60 days. Should the patient be hospitalized longer than 60 days, the authorization may be extended. A physician with a temporary exemption may not start new patients on methadone. A temporary exemption is only for patients who are already on methadone before hospitalization.

The attending physician may obtain a temporary exemption by contacting the Office of Controlled Substances:
Phone: 613-946-5139
Fax: 613-952-2196
Email: exemption@hc-sc.gc.ca

For patients who move away the prescribing doctor is responsible for ensuring a continued supply of Methadone in the new area if possible; ideally this includes finding a doctor and / or pharmacy in the new location to continue the prescription.

In Saskatchewan the College of Physicians and Surgeons requires new physicians wishing to prescribe methadone to acquire training at a recognised established clinic and at a College-approved training program. The College will then recommend suitably experienced physicians to Health Canada for a methadone exemption.

2. Methadone Prescriptions. (Read the section in conjunction with the pharmacist’s manual)

Before prescribing Methadone to a patient use a PIP viewer. Methadone is classified as a controlled substance and is subject to the Federal and Provincial Narcotic Control Regulations. The Prescription Review Program may provide you with valuable information with respect to a patient’s drug usage. Contact the College for a profile.
Prescribing and Dispensing Issues - cont’d

A written or faxed prescription is required, without which the pharmacist cannot dispense a narcotic (or other restricted drug on the Provincial list). At all times physicians must cover the pharmacists for Methadone scripts they authorise.

Scripts must be precise as to:

1. The patient.
2. The daily dose.
3. Start date for the Rx.
4. Finish date for the Rx.
5. Pharmacy.

Some prescribers also include carry information on Prescription Review Program prescriptions. Others separate the carry provisions from the scripts themselves, which allows for changes in carry privileges without waiting for a new prescription.

-The carry information is considered part of the prescription.

-A typical Carry Sheet is provided on Page 24

3. Methadone Availability.

Methadone is available in Canada as a highly soluble powder for reconstitution as a drink or for compounding in other forms. It is also available as a 10 mg/ml oral concentrate called Metadol. The raw liquid is quite bitter. Solutions are generally made up as 10 mg per ml stock; dispensed by the milligram per individual dose, each then diluted to 100 ml with a flavoured fruit juice.

Stock solutions have a long shelf life; diluted solutions are good for about one month when refrigerated, otherwise about two weeks.

Crystalline juices are recommended (Tang).

Carries should be dispensed in individual daily-dose sealed bottles, preferably "child-resistant" and "tamper-proof". Each should contain diluted Methadone and clearly identify:

1. The Pharmacy.
2. The patient.
3. Total Methadone dose.
4. Date of issue.
5. Day / date to be taken.
6. Total # of carries in the batch.

4. Prescribing Drug Combinations.

Dual or multiple diagnoses (physical and / or mental) are common. Quite often other drugs are needed in combination with Methadone. Control of all the drugs remains an issue for these patients, e.g.: over 50% of patients have concurrent disorders.

Because of the patient’s history of inappropriate drug use it is best for the Methadone prescribing doctor to handle all prescriptions for the psychotopic and analgesic drugs, issuing all the medications for the same total period. Many patients ask for quite short dispensing periods matching their Methadone drink-and-carry schedules.
Prescribing and Dispensing Issues - cont’d

Prescriptions can be written with long total periods but specifying short dispensing periods. The use of psychotropic drugs should be based on a clear diagnosis. A specialist consultation may be considered.

Adjusting doses of the various medications in a multiple prescription situation can be difficult. Once "stable" it is preferable to adjust the dose of only one drug at a time, the major drug being Methadone, and the duration of each change not less than one week before reassessment.

Some drugs may increase, others may decrease, the effect of Methadone, requiring adjustments to dosing or the frequency of dosing of Methadone. (See the section on Drug Interactions).

Caution should be used in prescribing drugs with street value or abuse potential.
Carry or take-home medication is a therapeutic tool to assist patients in re-establishing their lives constructively. Carries can also help the patient to avoid other persons who may trigger further illicit drug use. However carries also incur a risk of diversion, the main problem being the danger to others from respiratory depression which can be fatal, especially to children, and those adults not tolerant to Methadone. **The decision to allow carries is not a time-based decision.**

1. Carry or take-home medication is not recommended during the first three months of treatment. There must be a rationale for granting carries. For instance unemployed patients would not usually require carries.

2. Physician's records must justify the decision to grant carries.

3. Carry or take-home medication may be given to patients who are considered to be functionally stable. A decision to grant carries should ideally be made in consultation with other professionals involved, such as counsellors and pharmacists. Stability may be assessed by a measured consideration of behavioural and other criteria, including the following:

   (1) program participation:
   - attends as required for methadone
   - attends scheduled appointments
   - complies with treatment agreement

   (2) cognitive stability including the ability to assume responsibility for the care of the medication and to use it as prescribed.

   (3) improvement in drug use (as evidenced by acceptable urines for 3 months), either abstinence or non-harmful use of drugs (harm can be seen as a continuum and can result from a single use or from long term use of drugs).

   (4) confirm social integration, including:

      (a) Full time employment
      (b) Full time school attendance
      (c) Full time child care responsibilities
      (d) Full time volunteer work.

   (5) patients who continue to use non prescribed mood-altering drugs are not candidates for carry privileges. Continuing drug use indicates patient’s instability.

4. A progression of carries is recommended, starting at drink 6 (witnessed in the store) and carry 1, through to drink 1 (witnessed) and carry 6, over time.

5. Patients who are eligible for and receive carry medication must accept the responsibility for the take-home methadone doses and use them for their intended purposes.
6. Carry bottles must contain diluted Methadone and be dispensed in accord with the section on Prescribing and Dispensing Issues.

7. All carry bottles should be returned to the drugstore with labels intact. This ensures that they are still in the possession of the patient. A continued supply of carries is on a replacement basis bottle for bottle.

8. Some diversion of Methadone certainly occurs. Patients who have take-home medication should be informed that they may be asked at any time to appear in the clinic and bring with them the remainder of their carry medication. Those who cannot bring in all their remaining sealed carries should be suspected of diversion; carry privileges may then warrant revision. (see section 9 below).

9. Carry privileges must be stopped by the prescribing physician if he/she believes that the safety of the patient or that of others is at risk. Situations where the modification of carry medication must be considered include:

   - reasonable evidence that the patient has failed to meet the terms of the treatment agreement
   - use of unauthorized drugs
   - the patient has produced an unacceptable urine sample or has tampered with the collection of his/her required urine sample (for example, but not limited to, substituting another person's urine or some other material for his/her own urine; adding some contaminant to the urine sample submitted; providing a previously collected (i.e. "stale") sample of his/her own urine instead of a fresh sample collected under supervision; diluting his/her own urine sample)
   - credible evidence that the patient has approached another methadone-treated patient suggesting or proposing to sell, buy, or share any urine sample, or to tamper with any urine sample
   - credible evidence that the patient has diverted, or allowed to be diverted, any part of his/her methadone (i.e. has failed to consume all or part of the methadone dose prescribed for him/her and allowed it to become available for use by anyone else)
   - credible evidence that the patient has approached another person suggesting or proposing to sell, buy, or share methadone

10. A lock box is mandatory to store carry bottles at home.

It is the responsibility of the prescribing physician to make the final decision whether to approve a request for carries.

A typical carry sheet follows this section; intended for ease of use, filling in blanks and / or circling the options as appropriate.
Exceptions to the Carry Criteria.

For stable patients who are working or on vacation the prescribing physician may arrange for pick-up in a distant community pharmacy, or alternatively carries may be extended beyond 6 days to a maximum of 13 days.

It is recognized that occasions will arise where an extension of the regular carry arrangements may be appropriate, such as:

- annual vacation to areas where methadone is not readily available.
- compassionate leave.
- prolonged out-of-town employment opportunities.

It may be possible to have a responsible individual supervise the daily ingestion in these circumstances.
### EPISODIC METHADONE CARRY SHEET - DRUGSTORE / CLINIC

<table>
<thead>
<tr>
<th>Store :</th>
<th>Ph:</th>
<th>Fx:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinic :</td>
<td>Ph:</td>
<td>Fx:</td>
</tr>
<tr>
<td>Doctor :</td>
<td>Ph:</td>
<td>Fx:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patient :</th>
<th>Chart #:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Meth :</td>
<td>Meth mg:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reason :</th>
<th>Child Care / School / Work / Holiday / Distance / Injury / Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specify :</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>From: Day</th>
<th>Date</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>To: Day :</td>
<td>Date</td>
<td></td>
</tr>
<tr>
<td>Recurrent : Drink:</td>
<td>Carry :</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current Rx : Exp:</th>
<th>Drink : Carries Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comments :</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pharmacist :</th>
<th>Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counsellor :</td>
<td>Agreement</td>
</tr>
<tr>
<td>Date :</td>
<td>Doctor :</td>
</tr>
</tbody>
</table>

**METHADONE IS DANGEROUS. PATIENTS ARE RESPONSIBLE FOR THEIR CARRIES.**

**CARRIES MUST NOT BE MODIFIED, SOLD, DONATED - OR REPLACED IF LOST.**

Patient must sign before medications dispensed:
10. TRANSFERS BETWEEN METHADONE FACILITIES

Patients often move from town to town. Many are unemployed and travel to various family locations, etc. Some will move to avoid contact with troublesome intravenous drug users or dealers; and some get arrested. All of these situations require rapid contacts between various agencies including pharmacies, other clinics, Correctional Facilities, etc.

Transfer arrangements should be set up **ahead of time** wherever possible to minimise inconvenience to other Methadone prescribers, dispensing pharmacies, and institutions.

The minimum information needed by the recipient physician and/or pharmacist includes copies of:

1. Most recent Methadone prescription with expiry date.
2. Most recent Methadone dose administered or taken.
3. Any other medications prescribed.
4. Intake screening information sheet.
5. Tracking sheet with initial start date and dose progressions.
6. Any specific problems noted with this patient.
7. Indications of progress to date.

When patients desire to leave their home area for Methadone delivery and move in-province or to a neighbouring province, Methadone providers must be extremely careful. If the written rules of the home clinic cannot be followed, then every effort must be made to find a Methadone prescriber where the patient has moved. If there is no Methadone prescriber that is reasonably acceptable, Methadone prescribers may need to contact a local physician in that area to help with some of the surveillance; talk more frequently with the pharmacist to make sure the patient is adequately following the program. Methadone prescribers have a right to refuse patient transfers if the patient is too early in program, not stable, still has positive urines, etc.

**It is preferable but not required that methadone patients be treated by the closest methadone prescriber.**

Typical samples of Intake Screening Sheet and Tracking Sheet and Model Transfer Sheet are appended.
It is widely recognised that pain of all kinds, including acute pain, cancer related pain and chronic pain of non-cancer origin, historically has been under-treated in the general population (Marks and Shaker 1973, Morgan 1985). It is also clear that individuals with addictive disorders are at special risk for suffering due to inadequate management of their pain (Cohen 1980, Shines and Demas 1984).

In managing the patient with an addiction problem who is on Methadone and in pain, several considerations must be borne in mind:

a. Addicts can have legitimate pain that requires treatment.
b. Addicts may have a low pain tolerance and a high tolerance to opioid analgesics - they may require inordinately large doses to control their pain.
c. Addicts tend to be drug seeking and manipulative.
d. Addicts may confuse craving and/or withdrawal with pain.

The cause for the pain presenting in a patient must always be thoroughly investigated.

Pain is an experience and cannot be separated from the patient’s mental state, including their environment and cultural background. These factors are so critical that they may cause the brain to trigger or block the experience of pain.

All pain must first be assessed to determine whether it is nociceptive or neuropathic or mixed nociceptive/neuropathic.

Neuropathic pain involves pain emanating from the nervous system whether central or peripheral. Nociceptive pain is either visceral or nonvisceral and may be viewed broadly as any pain which is not neuropathic. Neuropathic pain responds better to anticonvulsants, tricyclics and methadone. Nociceptive pain responds better to opioids, NSAIDS, Acetaminophen and COX II’s.

Since there are numerous types of mu (25 known), Kappa and delta receptors responsible for pain relief, sometimes a combination of drugs that treat more than one receptor type will be needed to achieve optimum level of pain control. Optimum level of pain control is defined as the dose that results in the greatest level of improvement in ADL (activities of daily living) in a patient. All pain may not be abolished and in chronic pain (pain lasting longer than 6 months) it is often never abolished completely. Thus levels of pain relief are not a measure of the effectiveness of treatment but rather ADL are.

Clinical depression often presents as part of the chronic pain picture and should always be sought out and treated appropriately.
Pain Management While on Methadone - cont’d

Patients on methadone who are experiencing acute or chronic pain should be assessed and treated as if they are receiving no analgesia from methadone. (Having said this it stands to reason that some patients, especially those with neuropathic pain, will achieve some baseline relief of their pain from their methadone.)

The major difference regarding the management of pain in this patient population will be: 1) Their access to the medication and, 2) The duration of action of the opioids that are chosen.

1) **Access to Opioids**

Access to opioids should be carefully controlled. Fentanyl patches should be dispensed contingent on the return of used patches (which must not be tampered with). Any sudden escalation in dosage of opioids after a period of stability in dosing should trigger an immediate reassessment of the cause of the pain.

2) **Duration of Action of Opioids Chosen to Treat the Pain**

As far as possible, long acting opioids should be used to treat acute and chronic pain. This is to avoid the euphoric benefit that short acting opioids may provide these patients. Examples of long acting medications and their duration of action are:

<table>
<thead>
<tr>
<th>Medication</th>
<th>Duration of Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fentanyl</td>
<td>48-72 hours</td>
</tr>
<tr>
<td>Kadian</td>
<td>12-24 hours</td>
</tr>
<tr>
<td>Hydromorphone contin</td>
<td>8-12 hours</td>
</tr>
<tr>
<td>Oxycontin</td>
<td>8-12 hours</td>
</tr>
<tr>
<td>Codeine Contin</td>
<td>8-12 hours</td>
</tr>
<tr>
<td>Tramadone</td>
<td></td>
</tr>
</tbody>
</table>

It is important that the “contin” medications be swallowed whole as chewing on them will release a large amount of opioid quickly, which would provide a euphoric benefit. The contins should therefore be used as a last resort or only for a very limited period of time.

Benzodiazepines and Meperidine (Demerol), Talwin (Pentazocine) have no place in the management of chronic pain.

Anti-inflammatories may be combined with opioids and will provide additional pain relief. Muscle relaxants as Baclofen and Flexeril are important adjuncts for lower back pain management. Topical analgesics are preferable when treating joint pain. An example of this would be a compounded PLO gel with 3% Diclofenac and 2% Amitriptyline applied TID to the affected joint.

It should always be remembered that a combination of therapies have the best chance of success in managing pain. Exercise therapy, physiotherapy, acupuncture, massage therapy, hypnotherapy, mindful meditation, and Tens machine are but a few of the non-drug therapies available for combining with other methods of therapy in the management of pain.
Pain Management While on Methadone - cont’d

Pain Management

The College has guidelines for the treatment of pain with methadone. If you do not have them contact the College for a copy.

1. Acute Pain

This would be defined as self limiting. Maintain usual methadone dose and treat as you would normally.

2. Chronic Cancer Related Pain

Manage as in non-addicted patient, but use TID or QID Methadone in preference to opioids. Steps should be taken to avoid diversion of any medication by either the patient, relatives or drug-seeking contacts.

3. Chronic Non-Malignant Pain

Use non-pharmacological measures and non-opioid analgesics first. Exercise, cognitive behavioural therapy with adjunctive antidepressant medication and occasional NSAIDS will usually obviate the need for additional therapy.

You may use split-dosed Methadone titrated to effect. If carries are not a consideration and/or opioids indicated, follow the Guidelines for the Management of Opioid Therapy in Non-Malignant Pain (available from the College). Only long-acting opioids such as KADIAN should be used, preferably mixed with their Methadone. Short-acting opioids are to be avoided. Formulations that are known to have greater street value are best avoided whenever possible, i.e. Statex, Hydromorphone, etc.

Seek consultation with a colleague experienced in pain management and/or addictions medicine.

4. Supplement to Treatment of Pain in Methadone Patients

Neuropathic pain may be diagnosed by anatomical implication or symptoms. Symptoms suggestive of neuropathic pain are pain that is burning or intense tightness with super-imposed shooting or lancinating pain. Stimulus-evoked pain includes allodynia (pain which is in response to a normally non-painful stimulus) and hyperalgesia (increased pain in response to a normally painful stimulus).

First line analgesics

1. Tricyclic antidepressants – these have the best evidence of efficacy. They work by blocking re-uptake of Na and Serotonin and blocking NMDA induced pain. Eg. Amitriptyline from 10 mg to 150 mg at HS. All TCAs have equal efficacy.
Pain Management While on Methadone - cont’d

2. Anticonvulsants – Gabapentin and pregabalin bind to presynaptic voltage-gated calcium channels in the dorsal horn resulting in a decrease in release of glutamate and substance P. These are especially useful in painful diabetic neuropathy, post herpetic neuralgia and spinal injury pain. Eg. Lyrica 75 mg twice daily up to 150 mg twice daily.

Second line analgesics

1. SNRI’s, venlafaxine useful in painful diabetic neuropathy and mixed painful polyneuropathy at doses of 150 to 225 mg daily.
2. Topical lidocaine. This works by blocking sodium channels. Most useful for localized peripheral neuropathic pain. Eg. Post herpetic neuralgia. Treat with 5% lidocaine gel applied Q8H.
3. Topical capsaicin or capsaicin plus doxepin combined applied TID.

Third line analgesics

1. Tramadol – a weak mu receptor agonist and inhibitor of re-uptake of NA and serotonin. Useful in painful diabetic neuropathy. Eg. Zytram XL 150 mg once a day or BID.
2. Opioid analgesics – Morphine, oxycodone, methadone, levorphanol, fentanyl, hydromorphone are all useful, especially in diabetic neuropathic pain.

Fourth line analgesics

1. Cannabinoids – these are useful for central neuropathic pain of MS.
2. Methadone – this has NMDA agonist properties.
3. SSRI’s – Eg. Citalopram, Paxil are useful in painful diabetic neuropathic pain, but fluoxetine is not.
4. Other anticonvulsants – lamotrigine is useful in treating trigeminal neuralgia, painful diabetic neuropathy. Topamax has strong evidence for the prevention of migraines.

Stepwise Pharmacological Management of Neuropathic Pain

<table>
<thead>
<tr>
<th>4th line analgesics</th>
<th>do not add TCA’s to SNRI/SSRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd line analgesics</td>
<td>Tramadol or CR Opioid analgesics</td>
</tr>
<tr>
<td>2nd line analgesics</td>
<td>SNRI ↔ Topical lidocaine</td>
</tr>
<tr>
<td>1st line analgesics</td>
<td>TCA ↔ Gabapentin/Pregabalin</td>
</tr>
<tr>
<td>Additional agents</td>
<td>↓</td>
</tr>
<tr>
<td>Add additional agents sequentially if inadequate pain relief</td>
<td></td>
</tr>
</tbody>
</table>

29
12. MENTAL HEALTH ISSUES FOR OPIOID DEPENDENT PATIENTS

1. The Major problem for Opioid Dependent Patients (ODP)

Unless the patient is suicidal, the major issue is opioid addiction, and controlling and managing this with Methadone is almost always the top priority.

2. Mental Disorders in General among ODP

Opioid Addicted Patients include those with primary or secondary mental health problems such as anxiety, depression, sleep disorders, ADHD, bipolar affective disorder, Post Traumatic Stress Disorder, mixed personality disorders, and Anti-social Personality Disorder.

These can be very difficult to assess and diagnose, particularly when the patient first presents with severe opioid or other drug abuse issues given the prevalence of drug induced disorders, drug induced disorder or the development of a concurrent disorder.

Over a period of weeks / months / years on Methadone the patient tends to progressively stabilise and mental health issues become easier to assess and treat.

3. Anxiety

Many claim anxiety needing benzodiazepines; in most cases they have simply become dependent on them. Getting their daily dose down to manageable and controllable levels is the primary aim, (e.g. diazepam maximum 10 mg QID or equivalent), thereafter getting them off by slowly reducing their dose. Refer to college’s benzodiazepine withdrawal document. It is wise to follow a protocol for this process. Addition of an SSRI such as paroxetine (Paxil) or a similar like venlafaxine (Effexor) may facilitate this.

4. Depression

Many patients are depressed, but reject antidepressants, resenting the stigma, or the slow onset of effect, or both. Most patients improve so dramatically on Methadone alone that the "depression" they initially describe may turn out to be a secondary effect of their drug use / lifestyle etc, and may not need further treatment.

All antidepressants can be prescribed with Methadone. For those who do agree to go on antidepressants the effects vary considerably; some patients seem to feel that SSRIs are not beneficial, although in practice many on SSRIs do improve considerably. It is best to avoid TCAs because of their potential for overdose problems. It is not necessary to take patients off TCAs if the patient is doing well on them.

4. Sleep Disorders

1. Sleep hygiene rules need to be adhered to. Bedroom should be used for sleeping only. Bedtime should be at a later time of night. Environment should be quiet, dark, and cool. All stimulants such as caffeine and nicotine should be avoided.
Mental Health Issues - cont’d

2. Diagnosis of depressive disorders should be excluded.

3. Agents that may be employed mostly create drowsiness by stimulating histamine receptors. The following are suggested examples: mirtazapine 15 – 60 mg, trazadone 50 – 100 mg, amitriptyline 25 – 150 mg, clonidine .1 - .3 mg (avoid in elderly or patients on ritalin), quetiapine 25 – 100 mg.

5. Seizures / Epilepsy

Seizures can be primary, or secondary to use of stimulants, or to withdrawal from barbiturates, benzodiazepines or alcohol.

(Phenytoin (Dilantin), carbemazepine (Tegretol), and phenobarbitone are all appropriate for seizures as usual, but all can interfere with Methadone metabolism, possibly requiring an adjustment in Methadone dose or split dosing.

6. ADHD

Patients suspected of ADHD need careful assessment of Methadone dose (and other medications) first; when stable on Methadone one should first exclude depression, they may then be referred to a colleague who specialises in ADHD for assessment and recommendations for treatment. The Methadone doctor should then ideally prescribe all psychotropic and analgesic medications for the patient. Patients on Ritalin must be assessed on an ongoing basis by a psychologist and the physician should also receive regular reports from the teacher if the patient is in an educational program.

Ritalin could be dispensed as a witnessed daily dose with Methadone.

7. Bipolar Affective Disorder

Bipolar patients are asymptomatic for almost half of their lives. Not all bipolar states are alike. The three major forms of the disorder – bipolar I, bipolar II, and cyclothymia cover different parts of the mood arc. Hypomania is not usually experienced as being abnormal.

Hypomanic/manic symptoms include:
- inflated self-esteem or grandiosity
- decreased need for sleep
- talkativeness or pressured speech
- racing thoughts, distractibility
- increase in goal directed activity
- excessive involvement in activities with high potential for negative consequences

Bipolar disorder normally presents as depression. Depression tends to be more severe than in unipolar depression patients. Evidence of past hypomania or mania will need to be elicited to confirm the diagnosis.
Mental Health Issues - cont’d

Anxiety disorders, personality disorders are often co-morbid conditions with bipolar disorder. Bipolar disorder may present similar to agitated depression, polysubstance abuse, ADHD, and borderline narcissitic and histrionic personality disorders. Bipolar patients tend to abuse cocaine and amphetamines. There is a strong family history of bipolar disorder and symptoms begin early in life (less than 25 years old). Screening for bipolar disorder requires using tools such as the MDQ and HIGH-4 in depressed patients, especially those resistant to treatment. MDQ – this is the mood disorder questionnaire. High-4 – H-hyperactivity distractibility, racing thoughts. Insomnia, irritability, impulsivity. G-gradiosity, increased self-worth, H-hyperhedonia, high risk behaviour, hypersexual, creative. 4- symptoms last for four days.

First line agents recommended are the mood stabilizers. Olanzapine has best evidence for monotherapy medication and is more likely to provide results in the addicted population than respidal and quetimpine. More than one mood stabilizer may be required. Other agents to consider are: lithium, valproate, carbamazepine, and topamax. Monotherapy with an antidepressant is not recommended for bipolar patients; however, they may need to be combined with the mood stabilizer to optimize outcome in treatment of bipolar disorder.

8. Suicidal Patients

Careful prescribing to these patients is important. Supervision of their medication by daily dispensing is a way of controlling their medication use.

9. Schizophrenia

All the drugs normally prescribed for this condition (e.g. lithium, clopixol) are compatible with Methadone.

10. FASD

Fetal Alcohol Spectrum disorder, especially Alcohol Related Neurodevelopmental Disorder (ARND – FASD without the facial malformation) is common in the addicted population. This is characterized by major cognitive impairment. Patients have difficulty in making associations (i.e. can’t learn from experience), in making “linkages” (e.g. don’t understand how 09:45 links to a 10:00 o’clock appointment) and in executive function (i.e. find it difficult to organize even simple activities). Always ask your difficult patients about maternal drinking habits. If a patient can’t seem to follow instructions or keep appointments, and mother drank, “ever since I can remember” consider ARND. The old principle that “patient must take responsibility for his/her actions” doesn’t work for these patients. These patients “just don’t get it”. It is not productive to expect the ARND patient to conform to your practice expectations. You may have to modify your practice to conform to the patient’s needs and abilities.

The Saskatchewan Addiction Medicine Advisory Committee produced an article on Mental Health Disorders in Addicted Patients. This is provided to all physicians in the province. It is a good reference article and contains a list of all treatment facilities in the province.

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1. Incidence of Pregnancy in Untreated Opioid Addicted Patients (OAP)

The true incidence of pregnancy in this group is not known. It is not always possible to assess the extent of opioid use in a prenatal patient during the initial visit. Many Opioid Addicted Patients have amenorrhoea. Many pregnant intravenous drug users (IDU) are in poor health. It it difficult to separate other factors such as general malnutrition and smoking from the potential effects of opioids themselves.

Many opioid users seem to believe that opioids and Methadone are contraceptive, rot teeth and bones, cause genetic defects and that pregnant patients on Methadone should withdraw “to save the baby”. It is also a widely held belief that methadone maintained patients should not breast feed. There is no evidence to support any of these positions; they are simply myths.

2. Untreated Opioid Addicted Pregnant Patient

A. Obstetric Problems

Early Pregnancy: Effect of IDU uncertain. Variable drug access and supplies will precipitate withdrawal which may lead to spontaneous abortion.

Mid Pregnancy: No significant obstetric problems, regardless of opioid state. It is possible to come right off opioids at this stage without harm to the foetus. However because of the risk of relapse it would be wiser to withdraw from medication after delivery with relapse prevention strategy in place.

Late Pregnancy: Prematurity and IUGR are common.

B. Infant Problems

Variable opioid intake during pregnancy may cause the foetus to go into withdrawal. Prematurity, low birth weight, and associated problems are common - about the same as for smokers.

Mothers on Methadone may still be on other drugs, e.g. SSRI or benzodiazepines, and their infants may be affected by withdrawal from these substances.

After birth some infants go into precipitated withdrawal of some degree. Untreated infants can be very irritable and difficult to manage and are therefore at risk of malnutrition, abuse by caregivers, etc. On treatment they do well, and at one to two years there are no observable physical or mental differences in the children compared to normal non-opioid children.
3. Pregnancy in Opioid Addicted Clients - The Intent of Opioid or Methadone Prescriptions in Pregnancy

The primary intent is to create a stable environment for the pregnancy. This should improve outcome. Long-term issues can be addressed separately.

Opioids alone are compatible with good outcome in pregnancy. However, unless the patient is on stable dose of opioid prenatal care can be difficult.

Methadone is well tolerated in pregnancy (like other opioids), and is more easily controlled. It may be associated with some IUGR; birth weights are better than for infants of IDU mothers. Methadone readily crosses the placenta, but has no known teratogenic effects, and little gets into breast milk. Methadone patients can be given opioids and other analgesics like any other patient. Supervised withdrawal from Methadone is not recommended during pregnancy.

4. Antenatal Care

In general treat just as any other patient plus Urine Drug Screening. HIV testing should be done early and repeated during the third trimester if the patient has continued intravenous drug use. LFTs should be done. Early ultrasound is important for dating.

Methadone can be started in pregnancy, and should be maintained throughout pregnancy - longer if patient agrees. Use routine induction protocols. Because it is imperative to avoid withdrawal, it is advisable – for all pregnant patients starting methadone - to initiate daily supervised Kadian until the methadone dose has stabilized.

Because of increased body mass and an increased rate of methadone metabolism in late pregnancy, methadone doses may have to be increased and/or split as due date approaches. Do not withdraw a patient from Methadone or prescribed opioids, especially in very late pregnancy.

5. Labour and Delivery

Treat just as any other patient, plus maintain Methadone or Opioid dose, and never start or withdraw these medications in labour. Adequate analgesia may require much greater than average doses of opioids. Nursing staff may be reluctant to administer doses of opioid required to relieve pain. Obtaining an epidural early in labour is advisable.

6. Post Natal Care

While in hospital, treat just as any other patient, and again do not withdraw Methadone. The mother should stay long enough to assess possible infant withdrawal (see below). The mother’s methadone requirements may drop after delivery. Careful attention to reducing dose if mother becomes sleepy is important. If this is neglected staff may feel that the mother is “too stoned” to look after her infant.

Notify the Methadone prescribing doctor to ensure continued Rx after discharge, and discuss contraception, since Methadone patients ovulate fairly normally. Some patients may need a reduction in Methadone dose over the succeeding weeks.
7. Infant Care

NARCAN IS ABSOLUTELY CONTRA-INDICATED in babies born to opioid addicted mothers. Breast feed, watch for and treat withdrawal (see specific notes below). "Neonatal Abstinence Syndrome"

Neonatal Abstinence Syndrome is really a withdrawal from a chemical to which there is now full tolerance and dependency.

Opioids and Methadone are "downers"; abruptly discontinuing them therefore produces a relative stimulant effect through all systems, signs starting about 36 hours to 7 days post partum, and lasting a few days up to six months in severe cases, with average duration about one month.

Babies' withdrawal signs vary greatly; 30% have none at all; about 70% get some degree of withdrawal ranging from minor irritability and feeding problems, weight loss, inability to sleep or rest, through to seizures. Severely affected infants are inconsolable and very difficult to tolerate or manage if not treated adequately. The degree of NAS has little or no obvious relation to the amount of maternal intake of opioids or Methadone. There is evidence to indicate that babies who “room-in” with their mothers are less likely to need treatment for withdrawal. Rooming in has the advantage of improving mother/infant bonding.  

Breast feeding is recommended unless contraindicated (H.I.V or active TB). Breast milk has little opioid or Methadone, so the baby may not go into withdrawal.

Immediate management of NAS, and medications available.

The aim is to avoid the consequences of precipitated withdrawal; to maintain bonding by contact, breast feeding, etc.; and to promote growth and development rather than be concerned about opioid dependency at this stage.

Use morphine or phenobarbitone as needed (see below), and postpone supervised withdrawal from medications till the infant is stronger.

Medications available (Methadone is not appropriate):

1. Morphine. This is not done by weight but by an initial low dose titrated upwards entirely by response, as in adults, i.e. dose to effect.

Morphine Sulphate stock supplies are usually 5 mg/ml. Infants need a solution of 0.5 mg/ml, i.e. one tenth of the normal Canadian stock solution strength. Paregoric, available on request in Canada, is already constituted for infants.

4 Abrahams RR et al, Rooming in compared with standard care for newborns of mothers using methadone or heroin. *Canadian Family Physician* 2007;53:1722-1730
Pregnancy in Opioid Addicted Patients – cont’d

With either paediatric strength morphine or Paregoric, start at 0.2 ml with each feed; observe feeding and general sedation and sleep patterns, and titrate upwards by 0.05 ml per feed to 0.4 mg each feed as needed. Doses are therefore 0.2 ml, 0.25 ml, 0.3 ml, 0.35 ml, 0.4 ml in sequence. Most infants manage on low doses. Maintain the therapy until infant is clearly gaining strength, feeding and sleeping well.

Hospitals may prefer a precise milligram measure, in which case the infant should be started if necessary on 0.1 mg with each feed; adjusted upwards by no more than 0.05 mg per feed, dosing to effect.

2. On discharge the mothers are more experienced with “units” on a syringe (“rig”), and usually prefer to dose their infant by volume using a 1 ml syringe with 100 marks, e.g. an insulin syringe, using paediatric strength morphine or Paregoric as described above. Phenobarb. Especially for babies which have seizures, which usually means their mothers were polysubstance users. Benzodiazepine withdrawal may produce convulsions. Babies are dosed initially by weight, then by response. Start at 5 mg phenobarb / Kg / day in at least three divided doses (i.e. Q8H); then by response up to 10mg/Kg/day. Maintain the therapy until infant is clearly gaining strength, feeding and sleeping well.

Long term management of NAS, and weaning off opioids.

The priority is infant development first, weaning off opioids later. The infant should therefore not be withdrawn until the baby is strong enough (e.g. about 10 lbs.) and the mother can handle the process.

Wean off stepwise, each step lasting several days, by slow progressive reduction in the amount of medication given. Most of this can be done at home. The whole process can take many weeks or even months.
This scale scores 21 points which should be evaluated at two hours after birth and every four hours. If the severity scores >8 the infant should be evaluated every two hours until the severity of the score decreases, then every four hours. Pharmacotherapy should be initiated when the total score is >8 for three consecutive evaluations.

14. DRUG INTERACTIONS WITH METHADONE

1. Methadone metabolism

Methadone is metabolised mostly by the liver, via the cytochrome P450 system, mainly the enzymes 1A2, 2D6, 3A4. The rate of metabolism varies considerably, as with all other drugs; in general half life is about 24 hours for most patients.

Drugs which slow metabolism may increase Methadone effect, and may require a reduction in dose; other drugs decrease the effect and may require an increase in dose. Patients may require a reduction in dose (for immediate effect) or a split dose (for duration of effect).

2. Drugs Contraindicated with Methadone

- Mixed agonist / antagonists - Pentazocine (Talwin).
- Antagonists - Naltrexone (ReVia), Naloxone except in overdose

For specific drug interactions with methadone please consult an electronic drug interaction database. If you do not have one call the College for a list which can be emailed for faxed to you.
15. METHADONE OVERDOSE MANAGEMENT

There are at least three kinds of Methadone overdose situations in drug using patients:

1. Overdose in those not on Methadone at all - i.e. diverted doses.
2. Overdose in those starting Methadone, or in the induction phase.
3. Overdose in those stable on Methadone.

1. Methadone overdoses in those not on Methadone at all - i.e. diverted doses

The major issue here is the long duration of Methadone effect. Doses of 30 mg or under seem to be safe for virtually all adults, but research data clearly suggest that doses over 30 mg in people not accustomed to Methadone can be lethal over the next 24 hours, by respiratory depression and pulmonary congestion. By contrast Narcan is very short acting (about 1 hour), and the rapid "recovery" after its injection can be deceptive.

For those not known to be on a Methadone programme, and suspected of drug overdose:

1. Urine test for Methadone (not only for opioids, as this would miss Methadone).
2. If positive, Narcan should be given using the normal protocols (e.g. 24 hr Narcan drip).
3. Observe and monitor the patient carefully for the next 24 hours.

2. Methadone overdoses in those starting Methadone, or in the induction phase

New or restart patients should not receive more than 30 mgs daily for three days, but if for any reason they do get more Methadone (with ill-effects) they could be considered in Category 1 above, and potentially receive Narcan, or at least observation in hospital, followed by a more gradual induction at lower doses.

The occasional patient at 30 mg will experience overdose effects. One then treats the overdose and restarts the Methadone at a lower dose.

3. Methadone and Opioid overdoses in those well stable on Methadone

There is less data on such cases, but the evidence to date suggests that stable patients given quite large doses, up to six or seven times their daily dose, can handle that much with nothing more than some confusion and agitation. One should admit such patients for observation for about 24 hours until the "overdose" has been metabolised, then return them to normal dosing. The day immediately after a large overdose they will usually not require Methadone. It is important to note that Methadone metabolites are believed to be inactive; only the parent drug has an effective role. Narcan is not needed; observation alone is satisfactory.

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While a comprehensive treatment system attempts to provide options and levels of care that are appropriate for the diverse range of individuals who are opioid dependent, physicians have the right to determine who they can properly treat and to discharge or to transfer a patient to another program or physician if deemed necessary.

The Code of Ethics of the Canadian Medical Association provides that the ethical physician, having accepted professional responsibility for a patient, will continue to provide services until they are no longer required or wanted, until another suitable physician has assumed responsibility for the patient or until the patient has been given adequate notice that the physician intends to terminate the relationship. If it is necessary to inform the patient that Methadone Maintenance Therapy must be terminated, the timeline for this discharge from treatment must be clearly stated when the decision is communicated to the patient. If transfer of care is not possible in the circumstances, there is no alternative but to institute a taper.

Whether a patient on Methadone can be transferred to another program or must be tapered, the goal is to end the relationship in a way that will minimize the risk or discomfort to the patient.

It is important to balance the needs of the patient for care with other issues including program standards and the safety of other individuals when considering involuntary discharge.

The aim of this programme is to treat opioid addiction with the return to best function for the patient i.e. "recovery" or rehabilitation, and this takes time (two to four years) and often includes slips and relapses, usually precipitated by stressors which require the development of alternate coping strategies.

Slips or lapses should be expected from time to time, and noted but not punished. Relapses may require more thought and potential action, such as restarts under changed conditions etc.

Physicians should weigh carefully the physical, mental, social, and legal consequences for the patient before discharging patients out of care.

Involuntary discharge from methadone treatment will however be considered when evidence indicates that the following has occurred:

1. Threats, disruptive or violent behaviour, especially to staff.
2. Diversion of Methadone.
3. Repeated Failure to Meet Programme Criteria, e.g. non-attendance, persistent use of problematic non-prescribed drugs.
4. When the risks of continued therapy outweigh any benefits that might have been obtained.

Other modalities of treatment should then be recommended.

Complete the Involuntary Discharge Form and send it to the College
Form is on Page 66
1. General

Many are incarcerated for drug related behaviour or activity.
Inmates take drugs (i.e. are addicted on them), and their illegal activity is usually "small crime" to support their habit; others may be involved in the higher and more serious level of “Trafficking”. Many are treatable by Methadone.

2. ODP and Methadone in Federal Correctional Facilities.

Since 1997 the Federal Correctional Facilities system, which handles citizens incarcerated for more than two years, has allowed Methadone maintenance for patients on Methadone prior to incarceration, and requires its resident or contract physicians to take training and be licensed to prescribe Methadone.

They have moved to "Phase II", which includes assessment, diagnosis, and induction of Methadone while incarcerated. They have the advantage of a long enough period in which to induce and stabilise a patient.

3. ODP and Methadone in Saskatchewan Provincial Correctional Facilities

There is a Provincial equivalent of the Federal "Phase II". This process of assessment, diagnosis, and induction to stability does take longer than for many other medications. It is inappropriate if the individual is not likely to be incarcerated for at least two to three months.

Methadone prescribers should be careful to check with the facility when inmates are discharged. Other medications may have been introduced, or the medications changed, during incarceration. Continuity of care is important, because of the tendency of many inmates to relapse to street drugs almost immediately on release. Retaining them on treatment is central to their continued progress.

There is a policy developed by Corrections which regulates the administration of Methadone in Provincial Facilities. See Appendix 10
18. MEDICAL COMORBIDITY

The association between Hepatitis C and HIV infections and Intravenous Drug Use (IDU) is well known and will not be discussed here. Several other conditions occur with greater frequency in IDU than in the general population.

Colonization of the skin around injection sites by *Staphylococcus aureus* is almost universal in those who inject frequently, notably stimulant abusers. Injection through colonized skin can lead to hematogeneous spread with seeding of a number of organs resulting in infections that threaten life and/or function. The two most common complications of *Staphylococcus aureus* infection in IDU are:

**Bacterial endocarditis:** This condition, in IDU, involves the tricuspid valve and results in episodic septic pulmonary embolism presenting as fever, night sweats, weight loss. Patients may not be symptomatic when you see them but tend to look unwell. Investigations include physical examination (look for evidence of continuing injection drug use), chest x ray (bilateral multiple nodules, sometime with air fluid levels), blood culture x 3 during a febrile episode, and echocardiogram. These patients require hospitalization and intensive antibiotic therapy. Prognosis for complete recovery is good.

**Osteomyelitis (vertebral):** This most often involves the lumbosacral or the cervical spine. Patients complain of focal pain and tenderness. Fever is present in only two thirds of case. The dread complication is an epidural abscess, which can result in cord compression and permanent loss of function if not relieved quickly. The sudden development of paraparesis or loss of sphincter function in IDU is always a surgical emergency.

Never write off your patient’s complaint of back or neck pain as drug seeking until you have ruled out possible osteomyelitis. Any tenderness requires further investigation and possibly urgent referral to an orthopedic surgeon.

Other conditions: Cellulitis, Hepatitis (viral and alcoholic) and tuberculosis occur with increased frequency in IDU populations.
1. The Patients

Most people needing opiates take them for short periods and have no trouble getting off them. However about 0.25% of the population develop drug addiction. Some receive their first opiates by prescription; others from the illicit street market.

There are therefore three main types of opiate analgesic user:

1. The appropriate user with enough medication.
2. The appropriate user under treated, asking for more; the "pseudo-addict".
3. The inappropriate user, with compulsion, poor control, and consequences; the "Addict".

It is often difficult to distinguish between types (2) and (3); only the third category may really benefit from, and need, Methadone.

1. The appropriate user with enough medication

Most dependents in steady state are chronic pain patients on appropriate analgesia with no illegal activity and no indication for Methadone for addiction.

2. The appropriate user undertreated, asking for more; the "pseudo-addict"

Acute or chronic pain patients may well be undertreated; and repeatedly ask for more analgesia. This has the appearance of "drug-seeking", and can be very difficult to differentiate from true addiction. When properly supplied with analgesics they do not escalate use or demand more, and are therefore not the opiate addicted patients in category 3 below, and Methadone is not needed for them.

3. The inappropriate user, with compulsion, lack of control, and consequences; the "Addict"

The street opiate patients we treat have commonly progressed through several stages:

a. Recreational occasional use, often with other drugs initially; to
b. Recreational steady use; to
   c. Dependency/Addiction, usually with illegal behaviour to support drug use. (Some exceptions to this.)

The end product for these patients is inappropriate use of drugs, and for most of them a variety of other consequences in four areas: medical health (physical and mental), social health, legal health; and often spiritual angst.

I From the purely medical viewpoint (physical and mental health), since we are dealing with analgesics, there are at least three categories of Opiate addicted patients suitable for Methadone treatment, all of them usually experienced in using "pain" as a means of obtaining opiates from physicians, these being patients who:

a. Need Methadone to control analgesic use.
b. Need Methadone to control Opioid Addiction.
c. Need Methadone for both, Opioid Addiction plus analgesia.
In addition to pain, intravenous drug users (IDUs) are prone to infections such as:

   Systemic infections - Fever "NYD", Endocarditis.
   Systemic infections - Hepatitis A, B, C, HIV.

b. Chronic: Hepatitis A, B, C; TB and HIV.

2. From a social viewpoint, if adequately supplied with legal opiates, opiate addicted persons in steady state can behave entirely normally and do all the things the rest of us do; they simply need their drug of addiction. However they usually have to obtain their supplies illegally; when these patients are treated with Methadone, one effectively converts (illegal) opiate addicts into (legal) Methadone dependents. While stable on Methadone they can then get on with, or restructure, their lives, then potentially come off Methadone with a comprehensive program of relapse prevention.

3. From a legal viewpoint, opiate addicts need their drugs daily. During most of the 20th Century involvement with opiates (and some other drugs) had been considered anti-social; many addicts were therefore unable to obtain drugs legally, and resorted to illegal behaviour to obtain them. In consequence most opiate addicts have legal records, and the group in general is often regarded as a fundamentally illegal body. Experience suggests however that most of these patients have no inherent tendency to illegal behaviour, and on treatment behave normally and re-integrate well in society. Thus there are at least three types of patients from the legal viewpoint. It is interesting that Methadone, in the stabilised patient, sometimes helps differentiate between them:

   a. Those with evident inherent anti-social tendencies (or worse).
   b. Those with no evident inherent anti-social tendencies.
   c. Those whose experience puts them variously in both categories.

Opiate addicted patients in correctional facilities present a particular problem, since there are logistical and other difficulties in administering either opiates or Methadone in this environment. There has been considerable progress in the management of these patients, and work will continue to improve treatment and prospects for them in the Federal and Provincial systems.

Currently patients in existing Methadone programs can continue their Methadone in Federal and Provincial Correctional Facilities. The Federal system has now moved to allow patients diagnosed with opiate dependency to be started on Methadone while in Federal Correctional Facilities.

(See the section on Correctional Facilities.)

2. Rehabilitation (in all areas) - the real goal.

The goals of Methadone treatment are:

(1) To reduce harms of drug use.
(2) To treat medical and psychiatric comorbidity
(3) To bring substance Addiction into remission.
(4) To achieve the highest possible level of psycho social function.

Methadone can be very effective for managing the narcotic drug use problem; however improving the medical (physical and mental), social, and legal health involves many other components, and is the real long term benefit and goal of this therapy.
New Prescribers Information – cont’d

At the outset, however, patients' long term rehabilitation prospects are difficult to assess. Patients vary considerably in prior formal education, skill training, maturity, and in general life experience. In consequence a Methadone practitioner may encounter a full range of patients such as:

1. Those for whom the best one can do is ‘Harm Reduction’;
2. Others who become very functional but need continued Methadone Maintenance;
3. Yet others who manage to overcome opiate dependency/addiction and withdraw from Methadone.

At one time or another many patients move between these groups, depending on their physical, mental, social, and legal health circumstances.

3. Methadone Prescribing

Narcotic prescriptions are subject to the Controlled Drugs and Substances Act (CDSA) and the Narcotic Control Regulations. The authority to prescribe methadone is actually an exemption pursuant to section 56 of the CDSA from the application of subsection 5(1) of the CDSA with respect to methadone. Exemptions are issued by the Office of Controlled Substances, Health Canada, to approved physicians as recommended by the College of Physicians and Surgeons. Exemptions are issued for either Pain Control (palliative care or chronic pain) or Addiction or for both when appropriate or requested. (See section on Prescribing and Dispensing Issues).

4. Benefits of Methadone Maintenance Therapy

Numerous studies have shown that maintaining opioid-addicted individuals on Methadone has almost immediate harm reduction benefits to patients and society, and many significant longer term personal and societal benefits including:

- improved physical and mental health;
- improved psycho-social functioning such as:
  1. increased self esteem, personal, family and community involvement;
  2. improved educational status, vocational training and employment;
  3. reduced illicit drug use and decreased illegal activity;
- cost-effective treatment:
  1. much less expensive than not treating them. (USA costs $21,500 untreated, $1,750 treated, over six months - NIDA, Dec 1994).

Conversely, illicit opioid use has been shown to be associated with:

- serious personal and domestic costs such as:
  1. poor physical and mental health; death;
- serious infections (e.g. HPC, HIV, TB), overdoses and suicides;
  3. poor education, family disruption and unemployment;
  4. illegal activity, legal consequences and jail time.
- serious societal costs, direct and indirect:
  1. at least seven times the cost of treatment.
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APPENDIX 01. DSM IV

CRITERIA FOR SUBSTANCE ABUSE

A. A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one (or more) of the following, occurring within a 12-month period:

1. recurrent substance use resulting in a failure to fulfil major role obligations at work, school, or home (e.g. repeated absences or poor work performance related to substance use; substance-related absences, suspensions, or expulsions from school; neglect of children or household.)

2. recurrent substance use in situations in which it is physically hazardous (e.g. driving an automobile or operating a machine when impaired by substance use.)

3. recurrent substance-related legal problems (e.g. arrests for substance-related disorderly conduct.)

4. continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance (e.g. arguments with spouse about consequences of intoxication, physical fights)

B. The symptoms have never met the criteria for substance Dependence for this class of substances.

CRITERIA FOR SUBSTANCE WITHDRAWAL

A. The development of a substance-specific syndrome due to the cessation of (or reduction in) substance use that has been heavy and prolonged.

B. The substance-specific syndrome causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

C. The symptoms are not due to a general medical condition and are not better accounted for by another mental disorder.

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Appendix 01. DSM IV - cont’d

DIAGNOSTIC CRITERIA FOR OPIOID WITHDRAWAL. (292.0)

A. Either of the following:
   1. cessation of (or reduction in) opioid use that has been heavy and prolonged (several weeks or longer).
   2. administration of an opioid antagonist after a period of opioid use.

B. Three (or more) of the following, developing within minutes to several days after Criterion A:
   1. dysphoric mood
   2. nausea and vomiting
   3. muscle aches
   4. lacrimation or rhinorrhoea
   5. pupillary dilation, piloerection or sweating
   6. diarrhoea
   7. yawning
   8. fever
   9. insomnia.

C. The symptoms in Criterion B cause clinically significant distress or impairment in social, occupational or other important areas of functioning.

D. The symptoms are not due to a general medical condition and are not better accounted for by another mental disorder.

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Appendix 01. DSM IV - cont’d

CRITERIA FOR SUBSTANCE DEPENDENCE (for opioids 304.00)

A maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifested by three (or more) of the following, occurring at any time in the same 12-month period:

(1) tolerance, as defined by either of the following:

(a) a need for markedly increased amounts of the substance to achieve intoxication or desired effect

b) markedly diminished effect with continued use of the same amount of the substance

(2) withdrawal, as manifested by either of the following:

(a) the characteristic withdrawal syndrome for the substance

(b) the same (or closely related) substance is taken to relieve or avoid withdrawal symptoms

(3) the substance is often taken in larger amounts or over a longer period than was intended

(4) there is persistent desire or unsuccessful efforts to cut down or control substance use

(5) a great deal of time is spent in activities necessary to obtain the substance (e.g. visiting multiple doctors or driving long distances)

(6) important social, occupational, or recreational activities are given up or reduced because of substance use

(7) the substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.

- Reprinted with permission from DSM IV, American Society of Addiction Medicine.
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Methadone Dispensing Pharmacies – cont’d

Tisdale
Pharmasave #426
878-3800
878-380

Weyburn:
Price-Rite Guardian Drugs
842-4221
842-6455

Drugstore Pharmacy 6760
848-3407
848-3411

Other useful numbers:

PA Corrections
953-3000
953-3022

PA Pinegrove
953-3110
953-3108

PA Penitentiary
765-8161
765-8086

Regina Corrections
924-9085
787-0432

Regina Harm Reduction
775-0862
790-4253

Regina Parliament
546-5711
775-0862

Saskatoon Corrections
956-8825
931-0811

Saskatoon Public Health
655-4642
655-4723

Saskatoon Regional Psych Centre
975-5420
975-6024

Saskatoon Department of Community Resources and Employment
933-5960
933-8039
This Clinic is a general medical and surgical practice.

We provide all the usual services found in medical clinics.

It is not a walk in clinic. Visits are by appointment.

Most of our patients do not have opioid / addiction problems.

Respect other patients in the waiting room.

Kindly behave in our clinic. No stealing. No foul language.

Kindly don't tie up clinic phone lines without permission.

Clinic Staff are: Names___________________________________________

Addiction Staff: Names___________________________________________

All our staff work hard. Kindly respect them.

Abuse our staff and you can expect a lively response.

We also have specific notes and information on other issues.

- With permission from Meth Made Easy (c) Fern Management Ltd.
PATIENT INFORMATION 02 - METHADONE THERAPY

METHADONE FEATURES:

Methadone is a synthetic drug which acts like Morphine, Heroin, Demerol, Dilaudid. Methadone can initially be very dangerous to those not tolerant to it. The use of other drugs will not make you tolerant to Methadone! It is can be fatal for anyone not used to it, and particularly for children. At all times it must be kept well away from anyone it was not prescribed for.

Methadone functions are:

1. Painkiller, lasting about 6 to 8 hours.
2. Suppress withdrawal and craving, lasting 16 to 36 hours.
3. Clear the thought process (on long term use).

Main benefit short term is control of opioid withdrawal and craving. Main benefit long term is improved state of mind and social improvement. Long term benefits can take many months to become evident.

Important points about Methadone used for withdrawal and craving control:

Morphine, Heroin, Demerol, Dilaudid are short acting drugs. Methadone is a long acting slow release drug. There is no buzz, no high. It has no simple milligram for milligram equivalency with other opioids.

Dosage adjustments depend on patient's withdrawal and craving symptoms. The correct dose is that which eliminates opioid withdrawal and craving symptoms. The correct dose is usually 60 to 100 mgs orally once daily. There is no advantage to an inappropriate dose; too much or too little is incorrect. It takes time to find the correct dose. Doses start low and increase.

Increases in dose can cause drowsiness for three days, making driving dangerous. Patients may be unemployable in the short term until stabilised.

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APPENDIX 04. SAMPLE AGREEMENT

OPIOID / METHADONE REHABILITATION THERAPY AGREEMENT

· I am a serious opioid addict.

· I want medical help to manage my dependency/addiction. Methadone may be effective.

I have received, read, and understand, the written information on:

1. Opioid Dependency and Addiction.
2. Methadone itself.
3. The Saskatchewan Methadone Programme.

· I know that Methadone can be a very dangerous drug, and also that:

1. It is dangerous to combine Methadone with uppers, downers, alcohol.
2. Opioid use, prescription, and dispensing are regulated by Law.
3. Prescriptions are solely for my own use, and only as directed.
4. Any other use, such as diversion or donation, is illegal.
5. It is a Federal offence to break the law in use of these drugs.

· You may advise other Professional care givers that I am on the programme.

· General and / or specialist care / services may be provided or requested.

· This is a rehabilitation and development programme, which implies:

1. A prior / current problem needing assessment and stabilisation.
2. Potential development, training, employment, other treatments.
3. The setting of realistic and achievable individual goals.
4. Progress evaluation from time to time.

· While on the programme and receiving prescriptions:

1. I will inform you and other doctors of all drugs I take.
2. No other doctor will prescribe drugs of dependency/addiction without your knowledge
3. During transition to stable state I will stay in town with no carry privileges.
4. Clinic appointments will be made and kept as needed, initially weekly.
5. Spot checks may be done at any time while on the programme.
6. I will respect my responsibility to society and others on the programme.
7. I will co-operate with those administering all parts of the programme.
8. Failure to co-operate with treatment may result in termination.
9. Failure to progress in rehabilitation or development may result in termination.

· Privacy and confidentiality will be protected as required by Law.

· I am competent to sign this agreement and wish to participate in the programme.

Signed: __________________________________

Date: ____________________________________

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APPENDIX 06. BIBLIOGRAPHY

Methadone Maintenance: A Physician’s Guide to Treatment
Author: Brands and Brands
Publisher: Centre for Addiction and Mental Health. 1998

Methadone Maintenance Treatment and other Opioid Replacement Therapies
Author: Ward, Mattick and Hall,
Publisher: Harwood Academic Publishers 1998

Methadone Treatment for Opioid Dependence
Author: Strain and Stitzer
Publisher: The Johns Hopkins University Press 1999

Drugs & Drug Abuse
Author: Brands, Sproule, Marshman,
Publisher: Centre for Addiction and Mental Health. 1998

Principles of Addiction Medicine, Second Edition
Author: Graham and Shultz
Publisher: American Society of Addiction Medicine

Substance Abuse, Third Edition
Author: Lowinson et al
Publisher: Williams and Wilkins

Comprehensive Review in Toxicology, Third Edition
Author: Peter D Bryson
Publisher: Taylor and Francis

The Pathology of Drug Abuse, Second Edition
Author: Steven B Karch
Publisher: CRC Press, Florida

New Treatments for Opioid Dependents
Author: Stine and Kosten
Publisher: The Guilford Press

DSM-IV, American Psychiatric Association Manual
APPENDIX 07. INTERNET WEB SITES

American Society of Addiction Medicine - www.asam.org
Canadian Centre for Substance Abuse - www.ccsa.ca
Canadian Society of Addiction Medicine - www.csam.org
Fern Management Ltd - www.syscon.sk.ca
College of Physicians and Surgeons of Saskatchewan - Methadone Guidelines - www.cpss@quadrant.net
College of Physicians and Surgeons of Ontario - Methadone for Pain Guidelines - www.cpsso.on.ca
Pharmacy Information Program (PIP) - www.health.gov.sk.ca
PIP sign up - https://pip.shin.sk.ca
- pipinformation@shin.sk.ca
- 306-787-9833 (Phone)
- 306-781-8480 (Fax)
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METHTRAK. METHADONE DRUG & TEST DATA: CN

NAME: | PHN: | SEX
GP : | DOB: | AGE

MSC= MSCONTIN METH= Mg / Day DAYS= Duration

SCRIPTS FOR URINE

| A | B | C | C | O | M |
APPENDIX 09. PROTOCOL FOR ADMINISTRATION OF METHADONE IN PROVINCIAL CORRECTIONAL FACILITIES

Saskatchewan Justice
Corrections Division Policy

<table>
<thead>
<tr>
<th>TOPIC: METHADONE TREATMENT FOR INMATES</th>
<th>Page 1</th>
</tr>
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<tbody>
<tr>
<td>LEGISLATIVE AUTHORITY:</td>
<td>EFFECTIVE DATE:</td>
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<tr>
<td></td>
<td>October 5, 1998</td>
</tr>
<tr>
<td></td>
<td>NEW</td>
</tr>
<tr>
<td></td>
<td>July 12, 2006</td>
</tr>
<tr>
<td>PREPARED BY: Avonda McKay</td>
<td>AUTHORIZATION: Executive Directors of Corrections</td>
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**PURPOSE**

The purpose of this policy is to provide standards for the Methadone Maintenance Treatment for persons incarcerated in provincial correctional centres.

**PRINCIPLE**

Corrections has a duty to assist an offender to achieve better health by:

- Facilitating recognized medical intervention
- Supporting the harm reduction model as a strategy for reducing the transmission of communicable diseases.

**DEFINITION**

Methadone is a synthetic narcotic medication prescribed for the symptomatic treatment of addiction to opioids. Methadone prevents withdrawal symptoms and helps reduce cravings.

**STANDARDS**

1.0 General

1.1 Correctional centres that have medical units are responsible for co-operating with the directions provided by the medical authorities who provide Methadone Maintenance Treatment (MMT) services. This co-operation includes facilitating an offender who is established on Methadone Maintenance Treatment to continue on this program, and providing the physician who is prescribing the methadone with information about the offender’s circumstances throughout the period of incarceration. (e.g., program involvement, release plans, changes in sentence status.)

1.2 An offender who is established (i.e., not in the transition phase) on the Methadone Maintenance Treatment when admitted to a correctional centre will be maintained on this treatment while held at the correctional centre, subject to the approval of the methadone prescribing physician.
1.3 An offender, who is not on the program at the time of admission, may be considered for such treatment while incarcerated when referred by a physician and assessed by a qualified Methadone prescriber as being appropriate for the treatment.

1.4 The Correctional Centre Director is responsible for establishing a written agreement between the physician exempted to prescribe methadone and the correctional centre’s contract physician about:

- the procedures that apply to an offender being maintained on the Methadone Maintenance Treatment
- the procedures that apply to this same offender for receiving other health care services from the correctional centre’s contract physician
- the capacity for treatment (section 4.0 of this policy).

1.5 An offender wishing to participate in the Methadone Maintenance Program must sign a consent agreement (Appendix A). No methadone shall be administered without a signed agreement.

1.6 The Correctional Centre Director is responsible for establishing a process whereby all offenders on the Methadone Maintenance Program are photographed.

1.7 The Correctional Centre Director will establish local procedures to ensure the identity of the offender is verified before administering the methadone.

1.8 All offender photographs will be locked in a secure area when not being used for methadone administration.

2.0 Supply and Control of Methadone

2.1 The Correctional Centre Director is responsible for developing local procedures to facilitate receiving, storing, and distributing methadone as prescribed by the appropriate medical authority. These procedures will comply with the Corrections Policy on Pharmacy Services (Medical - 0001) and will include having methadone supplied in sealed containers.

2.2 Under no circumstances shall the methadone supplies for an offender be placed in his/her personal property effects.

2.3 An offender receiving Methadone Maintenance Treatment is eligible to participate in correctional centre programs except or unless:

- the prescribing physician recommends the offender not participate in an activity (e.g., operation of equipment)
- the program the offender wants to participate in results in the offender being unavailable to receive the medication from the medical staff at the prescribed times, (e.g., Urban Camp Work Crew), unless alternative times have been established for special events/programs (e.g., Visiting, Sweats).

2.4 Methadone medication may be conveyed with persons accompanying an offender when being escorted, transferred or in transit for court purposes.
2.5 An offender who is established on Methadone Maintenance Treatment will not be allowed “carrying privileges” for methadone within the correctional facility and will not be provided with methadone on release. Any remaining methadone will be returned to the pharmacy or disposed of as per the Narcotics Control Act. The offender will be assisted in arranging an appointment with the prescribing physician on release to ensure continuation of the treatment program.

3.0 Administration of Methadone

3.1 Methadone medication must be given under the direct supervision of medical unit staff.

3.2 The nurse will verify the identity of the offender before administering the methadone.

3.3 The offender will consume a full glass of water after ingesting the methadone and the nurse shall verify that the medication is not held in the mouth.

3.4 The offender shall be observed by correctional staff for approximately 20 minutes after the administration of methadone to ensure methadone ingestion, with no regurgitation. Ideally, the observation will occur in designated supervised areas.

4.0 Capacity for Treatment

4.1 When the demand for methadone currently surpasses the ability of the correctional centre to safely manage the storage and delivery of the medication to these offenders, priority for methadone initiation will be given to offenders who meet the following criteria:

- Remand and sentenced women who are pregnant and currently opioid dependent or were previously opioid dependent and are a high risk of relapse
- Remand and sentenced offenders who are currently opioid dependent
- Opioid dependent offenders who require treatment for Hepatitis C and HIV.

4.2 Each correctional centre, in consultation with the physician who is prescribing the methadone, must determine on a continual basis the patient load they can safely and responsibly maintain as evidenced by adherence to the parameters outlined in the Saskatchewan Methadone Guidelines for the Treatment of Opioid Addictions.

5.0 Review of Program

5.1 The correctional centre shall conduct a review of the offender’s participation in the program if the offender displays any of the following inappropriate behavior:

- is unco-operative or non-compliant in receiving the medication and/or conditions of the contract
- alters or attempts to alter a urine sample
- the offender’s behaviour indicates the offender is under the influence of illicit drugs, or appears to be having an adverse reaction that could endanger the offender’s health
- the offender is abusing other prescribed medication
• the offender has tested “dirty” on drug screen tests or the tests are negative for methadone
• the offender has been found guilty of trafficking in illicit substances while on the MMT Program.

5.2 The decision to remove an offender from the Methadone Maintenance Program is a medical decision, and will be made by the Centre’s medical staff in consultation with the methadone physician treating the offender.

5.3 Drug screen testing that is required to maintain the integrity of the offender’s Methadone Maintenance Treatment will be conducted on the direction of the prescribing physician, or as established in the “Provincial Protocol on Recovery Services for Opioid-Dependent Clients (Methadone Component.)” Results of the drug screen tests will be shared with the nursing unit. A disciplinary charge or other security measures may be considered in instances when an offender has tested “dirty” on a drug screen test after consultation with the prescribing methadone physician.

5.4 The correctional centre’s nursing unit, in consultation with the methadone prescribing physician and the correctional centre physician, will make provision for an offender on the Methadone Treatment Program to receive over-the-counter medication, as may be required due to the side-effects of using methadone. (e.g., medication for nausea or constipation as ordered by the prescribing physician.)

6.0 Intermittent Offenders

6.1 Intermittent offenders reporting to the correctional centres shall bring their Methadone ‘carries’ in a tamper proof, sealed container. The container shall be inspected by the nursing staff to verify it has not be adulterated or tampered with.

6.2 Intermittent offenders who do not have carry privileges must provide the nurse with the name of the methadone prescribing physician and dispensing pharmacy.

Effective Date: This policy is effective as indicated.

Maureen Lloyd
Executive Director of Corrections
Appendix A
Agreement to Participate in Methadone Maintenance Program

Date:______________________

I, _________________________________, understand that the Centre will continue to provide my methadone during my period of incarceration, and that I freely choose to control my use of opioid drugs by using methadone as prescribed by my physician.

I further understand and agree that:

1. My prescribing physician has determined that methadone is appropriate and safe for me, and that my prescribing physician shall determine what dosage of methadone is appropriate for me.

2. Methadone will be administered to me daily, and I will drink a glass of water after receiving my dose of methadone and be observed for a determined period of time. I also understand that methadone can be dangerous or even lethal if consumed by a person who is not tolerant, and that my methadone dose will be consumed by me alone.

3. I will provide urine samples for drug screening purposes, the frequency of such to be determined by the prescribing physician. I also understand that my methadone may be discontinued or used for security or discipline purposes if a drug screen test positive for any illicit substances.

4. I will only take medications other than methadone that are prescribed by the Centre’s physician. I understand that to do so may result in serious health problems, overdose, or even death.

5. I agree to sign a release of medical information to allow my prescribing physician and/or the community clinic where I was receiving methadone, to share information with correctional health care staff concerning medical issues related to my methadone maintenance.

6. I agree to participate in any substance abuse program as directed by my case manager.

7. My methadone may be discontinued for inappropriate behaviours related to the program such as use of illicit substances, not taking my prescribed dose of methadone, attempting to alter my urine sample or trafficking in illicit substances.

8. I understand I may voluntarily choose to discontinue my program of methadone maintenance at any time.

9. I acknowledge that methadone in my possession on admission will not be placed in my personal property and, further, will be destroyed in accordance with federal requirement (excluding Intermittent offenders)

Understood and signed by: _________________________________  Witnessed by: _________________________________
### APPENDIX 10. METHADONE TRANSFER SHEET

<table>
<thead>
<tr>
<th>Name</th>
<th>DOB</th>
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<tr>
<td>Past Med Hx</td>
<td>Past Surg Hx</td>
<td>Social Hx:</td>
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<th>Alcohol</th>
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<th>N</th>
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<tr>
<td>Past Surg Hx</td>
<td>Pack year</td>
<td>Stable</td>
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| Methadone Dose: | Last 3 urine Screens (circle) | Carries: |
| mgs od bid | | Date started: |
| | | Number of Carries: |

- □ Opiates
- □ Cocaine
- □ Ritalin
- □ Heroin
- □ Benzodiazepines
- □ Methamphetamine

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APPENDIX 11. INVOLUNTARY DISCHARGE FORM
METHADONE MAINTENANCE PROGRAM

<table>
<thead>
<tr>
<th>Patient Surname:</th>
<th>Patient Given Names:</th>
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</thead>
<tbody>
<tr>
<td>Date of Birth:</td>
<td>Personal Health Number (PHN):</td>
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</table>

The above patient is no longer on the Methadone Maintenance Program of:

PHYSICIAN NAME: ______________________________

DATE: ______________________________

PHYSICIAN’S SIGNATURE: ______________________________

EFFECTIVE DATE: ______________________________

REASON FOR DISCHARGE: ______________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Please email, fax or mail to: College of Physicians and Surgeons of Saskatchewan
500-321A-21st Street East
SASKATOON SK S7K 0C1

Email: meagan.fraser@cps.sk.ca

Phone: 306-667-4648

Fax: 306-244-0090

THIS IS A REQUIREMENT OF THE SASKATCHEWAN METHADONE PROGRAM