



Saskatchewan

METHADONE



GUIDELINES AND STANDARDS

for the Treatment of Opioid Addiction/Dependence

Saskatchewan



ACKNOWLEDGEMENTS

The information contained in this publication is based heavily upon the
College of Physicians and Surgeons'
*Alberta Methadone Maintenance Treatment –
Standards and Guidelines for Dependence*
and has been adopted and liberally adapted with permission
to provide support to methadone-prescribing physicians in Saskatchewan.

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Introduction and Overview



Introduction

The *Saskatchewan Methadone Guidelines for the Treatment of Opioid Addiction/Dependence* (2014) guides physicians and other healthcare practitioners in the use of methadone to treat patients diagnosed with **Opioid Use Disorder**.

The **College of Physicians and Surgeons of Saskatchewan** (CPSS) plays a leadership role in establishing standards and best practices in medicine including this very complex area of practice. Recently the Council of the CPSS adopted four policies related to the provision of methadone.

These policies include:

- Policy – Methadone Prescribing For Initiating Physicians for Pain
- Policy – Methadone Prescribing For Initiating Physicians for Opioid Dependence (Addiction)
- Policy – Methadone Prescribing for Maintaining (Non-Initiating) Physicians for Pain
- Policy – Methadone Prescribing for Maintaining (Non-Initiating) Physicians for Opioid Dependence (Addiction).

The main objective of this document is to increase or maintain the safety of patients in opioid dependency treatment. It is also hoped that the standards and guidelines raise awareness of opioid dependence with physicians and the healthcare community, and support and encourage physicians to consider **Methadone Maintenance Treatment** (MMT) in the treatment of patients in their clinic or as a part of their general practice.

These standards and guidelines were developed to support:

- (a) experienced MMT physicians (initiating physicians) with a focused MMT practice,
- (b) community-based physicians (maintaining physicians) who take on stable MMT patients as a part of their regular practice, and
- (c) temporary prescribers of methadone who are physicians that temporarily care for an MMT patient in a hospital or corrections facility.

Standards and guidelines for methadone treatment are intended to enhance patient care by improving the consistency of and access to safe clinical MMT management, and patient and community health and safety.

These standards and guidelines are based on multiple sources of evidence on the safe and effective management of opioid dependency. This document is based on data obtained from best practice guidelines and research in the field of methadone maintenance and addictions medicine, as well as clinical experience from respected authorities and individual professionals in the field.

This Saskatchewan-based document draws heavily on the standards and guidelines recently developed by the College of Physicians and Surgeons of Alberta. We thank the College of Physicians and Surgeons of Alberta for the thoroughness of their work, and for permission to use it as a foundation for our own guideline. This document has also been reviewed by a panel of prescribers in Saskatchewan, and was circulated for additional stakeholder input before it was provided to the Council of the College of Physicians and Surgeons for approval by the Council.

While the audience for this document is physicians, it is acknowledged that there are other health professionals involved in the care of opioid dependent patients.

This document is not intended to be a comprehensive manual, nor is it expected to replace sound clinical judgment.

Physicians are encouraged to consult with a specialist in MMT or addiction medicine as required.

Overview

The Difference between Standards and Guidelines

The *College of Physicians and Surgeons of Saskatchewan* (hereinafter referred to as the “College” or CPSS) has adopted the policies as outlined above as the **minimum standards** for the prescribing of methadone in the circumstances described.

An adapted version of the *Canadian Medical Association Code of Ethics* sets out the minimum standards of professional behavior and ethical conduct expected of all physicians registered in Saskatchewan.

Standards, or **policies**, define a minimum acceptable level of care to ensure patient safety. Standards are a mandatory requirement.

Guidelines provide direction that “should” be followed when managing specific issues. In Methadone Maintenance Treatment (MMT), guidelines provide direction and recommendations for effectiveness and optimal patient care. Guidelines assist Initiating, Maintaining and Temporary Prescribing Physicians in making clinical decisions about patients, and may be adopted, modified, or rejected according to clinical needs, individual patient considerations, local resources, and physician discretion. A physician must exercise reasonable discretion and have justifiable reasons when there is a decision to not follow a guideline. In every instance, the reasons for not following a guideline must be well documented.

*In this document, the term “physician” means **any person who is registered or who is required to be registered as a member of the CPSS**, which regulates the professions of physicians and surgeons.*

All references to the “patient” in these standards and guidelines include the patient’s legal guardian or substitute decision maker, where applicable.

The Role of Methadone Maintenance Treatment in Saskatchewan

The goal of Methadone Maintenance Treatment (MMT) in Saskatchewan is to provide safe, accessible, effective and consistent treatment for individuals with opioid dependence.

How does it work?

Methadone is a long acting, synthetic opioid that has been used in the treatment of opioid addiction for over fifty years. It 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. It prevents withdrawal, decreases craving and blocks euphoria produced by short acting opioids.

What are the risks and benefits?

As with any opioid, methadone can cause respiratory depression and cardiac 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. Serum methadone level will increase with each successive dose until it reaches steady state (this takes 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.

If managed properly, the benefits of MMT far outweigh the risks. Patients who are stable on methadone are less likely to inject opioid drugs, hence are not as apt to share needles. They are at less 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 user from the need to engage in criminal activity in order to support an expensive drug habit.

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 patients, 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.

MMT is a recognized therapy for an Opioid Dependence Disorder. It is not replacing one addiction with another. "Addiction" is a psychiatric and medical diagnosis, the criteria of which are not met by the patient who conscientiously adheres to a medication protocol and treatment plan.

In the absence of pharmacological intervention, an opioid addicted person has roughly a 15% chance of succeeding in recovery. Many patients who discontinue methadone relapse within a year of stopping treatment.

Methadone causes physiological dependence and will result in physical and psychological withdrawal symptoms if discontinued abruptly. This in itself does not constitute "addiction". The treatment of patients with addictions can be complicated by confusion between physiological dependence and

addiction. This misunderstanding can result in a reluctance to embark on an appropriate and compassionate treatment plan.

MMT is a substitution therapy that allows a return to normal physiological, psychological and societal functioning. It is one possible treatment for an Opioid Dependence Disorder. MMT may continue indefinitely for some people, while others may be able to eventually cease all opioid use and remain abstinent while preserving the normal functioning they attained while on MMT. Each patient must be assessed, treated and monitored on an individual basis, and MMT must consider the physiologic, psychological, and social aspects of the patient's

wellbeing. Successful outcomes through MMT require knowledge, experience, vigilance and diligence on the part of the physician, the patient and everyone involved in treatment.

The demand for MMT is growing as more individuals with opioid addictions request treatment. With this increased demand there is a corresponding need for more initiating and maintaining Physicians. It is hoped that these Standards and Guidelines will clarify the requirements and protocols for MMT and encourage more physicians to either become an initiating physician, or maintain MMT patients as a part of their current practice.

Chronic Pain

MMT is for the treatment of opioid dependence and not for the treatment of chronic pain. The protocol for using methadone to treat chronic pain is almost always different than the protocol used for the treatment of opioid dependence.

It is important to understand that it may be impossible to differentiate between an addiction and chronic pain. In cases where comorbid pain complicates the presentation of addiction (or vice versa), it is strongly recommended that there is consultation with a physician experienced in

managing patients with both an addiction and chronic pain.

For patients with chronic pain who have lost control of their use of opioid medication and when other methods fail to result in a return to stability, MMT can be helpful in regaining control and addressing a patient's pain issues in a healthy, manageable way.

Standards and Guidelines



1. Initiating Physicians

This section applies to physicians who deliver MMT in a private or in a Health Region supported methadone clinic. These MMT physicians evaluate patients on their suitability for the treatment and start, or initiate, patients on MMT, working closely with an interdisciplinary team that offers a range of services and support to the patient.

Standards

1. Initiating Physicians must have a license to practice medicine in Saskatchewan.
2. Initiating Physicians must have an exemption granted by the Office of Controlled Substances, Health Canada, to prescribe methadone for the treatment of opioid dependence.
3. Initiating Physicians will have the following training and experience:
 - a) Completion of a MMT workshop/course recognized by the CPSS
 - b) A period of direct training (2 days), supervision and mentorship with an experienced, CPSS-approved Initiating Physician until approved as competent in MMT
 - c) Documentation of clinical competence
 - d) College approved mentorship and support from an established Methadone prescriber, during the first two years of practice.
4. Initiating Physicians will pursue ongoing education relevant to MMT. Physicians must provide documentation of MMT-related education that is acceptable to the CPSS. Examples of education acceptable to the CPSS are:
 - a) Completion of a recognized course on the fundamentals of addiction medicine within 2 years of acquiring a methadone exemption
 - b) a minimum of 30 hours of formal Continuing Medical Education (CME) in addiction medicine every five years.
 - c) education equivalent acceptable to the Council of the CPSS
5. Initiating Physicians must access the PIP Viewer prescribing database.
6. An interview with the Registrar of the CPSS or his/her designate may be required.
7. Initiating Physicians must have access to laboratory services and a pharmacy.
8. If the Initiating Physician is going to be away or is suspending their practice, they must ensure the patient receives continued care from another physician trained in MMT according to standards described in the CPSS's Standards of Practice.
9. Initiating Physicians must collaborate with Maintaining Physicians that are continuing to provide MMT to former patients, and with the pharmacists that are dispensing to current patients.
10. New Methadone prescribers will be limited to a maximum of 50 patients until the first audit.
11. Initiating Physicians should make reasonable efforts to provide non-pharmacological support to their patients (i.e.: pharmacy, addiction services, counseling, etc.).

2. Maintaining (Non-Initiating) Physicians

This section applies to physicians who provide MMT to a limited number of stabilized patients as a part of their practice.

Standards

1. Maintaining Physicians must have a license to practice medicine in Saskatchewan.
2. Maintaining Physicians must have an exemption granted by the Office of Controlled Substances, Health Canada, to prescribe methadone for the treatment of opioid dependence.
3. Maintaining Physicians must have an ongoing association with an experienced Initiating Physician who serves as a resource to the Maintaining Physician.
4. Maintaining Physicians shall have an understanding of methadone pharmacology and will complete a MMT workshop/course recognized by the CPSS.
5. Maintaining Physicians must access the PIP Viewer prescribing database in an effort to provide informed care to MMT patients.
6. An interview with the Registrar of the CPSS or his/her designate may be required.
7. If a Maintaining Physician is going to be away or is suspending their practice, they must ensure the patient receives continued care from another physician trained in MMT.
8. A Maintaining Physician must work collaboratively with the Initiating Physician and other caregivers that provide an interdisciplinary network of resources to the MMT patient (i.e.: pharmacy, addiction services, counseling, laboratory, etc.)

Guidelines

1. Maintaining Physicians are encouraged to pursue a minimum of 20 hours of formal Continuing Medical Education (CME) in some aspect of addiction medicine every 5 years (time spent at a recognized MMT workshop/course qualifies).

3. Temporary Prescribing Physicians – In Hospitals and Corrections

This section applies to physicians who do not normally engage in MMT as a part of their practice, but may require brief, patient-specific exemptions to prescribe methadone for the treatment of opioid dependence. Temporary prescribing physicians may work in hospitals or in a corrections facility. If a physician is not a patient's current methadone prescriber, they are considered a Temporary Prescribing Physician. Whatever the situation, these physicians may not have specialized knowledge of opioid dependence but are responsible for patients who actively receive MMT.

A. Hospital-based Temporary Prescribing Physicians

Standards

1. Hospital-based (HB) Temporary Prescribing Physicians must have a license to practice medicine in Saskatchewan.
2. Temporary Prescribing Physicians must receive an exemption specific to in-patient treatment, granted by the Office of Controlled Substances, Health Canada, to prescribe methadone for the treatment of opioid dependence. A Temporary Prescribing Physician must apply for this exemption within 2 business days of starting MMT for a hospitalized patient.
3. In an urgent or emergency situation where an Initiating Physician is not available, the Temporary Prescribing Physician must consult their hospital policy or the College of Physicians and Surgeons of Saskatchewan.
4. Prescribing of MMT is only for the duration of the patient's hospital admission. An exception to this may be made only when a patient is discharged from the facility on a weekend. The physician is then permitted to prescribe methadone for a maximum duration of 72 hours after discharge **and** the community methadone prescriber must be notified at discharge that methadone was prescribed to avoid double dosing.
5. Prescribing carried doses is not permitted, except in consultation with the Initiating or Maintaining Physician.
6. HB Temporary Prescribing Physicians must collaborate with the current methadone prescriber and any other treating prescribers for all **changes to the methadone dosage**, frequency, or addition of medications that have the potential to interact with methadone.
7. Prior to the patient's discharge from hospital, the Temporary Prescribing Physician must collaborate with the Initiating or Maintaining Physician on:
 - a) Discharge plans
 - b) Any changes in dosage
 - c) The prescribing of short-term opioid analgesics, psychoactive or medications with the potential for interaction with MMT
8. A Temporary Prescribing Physician must review the overview of methadone and MMT. [See **Appendix A: Important information about Methadone Maintenance Treatment for all Physicians**]

Guidelines

1. HB Temporary Prescribing Physicians should be familiar with the basics of MMT, as obtained through previous education such as an introductory workshop/course, or mentorship by an Initiating Physician.
2. Any physician who manages patients on MMT on a routine basis should apply for a general exemption to prescribe methadone for the treatment of opioid dependence. In this case, the Standards and Guidelines for an Initiating or Maintaining Physician apply.

B. Corrections-based Temporary Prescribing Physicians

Standards

1. A Corrections-based (CB) Temporary Prescribing Physician must have a license to practice medicine in Saskatchewan.
2. A Corrections-based (CB) Temporary Prescribing Physician must have an exemption specific to in-patient treatment, granted by the Office of Controlled Substances, Health Canada, to prescribe methadone for the treatment of opioid dependence. A Temporary Prescribing Physician must apply for this exemption within 2 business days of starting MMT for an incarcerated patient.
3. In urgent or emergent situations where an Initiating Physician is not available, the Temporary Prescribing Physician must consult their facility's policy or the College of Physicians and Surgeons of Saskatchewan.
4. Prescribing of MMT is only for the duration of the patient's incarceration. An exception to this may be made only when a patient is discharged from the facility on a weekend. The physician is then permitted to prescribe methadone for a maximum duration of 72 hours after discharge **and** the community methadone prescriber must be notified at discharge that methadone was prescribed to avoid double dosing.
5. Carried doses are not permitted except in consultation with the Initiating or Maintaining Physician.
6. CB Temporary Prescribing Physicians must collaborate with the current methadone prescriber and any other treating prescribers for all changes to the methadone dosage, frequency, or addition of medications that have the potential to interact with methadone.
7. Prior to the patient's discharge from a corrections facility, the Temporary Prescribing Physician must collaborate with the Initiating or Maintaining Physician on:
 - a) Discharge plans
 - b) Any changes in dosage
 - c) The prescribing of short-term opioid analgesics, psychoactive or medications with the potential to interaction with MMT
8. CB Temporary Prescribing Physicians must review the overview of methadone and MMT. [See Appendix A: Important information about Methadone Maintenance Treatment for all physicians]

Guidelines

1. CB Temporary Prescribing Physicians should be familiar with the basics of MMT, as obtained through

previous education such as an introductory workshop/course, or mentorship by an Initiating Physician.

2. Any physician who manages patients on MMT on a routine basis should apply for a general exemption to prescribe methadone for the treatment of opioid dependence. In this case, the Standards and Guidelines for an Initiating or Maintaining Physician apply.

4. Methadone Prescriptions

The safe dispensing of methadone begins with a well-written prescription. Collaboration and communication between physician and pharmacist enhances patient safety. This section outlines what must be present in any prescription for methadone.

Standards

1. Methadone prescriptions must be written on the physician's personalized prescription pad, or by CPSS approved electronic prescribing, unless dispensed from a hospital pharmacy for in-patient use.
2. Prescriptions must specify all of the following:
 - a) Start/end dates
 - b) Days of the week to be supervised by daily witnessed ingestion (DWI)
 - c) Carried doses (with the number and days of week that are to be given as take-home doses specified)
 - d) Methadone dose written in numbers
 - e) Any special instructions and extraordinary situations
 - f) All methadone prescriptions **must be** faxed or sent electronically to the pharmacy
3. Methadone must be dispensed in crystalline suspension or in a form that reduces its diversion and potential for abuse.
4. If a patient requests methadone in a form that can be more easily diverted or abused, the Maintaining Physician must consult with the Initiating Physician. Only an Initiating Physician can change a prescription to a non-crystalline suspension.
5. Initiating and Maintaining Physicians must communicate with the patient's pharmacist on the management of spoiled, lost and missed doses, either with each prescription or as general instructions for all methadone prescriptions.
6. With any change in total daily dosage, the physician must:
 - a) Cancel the existing prescription, and
 - b) Issue a new prescription based on the Standards cited above.

Guidelines

1. To improve a patient's adherence to treatment, the duration of a methadone prescription should not exceed the interval between clinical visits. [See **Appendix I: Sample Dispensing Schedule-Methadone Maintenance.**]

5. Patient Assessment for Admission to an MMT Program

This section details the steps physicians must complete before starting a patient on MMT. The patient must be assessed to determine their suitability for MMT, their history documented, appropriate investigations completed and informed consent obtained. The patient is made aware of treatment options and if it is decided that the patient will benefit from MMT, an agreement between patient and physician and a detailed treatment plan are developed.

Standards

1. The patient must have a diagnosis of an Opioid Use Disorder, as based on the most current DSM criteria for opioid dependence, and be assessed by a physician as likely to benefit from MMT. [See **Appendix D – Diagnostic Criteria for Substance Dependence**]
2. Prior to initiating methadone, the Initiating Physician must assess the patient and ensure the following information has been reviewed and documented:
 - a) Medical history, including cardiovascular history
 - b) Appropriate physical examination
 - c) Pattern of drug use
 - d) Addiction treatment history
 - e) Psychiatric history and mental status
 - f) High-risk behavior
 - g) Social situation
 - h) Details on chronic or recurrent pain
3. Prior to methadone initiation, the Initiating Physician must obtain the patient's prescribing profile from the PIP Viewer.
4. The patient must understand the rights, responsibilities, risks and the daily requirements of MMT treatment.
5. Before admitting a patient to an MMT program, the physician must explicitly discuss all appropriate and available treatment options other than MMT, including opioid substitution, tapering and abstinence.
6. The patient must be informed and understand the impact of methadone on their health and activities, and all of the significant risks of methadone, particularly during initiation and with any increase in dosage.
7. The patient must sign an MMT agreement that will be kept as a part of the patient's medical record. A copy must be given to the patient and to the dispensing pharmacy. [See **Appendix J – Methadone Maintenance Treatment Agreement – Sample**]
8. The Initiating Physician must make every reasonable effort to notify the patient's family physician and any other healthcare providers that have prescribed to the patient in the 3 months prior, that the patient is being initiated on methadone.
9. If the patient prohibits the Initiating Physician from communicating with their primary care physician or other prescribers, the Initiating Physician must not begin methadone initiation.
10. The Initiating Physician or MMTP clinic staff must notify the CPSS of any patient's discharge from MMT. [See **Appendix P – Discharge Form - Submitted to CPSS**]
11. The patient's treatment plan must be documented and kept as a part of the patient's medical record.
12. Physicians must inform patients of arrhythmia risk when they prescribe methadone.
13. All patients should have an ECG on initiation and must for doses greater than 100 mg/day.
14. Initial Urine Drug Screening (UDS) must be

obtained prior to initiation of methadone and this test must include confirmation testing (GC/MS or tandem MS).

15. The physician must encourage the patient to include non-pharmacological measures (i.e.: addiction counseling) as a part of their treatment plan.

16. Pregnant women requesting MMT must be given priority over other applicants for MMT.

17. Risks to the individual, society and public health must be evaluated when considering priority access to MMT.

[See **Appendix K** – *Initial Patient Assessment Form-Sample*]

6. Clinical Visits

This section outlines the frequency an MMT patient must be seen by an Initiating or Maintaining Physician.

Standards

- a) Patients must be seen at least once a week during the first 14 days of treatment by the Initiating Physician or another physician with a methadone exemption that permits the initiation of methadone in opioid dependence. This requirement is in addition to the patient's daily witnessed ingestions at either the pharmacy or at an MMT clinic.
- b) After the first 14 days of treatment, patients must be seen by a physician every 1-4 weeks until the dose is stable.
- c) After the patient is stable, the patient must be seen by a physician at least every 3 months.
- d) If the patient shows a sign(s) of instability, the patient must have clinical contact with the Initiating Physician or another physician with a methadone exemption that permits the initiation of methadone in opioid dependence.

Guidelines

1. For stable patients, the following schedule of clinical visits is recommended:

Length of Time Patient is Stable on Methadone	Frequency of Visits with a Physician
Less than 6 months	At least monthly
Less than 12 months	At least every 2 months
Greater than 12 months	At least every 3 months

(See **Appendix L** – *Methadone Maintenance Clinical Note-Sample*)

7. Dosages

A. Initiation Phase

Patients are at the highest risk of methadone overdose (and overdose death) in the first 2 weeks of MMT. This section outlines the starting dose and subsequent dose increases for patients in the first few weeks of MMT. The initial dose is based on the patient's opioid tolerance and underlying risk for methadone toxicity. It is important to note that methadone can be dangerous, particularly in combination with other CNS depressants or substances that increase serum methadone levels. Rapidly escalating increases in dose bring increased risk and do not necessarily benefit the patient, and should be exercised with caution.

The risk of increasing a dose in the initiation phase needs to be balanced with the recognition that increasing methadone doses to effective levels can increase patient retention rates and decrease the use of illicit drugs, alcohol and psychoactive medications.

Standards

1. The risk of methadone toxicity must be assessed by a physician prior to initiation. [See **Appendix Q – Managing Potential Methadone Overdose**]
2. For patients at **LOW RISK** for methadone toxicity (otherwise well with no respiratory compromise or other acute illness):
 - a) The starting dose is 30 mg or less.
 - b) The initiating physician shall prescribe dose increases of no more than 10mg every 3 days during the early and late stabilization phases.
3. For patients at **MODERATE RISK** for methadone toxicity (mild respiratory compromise, mild concurrent illness or concerning drug interactions):
 - a) The starting dose is 20 mg or less.
 - b) The initiating physician shall prescribe dose increases of no more than 10mg every 4 days during early and late stabilization phases.

Low Risk Initiation		
Days	Dosage	Comments
1-3	30 mg	
4-6	40 mg	
7-9	50 mg	Reassess at one week
10-17	60 mg +	Must hold at 60 mg for at least one week prior to further increase
17 +	See Stabilization Phase	

4. For patients at **HIGH RISK** for methadone toxicity, or who have been abstinent from opioids for 7 or more days (moderate respiratory compromise, moderate to severe concurrent illness and/or potential drug interactions see **Appendix B – Drug Interactions with Methadone**)
 - a) The starting dose is 10 mg or less.
 - b) The initiating physician shall prescribe dose increases of no more than 5 mg every 5 or more days during the early and late stabilization phase
5. Patients must receive Daily Witnessed Ingestion (DWI) during the initiation phase.

Patient Factors	Initial Dose	Dose Increase	Frequency
Low Risk of Methadone Toxicity	30 mg or Less	10 mg	No more than every 3 days during early and late stabilization
Moderate Risk of Methadone Toxicity	20 mg or less	10 mg	No more than every 4 days during early and late stabilization
High Risk of Methadone Toxicity	10 mg or less	5 mg or less	No more than every 5 days during early and late stabilization

Guidelines

1. Generally patients should not be on other prescribed opioids during the initiation phase but if withdrawal symptoms indicate the Physician may prescribe Kadian in the induction phase. (See **Appendix T – Managed Opioid Withdrawal During Methadone**)
2. There are significant risks with increasing dosages beyond what is cited in the standards listed above.

B. Stabilization Phase

This section details how to manage the stabilization phase, where physicians work towards a dose and treatment plan to stabilize the patient's condition, social environment and overall wellbeing. This phase is typically at Methadone doses above 60 mg.

Standards

1. The Initiating Physician must ensure doses are increased only after the patient has been assessed in person, and it is determined that the patient is experiencing cravings or ongoing opioid use, and/or a constellation of withdrawal symptoms.
2. The Initiating Physician shall not increase the patient's dose by **more than 10 mg every 5-7 days** during the stabilization phase.
3. The Initiating Physician must adhere to the Standards and Guidelines in Section 12: ECGs.

Guidelines

1. The typical methadone dose to reduce cravings and withdrawal symptoms is between **60-120 mg**.
2. Changes to any concurrent medications should prompt a review of the current methadone dosage. Collaboration with a knowledgeable pharmacist is recommended.
3. The physician must evaluate the possibility of pregnancy and discuss contraception options regularly.

C. Maintenance Phase

When both the dose and the patient are adequately stable, (no cravings, withdrawal, or active use) the patient can be considered to be in the maintenance phase. This section details the requirements of physicians when their patient is maintained on methadone. The optimal maintenance dose of methadone will relieve withdrawal symptoms, prevent opioid-induced euphoria and reduce cravings for 24 hours without causing sedation or other significant side effects. The typical dose range is **60-120 mg**, however, higher doses may be required. Patients may be considered for transfer to a Maintaining (Non Initiating) Physician.

Standards

1. The Initiating Physician must document adequate stability in the patient and the dose for 3-6 months before transferring to a Maintaining Physician.
 - a) When the Maintaining Physician requests a transfer back to the Initiating Physician
 - b) When the patient shows more than one indicator of instability
 - c) When the Maintaining Physician is unable to provide appropriate care to the patient
 - d) When the pharmacist to the physician indicates that the patient is having issues managing their prescription
2. The Maintaining Physician must consult with the Initiating Physician before any change in dose and/or if the patient shows more than one indicator of instability. [See **Appendix C – Key Indicators of Stability and Instability**]
3. The Initiating Physician must resume care of the patient from the Maintaining Physician in the following situations:
 4. The Maintaining Physician should administer a UDS a **minimum** of every 3 months for a stable, maintaining patient.

Guidelines

1. The patient should have clinical contact with the Maintaining Physician at least every 3 months, or as otherwise recommended by the Initiating Physician. The Maintaining Physician may wish to see the patient more frequently than every 3 months, with urine drug screens, until they are comfortable with the patient and the required care.

8. Split Dosages

Split doses are occasionally used in the management of pregnant or chronic pain patients, or in patients with intrinsic rapid methadone metabolism or who are on medications that induce rapid metabolism of methadone. This section details how split dosages should be managed.

Standards

1. The prescribing and dispensing of split dosages of methadone must be supported by documented withdrawal signs and symptoms within 24 hours of the daily dose, and/or signs and symptoms of excessive methadone dose in the four hours following a single daily dosage.
2. Patients requiring split doses must either attend the pharmacy twice a day or be eligible for carries. *(See carries requirement)*

Guidelines

1. Split dosages may be required under certain clinical conditions. In these situations, it is recommended that physicians consult with an experienced prescriber.
2. Rapid metabolizers of methadone are rare; evaluation of the peak and trough serum methadone level, or calculating the half-life, is recommended.
3. Twice-daily observed ingestion may be necessary.
4. Split doses do not necessarily have to be equal. A lower dose of 1/4 to 1/3 the total daily dose, provided as a carry, may be satisfactory to the patient, and reduce the amount of methadone prone to diversion or misuse.
5. It is important to recognize these guidelines are intended for the treatment of the opioid-dependent patient. Patients with concurrent chronic pain may require special consideration, and consultation is advised to ensure optimal care.

9. Spoiled, Lost and Missed Doses

This section outlines how physicians and pharmacists must manage a spoiled, lost or missed dose. When there is uncertainty about whether a dose had been spoiled, lost, vomited or missed, it is important to remember that the risk of death from overdose is much greater than the risk of harm from mild withdrawal symptoms. Ongoing communication and collaboration between the physician and pharmacist is essential. Rapid decline in tolerance to methadone necessitates careful management of missed doses, as failure to adjust a dose in this context can result in overdose and/or in death.

Standards

1. If the patient has observed emesis after taking methadone, by the pharmacist or staff, and it occurred within 30 minutes after consumption, a replacement dose can be provided.
2. Unwitnessed vomited doses must not be replaced without consultation and documentation. Methadone absorption typically occurs within 30-60 minutes of ingestion. No dose replacement is required after one hour.
3. All reports of vomited, lost or missed doses must be documented on the patient's medical file.
4. Replacement doses must be given only as witnessed ingestion.
5. Communication with the Initiating Physician must occur for all missed doses, regardless of cause, duration or number.

Miss 1-2 days	Restart at the full stable dose
Miss 3-5 days	Restart at 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 beginning at 30 mg.

Guidelines

1. 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.

10. Carries

This section outlines the parameters for patients carrying 1 or more doses of methadone. Take-home doses are referred to as “carries”. The decision to permit carried doses must consider the safety of the patient and the community. Patients cannot be granted carries until adequate stability is achieved, which is based upon a combination of clinical data, urine toxicology results and a thoughtful consideration of social, psychological and other circumstances impacting the patient. It is important to recognize that some patients may never achieve adequate stability, due to underlying mental illness, co-existing addictions, or social conditions such as unstable housing. Carry privileges require evidence of functional progress.

Any deviation from the Standards and Guidelines for carries requires clear documentation of the rationale. Serious harm to the patient and others can result from inappropriately used, lost, stolen or spoiled carries. Patient requests for replacements may indicate clinical instability, and necessitates a thorough clinical evaluation. Decisions to replace doses should be made only after diligent consideration and evaluation of the risks and benefits.

Standards

1. Carries must not be granted in the initiation and stabilization phase, and until adequate clinical and social stability has been achieved and documented. Exceptions may only be made when the pharmacy is closed or in exceptional circumstances.
2. Carries cannot be granted until the patient has 3 months of negative urine drug screens.
3. The MMT physician shall not prescribe take-home doses if:
 - a) The patient is at risk of taking more than prescribed
 - b) The patient is not able to safely store the methadone
 - c) There is suspicion that the patient is diverting methadone
 - d) Continued use of prohibited drugs and other potentially harmful interacting substances such as alcohol or other CNS depressants.
4. Take home doses must be prescribed incrementally beginning at a rate of 1-2 doses per week, to a maximum of 6 take-home doses per week.
5. Prescriptions must clearly define witnessed ingestion days and carry intervals.
6. All carries must include a witnessed ingestion. There may be rare, exceptional circumstances where witnessed ingestions with carries cannot occur. In these situations, prescribers must consider:
 - a) The patient's circumstances,
 - b) Storage of methadone carries,
 - c) The environment in which they live and work.
7. Physicians must clearly document any decision to provide a patient with carries.
8. The prescribing physician must be satisfied that carried doses will be securely transported and stored by the patient. A locked box or storage container for any carried doses is required, and empty bottles should be returned to the pharmacy for proper disposal.
9. Inappropriately used, lost, stolen or spoiled carried doses require complete withdrawal of carry privileges until adequate clinical and social stability is established. Replacement dosing is provided only as a daily witnessed ingestion.
10. The daily observed dose should be reduced if the MMT physician suspects the patient may not have been taking the full take-home dose. The MMT physician shall cancel all carry

privileges immediately when any of the following circumstances occur:

- a) There is reasonable suspicion that the patient has diverted their methadone dose, or has tampered with their UDS,
- b) The patient has relapsed by self report, observed intoxication or by a positive UDS,
- c) The patient has unstable housing, and can no longer safely store their methadone,
- d) The patient is actively suicidal, cognitively impaired, psychotic, or is otherwise at risk for misuse of their methadone dose,
- e) The patient has recently been released from incarceration.

Guidelines

1. Resumption of carry privileges after reports of inappropriately used, lost, stolen or spoiled carried doses should take into account the circumstances of the incident, as well as the patient's clinical and social situation. A cautious and conservative approach is recommended.
2. Special consideration may be given if patient has 2 months of negative urine drug screens and documented employment, education, childcare responsibilities or physical disability.
3. Patients on MMT who are prescribed medications with potentially harmful interactions such as benzodiazepines, other CNS depressants, including other opioids, should not be granted carries.
4. If carried doses are granted in an exceptional situation, the physician must evaluate the risks and document the rationale for the decision to grant carries. [See **Appendix M – Take Home Dose Agreement-Sample**]

11. Urine Drug Screening (UDS)

Urine Drug Screening (UDS) is the analysis of urine for the presence of medications and illicit drugs or their metabolites. This section outlines how UDS results are used as one tool to verify patients' self-reported substance use, assess response to MMT and determine suitability for take-home doses.

False positives and false negatives may occur in UDS as in any other medical test. In addition, different substances may be detected in the urine for a variable period after their use depending on the type of lab methodology used.

Standards

1. Routine UDS should be done by provincial lab (GC/MS).
home carries, increasing the frequency of UDSs and the return of the patient back to the Initiating Physician.
2. Frequency of collection:
 - a) Initiation: at least 1 UDS before a patient is initiated
 - b) Stabilization: collected at every visit
 - c) Maintenance: collected at least every 3 months
3. Unexpected UDS results should prompt physicians to evaluate the withdrawal of take-home carries, increasing the frequency of UDSs and the return of the patient back to the Initiating Physician.
4. If the patient has provided a tampered urine sample or has failed to attend a requested UDS within 24 hours (48 hours in occasional exceptional circumstances), this behavior is considered equivalent to a positive UDS result. The patient must be considered unstable and treated with caution.

Guidelines

1. There should be a discussion between the Maintaining Physician and the Initiating Physician about how to manage and when to share UDS results.
2. Consultation with the provincial laboratory performing the testing should be considered if a result requires clarification or follow-up discussion.
3. A physician should consult with PIP or eHealth viewer.
4. Physicians should be aware of all medications prescribed to the patient as certain medications can purposefully or unintentionally mask the presence of other substances in UDS results.
5. Where there is a concern for the integrity of urine samples, an observed collection may be considered.
6. Laboratory results may be shared with primary care providers or specialists. Care should be taken to ensure patient privacy is maintained.
7. The UDS program for a patient must include random screenings: that is UDS's that are unscheduled with no fixed dates and where the patient has no more than 24 hours' notice that a urine collection is required. [See **Appendix R – Urine Testing** and **Appendix S – Urine Drug Screening Collection Practice**]

12. ECGs

This section outlines the frequency for ECGs in methadone patients. Methadone may prolong the QTc interval and result in torsade de pointes.

Guidelines

1. Initiating Physicians should obtain an ECG at initiation to measure the QTc interval.
2. Additional ECGs should be obtained in the following situations:
 - a) If the methadone dose meets or exceeds 100 mg, and thereafter at every dose that meets or exceeds a multiple of 20mg (i.e., 120 mg, 140 mg, 160 mg)
 - b) If the patient has unexplained syncope or seizures, or other symptoms that are suggestive of cardiac involvement
 - c) When a patient is initiated on medications known to prolong the QTc interval
3. If the QTc interval is greater than 450 msec but less than 500 msec, physicians must review the potential risks and benefits with patients and monitor them more frequently, including more frequent ECGs. There is an increased risk of cardiac dysrhythmia as the QTc exceeds 450 msec.
4. If the QTc interval exceeds 500 msec, the physician must carefully consider the risks and benefits of continued treatment at the current dose, and discuss alternatives with the patient, including discontinuing or reducing the methadone dose, or eliminating contributing factors or medications.
5. Medications should be reviewed prior to initiation of methadone and on a regular basis to identify any medications that are known to prolong the QTc interval, in an effort to reduce risk.
6. The patient's other prescribers should be advised of this issue, and encouraged to avoid medications that have the potential to prolong the QTc interval.

13. Methadone and Other Medications

This section discusses how to manage potential interactions between methadone and other medications.

Patients receiving MMT frequently have other medical conditions, including psychiatric diagnoses, for which they receive medication. People with a history of addiction to one substance have a much greater risk of developing other addictions. Methadone can prolong the QTc interval, suppress respiration and can interact with many medications. Every patient on MMT requires a thorough evaluation of all medications on an on-going basis. Information and communication between all healthcare providers is essential for patient safety and wellbeing.

Standards

1. Prescribing physicians must be familiar with other medications that interact with methadone due to prolongation of the QTc interval and/or CNS depression, and/or inhibition or induction of those cytochrome systems involved in the metabolism of methadone.
2. Prescribing physicians must access prescribing databases, including PIP, as a part of their ongoing patient management.
3. Prescribing physicians must advise patients about the interactions of benzodiazepines, Gabapentin and other opioids with methadone. Caution should be exercised in prescribing benzodiazepines in MMT, and a patient's history, examination findings and diagnoses leading to treatment with benzodiazepines should be well documented.

Guidelines

1. If the risk of continuing to prescribe methadone outweighs the benefits, the prescribing physician should discontinue methadone treatment. Maintaining Physicians are encouraged to consult with the Initiating Physician as necessary.
2. Patients that are prescribed methadone for the ongoing management of concurrent chronic pain and addiction need a comprehensive management plan. With such patients, it is recommended the advice of a physician with a specialization in chronic pain be considered.

14. Discontinuation

A. Involuntary Withdrawal

Involuntary withdrawal should be considered when continuation of treatment presents unreasonable risk to the patient, treatment staff, prescribers, pharmacy staff or the public.

Standards

1. The Initiating/Maintaining Physician may transfer or cease MMT to a patient if:
 - a. The patient has been threatening or disruptive, or has shown violent behavior towards a staff member or others,
 - b. The patient is consistently non-compliant with the treatment agreement,
 - c. The patient is at high risk for adverse outcomes and attempts to reduce the risk have failed,
 - d. The patient is believed to have diverted their methadone prescription.
2. All doses during involuntary withdrawal must be Daily Witnessed Ingestion, with no carries except as pharmacy closure requires.
3. Involuntary withdrawals are unstable patients and their withdrawal must be managed by an Initiating Physician only. Maintaining Physicians with a patient that must be involuntarily withdrawn from MMT must transfer the patient back to an Initiating Physician who will manage their withdrawal and ongoing care.
4. The Initiating Physician must notify the CPSS of any patients' discharge from MMT. [See **Appendix P – Discharge Form-Submitted to CPSS**]
5. The Initiating Physician must warn the patient about the loss of tolerance and the risk of toxicity if they relapse to opioids.

Guidelines

1. The Initiating/Maintaining Physician should explain the reasons for cessation to the patient and document the rationale.
2. An example of an aggressive schedule for involuntary withdrawal is as follows: a 10% reduction of the daily dose per day, or 1 mg per day, whichever is greater. This schedule results in complete cessation within 30 days for any dose under 150 mg, and within 40 days for any dose less than 500 mg.
3. The Initiating Physician may use pharmacotherapy in the final 1-2 weeks of the decrease to relieve withdrawal symptoms.
4. The Initiating/Maintaining Physician should encourage the patient to engage with other health care professionals or an addiction treatment program for counselling and support.

B. Voluntary Withdrawal

This section outlines how to manage a patient's voluntary withdrawal from MMT.

Any change in methadone dose, including voluntary tapering, may increase the risk of instability. It is prudent to discuss with the patient the preparation for this process, including ongoing or enhanced counselling or a reduction in the number of carried doses.

Standards

1. The Physician must notify the CPSS of any patients' discharge from MMT. [See **Appendix P** - Discharge Form Submitted to CPSS]
2. The Physician should warn the patient about the loss of tolerance and the risk of toxicity if they relapse to opioids.
3. The Physician must see the patient regularly during withdrawal to assess the patient's mood and withdrawal symptoms, and provide supportive counselling.

Guidelines

1. For voluntary tapers, the Physician should taper patients slowly, however, the rate of the taper should be patient driven, even if the patient desires a more rapid taper.
2. The Physician should attempt to decrease the dose more slowly at doses below 20-30mg daily, as withdrawal symptoms become more pronounced.
3. The Physician should identify patients who are good candidates for a successful methadone withdrawal, and discuss the risks and benefits of withdrawal with them.
4. The Physician should decrease the methadone dose slowly. The decrease should be stopped or reversed at the request of the patient, or if the patient experiences severe dysphoria, cravings, or withdrawal symptoms, or relapses to opioids or other drugs.
5. The Physician should offer to follow the patient for at least a few months after the completion of the decrease.
6. The Physician should offer to reinstate MMT if the patient requests it during voluntary withdrawal.
7. The Physician may use non opioid pharmacotherapy to relieve withdrawal symptoms.
8. The Physician should encourage the patient to engage with other health care professionals or an addiction treatment program for counselling and support. [See **Appendix N – Tapering Readiness Questions-Sample**]

15. Special Situations: Transfer of Care

This section outlines the requirements of physicians transferring a patient to another physician, whether the patient is being transferred between opioid dependency programs or from an Initiating Physician to a Maintaining Physician. Patient convenience and preference should not outweigh concerns for patient and community safety. Patients that are high risk, are not adequately stable and do not yet have a stable dose should not be transferred to a community that does not have a pharmacy open 7-days a week.

Standards

1. The Initiating Physician must provide detailed information on the patient and their treatment plan to the Maintaining Physician, including:
 - a) The dose of methadone,
 - b) All prescribed medications,
 - c) Details on how many carries are permitted
 - d) Frequency of UDS screens,
 - e) A copy of the treatment agreement,
 - f) Relevant clinical history of the patient,
 - g) Contact information for the Initiating Physician.
2. The Initiating/Maintaining Physician will continue to provide services to MMT patients until they are no longer required or desired or until involuntary withdrawal is completed.
3. When an Initiating/Maintaining Physician is closing their practice, they must initiate a transfer of care and assist the patient in finding alternate MMT services.
4. The current Initiating/Maintaining Physician must provide the new, receiving physician with sufficient clinical information to permit the safe and effective continuation of MMT.
5. When a patient is undergoing involuntary withdrawal, the Initiating/Maintaining Physician is under no obligation to find another Initiating/Maintaining Physician. However, the current Initiating/Maintaining Physician must provide the receiving physician with appropriate clinical information to permit the safe and effective continuation of MMT.
6. If a patient is stable and is moving to a community where they cannot access a pharmacy open 7 days a week, the Initiating/Maintaining physician and the local pharmacy must collaborate on a treatment plan prior to the patient transferring to the new community.
7. The physician initiating transfer of care must make all reasonable efforts to ensure the receiving physician has access to the patient's information at the time of transfer and anytime thereafter.
8. Patients that continue to be high risk, as they are not adequately stable and are not on a stable dose must not be transferred to a maintaining methadone prescriber or to a community that does not have reasonable pharmacy access.

Guidelines

1. When a patient on MMT moves to another community, region or country, it is the patient's responsibility to arrange ongoing MMT. However, the current Initiating/Maintaining physician should provide reasonable assistance to the patient.

16. Special Situations: Incarceration

Necessary medical treatment, including MMT, should be provided to any individual incarcerated in a provincial correctional centre or remand centre.

Community resources, including MMT programs and primary care physicians knowledgeable in MMT should be readily available resources for methadone prescribers in correctional or remand centres.

Standards

1. MMT prescribers practicing within provincial correctional or remand institutions must adhere to these Standards and Guidelines.
2. The prescriber/program providing MMT to the patient at the time of incarceration must provide all information necessary for safe and effective MMT upon the request of the correctional or remand centre.
3. The prescriber/program providing MMT to the patient at the time of incarceration and the prescriber during incarceration will collaborate to ensure continuity of care prior to and at the time of release.
4. Prior to release, the methadone prescriber or designate within the correctional or remand centre will assist the patient in making arrangements for continuation of MMT upon release.
5. The prescriber/program providing MMT to the patient at the time of incarceration will resume MMT at the time of release unless other arrangements have been made. Under extraordinary circumstances the prescriber may continue to prescribe during the incarceration.
6. Prior to the patient's discharge from a corrections facility, the Temporary Prescribing Physician must collaborate with the Initiating or Maintaining Physician on:
 - a) Discharge plans,
 - b) Any changes in dosage,
 - c) The prescribing of short-term opioid analgesics, psychoactive or medications with the potential to interaction with MMT.

Guidelines

1. Patients entering a provincial correctional or remand centre who are on a stable dose of methadone should be maintained on an appropriate dose for the duration of their incarceration, except where patient behavior incurs involuntary withdrawal as outlined in *Section 14A: Discontinuation: Involuntary Withdrawal* of this document or where clinical assessment determines the need for a dosage change.
2. In urgent circumstances to avoid interruption of MMT, the community methadone physician may choose to continue prescribing methadone for a patient who becomes incarcerated for a maximum period of 2 weeks.
3. The community methadone physician is not obligated to continue prescribing methadone for a patient who becomes incarcerated if the requirement for patient safety cannot be met to the satisfaction of the community physician.

17. Special Situations: MMT in Adolescents

Patients under 18 years of age may be considered for MMT, however abstinence-based treatment would be preferred for adolescents, particularly those with a shorter duration of opioid dependence. Caution must be exercised when considering MMT in an adolescent patient.

Standards

1. The Initiating Physician must consider abstinence-based treatment for patients under 18 years of age.
2. The Initiating Physician must consider MMT for patients under 18 years of age only after a thorough assessment and discussion about all appropriate and available treatment options.
3. The Initiating Physician must ensure there has been a discussion with patients under 18 years of age (and other family members where appropriate, and with the consent of the adolescent if required) about the potential issues with methadone, including side effects, risks and difficulty withdrawing and tapering off of methadone.
4. The Initiating Physician must consult with another MMT provider prior to initiating MMT in a patient under 18 years of age.

18. Special Situations: Pregnancy

This section outlines how to manage a pregnancy in an MMT patient.

Pregnant opioid-dependent women are at increased risk of obstetrical and medical complications, including prematurity and low birth weight leading to higher rates of infant morbidity and mortality. The benefits of MMT during pregnancy include improved prenatal care and social stability. Methadone crosses the placenta but has not been found to be teratogenic. Neonatal abstinence syndrome (NAS) is commonly associated with methadone exposure during pregnancy and other opioid agonists or partial agonists. Pregnant opioid dependent patients are considered high risk pregnancies and should be managed by physicians with appropriate expertise.

Pregnancy increases methadone metabolism in many patients; often higher doses and split doses are required. In order to maintain stability, methadone dosing may need to be adjusted throughout pregnancy and in the postpartum period.

MMT is the preferred therapy for pregnant opioid dependent patients. Aggressive detoxification is contraindicated in this patient population.

All women of child bearing age on MMT are to be given appropriate advice about contraception and the risks and benefits of becoming pregnant while on MMT.

Standards

1. The Initiating/Maintaining Physician must offer MMT to pregnant opioid dependant patients on a priority basis.
2. The MMT physician will refer if required their pregnant MMT patient for obstetrical care as soon as pregnancy is confirmed.
3. All physicians caring for an MMT patient must communicate and collaborate with the obstetrical physician and hospital staff regarding the use of MMT during pregnancy, the plan for labour and delivery, and remain available for consultation and assistance as required.

Methadone dosing may need to be readjusted throughout pregnancy and in the postpartum period.

Guidelines

1. Opioid dependant patients on MMT who become pregnant shall be encouraged to continue MMT during their pregnancy.
2. Methadone will not provide adequate pain relief during labour and additional analgesia should be considered. Regular methadone dosage should be continued and not considered as part of the pain management plan.
3. Physician providing obstetrical care should be encouraged to obtain temporary, patient-specific exemptions to prescribe methadone well in advance of patient admission.
4. MMT physicians should encourage breastfeeding during MMT (unless otherwise contraindicated), as methadone levels are low in breast milk and MMT reduces the symptoms of Neonatal Abstinence Syndrome (NAS).
5. Plans should be made well in advance for continuation of MMT during in-hospital perinatal care.
6. Physicians should consider increased or split doses in the third trimester for patients who experience early withdrawal due to changes in their metabolism of methadone.
7. Postpartum maternal methadone requirements usually drop. The dose may need to be decreased by 5 to 10 mg weekly until a new stable dose is reached. Following the reduction in dose, split doses may no longer be required.
8. The MMT physician may need more frequent contact with the patient during the immediate postpartum period. This may include face-to-face visits, telephone or email contact.

19. Special Situations: Concurrent Diseases

In general, priority should be given to patients where the risks of ongoing illicit drug use by the individual are substantial. Concurrent medical conditions that may be considered to elevate risk include HIV, Hepatitis C or serious psychiatric illnesses.

The role of MMT in preventing infection with HIV is well-documented. HIV positive patients with an Opioid Use Disorder benefit from enhanced social, psychological and physiological stability during MMT. Their overall MMT and HIV treatment and compliance is enhanced.

Standards

1. Risks to the individual, society and public health must be evaluated when considering priority access to MMT.

In general, priority should be given to patients where the risks of ongoing illicit drug use by the individual are substantial.

Guidelines

1. Some medications used for the treatment of HIV/AIDS can affect serum methadone levels. Consultation with a knowledgeable physician or pharmacist is recommended. Adjustments to methadone dosage should follow the standards and guidelines described in section 7(A) *Dosages: Initiation Phase* and section 7(B) *Dosages: Maintenance Phase*.
2. Daily observed anti-retroviral treatment can be linked to daily witnessed ingestion of methadone and can assist in the patient's adherence with a potentially difficult treatment regimen.

20. Suboxone

Health Canada has released Suboxone® for the substitution treatment of opioid drug dependence in adults. Suboxone® combines the partial agonist **buprenorphine**, a proven therapy for opioid dependence, and the opiate antagonist **naloxone**, which limits intravenous misuse and the potential for diversion. The naloxone component of Suboxone® has limited sublingual and oral bioavailability, and is inactive when Suboxone® is taken as prescribed.

Although it is not felt that Suboxone® will replace methadone for the treatment of opioid dependence, there are situations when this treatment modality might be preferred. Suboxone® sublingual tablets should only be prescribed by physicians who have experience in substitution treatment of opioid drug dependence. For this reason, Suboxone® may only be prescribed following the Bylaws in **Appendix U**.

Standards

1. Physicians must have completed the online education module by Schering-Plough Canada available at www.suboxonecme.ca. On completion of this module the physician must submit the post course certificate to the CPSS.
2. Physicians must have some training and interest in addiction medicine.
3. Suboxone prescriptions must be written on the physician's personalized prescription pad, or by CPSS approved electronic prescribing, unless dispensed from a hospital pharmacy for in-patient use.
4. Prescriptions must specify all of the following:
 - i. Start/end dates
 - ii. Days of the week to be supervised by daily witnessed ingestion (DWI)
 - iii. Carried doses (with the number and days of week that are to be given as take-home doses specified)
 - iv. Suboxone dose written in numbers
 - v. Any special instructions and extraordinary situations
 - vi. All suboxone prescriptions **must be** faxed or sent electronically to the pharmacy

Guidelines

1. Daily witnessed ingestion (DWI) for the first two months or until such time as stability is established by the usual criteria.
2. Initiating Physicians should make reasonable efforts to provide non-pharmacological support to their patients (i.e.: pharmacy, addiction services, counselling, etc.).
3. Patient assessment for admission to an ODT (opiate dependency program) is the same as for MMT – see chapter 5.
4. It is recommended that physicians follow the CAMH Clinical Practice Guideline for Buprenorphine/Naloxone for Opioid Dependence at:
https://www.cpso.on.ca/uploadedFiles/policies/guidelines/office/buprenorphine_naloxone_gdlns2011.pdf

Emergency physicians are reminded that patients with a Suboxone® overdose may present to the emergency department with an opiate toxidrome unresponsive to Narcan®.

Appendices



Appendix A

Important Information about Methadone Maintenance Treatment for all Physicians

The goal of MMT is to provide safe, effective and consistent treatment for individuals with opioid dependence. MMT is one component of a comprehensive treatment program for an opioid dependent patient.

Methadone is an oral long-acting synthetic opioid which is effective in treating both opioid dependence and for analgesic purposes. It is rapidly absorbed with a long half-life with the potential for accumulation which can lead to sedation, respiratory depression and death. This risk is greater when methadone is combined with alcohol, sedatives or other opioids. It is an important medication but it must be used cautiously and titrated individually for each patient.

For these reasons, there are requirements that physicians must meet before receiving authorization from Health Canada to prescribe methadone. To prescribe methadone for opioid dependence or for analgesia, physicians must be exempted under Section 56 of the *Controlled Drugs and Substances Act* which requires the approval of the College of Physicians & Surgeons of Saskatchewan (CPSS).

For information on the CPSS Methadone Program and application process and requirements, please see the CPSS website at www.cps.sk.ca.

Other important information about methadone:

- Risk of methadone overdose is highest in the early initiation stage
- A single dose of methadone may be fatal in an opioid naive individual
- Methadone can prolong the QTc interval and must be used cautiously in patients who are at risk of developing arrhythmias
- Methadone is metabolized by the cytochrome P450 system and physicians must be aware of potential drug interactions with methadone
- Physicians must access PIP viewer Prescription Review Program data to assist with patient care
- Random Urine Drug Screening is an integral part of routine MMT
- Missed doses must be managed carefully as tolerance to methadone may be rapidly lost and can result in unexpected overdose
- Open and ongoing communication between the physician, pharmacist and other treatment providers is essential to reduce the risk of harm

Appendix B

Drug Interactions with Methadone

This appendix outlines how methadone interacts with a variety of prescription medications.

It is important to note that new prescription drugs are introduced frequently, and as a result, this may not be a comprehensive list of prescription medications that interact with methadone.

NOTE: Physicians unsure of the potential interaction between methadone and other medications should contact a pharmacist.

	Increased Methadone Effect	Decreased Methadone Effect	QTc Prolongation	Serotonin Syndrome	Comments about Interaction
Anti-Infective					
<i>Antibacterials</i>			Azithromycin	Only a concern with systemic formulations (No interaction with topical/ophthalmic formulations)	
			Bedaquiline		
			Ciprofloxacin		
			Clarithromycin		
			Erythromycin		
Fusidic Acid					
			Gatifloxacin		
			Gemifloxacin		
			Levofloxacin		
				Linezolid	
			Moxifloxacin		
			Norfloxacin		
			Ofloxacin		
			Sprafloxacin		
			Telavancin		
			Telithromycin		
<i>Antifungals</i>		Fluconazole			
		Itraconazole	Itraconazole		
		Ketoconazole	Ketoconazole		
		Posaconazole	Posaconazole		
		Voriconazole			
<i>Antimalarials</i>			Artemether		
			Chloroquine		
			Halofantrine		
			Lumefantrine		
			Mefloquine		
			Quinine		
<i>Antiretrovirals</i>		Abacavir			
		Amprenavir			
		Atazanavir			
		Boceprevir	Boceprevir		Monitor methadone concentrations (May increase or decrease serum methadone levels)
		Efavirenz			
		Etravirine			
		Fosamprenavir			
		Lopinavir			
		Nelfinavir			
		Nevirapine			
		Rilpivirine			
		Ritonavir			
		Saquinavir	Saquinavir		
		Telaprevir			

		Increased Methadone Effect	Decreased Methadone Effect	QTc Prolongation	Serotonin Syndrome	Comments about Interaction
			Tipranavir			
			Darunavir			
			Delavirdine			
	Antituberculars		Rifampin			
			Rifapetine			
Antiviral				Amantadine		
				Foscarnet		
		Peginterferon Alpha-2				
Antihistamine				Astemizole		
				Terfenadine		
		Cimetidine				
Antineoplastic					Procarbazine	
				Eribulin/Halaven		
		Lapatinib		Lapatinib		Inhibition of CYP 3A4 mediated metabolism of methadone AND additive QT interval prolongation effects
		Nilotinib		Nilotinib		
				Pazopanib		
				Sunitinib		
				Soranfenib		
				Crizotinib		
				Dasatinib		
			Dabrafenib			Seek alternative drug therapy. If concomitant use can not be avoided, monitor closely for diminished therapeutic effects of methadone
		Thiotepa				Increases plasma concentrations of methadone
				Toremifene		
				Vandentanimb		
Antiparkinson				Apomorphine		
	Dopamine Agonists			Arsenic Trioxide		
				Amantadine		
	Monoamine Oxidase Inhibitors	Rasagiline		Rasagiline		Combining this MAO-I with methadone is contraindicated
Benign Prostatic Hyperplasia					Selegiline	
	Alpha-1 Blockers			Alfuzosin		
Cardiac				Dronedaron		
	Antiarrhythmics			Amiodarone		
				Flecainide		
				Ibutilide		
				Disopyramide		
				Procainamide		
				Propafenone		
				Quinidine		
				Ranolazine		
				Dofetilide		
	Beta Blockers			Sotalol		
	Ca++ Channel Blockers		Isradipine			

		Increased Methadone Effect	Decreased Methadone Effect	QTc Prolongation	Serotonin Syndrome	Comments about Interaction
			Verapamil			
Diuretics				Furosemide		
				Hydrochlorothiazide		
				Indapamide		
Electrolyte Supplements						
			Ammonium Chloride	Sodium Phosphate		
Ethanolamine Derivative						
		Carbinoxamine				
Erectile Dysfunction						
	Phosphodiesterase-5 Enzyme Inhibitors			Vardenafil		
	Enzyme Inhibitors					
Gastrointestinal						
	Anorexiant				Lorcaserin	
	Antacids	Cimetidine				Case report of severe respiratory depression with combined use (may not be clinically significant). May be used concurrently in some cases.
				Famotidine		
	Antiemetics			Granisetron		
				Ondansetron		
				Dolasetron		
				Droperidol		
		Meclizine				Additive CNS depressant / respiratory depression effects
	Prokinetics			Cisapride		
				Domperidone		
Neurological						
	Anticonvulsants		Carbamazepine			
			Fosphenytoin			
				Felbamate		
			Phenytoin			
		Perampanel				May potentiate impaired cognitive and motor effects
	Migraine				Almotriptan	
Psychiatric						
	Antidepressants			Amitriptyline	Duloxetine	
				Amoxapine	Selegiline	
				Citalopram	Isocarboxazid	
				Ecitalopram		
				Imipramine	Phenelzine	
				Nortriptyline		
				Protryptiline		
		Desipramine		Desipramine		
			Desvenlafaxine			No action required. Monitor patient
		Doxepin		Doxepin		
		Fluvoxamine				
				Fluoxetine		
		Clomipramine		Clomipramine		Increased risk of constipation and urinary retention

		Increased Methadone Effect	Decreased Methadone Effect	QTc Prolongation	Serotonin Syndrome	Comments about Interaction
		Thiethylperazine	Dabrafenib			Addictive sedation and respiratory depressant effects
		Thioridazine				Addictive sedation and respiratory depressant effects
		Chlorpromazine		Chlorpromazine		Enhances the hypotensive effect of methadone
	<i>Sedatives/Hypnotics</i>			Chloral Hydrate		
		Fospropofol				Additive sedative and cardiorespiratory effects (reduction in dose of one or both drugs may be necessary)
Opioids						
	<i>Opioid Antagonists/Partial Agonists</i>		Buprenorphine			May result in precipitation of withdrawal symptoms
		Tapentadol				Increase in CNS and respiratory depression
			Butorphanol			May result in precipitation of withdrawal symptoms
			Naltrexone			May result in precipitation of withdrawal symptoms
			Nalbuphine			May result in precipitation of withdrawal symptoms
			Pentazocine			May result in precipitation of withdrawal symptoms
			Dezocine			May result in precipitation of withdrawal symptoms
	<i>Opioid Agonists</i>	Fentanyl				
Urologic						
	<i>Anticholinergics (for incontinence)</i>			Solifenacin		
Abortifacient						
		Mifepristone		Mifepristone		
Herbal Drugs						
		Cat's Claw	St. John's Wort			
		Chamomile				
Food						
		Grapefruit Juice				Monitor for the increased effect of methadone
		Ethanol				Avoid the concomitant use of alcohol and methadone. Advise patients to avoid this combination, due to potential CNS depressant effects

	Increased Methadone Effect	Decreased Methadone Effect	QTc Prolongation	Serotonin Syndrome	Comments about Interaction
Respiratory					
			Formoterol Salmeterol		
Other					
			Octreotide		
			Galantamine		
			Pasireotide		
			Vilanterol		
			Tetrabenazine		CNS agent, monoamine depletor
	Cyclobenzaprine				Enhances the adverse/toxic effect of methadone. Risk for constipation and urinary retention
			Perflutren Lipid		
		Dexamethasone			Dexamethasone is a CYP 3A4 inducer, therefore consider alternative steroid
			Tizanidine		
MS Therapies					
	<i>Sphingosine 1-Phosphate (S1P) Receptor Modulators</i>		Fingolimod		

Comments:

1. PADIS has compiled this list of medications based on the current research and resources available (see reference list). No list is all inclusive and it is conceivable a medication which interacts with methadone or causes QTc prolongation may not appear on the list.
2. The cytochrome P450 system plays an important role in drug interactions involving methadone. Methadone is an inhibitor of CYP 2D6 and a substrate of CYP 3A4,5,7, and CYP 2B6. Consequently inhibitors of CYP 3A4, 5, or 7 will result in elevated methadone levels.
3. Management of potential drug interactions requires clinical judgment with consideration of drug and patient specific factors. In some cases, no specific action may be required, while in other cases close monitoring and/or changes in drug therapy might be warranted when an interaction is noted.

Practitioners wanting more information on the nature of these drug interactions are encouraged to call PADIS (Poison and Drug Information Services) at:

1-866-454-1212 (within Saskatchewan)

Appendix C

Key Indicators of Stability and Instability

Indicators of Stability

The patient's level of stability and evaluation of the benefits of MMT are based on improvements in all areas of a patient's life. The following are some of the indicators of patient stability. These indicators should be considered when:

- *Planning a transfer of care from the Initiating Physician to a Maintaining Physician*
- *A patient has requested carries and/or a non-crystalline suspension of methadone*
- *A patient is considering a voluntary withdrawal from methadone*

It is important to note that in many cases, while a patient's dose can be stable and effective, the patient themselves may never be considered truly stable.

Methadone Dosage and Use of Other Substances Indicators

- Reported suppression or elimination of opioid withdrawal symptoms
- Reported reduction or elimination of craving for opioids
- Reported and documented absence of over-sedation or euphoria on current dosage
- Reported evidence of the reduction or elimination in the number of injection drug-use events
- Demonstrated awareness of resources to obtain clean injection apparatus and knowledgeable in proper cleaning and non-sharing of equipment
- Demonstrated knowledge of the serious health consequences of CNS depressant use when combined with methadone
- Reported management of methadone related side effects
- Evidence of unadulterated urine samples that are absent of prescribed substances
- Demonstrated personal and social stability
- Reported sense of well-being
- Reported active avoidance of situations that are recognized triggers for relapse
- Abstinent social support systems identified and in place
- Demonstrated efforts to achieve positive lifestyle changes
- Positive supportive information from treatment team members
- Demonstrated mechanisms in place for the safety and storage of carries

Medical and Psychiatric Issue Indicators

- Documented stabilization of acute medical conditions
 - Established attendance for ongoing health care for chronic conditions
 - Demonstrated improvement in overall health status
 - Noted improved dental health and hygiene
 - Stable medical and mental health status
 - No reports of accidental overdose
 - The patient has an ongoing relationship with a primary care provider who has knowledge of or is the prescriber of the methadone
-

Basic Necessities Indicators

- Provisions made for food, clothing, housing and safety needs and financial assistance if necessary
 - Demonstrated management of basic personal care activities
 - Relatively stable and secure living conditions
 - Receipt of prenatal care
 - Documented established childcare resources
 - Transportation resources available
 - Documented stable source of income
 - Demonstrated involvement in productive activity: school, employment, volunteering
 - Reported involvement in healthy and safe leisure activities
-

Relationship Indicators

- Documented regular attendance for medication, UDS, counseling and medical appointments
 - Documented follow up with appropriate resources as per patient assessment and agreed upon treatment goals
 - Reported positive interactions with treatment team members
 - Reported maintenance of positive support systems
 - Reported absence of major conflict within family support system
 - Reported resolution of, or ongoing efforts to resolve, legal problems
 - Evidence of no illegal activities
-

Indicators of Instability

- Positive UDS
- Fraudulent urine specimen
- Missed appointments or DWIs
- Multiple doctoring
- Unstable and insecure living arrangements and social environment
- Unstable dosing pattern
- Pattern of missed doses
- Evidence of unstable medical psychiatric and social instability

Appendix D

Diagnostic Criteria for Substance Dependence

*Reprinted with permission from the Diagnostic and Statistical Manual of Mental Disorders IV, Text Revision, Copyright 2000, American Psychiatric Association.**

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. The need for markedly increased amounts of the substance to achieve intoxication or the 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 a 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 a 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 physicians or driving long distances), use the substance (e.g., chain smoking), or recover from its effects.
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 (e.g., current cocaine use despite recognition of cocaine-induced depression, or continued drinking despite recognition that an ulcer was worsened by alcohol consumption).

Specify if:

With Physiological Dependence: evidence of tolerance or withdrawal (e.g., either item 1 or 2 is present).

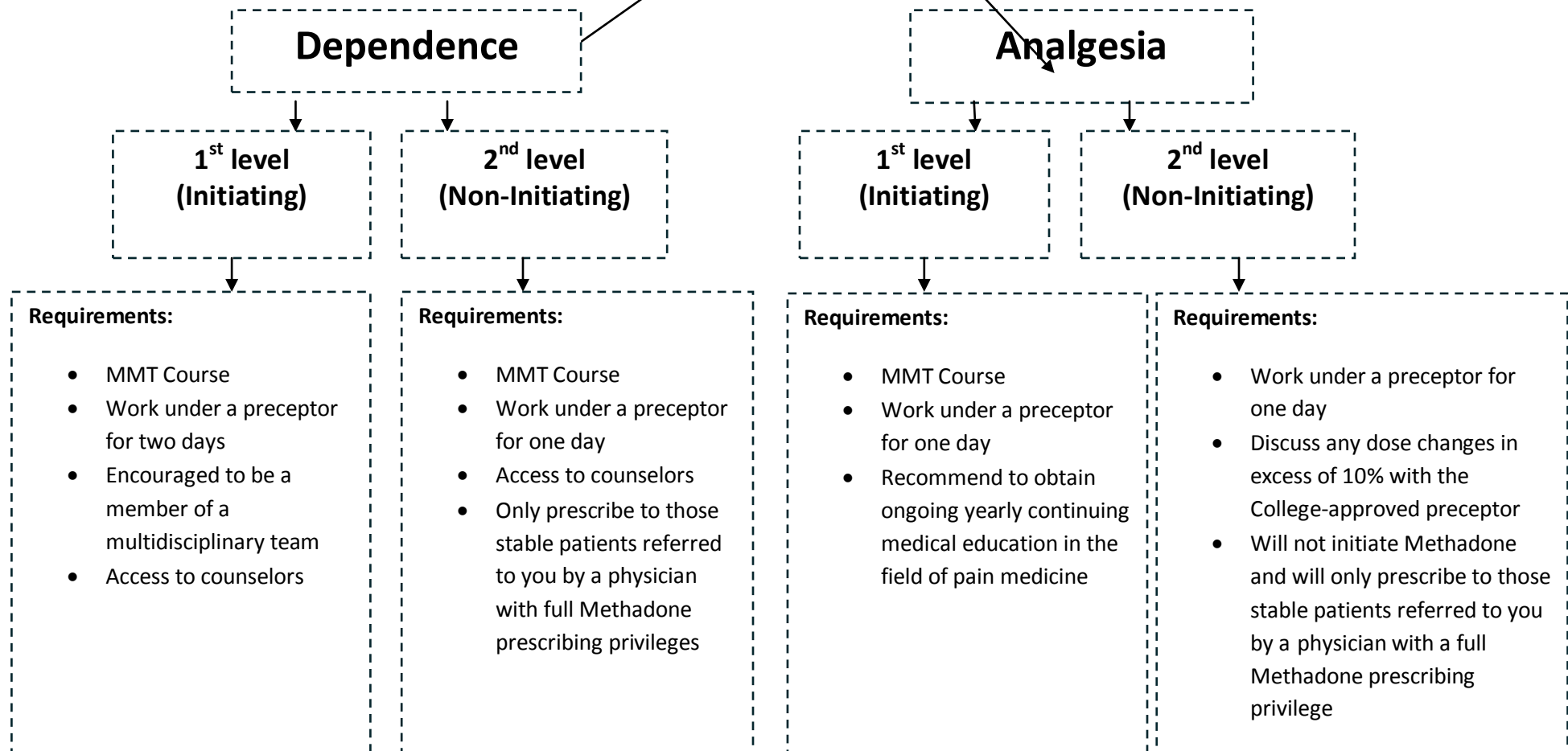
Without Physiological Dependence: no evidence of tolerance or withdrawal (e.g., neither item 1 nor 2 is present).

**Please note that in May 2013, the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders, DSM-V, was published. The section Substance Use Disorders now combines substance abuse and substance dependence into a single disorder measured on a continuum from mild to severe. Each specific substance is addressed as a separate use disorder (e.g. opioid use disorder). For more information on the revised chapter of "Substance Use Disorder", please see the following link:
<http://www.dsm5.org/Documents/Substance%20Use%20Disorder%20Fact%20Sheet.pdf>*



Appendix E

Methadone Exemption Process



Appendix F

Health Canada Methadone Exemption Application Form

Please find below the application form that physicians must fill out to request exemption for prescribing methadone (total 4 pages).

Methadone

Exemption Application

Application pour une exemption

1. IDENTIFICATION

Please Print / s.v.p. en lettres moulées

Applicant: Physician/ Médecin <input type="checkbox"/> Veterinarian/Vétérinaire <input type="checkbox"/> Dentist/Dentiste <input type="checkbox"/>			
Surname/ Nom:		Given Name/ Prénom:	
Licence(s)/ License(s):			
Specialty/Spécialité:			
Post Graduate Training/ Formation professionnelle:			
Primary Practice Address/Adresse du lieu d'exercice:	Institution:		
	Street/Rue:		
	Room/pièce:		
	City/Ville:		
		Province:	
		Postal Code/ Code postal:	
Telephone/Téléphone:		Fax/ télécopieur:	
E-mail Address/ Courriel:			
Mailing Address (if different from above)/ Adresse de correspondance (si différente)			
Language / Langue		English <input type="checkbox"/> Français <input type="checkbox"/>	

2. EXEMPTION

Indication:	Dependency / Dépendance <input type="checkbox"/> Analgesia / Analgésie <input type="checkbox"/>
Type:	New/ Nouvelle <input type="checkbox"/> Renewal/ Renouvellement <input type="checkbox"/> Cancellation / annulation <input type="checkbox"/>
Other/ Autre:	For one patient only/ pour un(e) patient(e) seulement <input type="checkbox"/> name of patient/ nom du/de la patient(e): Correctionnal Services/ Service correctionnel <input type="checkbox"/>

3. QUALIFICATIONS AND EXPERIENCE / QUALIFICATIONS ET EXPÉRIENCE

Please print/s.v.p. lettres moulées

Describe qualifications and experience with methadone (courses, seminars, conferences, etc)/ Décrire qualifications et expérience avec la méthadone (cours, séminars, conférences, etc.)	
Type of practice (solo or group)/ Type de pratique (seul/en groupe)	

4. DECLARATION

By, this and under the condition that the released information is treated confidentially, I consent to the release from the licensing authority of the province or provinces in which I am registered and entitled to practice, to the Office of Controlled Substances of information from my personal file pertaining to the review of my application to prescribe methadone or to any other action related to this request for an exemption

Par la présente, et sous réserve que soit respecté leur caractère confidentiel, j'autorise le Collège des médecins de la / des provinces où je suis enregistré à dévoiler au Bureau des substances contrôlées toute recommandation ou tout renseignement contenu dans mon dossier personnel susceptible d'être utile à l'étude de ma demande d'exemption à prescrire la méthadone ou toute autre action pouvant être prise en rapport avec cette demande d'exemption.

Signature:		Date:	

Please send the application to the address below:

**Methadone Programme
Evaluation and Authorization
Division Office of Controlled
Substances Health Canada
2nd Floor
123 Slater St
AL 3502B
Ottawa ON K1A 1B9**

A copy of the application may be faxed to (613) 952-8576, however, the original must be sent by mail.

For further information, please contact the Evaluation and Authorization Division at (613) 946-5139 or toll free at 1-866-358-0453, by fax at (613) 952-8576 or by e-mail at exemption@hc-sc.gc.ca

Veuillez faire parvenir la demande à l'adresse ci-dessous :

**Programme de la méthadone
Division de l'évaluation et autorisations
Bureau des substances contrôlées
Santé Canada
2^e étage
123, rue Slater
IA 3502B
Ottawa ON K1A 1B9**

Il est à noter qu'une copie de la demande peut être envoyée par télécopieur au (613) 952-8576;
l'original doit cependant être envoyé par la poste.

Pour plus d'information, veuillez communiquer avec la Division de l'évaluation et autorisations par téléphone au (613) 946-5139 ou sans frais au 1-866-358-0453, par télécopieur au (613) 952-8576 ou par courriel à exemption@hc-sc.gc.ca

Appendix G

Methadone Prescribing Policy Forms

Please fill out and sign the following policy form(s) applicable to you and return to the College of Physicians and Surgeons of Saskatchewan.

1. POLICY: METHADONE PRESCRIBING FOR INITIATING PHYSICIANS FOR OPIOID DEPENDENCE (ADDICTION)
2. POLICY: METHADONE PRESCRIBING FOR INITIATING PHYSICIANS FOR PAIN
3. POLICY: METHADONE PRESCRIBING FOR MAINTAINING (NON-INITIATING) PHYSICIANS FOR OPIOID DEPENDENCE (ADDICTION)
4. POLICY: METHADONE PRESCRIBING FOR MAINTAINING (NON-INITIATING) PHYSICIANS FOR PAIN



POLICY: METHADONE PRESCRIBING FOR INITIATING PHYSICIANS FOR OPIOID DEPENDENCE (ADDICTION)

Physicians authorized to prescribe Methadone in the management of opioid dependence (addiction) are required to:

1. Attend a one day Methadone workshop for physicians approved by the College of Physicians and Surgeons of Saskatchewan;
2. Work under the preceptorship of a Methadone prescriber in Saskatchewan for one or two days prior to seeing patients in your own practice;
3. Strongly encouraged to be a member of a multidisciplinary treatment team that offers medical and psycho-social assessment;
4. Have access to counseling and aftercare services;
5. Have adequate provision for appropriate Methadone dispensing, administration, and urine drug testing according to Health Canada guidelines and the Saskatchewan Guidelines for the Treatment of Opioid Addiction/Dependence with Methadone;
6. Strongly encouraged to be a member of the Canadian Society for Addiction Medicine or the American Society for Addiction Medicine and/or the Canadian Pain Society;
7. Recommended to obtain five hours per year of continuing medical education in the field of addiction medicine;
8. An interview with the registrar of the CPSS or his/her designate may be required.
9. Agree in writing to an audit of your Methadone Practice by the College of Physicians and Surgeons of Saskatchewan as may be required by the College.

I, Dr. _____ have received, read and agree with the policy of Council dated March 21, 2014 with respect to my request to become a Methadone prescriber for the purpose of treating addiction/dependence. I will comply with this policy if I am granted a exemption by Health Canada.

Sign _____

Print _____

Date _____



POLICY: METHADONE PRESCRIBING FOR INITIATING PHYSICIANS FOR PAIN

Physicians authorized to prescribe Methadone in the management of pain are required to:

1. Attend a Methadone workshop for physicians approved by the College of Physicians and Surgeons of Saskatchewan;
2. Work under the preceptorship of a Methadone prescriber for pain in Saskatchewan for one day prior to seeing patients in your own practice;
3. Recommended to obtain ongoing yearly continuing medical education in the field of pain medicine;
4. Have adequate provision for appropriate Methadone dispensing, administration, and urine drug testing according to Health Canada guidelines;
5. Strongly encouraged to be a member of the Canadian Society for Addiction Medicine or the American Society for Addiction Medicine and/or the Canadian Pain Society
6. An interview with the registrar of the CPSS or his/her designate may be required; and
7. Agree in writing to an audit of your Methadone Practice by the College of Physicians and Surgeons of Saskatchewan as may be required by the College.

I, Dr. _____ have received, read and agree with the policy of Council dated March 21, 2014 with respect to my request to become a Methadone prescriber for the purpose of treating pain. I will comply with this policy if I am granted a exemption by Health Canada.

Sign_____

Print_____

Date_____



POLICY: METHADONE PRESCRIBING FOR MAINTAINING (NON-INITIATING) PHYSICIANS FOR OPIOID DEPENDENCE (ADDICTION)

Physicians authorized to prescribe Methadone in the management of opioid dependence (addiction) in stable patients are required to:

1. Attend a one day Methadone workshop for physicians approved by the College of Physicians and Surgeons of Saskatchewan;
2. Work under the preceptorship of a Methadone prescriber in Saskatchewan for one day prior to seeing patients in your own practice;
3. Have access to counseling and aftercare services;
4. Recommended to obtain ongoing yearly continuing medical education in the field of pain medicine;
5. Have adequate provision for appropriate Methadone dispensing, administration, and urine drug testing according to Health Canada guidelines and the Saskatchewan Guidelines for the Treatment of Opioid Addiction/Dependence with Methadone;
6. Strongly encouraged to be a member of the Canadian Society for Addiction Medicine or the American Society for Addiction Medicine;
7. Only prescribe to those stable patients referred to you by a physician with full methadone prescribing privileges;
8. Continue urine testing of the patient(s); and
9. Agree in writing to an audit of your Methadone Practice by the College of Physicians and Surgeons of Saskatchewan.

I Dr. _____ have received, read and agree with the policy of Council dated March 21, 2014 with respect to my request to become a Methadone prescriber for the purpose of treating addiction/dependence in stable patients. I will comply with this policy if I am granted a exemption by Health Canada.

Sign _____

Print _____

Date _____



POLICY: METHADONE PRESCRIBING FOR MAINTAINING (NON-INITIATING) PHYSICIANS FOR PAIN

Physicians authorized to prescribe methadone in the management of pain in stable patients are required to:

1. Work under a College-approved preceptor with full methadone prescribing privileges in Saskatchewan;
2. Discuss any dose changes in excess of 10% with the College-approved preceptor;
3. Have adequate provision for appropriate methadone dispensing, administration, and urine drug testing according to Health Canada guidelines;
4. Strongly encouraged to be a member of the Canadian Society for Addiction Medicine or the American Society for Addiction Medicine;
5. Agree in writing to an audit of your methadone practice by the College of Physicians and Surgeons of Saskatchewan;
6. Will not initiate methadone and will only prescribe to those stable patients referred to you by a physician with full methadone prescribing privileges; and
7. Continue urine testing of the patient(s).

I, Dr. _____ have received, read and agree with the policy of Council dated March 21, 2014 with respect to my request to become a Methadone prescriber for the purpose of treating pain in stable patients. I will comply with this policy if I am granted a exemption by Health Canada.

Sign _____

Print _____

Date _____

Appendix H

Application for Temporary Methadone Exemption to Prescribe Methadone in a Hospital or Correctional Facility

Temporary Methadone Exemptions

TO:

National Compliance and Exemption Division /
Division de la conformité et des exemptions nationales
Office of Controlled Substances / Bureau des
substances contrôlées
Health Canada / Santé Canada
123 Slater St., Ottawa ON K1A 1B9
Government of Canada / Gouvernement du Canada

Phone: 1-866-358-0453

FAX: 613-952-8576

Email: exemption@hc-sc.gc.ca

Request for temporary authorization for prescribing methadone for patients already on methadone prior to admission to the hospital.

Physician's Full Name:	
Physician's License #:	
Physician's Phone #:	
Name and Address of Hospital:	
Patient's Full Name:	_____
	Male <input type="checkbox"/> or Female <input type="checkbox"/>
Methadone Indication:	Addiction <input type="checkbox"/> or Analgesia <input type="checkbox"/>
Methadone Dose	
Date requesting physician wrote prescription: (Not the date the prescription is to start, unless they are the same)	
Pharmacy Phone #:	
Name of Person calling/faxing/e-mailing:	
Verbal Authorization from Health Canada Given to: (for Health Canada purposes)	
Date Verbal Authorization Given:	
Time Verbal Authorization Given: (for Health Canada purposes)	

Appendix I

Sample Dispensing Schedule-Methadone Maintenance-Electronic sample

New/Pending Prescription

Template: Methadone Start ☐ Save as template

Prescription Type Simple Rx ☒ Continuous ☐ Short Term

Drug Name* METHADONE HCL 10 mg/mL CONCENTRATE, OP

Generic Drug Name METHADONE HCL

	Dosage	Frequency	PRN	Duration	
	30 mg	QD	<input type="checkbox"/>	3 Day(s)	✗
Then ▾	40 mg	QD	<input type="checkbox"/>	2 Day(s)	✗
Then ▾	50 mg	QD	<input type="checkbox"/>	1 Day(s)	✗
Then ▾	60 mg	QD	<input type="checkbox"/>	1 Day(s)	✗ +

The recommended daily dose is 0.25-12 mL

Patient Instructions
 Drink contents of one bottle each day.
 (Prescription start and end dates at bottom of)

Pharmacy Instructions ☐ Do Not Adapt
 Carry days: Sat Sun and stat holidays
 Pharmacy: [[Giant Tiger Pharmacy]][Harbour Pharmacy]]

Quantity* mg **Refills** **Route*** Oral ▾

Indication opioid type dependence 304.0

☒ Allow Substitutions ☐ Trial Dispenses Authorized
☐ Compliance Package Req'd ☐ Confidential

Effective Date	Start Date*	End Date*	Expiry Date
dd-MMM-yyyy 11-Dec-2014	dd-MMM-yyyy 11-Dec-2014	dd-MMM-yyyy 18-Dec-2014	dd-MMM-yyyy 11-Dec-2015

Ordering Provider* Groves, Sean ▾

Save Approve Approve & Preview Preview 8.5x11 ▾

Jill J Test
 Age: 32 Phone: (306) 555-5555

Allergies to Medication and Significant Reactions

	Allergy	Mild	Other
Penicillins			
No Non-Drug Allergies Known			
No Drug Intolerances Known			
Lactose Intolerant			Other, Diarrhea

Notes Add

Observations **Template:**

Methadone-Dispensing Pharmacies
 Giant Tiger Pharmacy (La Ronge):
 Ph: (306) 425-2252 Fax: (306) 425-3082
 Harbour Pharmacy (La Ronge):
 Ph: (306) 425-5566 Fax: (306) 425-5523
 Medicenter, 2nd Ave W. Prince Albert:
 Ph: (306) 763-2022 Fax: (306) 764-0602
 CO-OP Pharmacy #2, Prince Albert:
 Ph: (306) 953-6249 Fax: (306) 922-5994
 Medi-Cross Pharmasave, 1316 Central Ave, Prince Albert:
 -closed Sun
 Ph: (306) 922-1118 Fax: (306) 763-8118
 Victoria Square Compounding Pharmacy, Prince Albert
 Ph: (306) 922-8959 Fax: (306) 763-6543
 Mayfair Drugs 33rd St. W Saskatoon
 -open Sat and Sun
 Ph: (306) 653-4357 Fax: (306) 653-7730
 Medicine Shoppe, 103 Hospital Dr. Saskatoon:
 -closed Sat, Sun
 Ph: (306) 655-4045 Fax (306) 655-4048
 Medicine Shoppe (for Caulder), #30-1501, 8th St.E, Saskatoon
 limited hours Sat, closed Sun
 Ph: (306) 931-1222 Fax: (306) 931-0002
 Medicine Shoppe, 20th St. and Ave D, Saskatoon
 Ph: (306) 382-1890, Fax: (306) 242-4913
 Rexall Drug Store, 1530-20th St. W., Saskatoon, open Sundays
 Ph: (306) 652-6822 Fax: (306) 652-6172

Sample Dispensing Schedule – Methadone Maintenance-Paper Sample

<p>(sticker)</p>	<p>Dr. B Sample Saskatoon Clinic 111 10th Street N Saskatoon, Saskatchewan Canada S70 1G5 Tel: (306) 222-1111 FAX: (306) 222-1234</p>
<hr/>	
<p><input type="checkbox"/> Mayfair Drugs <input type="checkbox"/> Rexall <input type="checkbox"/> Broadway <input type="checkbox"/> MS 8th <input type="checkbox"/> MS 20th & D <input type="checkbox"/> MS 20th & Q</p>	
<p><input type="checkbox"/> Shoppers 7th & 33rd <input type="checkbox"/> Shoppers B & T <input type="checkbox"/> _____</p>	
<p><i>Prescriber Certification:</i></p> <ul style="list-style-type: none">▪ This prescription represents the original prescription drug order.▪ The pharmacy address noted above is the only intended recipient for dispensing.▪ This prescription will be securely filled and not transmitted elsewhere at another time.	
<p><i>Prescription valid only for 3 days from date of issue/start date.</i> <i>Prescription is void if not faxed from Methadone Assisted Recovery Program</i></p>	
<p><u>RX:</u></p>	
<p>Methadone _____ mg po od</p>	
<p>Start Date: _____</p>	
<p>End Date: _____</p>	
<p>Witness: Daily unless closed or Mon – Tue – Wed – Thur – Fri – Sat – Sun</p>	
<p>Carry: Mon – Tue – Wed – Thur – Fri – Sat – Sun</p>	
<hr/>	
<p>Other Medications: _____</p>	
<div style="display: flex; justify-content: space-between;"><div>Signature: _____ Prescriber ID # _____</div><div>Next Appointment: _____</div></div>	

Methadone Maintenance Treatment Agreement – Sample

This is an agreement for Methadone Maintenance Treatment between

_____ and _____
(patient/client) (physician/clinic)

1. I understand that the methadone maintenance doctor will perform an assessment and medical examination, will establish the diagnosis of an Opioid Use Disorder, and will prescribe methadone if it is considered appropriate and safe for me.
2. I agree to take methadone under medical direction, to assist me in dealing with my opioid dependence. I have tried or considered other treatment options. I understand that methadone is generally a long-term treatment.
3. I understand that I will become physically dependent on methadone and will experience withdrawal symptoms if I suddenly stop taking it.
4. I understand that methadone may cause drowsiness especially when starting treatment or when I receive increases in my dose. As a result, this may impair my ability in operating motor vehicles.
5. I am aware that the Methadone Maintenance Treatment team may consist of several professionals including doctors, pharmacists, nurses, counsellors, social workers and support staff, who will be in close communication with each other to assure safety in my care.
6. For safety reasons, the methadone doctor will contact my doctor in order to ensure that each is fully aware of the treatment being provided by the other.
7. I recognize that counselling and other addiction assessments are available to assist me in dealing with the psychological and social difficulties that can accompany problems of opioid dependence.
8. I understand that when on methadone, taking other narcotics (e.g. Tylenol #1, 2, 3, 4, codeine, morphine, oxycodone, hydromorphone, fentanyl) and/or other substances, especially alcohol and benzodiazepines (Ativan, Lectopam, Restoril, Rivotril, Serax, Valium, Xanax) could be dangerous, especially if taken in excess. These drugs may interact with methadone and cause overdose, coma, or even death.
9. I agree that when I see another doctor or dentist, I will inform them that I am taking methadone. I agree to provide copies of any prescriptions obtained by me for medical reasons to be reviewed by the methadone maintenance doctor. The treatment team, if necessary, may do follow up with the prescription doctor. I understand that in certain cases, the methadone prescribing doctor might not feel comfortable with prescribing methadone to me in combination with other medications that I have been prescribed.
10. I understand that initially I will be required to consume methadone daily under the direct observation of a pharmacist or other qualified health care professional. Even after carry privileges have been granted (see #11), I will still be required intermittently to drink a dose

- of my methadone under direct pharmacy or health care supervision.
11. I am aware that I may be granted a limited number of take-home carries of methadone once I have demonstrated sufficiently that I am no longer continuing to use illicit and/or other non-prescribed drugs and have made obvious positive and stable lifestyle changes. Carries may also be considered for specific reasons such as work/school. Carry privileges may not be provided if I miss clinic or medical appointments, not provide urine samples for toxicology testing when requested, misuse or divert my carries, as examples.
 12. I realize that methadone can be fatal to others and will keep the methadone in my possession secure.
 13. I understand that I must satisfy the doctor prescribing methadone for me that I have made all necessary arrangements to ensure the safety of myself and others, where carries are involved. This may include transporting and storing carries in a locked box or other secure container.
 14. I realize that if I use my carries inappropriately, further carries will be suspended.
 15. I understand that missed doses will be recorded on my file and will result in actions to ensure my safety. These may include a reduction or suspension of my dosage until I am reassessed.
 16. I understand that the College of Physicians and Surgeons of Saskatchewan (CPSS), Prescription Review Program (PRP) monitors methadone prescriptions, and as such my prescription information will be recorded. This may involve the occasional review of my file by an external reviewer to ensure that my medical treatment is delivered in a safe manner. None of the information on my file will be given to anyone outside this review process.
 17. I understand that all clinical information on my file is confidential and will not be released to anyone without my written consent, except where staff believes there is a medical emergency and intervention is required by clinical staff and/or other persons.
 18. I agree to attend ongoing medical examinations, urine drug testing, other laboratory testing, and counselling appointments when required.
 19. A witnessed collection may be required in the following examples: an invalid sample based on its temperature, results or repeated missed appointments for the required urine drug testing.
 20. I agree to behave in a respectful manner towards all treatment team members and other patients/clients.
 21. I understand that any violence, threats of violence, verbal abuse or disruptive behaviour, or diversion of my methadone, will not be tolerated and could result in my termination from treatment.
 22. I understand that my dose may be decreased and then stopped if it is determined that I am not benefitting from Methadone Maintenance Treatment. Involuntary withdrawal from methadone may be more rapid if it is medically indicated for my safety or the safety of others.
 23. I understand that it is my responsibility to be aware that my prescription is coming due and take the appropriate steps (e.g. make an appointment to see my doctor) to get it filled.

The undersigned fully understands the conditions of this agreement, agrees to the provisions in full and has received a copy of this document.

Patient/client signature

Witness signature

Date

Date

Addendum to Methadone Maintenance Treatment Agreement

I understand that the pharmacist and other staff at the pharmacy are a part of the treatment team.

I will ensure my behaviour is always respectful and honest towards this important part of the team, and I will not engage in any activities in or around the pharmacy that may have a negative impact on the pharmacy, its staff, clients or customers.

Patient signature

Pharmacy representative signature

Date

Pharmacy representative name and title

Appendix K

Initial Patient Assessment Form – Sample

Name: _____

Age: _____ Date: _____

Expectations of/Goals for MMT – Why treatment?

Drug of choice:

Second drug of choice:

Addiction history

[c = current (past three months); p = past] Include all: opioids, alcohol, benzodiazepines, cocaine, amphetamines, prescription stimulants, hallucinogens, solvents, tobacco, cannabis, steroids

Substance/first use		Route/progression/typical amount/frequency	Last use
	c		
	p		
	c		
	p		
	c		
	p		

How drug use started: _____

How opioid use started: _____

Length of opioid addiction: _____

Drug attitudes

What patient likes about opioid use: _____

What patient dislikes about opioid use: _____

Perceived control over drug use: yes _____ no _____

Triggers: _____

Drug behaviour

Needle injections a day: current _____ at peak use _____

Needle source: _____

Opioid source: current _____ at peak use _____

Opioid prescriptions: current _____
past _____

Money spent on drugs: current _____ at peak use _____

Source of money for drugs: current _____ at peak use _____

Typical day (*time getting, using, recovering from drugs*):

current _____

past _____

Risk behaviours (*needle sharing, crime, driving, safe sex, sex work*):

current _____

past _____

DSM Criteria

Need for increasing dose over time: yes _____ no _____

Used more than planned: yes _____ no _____

Drug overdoses: yes _____ no _____

Hospital admissions or other significant health consequences resulting from drug related illness:
yes _____ no _____

Presence of withdrawal symptoms (*dysphoria, insomnia, myalgia, lacrimation/rhinorrhea, sweating, piloerection, papillary dilation, nausea/vomiting/diarrhea*): _____

Addiction treatment

Attempts to cut down or stop: yes _____ no _____

How tried to cut down or stop: _____

Past treatment of addiction (*detox, structured treatment program, methadone, NA/AA*): _____

Plans for treatment of other current drug problems: _____

Longest period in full remission: _____

Factors involved in relapse: _____

Effects of drug use on life

Family: _____

Friends: _____

Crime: _____

Housing: _____

School: _____

Job: _____

Physical Health: _____

Mental Health: _____

History of behaviour addiction (*gambling, internet, exercise, shopping, sex, work, eating*):

Immunization (HAV, HBV) _____ Date _____

Current medications (prescribed, OTC, herbal, contraception, allergies): _____

Current MDs: _____

Current medical problems (including HIV, HCV, psychiatric): _____

Past history (admissions): _____

Past transfusions: _____

History of abuse: _____

Family history (*addiction, psychiatric, ischemic heart disease, hypertension, stroke, diabetes, cancer, respiratory (emphysema/COPD), neurologic (Parkinson's), liver*)

Father: _____

Mother: _____

Sister(s): _____

Brother(s): _____

In women

G: _____ P: _____ TA: _____ Miscarriage: _____ Adopted out: _____

First day of LMP: _____

Menstrual cycle characteristics: _____ Current contra

Social history

Financial: _____

Employment: _____

Education: _____

Drug plan: _____

Relationship: _____

Family: _____

Children: _____

Housing: _____

Legal: _____

Sexual: _____

Review of systems allergies

Skin: tattoos, piercing _____

Neuro: vision, weakness, headache, paresthesia _____

ENT:

CVS: edema, chest pain, palpitations _____

Resp: SOB, cough, smoking _____

GI: pain, swelling, constipation _____

MSK: arthralgia, myalgia _____

GU: hematuria, retention, LMP, birth control _____

Psych: depression, sleep, suicidal ideation, anxiety _____

Fatigue: _____

Weight: _____

Appetite: _____

Pain: _____

Mood: _____

Smoking: _____ PPD: _____ Pack years: _____

Examination

BP: _____

Weight: _____ BMI: _____

Height: _____

General appearance: _____

Pulse: _____

Skin: tattoos _____ piercings _____

Spiders/palmar erythema, jaundice: _____

Trackmarks: _____ ENT: _____

Eyes: pupil Size _____

Thyroid: _____

Teeth: _____

Adenopathy: _____

Chest: _____

CVS:

peripheral edema: _____

Abdomen: _____

Ascites: _____

Liver: _____

Spleen: _____

GU: _____ Testes: _____

MSK: _____ Dupuytren's: _____

Psych: _____ Depression: _____

Plan

- Discuss methadone benefits and drawbacks.
- Methadone - start date and dose: _____
- Initial blood work (CBC, Lytes, AST, ALT, GGT, TBili, ALP, Cr, BUN, Albumin, INR, PTT, FBG, Lipids: TC, TG, LDL, HDL, TSH)

- Pre-test counseling for HIV, Hep BsAg, Hep CAbs, VDRL/RPR +/-bHCG
- Contract signed
- Urine Toxicology Test
- Sign release of info for past records
- PIP ehealth viewer profile obtained
- Psychosocial support plan

Physician signature

Date

*** The information presented in this appendix was drawn from the College of Physicians and Surgeons of Nova Scotia: Methadone Maintenance Handbook: May 2012.*

Appendix L

Methadone Maintenance Clinical Note – Sample

Name: _____

Date: _____

Current Methadone Dose: _____ mg

Number of Take-home

Doses: _____

Missed doses: Yes _____ No _____

Psychological Issues Update:

Mood: Normal – Other _____

Sleep: Normal – Insomnia

Anxiety: Absent – Present

Energy: Normal – Other _____

Suicidal Ideation: Absent – Present – NA

Supervised UDS: O/E:

Methadone: _____ Cocaine:

_____ Opiates: _____

Benzodiazepines: _____

Oxycodone: _____

Creatinine: Normal/Abnormal _____

Interpretation of UDS _____ O/E:

Appearance: Alert – Intoxicated

Behaviour: Normal – Abnormal Gait:

Normal – Abnormal Speech: Normal

– Abnormal Eye contact: Normal –

Abnormal

Patient stated drug/alcohol use & route

Since last visit:

Opiates: Yes _____ no _____

Cocaine: Yes _____ no _____

Benzodiazepines: Yes _____ No _____

Alcohol: Yes _____ No _____

Other problematic drug use: Yes _____ No _____

Reported methadone sedation: Yes _____ No _____

Reported methadone withdrawal: Yes _____ No _____

Take-home dose safety issues discussed: Yes _____ No _____

Take-home dose locked up in a box: _____ No _____ – NA

Safe with take-home dose: Yes _____ No _____

Stable housing: Yes _____ No _____

Stable employment/social support: Yes _____ No _____

Reviewed dangers of methadone diversion:

Yes__ No__ – NA

Clinically stable: Yes _____ No _____

Opioid Cravings:

None – Mild – Moderate – Severe

Opioid Withdrawal:

None – Mild – Moderate – Severe

Opiate Withdrawal Symptoms:

None – Insomnia – Anxiety – Dysphoria – Nausea

– Diarrhea – Hot flashes – Irritability – Myalgia – Restlessness –

Rhinorrhea – Sneezing – Sweats – Yawning – Pupil dilated –

Malaise – Abdominal Cramping

– Piloerection

Timing of Withdrawal from Last Dose: _____

Counselling/Clinical Notes: _____

Plan:

Rx: Methadone _____ mg po od from _____ to _____

Take-home doses: M T W T F S S

for _____ week(s) RTC _____ day/week

Appendix M

Take-Home Dose Agreement-Sample

Patient Name (or identification sticker): _____

- I am aware that I am required to keep my medications in a lock box for safe storage
- I understand that carries will not be issued to me until I present proof (present the actual lockbox) to the pharmacist for him/her to see.
- I understand that being given carries is a privilege that is earned and that may be taken away if I violate my treatment agreement. Carries are the responsibility of the participant and will not be replaced if stolen, lost, spilled, or vomited.
- Regular carries on weekdays are only considered if there is a good reason to need them, such as work, school, volunteer, childcare responsibilities, or significant travel circumstances.
- Weekday carries will not be given for the first three months of entry or re-entry into the program, after release from prison, or loss of carries for any reason.
- Requests for carries on weekdays will not be considered if urine tests have not been free of illicit drugs for at least three months.
 - Eg. Requests for carries for a vacation will not be granted if drugs such as cocaine/morphine/Ativan (and other) are found on urine screens in the past three (3) months.
 - Exceptions may be made for true emergencies, though a case worker will have to verify the emergency before granting any carries.
- Requests for additional carries on weekdays require 48 hours' notice. Requests can be made in person at a regular scheduled visit or written on a form which is available at the front desk. A case worker may call you regarding this request.

Signed: _____ Date: _____

Witness Signature: _____

Witness Name: _____ Date: _____

Tapering Readiness Questions – Sample

When a patient indicates that he or she would like to leave treatment, a number of questions should be asked to determine if the person is ready to taper from methadone. Physicians should consider asking the patient the following questions:

1. Have you been abstaining from illegal drugs, such as cocaine and non-prescribed opioids and benzodiazepines?
2. Do you think you are able to cope with difficult situations without using drugs?
3. Are you employed or in school?
4. Are you staying away from people who use drugs and illegal activities?
5. Have you gotten rid of your “works”/“outfit”?
6. Are you living in a neighbourhood that doesn’t have a lot of drug use, and are you comfortable there?
7. Are you living in a stable family relationship?
8. Do you have non-drug-using friends that you spend time with?
9. Do you have friends or family who would be helpful during a taper?

10. Have you been participating in counselling that has been helpful?

11. Does your counsellor think you are ready to taper?

12. Do you think you would ask for help when you were feeling bad during a taper?

13. Have you been on methadone for a long time (> 1 year)?

14. Are you in good mental and physical health?

15. Do you want to get off methadone?

The more questions the patient can honestly answer in the affirmative, the greater the likelihood that he or she is ready to taper from methadone. Consider that each negative response represents an area that probably needs work to increase the odds of a successful taper.*

**Adapted from “Tapering Readiness Inventory” from Treatment of Opiate Addiction with Methadone: A Counselor Manual, U.S. Department of Health and Human Services (DHHS) SMA94-2061. Reproduced in S. Brummett, R. Dumontet, L. Wermuth, M. Gold, J.L. Sorensen, S. Batki, R. Dennis & R. Heaphy (1986), Methadone Maintenance to Abstinence: The Tapering Network Project Manual, University of California, San Francisco. Methadone Maintenance: A Counsellor’s Guide to Treatment, 242*

Appendix O

Opioid Withdrawal and Tolerance

MMT Physicians must be familiar with the clinical features of opioid withdrawal.

Opioid Withdrawal

Opioid withdrawal peaks at 2-3 days after the last use. Physical symptoms largely resolve by 5-10 days, although psychological symptoms can continue for weeks or months.

Serious complications of withdrawal include miscarriage, premature labour, suicide, and overdose or relapse due to loss of tolerance.

Opioid Withdrawal Signs and Symptoms		
Physical Symptoms	Psychological Symptoms	Physical Signs
Myalgia	Restlessness	Lacrimation
Abdominal cramps	Dysphoria	Rhinorrhea
Nausea	Insomnia	Dilated pupils
Chills	Anxiety	Abdominal
Hot flashes	Irritability	tenderness
Electric or uncomfortable	Fatigue	Vomiting
Yawning	Drug craving (the insomnia and anxiety may be severe and distressing)	Diarrhea
		Sweating
		Chills
		Piloerection
		Tachycardia
		Hypertension

The patient on inadequate doses of methadone will describe a characteristic set of symptoms. The symptoms appear a certain number of hours after the methadone dose, although there may be some variation with the patient's activity level and other factors. The onset of symptoms is delayed with each dose increase.

Alternative explanations should be sought if the patient:

- gives an inconsistent history of withdrawal symptoms;
- has one isolated symptom (such as insomnia or nausea);
- advises the onset of symptoms is not related to the time of the dose; or
- has been taking a stable dose and suddenly complains of withdrawal (see below).

A dose might be considered acceptable if the patient sleeps comfortably at night and only has mild withdrawal symptoms on awakening, which are tolerable to the patient.

Conditions Commonly Confused with Withdrawal

The clinician should determine why the patient continues to report withdrawal symptoms despite dosage adjustment. Common reasons for ongoing withdrawal include:

- medication use that speeds methadone metabolism (such as phenytoin, chronic alcohol use)
- opioid use
- diverting doses

Physicians should consider a medication review with the pharmacist. The following conditions cause symptoms that are confused with withdrawal:

Pseudonormalization should be suspected if the patient regularly complains some weeks after a dose increase that it is no longer ‘working.’ Patients who are mildly intoxicated on opioids feel more enthusiastic and energetic. As they develop tolerance, they may feel they need a dose increase to recreate this effect, which they view as both desirable and normal.

Insomnia is often the dominant symptom of opioid withdrawal. Other causes should be ruled out if the patient reports insomnia that isn’t accompanied by other withdrawal symptoms and is not relieved by a dose increase. Depression, anxiety, and use of alcohol and cocaine are common causes of insomnia in this population. A careful sleep history will identify day-night reversal, daytime napping and other causes of night-time insomnia. Careful instruction in sleep hygiene should be undertaken. Medication should be used only when the patient is on a stable dose of methadone and sleep hygiene counselling has failed. Trazodone or other non-benzodiazepine hypnotics are the treatments of choice.

Sedation and Withdrawal Symptoms: Occasionally patients report sedation several hours after dosing, with withdrawal symptoms and insomnia at night. The sedation may simply represent the onset of sleep following a night of insomnia due to withdrawal. The methadone dose might be too high, causing excessive sleep during the day and inadequate sleep at night. The patient may have day-night reversal, independent of the methadone dose.

Other conditions: Patients may be anticipating that an increase in their dose will manage symptoms that have little to do with withdrawal. Common examples include depression, anxiety, irritable bowel syndrome, and some forms of chronic pain. The physician should identify these symptoms, explain to the patient the limitations of MMT, and assist the patient in finding an appropriate management strategy.

Diagnostic Criteria for Opioid Withdrawal

1. *Either of the following:*
 - a. cessation of (or reduction in) opioid use that has been heavy and prolonged (several weeks or longer)
 - b. administration of an opioid antagonist after a period of opioid use
2. *Three (or more) of the following: developing within minutes to several days after Criterion A:*
 - a. dysphoric mood

- b. nausea or vomiting
- c. muscle aches
- d. lacrimation or rhinorrhea
- e. papillary dilation, piloerection or sweating
- f. diarrhea
- g. yawning
- h. fever
- i. Insomnia

3. *The symptoms in Criterion B cause clinically significant distress or impairment in social, occupational or other important areas of functioning.*
4. *The symptoms are not due to a general medical condition and are not better accounted for by another mental disorder.*

Medical Treatment of Acute Opioid Withdrawal

Buprenorphine: If you have the authority/approval to prescribe buprenorphine, its tapering is substantially more effective than clonidine and other non-opioid treatments in reducing opioid withdrawal symptoms and retaining patients in treatment.

Protocol:



Page 1 of 1

Opiate Withdrawal Scale (OWS)

Opiate Withdrawal Scale (OWS)		Date											
		Time											
Nausea and Vomiting	0 = No nausea 1 = Mild nausea with no retching or vomiting 4 = Intermittent nausea with dry heaves 5 = Constant nausea, frequent dry heaves and/or vomiting												
Piloerection (gooseflesh)	0 = No gooseflesh visible 1 = Occasional gooseflesh but not elicited by touch, not prominent 2 = Prominent gooseflesh in waves and elicited by touch 3 = Constant gooseflesh over chest and arms												
Perspiration	0 = No sweat visible 1 = Barely perceptible sweating, palms moist 2 = Beads of sweat, obvious on forehead 3 = Drenching sweat over face and chest												
Restlessness	0 = Normal activity 1 = Somewhat more than normal activity 2 = Moderately fidgety and restless, shifting positions frequently 3 = Gross movements most of the time or constantly thrashes about												
Tremor "Extend arms with fingers spread"	0 = No tremor 1 = Tremor not visible but can be felt by fingertip to fingertip. 2 = Moderate with patient's arms extended 3 = Severe even if arms are not extended												
Lacrimation	0 = No lacrimation 1 = Eyes watering, tears at corner of eyes 2 = Constant watering												
Nasal Congestion	0 = No nasal congestion 1 = Frequent sniffing 2 = Constant watering												
Yawning	0 = No yawning 1 = Frequent yawning 2 = Constant uncontrolled yawning												
Abdominal changes	0 = No abdominal complaint, normal bowel movements 1 = Reports waves of abdominal cramping pain, active bowel sounds 2 = Reports abdominal cramping pain, active bowel sounds, diarrhea												
Changes in temperature "Do you feel hot or cold?"	0 = No report of temperature change 1 = Reports feeling cold, hands cold and clammy to touch 2 = Uncontrollable shivering												
Muscle aches "Do you have any muscle cramps?"	0 = No muscle aching, arm and neck muscles soft at rest 1 = Mild muscle pains 2 = Severe, constant muscle pains												
Total Score													

Initiate all patients at Step 1 of the protocol. After 24 hours at Step 1: if OWS less than 10= continue Step 1, if OWS 10 or more= proceed to Step 2

☐ RUH ☐ SCH ☐ SPH
☐ OTHER: _____

Opiate Withdrawal Syndrome Detox Order Set		ACTION			
		MAR	ICP	REQ	RN
Ensure Medication Reconciliation Form has been reviewed					
Consults <input checked="" type="checkbox"/> Addiction Services - Reason: _____ <input type="checkbox"/> SW - Reason: _____ <input type="checkbox"/> Dietitian - Reason: _____ Other: _____ Reason: _____					
Lab Investigations Lab Investigations on Day 1 of symptoms (if not already done) <input checked="" type="checkbox"/> CBC <input checked="" type="checkbox"/> APTT <input checked="" type="checkbox"/> INR <input checked="" type="checkbox"/> Na, K, Cl, CO ₂ , Creatinine, BUN, Anion Gap <input checked="" type="checkbox"/> Glucose <input type="checkbox"/> Ca, Mg <input checked="" type="checkbox"/> ALT, ALP, Bili <input checked="" type="checkbox"/> AST <input checked="" type="checkbox"/> Albumin <input checked="" type="checkbox"/> GGT <input type="checkbox"/> Amylase <input type="checkbox"/> Lipase <input type="checkbox"/> βHCG <input checked="" type="checkbox"/> Urinalysis <input checked="" type="checkbox"/> Drug Screen Urine <input type="checkbox"/> Serum ETOH level <input type="checkbox"/> Repeat CBC, Na, K, Cl, CO ₂ , Mg, Creatinine in 24 hours Additional Labs: _____ Follow-up Labs: _____					
Additional Lab Investigations <input type="checkbox"/> Hep A Ab <input type="checkbox"/> Hep B Ab <input type="checkbox"/> Ag <input type="checkbox"/> Hep C Ab <input type="checkbox"/> PCR <input type="checkbox"/> Genotype <input type="checkbox"/> HIV					
Diagnostics (if not already done) <input type="checkbox"/> CXR PA + Lateral - Reason: _____ <input type="checkbox"/> ECG					
IV Therapy Bolus IV: <input type="checkbox"/> 0.9% NS _____ mL over _____ THEN IV Fluid: <input type="checkbox"/> 0.9% NS <input type="checkbox"/> D5W <input type="checkbox"/> 2/3 - 1/3 at _____ mL/h <input type="checkbox"/> With 20 mmol KCl/L of IV fluid <input type="checkbox"/> With 40 mmol KCl/L of IV fluid <input type="checkbox"/> Saline Lock <input type="checkbox"/> TKVO <input checked="" type="checkbox"/> Discontinue IV when drinking well. If on IV medications, then change IV to Saline Lock					
Nicotine Replacement Therapy <input type="checkbox"/> Complete Form #102844 Nicotine Replacement Therapy (if not already done)					
PRACTITIONER PRINTED NAME		PRACTITIONER SIGNATURE		DATE/TIME	

Form #

MM/YY

Category:

Page 1 of 4

☐ RUH ☐ SCH ☐ SPH
☐ OTHER: _____

Opiate Withdrawal Syndrome Detox Order Set		ACTION			
		MAR	ICP	REQ	RN
Nutritional Supplementation					
<input checked="" type="checkbox"/> Multivitamin 1 tab PO daily					
Protocol					
<input checked="" type="checkbox"/> Opiate Withdrawal Scale (OWS) q12h					
<input checked="" type="checkbox"/> Step care per OWS score; all patients start at Step1					
Symptom Protocol					
Nausea and Vomiting					
<input type="checkbox"/> dimenhydrinate 50 – 100 mg PO/IM q4h PRN					
Diarrhea					
<input type="checkbox"/> loperamide 4 mg PO x 1 for diarrhea					
THEN loperamide 2 mg PO PRN for loose bowel movements (max dose 16 mg/24 hrs)					
Spasticity, Restlessness					
<input type="checkbox"/> baclofen 10 mg PO TID PRN x _____ days					
Myalgias					
<input type="checkbox"/> acetaminophen 325 – 650 mg PO q4h PRN (max dose 4,000 mg/24 hrs)					
<input type="checkbox"/> indomethacin 50 mg PO TID PRN x _____ days					
OR					
<input type="checkbox"/> naproxen 500 mg PO TID PRN x _____ days					
Anxiety, Irritability, Lacrimation, Cramps, Rhinorrhea, Myalgias, Diaphoresis, Insomnia					
<input type="checkbox"/> hydroxyzine 25 – 50 mg PO TID PRN x _____ days					
Insomnia					
<input type="checkbox"/> trazodone 50 – 100 mg PO nightly x 4 days,					
THEN trazodone 50 – 100 mg PO nightly PRN for insomnia x _____ days					
PRACTITIONER PRINTED NAME		PRACTITIONER SIGNATURE		DATE/TIME	

Form #

MM/YY

Category:

Page 2 of 4

☐ RUH ☐ SCH ☐ SPH
☐ OTHER: _____

Opiate Withdrawal Syndrome Detox Order Set		ACTION			
		MA	ICP	REG	RN
STEP 1: OWS Score q12h – Symptom Protocol + clonidine					
clonidine test dose <input type="checkbox"/> clonidine 0.1 mg PO x 1 <input checked="" type="checkbox"/> Baseline BP then check BP one hour later; if BP less than 90/60 mmHg, if marked postural hypotension occurs or if HR less than 60 beats/minutes, hold and notify MRP or designate Vitals <input checked="" type="checkbox"/> Check BP prior to each dose of clonidine; if BP less than 90/60 mmHg, if marked postural hypotension or dizziness occurs or if HR less than 60 beats/minute hold dose Opiate Withdrawal Score <input checked="" type="checkbox"/> Assess Opiate Withdrawal Score at least every 12 hrs <input checked="" type="checkbox"/> If after 24 hrs at step 1 the score is 10 or more (suggesting moderate withdrawal symptoms), proceed to step 2 If less than 91 kg <input type="checkbox"/> clonidine 0.1 mg PO QID x 4 days THEN clonidine 0.05 mg PO QID x 2 days THEN clonidine 0.025 mg PO QID x 2 days, then stop If greater than or equal to 91 kg <input type="checkbox"/> clonidine 0.2 mg PO QID x 4 days THEN clonidine 0.1 mg PO QID x 2 days THEN clonidine 0.05 mg PO QID x 1 day THEN clonidine 0.025 mg PO QID x 1 day, then stop					
STEP 2: OWS Score 10 or more – Symptom Protocol + Intensified clonidine					
Vitals <input checked="" type="checkbox"/> Check BP prior to each dose of clonidine; if BP less than 90/60 mmHg, if marked postural hypotension or dizziness occurs or if HR less than 60 beats/minute hold dose Opiate Withdrawal Score <input checked="" type="checkbox"/> Assess Opiate Withdrawal Score at least every 12 hrs <input checked="" type="checkbox"/> If after 48 hrs at step 2, the score is 15 or more (suggesting severe withdrawal symptoms), continue intensified clonidine and proceed to step 3 If less than 91 kg <input type="checkbox"/> clonidine 0.2 mg PO QID x 4 days THEN clonidine 0.1 mg PO QID x 2 days THEN clonidine 0.05 mg PO QID x 1 day THEN clonidine 0.025 mg PO QID x 1 day, then stop <div style="text-align: right;">.....continued on next page</div>					
PRACTITIONER PRINTED NAME		PRACTITIONER SIGNATURE		DATE/TIME	

Form #

MM/YY

Category:

Page 3 of 4

☐ RUH ☐ SCH ☐ SPH
☐ OTHER:

Opiate Withdrawal Syndrome Detox Order Set		ACTION			
		MAIR	ICP	REQ	RN
STEP 2: OWS Score 10 or more – Symptom Protocol + Intensified clonIDINE continued... If greater than or equal to 91 kg <input type="checkbox"/> clonIDINE 0.3 mg PO QID x 4 days THEN clonIDINE 0.2 mg PO QID x 1 day THEN clonIDINE 0.1 mg PO QID x 1 day THEN clonIDINE 0.05 mg PO QID x 1 day THEN clonIDINE 0.025 mg PO QID x 1 day, then stop					
STEP 3: OWS Score 15 or more – Symptom Protocol + Intensified clonIDINE + Refer to a Methadone Prescribing Physician ***methadone can only be ordered by a physician authorized to prescribe methadone*** ***methadone-related deaths have occurred almost exclusively at doses in excess of 30 mg/day*** methadone 10 mg PO TID x 4 days THEN 10 mg PO BID x 1 day THEN 10 mg PO daily x 1 day THEN 5 mg PO daily x 1 day, then stop					
FAX ORDER SET TO SHR DETOX CENTRE @ 655-4190					
Additional Orders _____ _____ _____ _____ _____ _____ _____ _____ _____ _____					
PRACTITIONER PRINTED NAME		PRACTITIONER SIGNATURE		DATE/TIME	

Appendix P



Discharge Form – Submitted to CPSS

METHADONE MAINTENANCE PROGRAM PATIENT CESSATION OF TREATMENT FORM

Patient Surname:	Patient Given Names:
Date of Birth:	Personal Health Number (PHN):

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**
101 -2174 Airport Drive,
SASKATOON SK S7L 6M6
Email: prp@cps.sk.ca
Phone: 306-667-4648
Fax: 306-244-0090

**THIS IS A REQUIREMENT OF THE SASKATCHEWAN
METHADONE PROGRAM**

Managing Potential Methadone Overdose

Reducing Risk of Toxicity during Initiation

Patient education

- The patient is to limit driving or use of machinery after
- a dose increase, particularly in the first few hours after dosing.
- The patient is to take the methadone dose in the morning, since the risk of overdose is increased at night.
- Whenever feasible (with the patient's consent), a family member or significant other should be educated about the symptoms of toxicity with instructions to go to the emergency department immediately at the first sign of toxicity. A patient information guide may be used for this purpose.

Explain the risks of diverted methadone

- A single dose of methadone can be fatal.
- Patients are responsible for the safe storage of their methadone.

Frequency of visits

- The MMT physician shall follow the frequency of visits as outlined in Standard 6.
- The MMT physician should inquire about sedation and other side effects.

Take-home doses

- No take-home doses shall be granted during the initiation phase.
- It is recommended that no take-home doses be given for the first three months unless necessary (undue hardship, pharmacy closed on Sunday) and the reason for this should be documented in the patient's chart.

Avoid prescribing any sedating drugs

- Includes benzodiazepines, non-benzodiazepine hypnotics, antipsychotics, antidepressants, and sedating antihistamines. Even moderate, therapeutic doses of these drugs may increase the risk of toxicity if they are initiated at the same time as methadone and the patient is not fully tolerant to their sedating effects.
- Patients should also be advised to avoid alcohol and over-the-counter sedating drugs.

Tapering high-dose benzodiazepine user

- Benzodiazepine abuse and dependence are common in this population.
- As with opioids, it is difficult to accurately judge a patient's benzodiazepine use and tolerance.
- Benzodiazepine tapering, while difficult on its own, can be very complicated and potentially unsafe when attempted with MMT initiation.

Intoxication or sedation

- At any stage of MMT, the pharmacist should be instructed to alert the MMT physician if the patient appears sedated or intoxicated.
- Intoxicated patients should not be medicated until assessed by their MMT physician.
- If signs of intoxication are observed after ingestion of methadone, the patient should be sent to the hospital by ambulance for assessment.

*** The information presented in this appendix was drawn from the College of Physicians and Surgeons of Ontario: Methadone Maintenance Treatment Program Standards and Clinical Guidelines: February 2011.*

Appendix R

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 its 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 stabilization 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 are 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. 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).

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 most current tests and cut-off levels for drugs are listed in the Table below (October, 2002):

Tests and cut-off levels for drugs (These drugs are part of the routine drugs of abuse panel measured by EMIT/ELSIA).			
Drug	Cut-off	Time detectable	Species
Amphetamines	1000 ng/ml	1 - 2 days	parent/metabolite
Barbiturates	200 ng/ml	variable, hours to weeks	parent
Benzodiazepines	200 ng/ml	3 days to six weeks	parent/metabolite
Cannabinoids (THC)	50 ng/ml	1 to 4 weeks	parent/metabolite
Cocaine	300 ng/ml	2 - 4 days	BEG/metabolite
Methadone	300 ng/ml	1 - 3 days	EDDP and/or parent
Opioids	300 ng/ml	1 - 2 days	parent/metabolite
Phencyclidine	25 ng/ml	1 - 30 days	parent/metabolite

Tests and cut-off levels for drugs (The following drugs are not part of the routine drug screen; they are measured by GLC, and are done only by special request).			
Drug	Cut-off	Time detectable	Species
Alcohol	>10 mmo/L	2 - 14 hours	parent
Meperidine	300 ng/ml	1-2 days	parent
Methaqualone	300 ng/ml	1 - 7 days	parent
Propoxyphene	300 ng/ml	1-2 days	parent
Methylphenidate	50 nmol/L	1 - 2 days	parent
Fentanyl	25 ng/ml	2-3 days	parent/metabolite

(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).

Appendix S

Urine Drug Screening Collection Practice

UDS are clinically reliable when urine collection is directly observed. However, other measures can be taken to enhance the authenticity of the urine sample and consequently the test results.

In most cases directly observing urine collection is not required.

- Temperature check to be performed immediately after urine sample is obtained, using a temperature sensitive strip.
- Lab staff does not witness urine collection.

If there is concern about the integrity of the sample, please notify the ordering physician's office and indicate concerns on the requisition, providing all relevant details.

Chain of custody is for legal matters and does not apply to MMT.

The primary care physician may not have direct lab services in concert with the clinical practice and therefore patients will have a choice of labs for this service.

This document may be attached to the requisition for collection of urines to ensure the proper protocol is followed.

- Extra clothing such as coats and sweaters should be removed
- Parcels, bags and purses must not be taken into the collection area
- Patients should receive a pre-labelled urinalysis container prior to entering the collection area
- The patient must bring the sample directly to the collector and not place it in a pass-through-window

- No other urine samples should be accessible to the patient during the provision of the sample (ie: specimen pass-through cabinet).
- A minimum volume of 30 ml is required

Considerations:

- Hand washing facilities are made available to patient after provision of the sample
- Provide a dry collection area
- All sources of water should be disabled
- Bluing of toilet water

Appendix T

Managed Opioid Withdrawal during Methadone Induction

The purpose of managed opioid withdrawal during methadone induction is to:

1. extinguish IVDU as quickly as possible, and
2. engage the patient in ongoing care for their Opioid Use Disorder.

Risks and Benefits

Methadone alone during induction may be sufficient to manage opioid withdrawal. It is not for many however, with the desire to avoid withdrawal symptoms a potent stimulus for ongoing use. Many methadone guidelines recommend no concurrent opioid treatment of withdrawal. Typically patients are then left with ongoing, problematic street use, of uncertain quality and quantity, until a sufficient blockade is established. This ongoing IVDU may disrupt the patient's engagement in recovery, and lead to early departure from a program.

The primary risk is from overdose, with supplemental opioids potentially increasing the risk of respiratory depression. Dosing must therefore be conservative and safe, and patients warned to watch for excess sedation or shortness of breath.

Assessment

A patient being treated with opioids during their methadone induction should have a normal SaO₂ and no history, symptoms or clinical findings of respiratory compromise. Due to the risk of increased sedation it is not recommended for those needing to drive, work or care for children.

When taking the patient's current history of opioid use determine the minimal daily amount required to avoid withdrawal. Confirm this is IVDU.

Convert that dose into morphine equivalence. (1 mg hydromorphone = 5 mg morphine)

Divide by 2.

This amount, given orally, is effectively 25% of their minimum IVDU requirement. Do not exceed 300 mg per day.

Dispense in a slow release OD preparation, such as Kadian. Have it witnessed, with the methadone, with the capsule opened and the beads mixed in.

Taper the morphine by 50 mg per week, during the usual methadone induction process.

Monitor for excess sedation.

Example

JW used a range of 20 to 24 mg of hydromorphone IV, injected four times per day. His estimated minimal daily requirement was 20 mg QID or 80 mg per day. This equates to 400 mg of morphine equivalence.

He met the inclusion criteria.

He was prescribed 200 mg of Kadian initially during his methadone induction, with tapering by 50 mg per week. In 4 weeks he was off Kadian and the UDS were opioid free. He reported cessation of IVDU within the first week of treatment.

Dosing

Standards for Prescribing of Buprenorphine

19.1 Standards for prescribing of buprenorphine for addiction

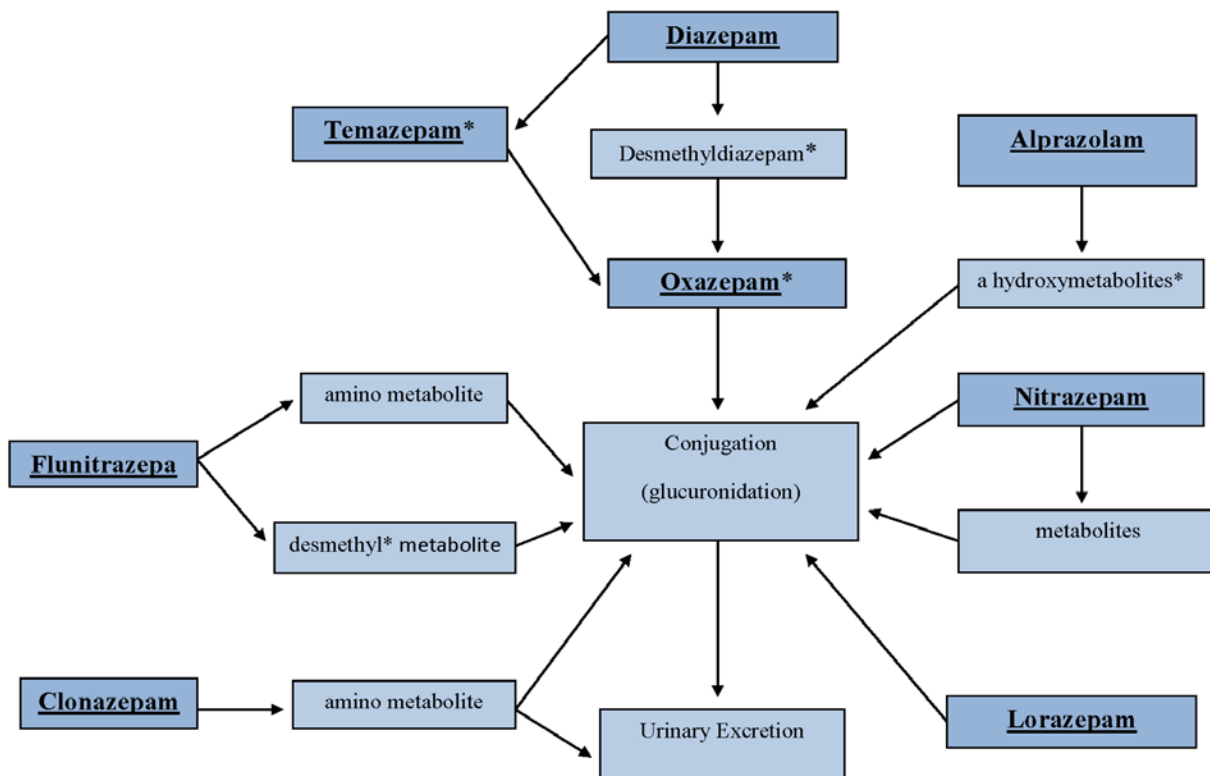
- (a) For the purposes of this bylaw, "buprenorphine" shall include all products containing buprenorphine, but shall not include buprenorphine in its transdermal form and shall not include buprenorphine that is prescribed solely for the purpose of pain control.
- (b) No physician shall prescribe Buprenorphine for the treatment of addiction unless:
 - (i) The physician has taken an educational program on prescribing of buprenorphine approved by the Council; and,
 - (ii) The physician has access to one or more addiction counselors and one or more pharmacists to provide patients the full range of treatment options; and,
 - (iii) The physician has established a program for the regular testing of patients receiving buprenorphine for drugs of possible abuse; and,
 - (iv) The physician has access to the Pharmaceutical Information Program to permit monitoring of drugs prescribed to those patients for whom the physician has prescribed buprenorphine.
- (c) No physician shall prescribe Buprenorphine for treatment of addiction unless:
 - (i) The physician has received an exemption from Health Canada to allow that physician to prescribe methadone for the purpose of treating addiction; or
 - (ii) The physician has spent a minimum of one day with another physician who has received an exemption from Health Canada to allow that physician to prescribe methadone for the purpose of treating addiction, who has met the requirements of this bylaw to prescribe buprenorphine and who prescribes buprenorphine as part of his/her regular practice.
- (d) Physicians who prescribe Buprenorphine for treatment of addiction shall, as a condition of prescribing buprenorphine, participate in a program of continuing medical education which includes a minimum of six hours every two years in addiction medicine.
- (e) Physicians who wish to prescribe Buprenorphine for treatment of addiction shall, as a condition of doing so, sign an undertaking in which they agree that:
 - (i) Their prescribing of buprenorphine may be audited on such terms and at such times as may be required by the College of Physicians and Surgeons; and,
 - (ii) They will co-operate with any such audit or audits; and
 - (iii) They will follow the requirements of this bylaw pertaining to the prescribing of buprenorphine.
- (f) Failure to follow this bylaw shall be unbecoming, improper, unprofessional or discreditable conduct under the Act.

Appendix V

Benzodiazepine Metabolism

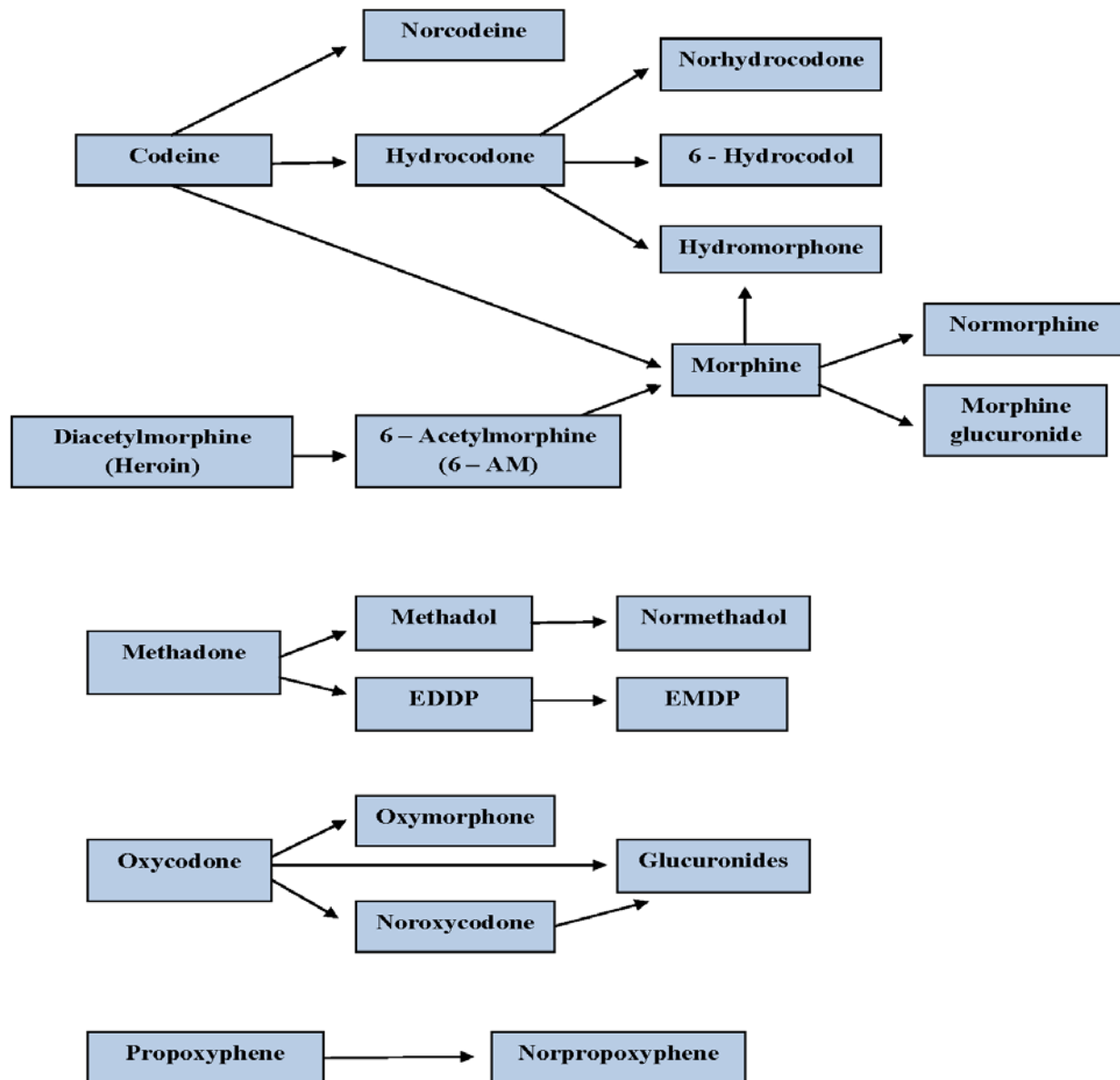
Benzodiazepine Metabolism

*= active metabolite



Opiate Metabolism Chart

Opiate Metabolism Chart



Appendix X

Clinical Resources

Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-Cancer Pain

Link to documents: <http://nationalpaincentre.mcmaster.ca/opioid/>

Methadone Drug Interactions Information

Website(s): www.atforum.com and /or www.drug-interactions.com

Centre for Addiction and Mental Health

Phone: (416) 535-8501

Website: www.camh.net

My Health

<https://myhealth.alberta.ca/Pages/default.aspx>

Health Canada Office of Controlled Substances

Phone: (613) 946-5139

Toll-free: 1-866-358-0453

Website: www.hc-sc.gc.ca/ahc-asc/branch-dirigen/hecs-dgsesc/dscsp-psasc/index-eng.php

American Society for Addiction Medicine

Phone: 301-656-3920

Email: email@asam.org

Website: www.asam.org

Canadian Society for Addiction Medicine

Phone: 403-813-7217

Email: admin@csam.org

Website: www.csam.org

Appendix Y

Glossary

Abuse, drug – Any use of an illegal drug, or the intentional self-administration of a medication for a non-medical purpose such as altering one's state of consciousness, e.g., "getting high." (*Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-cancer Pain 2010*)

Addiction – A primary, chronic, neurobiological disease with genetic, psychosocial, and environmental factors influencing its development and manifestations. It is characterized by behaviours that include one or more of the following: impaired control over drug use, compulsive use, continued use despite harm, and craving. (*Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-cancer Pain 2010*)

Agonist – 1. Drugs that interact with receptor sites to cause the same effect that natural chemicals would cause at these sites. (Karch, A, M. (2008). *Focus on nursing in pharmacology*. (4th ed.). Philadelphia: Wolters Kluwer/ Lippincott Williams & Wilkins). 2. A substance that acts at a neuronal receptor to produce effects similar to those of a reference psychoactive substance, e.g. methadone is an agonist at the opioid receptors.

Antagonist – 1. Drugs that combine with receptors that do not begin a change in cell function. When antagonists bind to receptors, agonists are prevented from binding and causing an action. Gutierrez, K. (2008). *Pharmacotherapeutics: Clinical reasoning in primary care* (2nd ed.). Saunders: St. Louis. 2. (Adopted Canadian Society of Addiction Medicine October 14, 1999) A substance that counteracts the effects of a reference psychoactive substance by

inhibiting or reversing its effects at a neuronal receptor site, e.g. naltrexone acts as an antagonist at the opioid receptor.

Concurrent Disorders – (Adopted Canadian Society of Addiction Medicine October 14, 1999). The presence of one or more primary, physical and/or psychiatric disorders that have an interactive effect on the course of Substance Dependence and require specific diagnosis and treatment in order to achieve stabilization and/or recovery.

Controlled Substance – There are many controlled substances listed under the *Controlled Substance Act*. These drugs are grouped under schedules. Below are examples of some of the better known drugs within each Schedule:

- **Schedule I** contains drugs made from the opium poppy such as heroin, codeine; drugs made from coca such as cocaine; and synthetically derived drugs such as methadone.
- **Schedule II** contains cannabis (marijuana) and its derivatives.
- **Schedule III** contains drugs such as amphetamines and lysergic acid diethylamide (LSD).
- **Schedule IV** contains drugs such as benzodiazepines and barbiturates.
- **Schedule V and VI** contain precursors required to produce controlled substances (National Association of Pharmacy Regulatory Authorities, 2002-2004).

Craving – (Adopted Canadian Society of Addiction Medicine October 14, 1999) A biopsychological arousal and urge to return to addictive behaviour, characterized by a strong desire, pre-occupation and possible impulsivity.

Contingency Management – A type of treatment used in the mental health and substance abuse fields. Patients are rewarded (or less often, punished) for their behaviour; generally, adherence to or failure to adhere to program rules and regulations or their treatment plan.

Dependence, Physical – A state of adaptation manifested by a drug class-specific withdrawal syndrome that can be produced by abrupt cessation, rapid dose reduction, decreasing blood level of the drug, and/or administration of an antagonist. (*Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-cancer Pain 2010*)

Diversion – The intentional transfer of a controlled substance from legitimate distribution and dispensing channels. (*Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-cancer Pain 2010*)

Dose, stable – A “pharmacologically stable dose” is one that produces a fairly steady plasma level; it is established when the total daily dose is fixed for at least two weeks and:

1. frequency is scheduled and spread throughout the day, AND/OR
2. at least 70% of the prescribed opioid is controlled release.

Double-doctoring – Receiving a prescription for a narcotic, and then seeking and receiving another prescription or narcotic from a different practitioner without disclosing to that practitioner particulars of every prescription or narcotic obtained within the previous 30 days. (*Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-cancer Pain 2010*)

Half-life – The time required for half of the total drug amount to be eliminated from the body. Generally after five half-lives, 97% of a drug will be eliminated.

Pharmacotherapeutics for Advanced Practice – A *Practical Approach*, Virginia Poole Arcangelo and Andrew M. Petersen, Second Edition, 2006.

Harm Reduction – A continuum of services that represent a philosophical, pragmatic approach to providing care while minimizing the negative outcomes associated with substance use. The focus is goal oriented, humanistic and in keeping with a cost benefit awareness. (Pauly, Goldstone, McCall, Gold & Pyne, 2007). Pauly, B., Goldstone, I., McCall, J., Gold, F., & Payne, S. (2007). *The ethical, legal and social context of harm reductions*. Canadian Nurse, 103, 19–23.

Maintenance Therapy – Treatment of Substance Dependence by a prescription drug, to prevent withdrawal and reduce the harm associated with a particular method of administration, attendant dangers to health and/or social consequences, e.g. methadone for Opioid Dependence or nicotine replacement therapy (NRT) for tobacco.

Methadone Toxicity – When the level of methadone in the body exceeds the level that is determined safe.

Misuse, opioid – Use of an opioid in ways other than those intended by the prescribing physician (sometimes also called problematic opioid use). (*Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-cancer Pain 2010*)

Narcotic – Any drug included in the “Schedule” under the *Controlled Drugs and Substances Act: Narcotic Control Regulations*. (Ministry of Justice)

Opiate – A naturally-occurring or semi-synthetic compound derived from the opium poppy (papaver somnifer) (College of Physicians and Surgeons of Alberta, 2005).

Opioid – A compound having actions or properties similar to opiates. A broader term

encompassing all opiates (such as heroin, morphine and codeine) as well as synthetic opiate-like compounds (such as methadone and fentanyl). (College of Physicians and Surgeons of Alberta, 2005). A family of drugs that act by attaching to endogenous mu, kappa and delta receptors in the brain and share a common set of clinical effects, including analgesia, sedation, constipation, and respiratory depression.

Note: Reference throughout this document to specific pharmaceutical products as examples does not imply endorsement of any of these products.

Pharmacodynamics – The set of processes by which drugs produce specific biochemical or physiological changes in the body-how the drug acts on the body. *Pharmacotherapeutics for Advanced Practice – A Practical Approach*, Virginia Poole Arcangelo and Andrew M. Petersen, Second Edition, 2006 (Arcangelo & Peterson, 2006).

Pharmacokinetics – Examining the absorption, distribution, metabolism and excretion of a drug, the onset of action, the half life, peak effect and duration of effects – how the body acts on the drug. Karch, A, M. (2008). *Focus on nursing in pharmacology*. (4th ed.). Philadelphia: Wolters Kluwer/Lippincott Williams & Wilkins.

Split doses – An alternative way of providing methadone to clients, consisting of two or more doses per day (so it is not ingested all at one time). It is used for clients who have demonstrated “rapid metabolism” of their once daily methadone dose (e.g. during third trimester of pregnancy) or are on medications that have been shown to induce rapid metabolism of methadone (i.e. certain HIV medications). A consultation with a experienced MMT provider should be considered in these circumstances. Split doses do not necessarily have to be equal; twice- daily observed ingestion may be necessary

(College of Physicians and Surgeons of Alberta, 2005)

Stable daily dose – Optimal daily dose of methadone that will relieve withdrawal symptoms, block opioid-induced euphoria and reduce drug cravings without sedation or other significant side effects (College of Physicians and Surgeons Ontario, 2005).

Steady state – A constant mean concentration of a drug in the body, there are peaks and troughs in the drug level, but the fluctuations remain within a constant range. *Pharmacotherapeutics for Advanced Practice – A Practical Approach*, Virginia Poole Arcangelo and Andrew M. Petersen, Second Edition, 2006. (Arcangelo & Peterson, 2006).

Substance – Any drug with pleasant psychoactive effects and addiction potential, including alcohol, illegal drugs, and prescription drugs. (*Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-cancer Pain 2010*)

Substance abuse – (American Psychiatric Association, 1994)

1. 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:
 - a. recurrent substance use resulting in a failure to fulfill 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).
 - b. 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).

- c. recurrent substance-related legal problems (e.g. arrests for substance-related disorderly conduct)
2. 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)
 - a. The symptoms have never met the criteria of Substance Dependence for this class of substance.

Substance dependence – 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 (American Psychiatric Association, 1994)

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; or
 - 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; or
 - b. the same (or a 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 a 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), use the substance (e.g. chain-smoking), or recover from its effects.
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 (e.g. current cocaine use despite recognition of cocaine-induced depression, or continued drinking despite recognition that an ulcer was made worse by alcohol consumption).

With physiological dependence: evidence of tolerance or withdrawal (i.e. either Item 1 or 2 is present).

Without physiological dependence: no evidence of tolerance or withdrawal (i.e. neither Item 1 nor 2 is present).

Substance misuse – The use of a psychoactive substance (drug or alcohol) for a purpose other than that for which it was intended, and that cause's physical, social, and psychological harm. The term is also used to represent the pattern of use: experimental, recreational and dependent (Rassool, 2002). *Substance misuse and mental health: An Overview*. Nursing Standard, 16, 46-52.

Substance tolerance – A neurological adaptation to the psychoactive effects of a substance; more of the drug is required to achieve the same effect. Tolerance develops quickly to the psychoactive effects of alcohol and

opioids. Highly tolerant clients can behave almost normally after consuming opioid doses that would be fatal in non-tolerant clients (Kahan & Wilson, 2002). Tolerance to the psychoactive effects of opioids develops within days, and is lost within days (CPSO, 2005). A state of adaptation in which exposure to a drug induces changes that result in a diminution of one or more opioid effects over time. (Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-cancer Pain 2010) Substance Use Disorders (Adopted Canadian Society of Addiction Medicine October 17, 2003) A category of two disorders, namely, Substance Abuse and Substance Dependence, as in DSM IV.

Substance withdrawal – Characteristic syndrome produced by abrupt cessation of a drug. (Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-cancer Pain 2010)

Tapering – A gradual decrease in a dose of a drug; could result in a lower daily dose or cessation of the drug. (*Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-cancer Pain 2010*)

Titration – A technique of adjusting a dose until a stable/ optimal dose is reached; usually means gradually increasing the dose to allow the body to develop tolerance and minimize adverse effects. (*Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-cancer Pain 2010*)

Tolerance – A state of adaptation in which exposure to a drug induces changes that result in a diminution of one or more opioid effects over time. (*Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-cancer Pain 2010*)

Withdrawal – Characteristic syndrome produced by abrupt cessation of a drug. (*Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-cancer Pain 2010*)

*** The information presented in this appendix was drawn and adapted from the College of Physicians and Surgeons of Ontario: Methadone Maintenance Treatment Program Standards and Clinical Guidelines: February 2011.*

Appendix Z

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