



PRINCE EDWARD ISLAND
COLLEGE OF PHARMACY

Member organization of National Association of Pharmacy Regulatory Authorities (NAPRA)

Opioid Agonist Maintenance Treatment Practice Directive for Community Pharmacies

Approved: September 2014

Revised: November 2015, July 2019, November 2021, March 2026



Table of Contents

Introduction	5
Purpose	5
Acknowledgment	6
Support.....	6
1. Opioid Agonist Maintenance Treatment (OAMT): Introduction	7
2. Treatment Choices	8
A. Buprenorphine/Naloxone	8
B. Methadone	9
C. Slow-Release Oral Morphine	10
3. Professional Requirements	11
A. Extended Practice Certification.....	11
B. Expected Role of the Pharmacist	11
C. Expected Role of the Pharmacy Technician	12
D. Ethical Considerations.....	13
4. Operational Requirements	14
A. Pharmacy Layout and Design	14
B. Pharmacy Registration	14
C. Pharmacy Hours.....	14
D. Security	14
E. Staff Education	14
5. Establishing Relationships	15
A. Pharmacist/Prescriber Collaboration.....	15
B. Pharmacist/Patient Relationship	15



PRINCE EDWARD ISLAND
COLLEGE OF PHARMACY

Member organization of National Association of Pharmacy Regulatory Authorities (NAPRA)

6.	Opioid Agonist Maintenance Treatment - Methadone	17
.....		17
A.	Assessing the Prescription	17
	Prescription Requirements	17
	Methadone Dosing	18
B.	Dispensing the Prescription	18
	Methadone Solution	18
	Dispensing Equipment	19
	Preparing Witnessed and Take-Home Doses	19
	Storage and Stability	20
C.	Releasing the Prescription	23
	Providing Witnessed Doses	23
	Providing Take-Home Doses	24
	Monitoring Compliance with Take-Home Doses	27
	Naloxone	27
D.	Responding to Special Circumstances	28
	Divided Dosing	28
	Take-home Doses Released to Patient's Agent	28
	Take-home Doses in the Event of a Storm	28
	Intoxication	29
	Missed Doses	30
	Vomited Doses	30
	Administration Errors	31
	Methadone Discontinuation	32
	Pregnancy	33
	Guest Dosing	33
7.	Opioid Agonist Maintenance Treatment - Buprenorphine	35
.....		35
A.	Assessing the Prescription	35



PRINCE EDWARD ISLAND
COLLEGE OF PHARMACY

Member organization of National Association of Pharmacy Regulatory Authorities (NAPRA)

Prescription Requirements 35

Buprenorphine Dosing 35

B. Dispensing the Prescription 36

 Preparing Witnessed Doses 36

 Preparing Take-Home Doses..... 36

C. Releasing the Prescription 37

 Providing Witnessed Doses..... 37

 Providing Take-Home Doses 38

D. Responding to Special Circumstances..... 40

 Intoxication 40

 Missed Doses 41

 Administration Errors..... 41

Appendix A: Comparison of Methadone and Buprenorphine/Naloxone 42

Appendix B: Sample Patient-Pharmacist Agreement Methadone or Buprenorphine/Naloxone..... 44

Appendix C: Sample Prescriber-Pharmacist Agreement..... 47

Appendix D: Opioid Agonist Maintenance Treatment Prescriber Fax Notification Form 49

Appendix E: Patient Daily Methadone/Buprenorphine Witnessed Ingestion and Carry Log 50

Appendix F: Resources for Pharmacy Professionals 51

References 52



Introduction

Purpose

The primary goal of the *Opioid Agonist Maintenance Treatment: Practice Directive for Community Pharmacies* document is to enhance the safety, consistency, and effectiveness of the opioid agonist maintenance treatment (OAMT) services provided by community pharmacies in Prince Edward Island, contributing to improved patient and societal outcomes.

This standards document is intended to provide Island pharmacists with the processes for providing OAMT in a safe and effective manner that is compliant with the relevant legislation and consistent with best practices.

It is recognized that there may be rare, exceptional situations, or extenuating circumstances, in which some of the provisions of this document may not be appropriate. In such situations, where these practice standards are not followed, the pharmacist is required to communicate with the prescriber and document the rationale for the deviation. Such deviations will occur only in the interest of providing optimal patient care.



PRINCE EDWARD ISLAND
COLLEGE OF PHARMACY

Member organization of National Association of Pharmacy Regulatory Authorities (NAPRA)

Acknowledgment

This practice directive was developed from best practice documents from other provincial pharmacy regulatory authorities including British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick, Nova Scotia, Newfoundland and Labrador. Best practice documents of the College of Physicians and Surgeons of Ontario, British Columbia and Nova Scotia were consulted along with the Centre for Addiction and Mental Health's publication *Opioid Agonist Maintenance Treatment – A Pharmacist's Guide to Methadone and Buprenorphine for Opioid Use Disorder*.

The PEI College of Pharmacy gratefully acknowledges the work of the methadone committee and document reviewers.

Support

While this document is specific to pharmacy practice, the Prince Edward Island College of Pharmacy (PEICP) recognizes that a pharmacist's adherence to this practice directive will have implications for the manner in which other health care professionals provide treatment for opioid dependence to their patients. As such, support of this document by the other health care professionals involved in providing treatment for opioid dependence is essential for effective collaboration towards optimal patient and societal outcomes.



1. Opioid Agonist Maintenance Treatment (OAMT):

Introduction

Opioid use disorder (OUD) is a chronic and relapsing condition. It is a major factor in the increase in opioid-related morbidity and mortality in Canada. In 2018, there were 4,460 apparent opioid-related deaths nationally, 94% of which were unintentional. This equates to one life lost every two hours related to opioids.¹

Opioid agonist maintenance treatment (OAMT) has been shown to be effective in decreasing the morbidity and mortality of opioid use disorder. Treatment also decreases the risk of hepatitis and HIV infection among people who inject drugs.² With appropriate treatment and follow up, individuals with opioid use disorder can reach long-term remission.

The goal of a treatment program for OUD should be to provide broad access to evidence-based treatments that are assessed, administered, monitored, and supported by experts trained in OAMT to ensure optimal safety and efficacy from therapy. Patients with OUD may also benefit from harm-reduction interventions such as take-home naloxone, syringe distribution programs and education about sterile syringe use.³

These practice directives are intended to provide information and guidance to community pharmacists involved in medication-assisted treatment of OUD and to promote consistency in the provision of treatment to patients in Prince Edward Island.

¹ Public Health Agency of Canada Special Advisory Committee on the Epidemic of Opioid Overdoses. (2019). National report: Apparent opioid-related deaths in Canada (January 2016 to December 2018). Web Based Report. Retrieved from <https://health-infobase.canada.ca/datalab/national-surveillance-opioid-mortality.html>.

² CRISM National Guideline for The Clinical Management of Opioid Use Disorder. (2018). Retrieved from http://www.bccsu.ca/wp-content/uploads/2018/03/CRISM_NationalGuideline_OUD-ENG.pdf.

³ CRISM National Guideline for The Clinical Management of Opioid Use Disorder. (2018). Retrieved from http://www.bccsu.ca/wp-content/uploads/2018/03/CRISM_NationalGuideline_OUD-ENG.pdf.



2. Treatment Choices

The main treatment option for opioid use disorder is therapy with methadone or buprenorphine/naloxone. Slow-release oral morphine (SROM) may also be used as a third-line treatment. See [Appendix A- Comparison of Methadone and Buprenorphine/Naloxone](#) for details.

The choice between methadone and buprenorphine/naloxone will depend on several patient-specific factors including initial presentation, co-morbidities, potential drug interactions, patient preferences, psychosocial factors, treatment history and response. Prescriber experience must also be considered.

A. Buprenorphine/Naloxone

The *CRISM National Guideline for the Clinical Management of Opioid Use Disorder* suggests that opioid agonist treatment (OAT) be initiated with buprenorphine/naloxone whenever feasible to reduce the risk of toxicity, morbidity, and mortality, as well as to facilitate safer take-home dosing.

Buprenorphine is a partial mu (μ) opioid receptor agonist that can relieve withdrawal symptoms and cravings for 24 hours or more. Buprenorphine has a maximum agonist effect lower than that of full opioids such as methadone and heroin. Because of this “ceiling effect”, buprenorphine has a lower risk of respiratory depression and side effects. The safety profile of buprenorphine is enhanced by the addition of naloxone, an opioid antagonist. Naloxone has no effect sublingually but will precipitate opioid withdrawal if injected.⁴

Further information on the pharmacology of buprenorphine can be found in [Appendix A- Comparison of Methadone and Buprenorphine/Naloxone](#).

⁴ CRISM National Guideline for The Clinical Management of Opioid Use Disorder. (2018). Retrieved from http://www.bccsu.ca/wp-content/uploads/2018/03/CRISM_NationalGuideline_OUD-ENG.pdf.



B. Methadone

OAMT can also be initiated with methadone if buprenorphine/naloxone is not the preferred treatment.⁵ Methadone is a long acting orally effective synthetic opioid with full mu (μ) opioid receptor agonist properties. In the treatment of opioid use disorder, methadone prevents opioid withdrawal, decreases cravings and blocks the euphoric effects of other opioids.

Due to the long half-life of methadone, there is an increased risk of toxicity and adverse effects. Methadone also has a narrow therapeutic index and high potential for drug and alcohol interactions. When diverted, methadone has an increased risk of overdose.

However, there is extensive evidence that methadone is safe and effective when used as directed for treatment of opioid use disorder. Further information on the pharmacology of methadone can be found in

[Appendix A- Comparison of Methadone and Buprenorphine/Naloxone.](#)

C. Injectable and Implantable Buprenorphine

Buprenorphine for treatment of opioid use disorder is also available as both a subdermal implant and an extended-release subcutaneous injection. Both formulations of buprenorphine are available in Canada via a controlled distribution process.

Pharmacists should be aware that buprenorphine subdermal implant and extended-release injectable buprenorphine should not be dispensed directly to the patient. These forms of buprenorphine must be dispensed directly to the prescriber or delivered securely to the clinic where administration will take place.

Although pharmacists in certain practice sites might not be directly involved in dispensing and administering implantable or injectable buprenorphine, it is important to be familiar with the pharmacology of buprenorphine formulations to screen for potential drug interactions and side effects.

⁵ CRISM National Guideline for The Clinical Management of Opioid Use Disorder. (2018). Retrieved from http://www.bccsu.ca/wp-content/uploads/2018/03/CRISM_NationalGuideline_OUD-ENG.pdf.



D. Slow-Release Oral Morphine

Slow-release oral morphine in the once daily 24-hour formulation (e.g., Kadian[®]) is considered as a third-line treatment option for opioid use disorder.⁶ There is growing evidence for its use in opioid use disorder. Though this is an off-label use, this option may be prescribed for patients who have been unsuccessful with or have contraindications to first- and second-line treatment options. It is important to note that other formulations of oral morphine, such as twice-daily, 12-hour, or extended-release formulations (e.g., M-Eslon[®]) have not been empirically studied for OAMT and are therefore not recommended for this indication.⁷

⁶ British Columbia Centre on Substance Use and B.C. Ministry of Health. (2017). A Guideline for the Clinical Management of Opioid Use Disorder. Retrieved from <http://www.bccsu.ca/care-guidance-publications>.

⁷ Newfoundland and Labrador Pharmacy Board. (2018). Standards for the Safe and Effective Provision of Opioid Agonist Maintenance Treatment. Retrieved from <http://www.nlpb.ca/media/SOPP-OAMT-May2018.pdf>.



3. Professional Requirements

A. Extended Practice Certification - Pharmacists

All pharmacists who are involved in dispensing methadone or buprenorphine/naloxone for the treatment of opioid use disorder must apply for an Extended Practice Certification (EPC) from the PEI College of Pharmacy. Dispense in the context of the legislation includes the following activities:

- a) assessing the pharmaceutical and therapeutic suitability of the drug for its intended use,
- b) assessing the patient, the patient's health history and the patient's medication record,
- c) preparing, packaging, and labelling a drug,
- d) providing the drug to the patient or a representative of the patient, and
- e) counselling the patient or a representative of the patient on the use of a drug.

To apply for an EPC in Dispensing Methadone and Suboxone, pharmacists must complete the following:

- a) Complete the EPC application and submit to the PEI College of Pharmacy.
- b) Provide proof of successful completion of either the Centre for Addiction and Mental Health (CAMH) *Opioid Use Disorder Treatment (OUDT)* course or the *Optimizing Opioid Dependence Treatment* in PEI online course through Dalhousie Continuing Pharmacy Education.

B. Continuing Education – Pharmacy Technicians

Pharmacy technicians are unable to apply for an extended practice certification (EPC) in dispensing methadone or buprenorphine/naloxone. However, all pharmacy technicians involved in dispensing methadone or buprenorphine/naloxone must complete the following:

- a) A continuing education course approved by Council
- b) Submission of proof of successful completion of the continuing education course to PEICP.

C. Expected Role of the Pharmacist

Before engaging in the provision of OAMT services, pharmacists need to consider the activities they are expected to undertake and establish a plan of how to address the associated time and physical space requirements.



The expected activities of pharmacists providing methadone or buprenorphine/naloxone include but are not limited to:

- Medication dispensing (including witnessed administration 7 days a week – see [Pharmacy Hours](#) under operational requirements for options)
- Aiding with dosing
- Educating and counselling patients on the use of their treatment
- Patient monitoring and support
- Thorough record keeping
- Communicating progress of treatment to the physician (for example: missed/lost doses, patient behaviour, treatment plan changes), and

Providing input to the physician or treatment team on authorization of take-home doses.

It is essential that pharmacists providing methadone or buprenorphine/naloxone are competent in this clinical area, including an understanding of:

- a) Opioid use disorder
- b) Opioid withdrawal and its management
- c) Harm reduction treatment strategy
- d) Methadone and buprenorphine/naloxone (pharmacokinetics, pharmacology, therapeutics, etc.)
- e) Expected activities of the pharmacist providing OAMT
- f) Dosing issues (including management of overdose, dosing in special and emergency circumstances, etc.)
- g) Inter-professional collaboration (i.e., working with the treatment team)
- h) Pharmacy legislation, guidelines and practice directives pertaining to opioid use disorder treatment, and
- i) Community support and referral resources.

D. Expected Role of the Pharmacy Technician

The expected role of the pharmacy technician in OAMT includes the technical aspects corresponding to the standards of practice for Canadian pharmacy technicians.

These responsibilities may include:

- a) Medication dispensing,
- b) Thorough record keeping,
- c) Witnessing patient doses.

Pharmacists must be responsible for assessing the appropriateness of opioid use disorder treatment prescriptions, counselling patients, and assessing patients before witnessed doses.



E. Ethical Considerations

Stigma is a significant challenge to patients receiving OAMT. Stigma includes negative attitudes and negative behaviour toward people with substance use problems.⁸ Unfortunately, health care professionals can sometimes add to the stigma that patients face.

Pharmacy professionals should consider the PEI College of Pharmacy Code of Ethics when evaluating their provision of OAMT.

Sections of the Code of Ethics applicable to OAMT treatment include (but are not limited to):

PRINCIPLE 1: ALWAYS PUT THE PATIENT FIRST

APPLICATION 1.1 Treat those in your care with respect and dignity

- 1.1.1 Always consider, and act in, the best interests of the patient.
- 1.1.2 Respect and value the autonomy and dignity of patients.
- 1.1.3 Practice patient-centered care acting with integrity and treat patients with sensitivity, caring, consideration and respect.
- 1.1.7 Act in a way that does not unfairly discriminate against any person.
- 1.1.9 Provide fair and equitable access to quality pharmacy services regardless of socioeconomic status, culture, disease state, or any other related factors that might unfairly bias patient care.

PRINCIPLE 4: COMMUNICATE EFFECTIVELY AND COLLABORATE WITH COLLEAGUES

APPLICATION 4.1 Communicate effectively

- 4.1.1 Provide information that the patient needs about their treatment and care, in a way that they can understand, be engaged and supported to use their medications safely and effectively.

APPLICATION 4.2 Establish effective partnerships with patients

- 4.2.1 Encourage and seek to empower patients to be knowledgeable about their medications.

⁸ Centre for Addiction and Mental Health (CAMH). (2019). Stigma: Understanding the Impact of Prejudice and Discrimination. Retrieved from <https://camh.ca/en/health-info/guides-and-publications/stigma>.



4. Operational Requirements

A. Pharmacy Layout and Design

The pharmacy should be designed to allow for all pharmacist-patient discussions, witnessed doses and the provision of take-home doses to take place in a patient care environment that ensures privacy and confidentiality and that is clean, safe and comfortably furnished for the patient.

B. Pharmacy Registration

Pharmacy managers will ensure that the PEI College of Pharmacy is aware that their pharmacy is participating in the provision of medication for the treatment of opioid use disorder.

C. Pharmacy Hours

When a patient is prescribed daily witnessed ingestion of methadone or buprenorphine/naloxone, they should ideally attend a pharmacy that is open every day of the week. Pharmacies which are open only five or six days each week will have to adjust their practices for patients for whom take-home doses are not appropriate.

Options include:

1. opening for a few hours so patients can have their daily dose observed, or
2. coordinating weekend witnessed ingestion with another pharmacy and the prescribing physician. In this situation, communication between the weekday dispensing pharmacy and the weekend pharmacy shall occur, when appropriate, to ensure continuity of dosing.

D. Security

The security of the pharmacy should address the potential risks associated with the provision of medication for the treatment of opioid use disorder and the risks to the community that can result from theft of methadone or buprenorphine/naloxone. As with other controlled drugs and substances, preparations containing methadone and buprenorphine/naloxone should always be stored in a locked and secure location.

E. Staff Education

The pharmacy manager is responsible for ensuring that all pharmacists have an Extended Practice Certificate in Dispensing Methadone and Suboxone prior to dispensing either medication, and that pharmacy technicians have completed the required continuing education course. The pharmacy manager is also responsible for ensuring that all staff in the pharmacy understand the scope of their role in the provision of medications for the treatment of opioid use disorder.



5. Establishing Relationships

The interactions a patient has with their health care providers have a significant impact on the patient's success in an OAMT program. Pharmacists are in the unique position of seeing and interacting with the patient daily. This daily interaction affords a pharmacist the opportunity to monitor a patient's progress, identify actual and potential drug-related problems and make recommendations for changes to the patient's care. Pharmacists who have a clear understanding of the goals of the program, of their role on the patient's collaborative care team and who are committed to providing optimal care can substantially contribute to their patients' success.

A. Pharmacist/Prescriber Collaboration

Pharmacists are encouraged to develop a strong working relationship with their patients' prescribers. Effective communication and collaboration between the pharmacist and the patient's prescriber enable clinical decisions to be based on current, comprehensive patient information.

Prescribers are encouraged to send a written Prescriber-Pharmacist Treatment agreement (see [Appendix D – Sample Prescriber-Pharmacist Agreement](#)) to the patient's pharmacy that puts in writing their expectations regarding missed doses and intoxication of the patient. Prescribers are also encouraged to include their contact information for use by the pharmacist in emergency situations.

B. Pharmacist/Patient Relationship

A patient enrolling in an OAMT program should be offered the option to receive counselling in a private area of the pharmacy where conversation cannot be overheard by others, respecting the patient's right to privacy and confidentiality.

The patient should receive an orientation to the pharmacy and be provided with the following information about their medication:

- a) information on the side effects of OAMT,
- b) a caution on the risks of abrupt discontinuation of OAMT,
- c) a warning about the risks of drug or alcohol use with methadone or buprenorphine,
- d) information on pharmacy hours and the timing of doses,
- e) information on the signs of toxicity and of the need to seek medical attention should they occur,
- f) the pharmacy's protocol for missed doses and prescriber notification,
- g) a caution regarding improved fertility with stabilization on opioid use disorder treatment, and



PRINCE EDWARD ISLAND
COLLEGE OF PHARMACY

Member organization of National Association of Pharmacy Regulatory Authorities (NAPRA)

- h) information on the offence of double-doctoring and patients' legal obligation to disclose having received a narcotic prescription from another prescriber within the preceding thirty-day period.

A treatment agreement can help the pharmacist explain to the patient the goals of the program, the responsibilities of the pharmacist and the responsibilities of the patient (See [Appendix B – Sample Patient-Pharmacist Agreement Methadone or Buprenorphine/Naloxone](#)). The pharmacist must review the treatment agreement with the patient and keep a copy signed by both the pharmacist and patient in the patient's record.

A pharmacist may decide, during initial consultation with the patient and in compliance with the Code of Ethics, they do not wish to provide OAMT to the patient.



6. Opioid Agonist Maintenance Treatment - Methadone

A. Assessing the Prescription

Prescriber Eligibility

On May 19, 2018, Health Canada removed the requirement for an exemption under section 56(1) of the *Controlled Drugs and Substances Act* to prescribe or administer methadone.

Prescription Requirements

Methadone is found in Schedule I of the *Controlled Drugs and Substances Act*. Prescriptions for methadone must follow the requirements of federal and provincial legislation for controlled substances. Under the *Subsection 56(1) class exemption for patients, practitioners and pharmacists prescribing and providing controlled substances in Canada* issued by Health Canada on October 1, 2020, practitioners may verbally prescribe controlled substances. Prescriptions for methadone may be accepted verbally or in a written form (including by fax.) A fax form may be used for convenience but is not required.

If for some reason the treatment period of a prescription overlaps with that of a previously issued prescription, instructions should be included on the new prescription to cancel the previous prescription.

Methadone prescriptions must include:

- a) The number of doses to be provided
- b) The start date and end date of the prescription
- a) The daily dose in milligrams, given in both numbers and words if the prescription is in a written format
- c) The dispensing schedule including:
 1. the dosing frequency,
 2. which doses must be administered as supervised ingestion; and
 3. whether take home doses are permitted and, if so, the schedule.
- d) If this information is not included on the prescription, clarification from the prescriber is required.

Consistent with current best practices, the number of consecutive take home doses should be limited to a maximum of six for methadone. An exception to this maximum can be made for reasons including the following:



- a) The patient is going on vacation to an area where methadone is not readily available.
- b) The patient has employment opportunities in an area where methadone is not readily available.
- c) Other exceptional circumstances as agreed upon by the pharmacist and prescriber in collaboration.

If the number of take-home doses prescribed exceeds the recommended maximum, the pharmacist will contact the prescriber and document the reason(s).

Methadone Dosing

Dosing of methadone must be undertaken carefully, individually titrating the optimal dose for each patient. An effective dose for one patient may be a lethal dose for another. Many factors impact an individual's optimal dose including their opioid tolerance, physiologic and metabolic response, concurrent drug therapy, and methadone's pharmacokinetic activity.

The College of Physicians and Surgeons of PEI directs physicians prescribing methadone to review the *Methadone Maintenance Treatment Program Standards and Clinical Guidelines* published by the College of Physicians and Surgeons of Ontario. The guidelines provide direction on methadone dosing. Pharmacists in PEI should assess the dose of methadone for each prescription in accordance with current references, including these guidelines.

If a pharmacist believes that doses being prescribed falls outside of current recommended guidelines, they shall consult with the prescriber and document the rationale for the deviation in the patient record.

B. Dispensing the Prescription

Methadone Solution

Pharmacists must use a commercially available 10mg/mL methadone solution when preparing individual patient doses because of:

- enhanced patient safety (fewer steps to be potentially impacted by human error),
- enhanced stability of commercial product, and
- the expectation that large volume production is undertaken under the requirements of federal legislation governing manufacturing.



Dispensing Equipment

Methadone doses must be prepared with a calibrated device that minimizes the measurement error rate to no greater than 0.1 ml. Devices must be used solely to prepare methadone and should be clearly labeled with “methadone only.” Graduated cylinders are not acceptable for preparing methadone.

Pharmacists and pharmacy technicians must ensure that the manufacturer’s instructions for the use of measuring devices are followed. This includes proper use, cleaning, maintenance, and storage of the device and associated equipment or software. Any required device calibration or quality control processes used to monitor the integrity of the device must be documented in a readily retrievable manner.

Preparing Witnessed and Take-Home Doses

1. Calculations for the preparation of the patient’s dose must be completed by a pharmacist or pharmacy technician. It is preferable if these calculations are checked using an independent calculation performed by another pharmacist or pharmacy technician.
2. Procedure:
 - a) Measure the amount of 10mg/mL methadone solution required to obtain the individual dose using an appropriate measuring device (e.g., a syringe or Methameasure® system.)
 - b) Perform independent double-check of the quantity of methadone.
 - c) Put measured solution in a child proof, amber, calibrated bottle.
 - d) Add enough diluent to bring the final volume of the dose to 100mL.
3. The final dosage volume for each individual dose must not be less than 100 ml, both for on-site consumption and for take-home doses. For example, a dosage of 80 mg requires 8ml of a 10 mg/ml solution. Enough diluent is then added to make a final volume of 100ml. This volume is sufficiently large to ensure the dose is not retained in the mouth and diverted. A consistent volume also enables patients to easily identify unanticipated changes in the taste of their solution.
4. All individual patient doses will be bottled separately in 100 mL amber childproof bottles.
5. If the periodic auditing of unconsumed take-home bottles is being considered, the use of tamper evident seals is recommended.



6. If individual patient doses are prepared in advance of being processed for dispensing, they must be clearly labelled with at least:
 - a) strength and quantity of methadone (i.e., methadone 8 mg in 100 mL of diluent),
 - b) prepared date/expiry date, and
 - c) initials of preparing pharmacist or pharmacy technician. These doses must be stored securely in the fridge.

7. All doses provided to the patient (by witnessed ingestion or by witnessed ingestion plus take-home doses) must be labelled in accordance with the provincial labelling requirements. In addition, the label of each dispensed doses must include the total dose (in mg) of methadone contained in the bottle.

8. Individual patient doses dispensed as take-home doses must also be labelled with:
 - a) The date of ingestion of take-home doses,
 - b) the start date and the end date of the prescription,
 - c) the auxiliary label “Keep in Refrigerator”,
 - d) the auxiliary label “Keep Away from Children”,
 - e) a notation “Drink entire contents of bottle” and one of the following auxiliary labels:
 - “Methadone can be fatal when taken by individuals for whom it is not prescribed” or,
 - “The contents of this bottle may cause harm or toxicity if taken by someone other than the person whose name appears on the prescription label.”

9. For security and safety reasons, it is recommended that the preparation of methadone occurs away from the high traffic area in the dispensary, in an area that is free from distraction.

Storage and Stability

When storing individual doses of methadone, pharmacists must consider the following:

- The stability of commercially available methadone solution,
- whether the individual doses have been diluted, and
- the date the individual dose was prepared.



PRINCE EDWARD ISLAND COLLEGE OF PHARMACY

Member organization of National Association of Pharmacy Regulatory Authorities (NAPRA)

Stock Solutions

An unopened bottle of Methadose™ or Metadol™ has a shelf life of approximately four years from the date of manufacture. The expiry date will appear on the bottle. Once opened, it can be stored at room temperature (15-30°C) for six months.

Individual Patient Doses

The stability and sterility of Methadose™ diluted with a crystalline drink such as Kool-Aid, Tang, or Crystal Light, is unknown as published studies are not available. Available literature does not address the issue of sterility, which includes the likelihood of bacterial growth in prepared solutions stored under refrigerated or unrefrigerated conditions. Pharmacists are required to use best judgment to assign the beyond-use date for diluted products.

All diluted doses of Methadose™ must be refrigerated and are permitted a maximum expiry date of 14 days from the date of dilution. The dispensing staff must assign dates based on the earliest expiry of the ingredients used or 14 days refrigerated, whichever comes first. Dilution with fruit juices may require a shorter dating as an opened juice bottle may have a best before date that is earlier than 14 days. Metadol™ is stable and sterile in crystalline diluents for 14 days.

Table 1 is provided as the best existing guidance to allow pharmacy professionals to use professional judgment when assigning best-before dates to diluted Methadose™ or Metadol™.



Table 1 - Methadone stability in various diluents for take home doses

Diluent	Stability Room Temp. (20-25°C)	Stability Refrigerated (5°C)	Period of acceptable sterility for oral consumption under refrigeration (i.e., bacterial or pathogenic growth)
Grape Flavored Kool Aid®	17 days	55 days	Unknown for dilution with Methadose™ 14 days for dilution with Metadol™
Orange Flavored Tang®	11days	49 days	Unknown for dilution with Methadose™ 14 days for dilution with Metadol™
Allen's® Apple Juice	9 days	47 days	Unknown for dilution with Methadose™ 7 days for dilution with Metadol™
Grape Flavored Crystal Light®	8 days	34 days	Unknown for dilution with Methadose™ 14 days for dilution with Metadol™
Grape Flavored Crystal Light® (0.1% Sodium Benzoate)	29 days	Not available	Unknown for dilution with Methadose™

Lauriault, G., Lebel, M.J., Lodge, B.A., et al. (1991). Stability of Methadone in Four Vehicles for Oral Administration. *Am. J. Hosp. Pharm.* (48): 1252-1256.



C. Releasing the Prescription

Providing Witnessed Doses

The pharmacist is required to assess the patient prior to the ingestion of the dose. This function may not be delegated to a pharmacy technician or any other member of the pharmacy team.

Prior to releasing the witnessed dose to the patient, the *pharmacist* must:

- a) Positively identify the patient. If uncertain as to the patient's identity, photo identification must be requested.
- b) Assess the patient for signs of intoxication or sedation. If it is determined that the patient is intoxicated or sedated, it is advisable to withhold the dose. If such a determination is made, the prescriber must be notified immediately (see sample [Appendix D: Opioid Agonist Maintenance Treatment Prescriber Fax Notification Form](#)).
- c) Review the patient's profile and administration log for notes, missed doses, documentation of returned bottles (if applicable), or any other applicable information.
- d) Counsel the patient appropriately (for complete patient counselling information, see the relevant product monograph).

Once the pharmacist determines that it is appropriate to release the witnessed dose, the *pharmacist or a pharmacy technician* must:

- a) Directly observe the patient ingesting the dose,
- b) engage the patient in brief conversation to ensure the entire dose has been swallowed, and
- c) appropriately document the dose on the Administration Log ([Appendix E: Patient Daily Methadone/Buprenorphine Witness Ingestion and Carry Log](#)).



Providing Take-Home Doses

Based on certain criteria, take-home privileges may be granted by prescribers to stable patients to improve the patient's quality of daily life. In keeping with best practices, a patient should have a dose witnessed prior to being provided take-home doses.

The practice of dispensing continuous take-home doses without a witnessed ingestion is strongly discouraged because:

- a) It is inconsistent with current best practices,
- b) It places the patient at risk of overdose or toxicity, and
- c) It places the public at risk of diversion.

When providing take-home doses to the patient, the pharmacist must:

- a) Positively identify the patient. If uncertain as to the patient's identity, photo identification should be requested.
- b) Review the patient's profile and administration log for notes, missed doses, documentation of returned bottles (if applicable), or any other applicable information.
- c) Counsel the patient appropriately.
- d) Appropriately document the provision of the take-home doses on the Administration Log.

Criteria for Take-Home Doses

Patients must adhere to the following criteria if they are being considered for take-home dosing.

1. Program participation including:
 - a) Attendance at the pharmacy on schedule for methadone dosing,
 - b) Attendance at scheduled appointments with the prescriber, nurse or counselor, and
 - c) Compliance with the treatment agreement.
2. Demonstration of cognitive stability to assume responsibility for the care and use of the medication including proper security.
 - a) Patients with unstable living arrangements such as those living on the street or in hostels without storage facilities may not be appropriate candidates to receive take-home doses. If the pharmacist is aware of such circumstances, they will notify the prescriber.
 - b) Patients must bring an impenetrable locked box with them in which to place their take-home doses. Patients should be counselled to store the locked box in a safe and secure location.



Table 2 - Best Practice - Take-Home Dose Schedule

Typical Take-Home Dose Schedule	
<i>Schedule A</i>	<i>Schedule B</i>
<ul style="list-style-type: none">• Start with one take-home dose per week.• Increase by one take-home dose per week every four weeks, as appropriate, to a maximum of six take-home doses per week.• Each additional take-home dose should be prescribed only after the patient has had at least four additional weeks without substance use.	<ul style="list-style-type: none">• Start with two take-home doses on consecutive weekend days.• After a further eight weeks free of substance use, take-home doses may be increased to one set of three consecutive days and one set of two consecutive days with an intervening witnessed dose.• After an additional 12 weeks free of substance use, take-home doses may be increased to six take-home doses per week.

Newfoundland and Labrador Pharmacy Board. (2015). Standards for the Safe and Effective Provision of Medication for the Treatment of Opioid Dependence.

Exceptional Circumstances- Take-Home Doses

In situations where a patient is clinically stable, and receiving three to six take-home doses per week, the prescriber may allow for exceptional take-home doses to be given. This would apply in the case of travel for work, vacation, or family crisis only if a local pharmacy cannot be found.

The maximum recommended number of take-home doses should not exceed 13 with an observed dose. However, circumstances may dictate that the prescriber authorizes more than this. Pharmacists shall contact the prescriber to discuss any take-home doses that exceed the usual 6/week schedule. The previous take-home dose schedule should be resumed after the period of exceptional take-home doses is completed.

Discontinuation of /Refusal to fill Take-Home Doses



A pharmacist may refuse to fill a prescription for a take-home dose if there is concern for the safety of the patient or the safety of others. This decision must be communicated to the prescriber.

Take-home doses may be discontinued or decreased by the prescriber for reasons including:

- The patient has failed to meet the terms of a prescriber treatment agreement.
- The patient has a sustained use of unauthorized drugs.
- The patient has produced an unacceptable urine sample or has tampered with the collection of the urine sample.
- The patient has approached another treated patient suggesting or proposing to sell, buy or share any urine sample or tamper with any urine sample.
- The patient has diverted, or permitted to be diverted, any part of the methadone.
- The patient has approached another person suggesting or proposing to sell, buy or share medication.
- The patient shows disruptive behavior.

In such situations, take-home doses should not be reinstated until stability can be re-established objectively via weekly urine drug screening and other measures of clinical stability.

Pharmacists may refuse to fill or withhold doses for any of the many reasons which may include:

- The patient fails to meet the terms of the patient-pharmacist agreement.
- The pharmacist suspects the patient is intoxicated when they arrive for their doses.
- The pharmacist has knowledge that the patient has diverted or attempted to divert doses.
- The patient has missed several doses outside these practice directives or within the prescriber-pharmacy agreement.



Monitoring Compliance with Take-Home Doses

There are several ways that pharmacists can monitor a patient's compliance with take home doses including a take-home dose audit.

Patients should be advised that they may be asked at any time to return to the pharmacy with the remainder of their take-home doses and empty containers. This procedure, known as a “take-home dose audit”, may be used to deter patients from diverting their take-home doses. This audit may be initiated by either the prescriber or the pharmacist.

If there are issues of concern with the patient’s compliance with their take-home doses or evidence of diversion, the pharmacist should notify the prescriber immediately (see sample [Appendix D: Opioid Agonist Maintenance Treatment Prescriber Fax Notification Form](#)).

NOTE: When patients return their take-home dose containers to the pharmacy prior to receiving their next lot of take-home doses, pharmacists must ensure that the returned containers are disposed of in a manner that protects the public from diversion of any methadone remaining in the containers, complies with environmental legislation and maintains the patient’s confidentiality.

Naloxone

Pharmacists should provide access to and training for the administration of naloxone in the event of methadone overdose. This training may include those available to assist the patient (for example, friends and family.) Patients should be cautioned that due to the long half-life of methadone, naloxone administration must be accompanied by follow-up care at the emergency department.



D. Responding to Special Circumstances

Divided Dosing

Prescribers may authorize “split doses” for the following reasons:

- a) A small proportion of patients may metabolize methadone rapidly.
- b) Split dosing or dose increases may be necessary in the 3rd trimester of pregnancy and occasionally in the initiation phase of treatment in pregnant women with opioid use disorder.

Take-home Doses Released to Patient’s Agent

Best practice would indicate that methadone take-home doses are released to the patient when their observed dose is provided. Only in exceptional circumstances should the pharmacist deviate from this practice. The prescriber’s consent must be obtained and documented. The patient’s consent and designation of an individual permitted to receive carries must be obtained and documented.

Take-home Doses in the Event of a Storm

Storm days pose a significant challenge to pharmacists dispensing OAMT. Pharmacists should not provide take-home doses unless directed by the prescriber.

Acceptable forms of communications from prescribers include:

- A new prescription with directions for take-home doses, or
- A notation within special instructions directing the pharmacists to provide a take-home dose in the event of a storm.

Pharmacist should not provide an observed dose or a take-home dose to patients who do not regularly obtain doses at their pharmacy, even after consulting the provincial drug information system. Variations in the method of billing in each pharmacy may lead to double dosing of patients.



Intoxication

Concurrent use of sedatives such as benzodiazepines and alcohol can contribute to methadone intoxication and toxicity. Prior to dispensing methadone pharmacists must assess all patients for signs of intoxication including but not limited to:

- slurred speech,
- incoordination,
- smelling of alcohol,
- unusual behavior,
- ataxia.

To assess a patient for intoxication or sedation, consider their general demeanor and behavior in comparison to what you know as their usual behavior. If necessary:

- Ask the patient to remove sunglasses and observe their eyes for pin-point pupils, alertness, or sedation.
- Talk to the patient, asking questions to determine if they are slurring or incoherent.
- Ask the patient to walk to the counter and observe their gait.

If an intoxicated patient presents at the pharmacy asking for their methadone dose, the dose must be withheld, and the pharmacist will inform the prescriber immediately using the Prescriber Notification Form. If the patient returns within 8 hours of the dose that was refused and is no longer intoxicated, the pharmacist may provide the dose. It is safer to refuse to dispense a patient's methadone than to medicate an intoxicated patient. Opioid withdrawal, while uncomfortable, is not life threatening. However, adding methadone to the other drugs already consumed by an intoxicated patient may be.

The handling of such situations will have been made clear to the patient well in advance, by means of a pharmacist-patient agreement. In such a situation, the pharmacist will:

- Try to avoid confrontation with the patient by explaining that it would be dangerous to medicate at this time.
- Warn the patient against driving a car.
- Inform the prescriber that the patient appeared intoxicated in your pharmacy.
- Clearly document the rationale and the parameters around the decisions to withhold the dose.



Missed Doses

Missed doses may be handled by the pharmacist in accordance with the Prescriber-Pharmacist agreement ([Appendix C: Sample Prescriber-Pharmacist Agreement](#)). However, patients who miss two consecutive observed doses should have the remainder of their prescription suspended and the prescriber should be contacted to discuss next steps. Pharmacists will note the missed dose on the Patient Daily Methadone Witnessed Ingestion and Take-Home Dose Log and in the patient's electronic record.

Since a clinically significant loss of tolerance to opioids may occur within as little as three days without methadone, the prescriber should reduce the dose in patients who have missed three consecutive days. The dose can be rapidly increased once the response to the lower dose is assessed.

The College of Physicians and Surgeons of Ontario *Methadone Maintenance Treatment Program Standards and Clinical Guidelines* provide guidance on dose changes in the event of missed doses.

Vomited Doses

A dose should not automatically be replaced when a patient reports that he or she has vomited. Vomited methadone doses should not be replaced unless a health professional directly observes the emesis. If the emesis was witnessed by the health professional and it occurred less than 30 minutes after consumption, best practice indicates that the dose can be replaced at no more than 50% of the regular dose after consultation with the prescriber.

The prescriber is to be notified and provided with as much information as possible about the incident (time the dose was taken, time of vomiting) so that a decision can be made regarding replacement doses. Pharmacists may use the Prescriber Notification Form to document the incident and provide follow up to the prescriber for their records.

For pregnant patients or patients with serious underlying conditions (e.g., cancer or HIV), the prescriber should be contacted promptly as he or she may decide to prescribe a replacement dose even if the pharmacist or staff did not directly observe the emesis.



Administration Errors

In the event of a confirmed or suspected medication dosing error, the pharmacist must take appropriate and necessary action to minimize harm to the patient, ensuring transparency throughout the entire process. This includes prompt consultation with the patient's other health care providers for determination of appropriate action.

In addition to the following standards specific to methadone, it is expected that pharmacists will manage the error in accordance with the NAPRA *Model Standards of Practice for Canadian Pharmacists* and the individual pharmacy's medication error management policy.

Methadone Overdose

- Tell the patient. If the patient has left the pharmacy, contact them. If the patient has no phone, you may need to contact the patient's prescriber or clinic to obtain a contact number or send police to the home.
- Advise the patient to seek medical attention immediately. If the patient refuses medical attention, document the time and details. Ask the patient to remain in the care of a friend or relative for the day.
- Advise the patient of the symptoms of overdose including the possibility of euphoria and respiratory depression. Make follow-up contact with the patient throughout the day.
- Advise the patient's prescriber or clinic.
- Reassess the patient's health condition before administering the next daily dose.

Methadone Underdose

- Advise the patient's prescriber or clinic and the patient.
- Once the patient is contacted, offer the patient the "difference" of methadone between the amount administered and the amount prescribed.
- Should the patient refuse to return for the methadone, advise them of the possibility of withdrawal and the symptoms related to opioid withdrawal.
- If the patient cannot be reached during business hours, advise them of the error at their next administration.



Methadone Discontinuation

Patients who are doing well and want to discontinue treatment for opioid use disorder are encouraged to taper slowly. The patient usually guides the rate of taper.⁹ The OAMT prescriber should decrease the methadone dose slowly. The decrease should be stopped or reversed at patient request or if the patient experiences severe dysphoria, cravings, or withdrawal symptoms, or relapses to opioids or other drugs.¹⁰

If a patient starts a “self-taper” by drinking only a portion of their daily methadone, this will be recorded on the patient dose log with a note of the estimated dose consumed. The pharmacist must discuss the taper with the prescribing physician. This discussion provides a chance to work together to determine a strategy for future prescribed doses.

The last part of the taper process is the most difficult, and therefore should be done slowly and cautiously. Abrupt discontinuation is discouraged as withdrawal symptoms can be severe and long-lasting. If the patient is insistent on discontinuing their methadone treatment, the patient should be made aware of the consequences and risk of relapse to illicit drug use. Other members of the health care team should be informed of the patient’s decision and status. Medication for the symptoms of withdrawal should be considered (clonidine, loperamide, NSAIDs, dimenhydrinate), and counselling on other appropriate resources should be made available.¹¹

⁹ Centre for Addiction and Mental Health (CAMH). (2019). Stigma: Understanding the Impact of Prejudice and Discrimination. Retrieved from <https://camh.ca/en/health-info/guides-and-publications/stigma>.

¹⁰ College of Physicians and Surgeons of Ontario. (2010). Methadone Maintenance Treatment for Opioid Dependence. Retrieved from <http://www.cpso.on.ca/admin/CPSO/media/Documents/physician/polices-and-guidance/policies/methadone-maintenance-treatment-for-opioid-dependence.pdf>.

¹¹ Alberta College of Pharmacy. (2014). Medication-Assisted Treatment for Opioid Dependence: Guidelines for Pharmacists and Pharmacy Technicians. Retrieved from <https://abpharmacy.ca/sites/default/files/ODTGuidelines.pdf>.



Pregnancy

Untreated opioid use disorder in pregnant women leads to several adverse outcomes including fetal growth restriction, fetal death and neonatal abstinence syndrome.¹² Pregnancy in women with opioid-use disorder is an urgent indication for inclusion into an OAMT program.

Compared to the risks associated with continued opioid use, the use of methadone during pregnancy is preferred for both the mother and the fetus. Studies have shown that methadone treatment improves both maternal and neonatal outcomes in pregnant women with opioid use disorder. Methadone leads to longer gestation, more live births, increased birth weight and earlier hospital discharge.¹³ Methadone can cause neonatal abstinence syndrome. This can be managed medically in hospital.

Split dosing may be necessary in the third trimester due to changes in the woman's body composition. Pregnancy may cause the effects of methadone to abruptly change and therefore close monitoring is required.¹⁴

Pregnant women should not miss a dose of methadone, as the withdrawal symptoms associated with missing a dose may cause fetal distress.

Guest Dosing

There are occasions, such as a vacation or business travel, when a methadone patient might ask to be medicated on a temporary basis at another pharmacy. Guest dosing generally involves situations in which the patient cannot be provided with sufficient take-home doses for the period of absence. Such situations may arise when the patient:

- Is not considered functionally stable enough to be given take-home doses for the time period.

¹² CRISM National Guideline for The Clinical Management of Opioid Use Disorder. (2018). Retrieved from http://www.bccsu.ca/wp-content/uploads/2018/03/CRISM_NationalGuideline_OUD-ENG.pdf.

¹³ CRISM National Guideline for The Clinical Management of Opioid Use Disorder. (2018). Retrieved from http://www.bccsu.ca/wp-content/uploads/2018/03/CRISM_NationalGuideline_OUD-ENG.pdf.

¹⁴ Alberta College of Pharmacy. (2014). Medication-Assisted Treatment for Opioid Dependence: Guidelines for Pharmacists and Pharmacy Technicians. Retrieved from <https://abpharmacy.ca/sites/default/files/ODTGuidelines.pdf>.



PRINCE EDWARD ISLAND
COLLEGE OF PHARMACY

Member organization of National Association of Pharmacy Regulatory Authorities (NAPRA)

- May be away for a long period that prevents issuing sufficient take-home doses. For example: juice will spoil, it is not practical to travel with a large number of containers, or concern exists about loss or theft of a large number of containers.

With the patient's consent, the pharmacist can facilitate identifying a conveniently located pharmacy that would be willing to dispense methadone on a temporary basis. Health care professionals may contact the PEICP to identify pharmacies dispensing methadone in PEI. Addiction Treatment Centers in other provinces can often facilitate identification of opioid use disorder treatment prescribers and pharmacies in their province. The name of a dispensing pharmacy will not be provided to a patient without the prior consent of that pharmacy.

The patient or pharmacist will inform the methadone prescriber of the name and address of the temporary pharmacy. If the prescription at the usual pharmacy is still valid for the time the patient will be away, the prescriber should cancel the remainder of that prescription and write a new one for the temporary pharmacy.

The pharmacists at both pharmacies must communicate clearly with one another at the beginning and end of the guest-dosing period, so that everyone understands where and when the patient is receiving the methadone. This communication is imperative to prevent double-dosing or missed dosing.



7. Opioid Agonist Maintenance Treatment - Buprenorphine

A. Assessing the Prescription

Prescription Requirements

Buprenorphine is found in Schedule I of the *Controlled Drugs and Substances Act*. Prescriptions for buprenorphine must follow the requirements of federal and provincial legislation for controlled substances. Under the *Subsection 56(1) class exemption for patients, practitioners and pharmacists prescribing and providing controlled substances in Canada* issued by Health Canada on October 1, 2020, practitioners may verbally prescribe controlled substances. Prescriptions for buprenorphine may be accepted verbally or in a written form (including by fax.) A fax form may be used for convenience but is not required.

If for some reason the treatment period of a prescription overlaps with that of a previously issued prescription, instructions should be included on the new prescription to cancel the previous prescription.

Buprenorphine prescriptions must include:

- b) The number of doses to be provided
- c) The start date and end date of the prescription
- d) The daily dose in milligrams, given in both numbers and words if the prescription is in a written format
- e) The dispensing schedule including:
 1. the dosing frequency,
 2. which doses must be administered as supervised ingestion; and
 3. whether take home doses are permitted and, if so, the schedule.
- f) If this information is not included on the prescription, clarification from the prescriber is required.

Buprenorphine Dosing

Buprenorphine dosing tends to be less variable than methadone dosing overall. Patients are generally given an induction dose when they are in a period of at least moderate opioid withdrawal and are then steadily increased according to the patient's needs over a period of a few days.



The College of Physicians and Surgeons of PEI directs physicians prescribing buprenorphine to review the *Buprenorphine Guideline for Treatment of Opioid Dependence* published by the Centre for Addiction and Mental Health. The guidelines provide direction on buprenorphine dosing. Pharmacists in PEI should assess the dose of buprenorphine for each prescription in accordance with current references, including these guidelines.

If a pharmacist believes that doses being prescribed fall outside of current recommended guidelines, they shall consult with the prescriber and document the rationale for the deviation in the patient record.

B. Dispensing the Prescription

Preparing Witnessed Doses

Buprenorphine-naloxone should be dispensed in a light-resistant vial labelled with:

- a) Patient's first and last name,
- b) prescriber's full name or first initial and last name,
- c) drug name (i.e., buprenorphine-naloxone or brand),
- d) amount of drug (in mg) contained in the vial to be consumed in a single dose,
- e) local prescription number and DIS prescription number (if applicable),
- f) date of dispense,
- g) quantity of medication (part-fills) remaining (if applicable); and
- h) dispensing pharmacist's initials.

Preparing Take-Home Doses

Take-home doses of buprenorphine-naloxone should be dispensed in the original foil packaging (if applicable) in a light-resistant vial with a child-resistant cap and labelled with:

- a) Pharmacy name, phone number and street address (if available, or, if not, a way of uniquely identifying the pharmacy location),
- b) patient's first and last name,
- c) prescriber's full name or first initial and last name,
- d) drug name (i.e., buprenorphine-naloxone or brand) and strength,
- e) total number of tablets in the vial,
- f) specific directions for use (such as "Take X tablets on (insert date or days of week),
- g) local prescription number,
- h) date of dispense,



PRINCE EDWARD ISLAND COLLEGE OF PHARMACY

Member organization of National Association of Pharmacy Regulatory Authorities (NAPRA)

- i) quantity of medication (part-fills) remaining (if applicable),
- j) dispensing pharmacist's initials, and
- k) cautionary labels:
 - a. Keep out of reach of children
 - b. Special cautionary label such as: *"May be toxic or lethal if ingested by a child or adult other than the intended patient. Accidental ingestion is considered a medical emergency and requires immediate medical attention."*

C. Releasing the Prescription

Providing Witnessed Doses

The pharmacist is required to *assess* the patient prior to the ingestion of the dose. This function may not be delegated to a pharmacy technician or any other member of the pharmacy team.

During the assessment the pharmacist must:

- a) Positively identify the patient. If uncertain as to the patient's identity, photo identification should be requested.
- b) Assess the patient for signs of intoxication or sedation. If it is determined that the patient is intoxicated or sedated, it may be advisable to withhold the dose. If such determination is made, the prescriber must be notified immediately (see sample [Appendix D: Opioid Agonist Maintenance Treatment Prescriber Fax Notification Form](#)).
- c) Review the patient's profile and Administration Log for notes, missed doses, documentation of returned vials (if applicable), or any other applicable information.
- d) Counsel the patient appropriately (for complete patient counselling information, see the product monographs).

Once it has been determined to be appropriate to release the witnessed dose, the pharmacist or pharmacy technician must:

- a) Prepare the buprenorphine-naloxone dose, taking care to avoid skin contact, and place the tablets in a disposable single-use cup.
- b) Directly observe the patient tipping the medication cup so that the tablets are positioned under the tongue. Tablets may take up to 10 minutes to dissolve. After the first few minutes, once the tablet has dissolve into a pulpy mass, diversion is more difficult. Pharmacy professionals may use professional judgement to determine how long a patient must wait before leaving the pharmacy.
- c) Appropriately document the dose on the Administration Log.



Providing Take-Home Doses

Take home medication or “carries” are given to stable patients to reduce disruption in and improve the quality of the patients’ daily life. Patients must demonstrate to the prescriber that they are clinically stable and are able to store the medication safely.¹⁵

When providing take-home doses to the patient, the pharmacist must:

- a) Positively identify the patient. If uncertain as to the patient's identity, photo identification should be requested.
- b) Review the patient's profile and Administration Log for notes, missed doses, documentation of returned vials (if applicable), or any other applicable information.
- c) Counsel the patient appropriately (for complete patient counselling information, see the product monographs).
- d) Appropriately document the provision of the take-home doses on the Administration Log.

Criteria for Take-Home Doses

In general, patients are eligible for their first take-home dose of buprenorphine if they meet specific criteria for clinical stability, have had at least two months of daily witnessed dosing and have demonstrated two months without substance use, as determined by history and urine drug screening.

There should be a gradual increase in the number of weekly take-home doses (starting with just weekends and holidays) up to a suggested maximum of one to two weeks of consecutive take-home doses dispensed between observed doses. While the Centre for Addictions and Mental Health (CAMH) guidelines do allow for the prescriber to prescribe take-home doses earlier than two months after treatment is initiated, this is considered “against-label” prescribing. The patient must be made aware of the “against-label” prescribing as well as of the additional risks of starting take-home dosing earlier than normal.

¹⁵ College of Pharmacists of Manitoba. (2018). Opioid Replacement Therapy Guidelines for Manitoba Pharmacists. Retrieved from <https://cphm.ca/uploaded/web/Guidelines/ORT%20Opioid%20Replacement%20Therapy%20Guidelines%20for%20Manitoba%20Pharmacists.pdf>.



If pharmacists see take-home doses being prescribed outside of these criteria, they should consult with the prescriber and document the rationale for the deviation in the patient record.

Exceptional Circumstances

There may occasionally be circumstances where the prescriber allows for exceptional take-home doses to be given in the case of travel for work, vacation, or family crisis. The previous take-home dose schedule should be resumed after the period of exceptional take-home dose is completed.

If pharmacists see take-home doses being prescribed outside of these criteria, they should consult with the prescriber and document the rationale for the deviation in the patient record.

Suspending Take-Home Doses

In certain circumstances, it may be advisable for the prescriber to suspend the patient's take-home doses. This generally occurs in response to the patient having a relapse to substance use, or in the following situations:

- a) There is reasonably strong evidence that the patient has diverted their dose or has tampered with their Urine Drug Screen (UDS).
- b) The patient has missed three or more doses (except in unavoidable circumstances such as hospitalization).
- c) The patient has become homeless, or has unstable housing, and can no longer safely store their medication.
- d) The patient is actively suicidal, cognitively impaired, psychotic, or is otherwise at high risk for misuse of their medication.
- e) The patient has recently been released from jail when incarcerated for prolonged periods of greater than three months. In such situations, take-home doses should not be reinstated until stability can be re-established objectively via weekly UDS and other measures of clinical stability. This may take one month in patients whose drug use was sporadic and brief, and whose clinical stability is not significantly compromised, or up to two months or more in patients who have had a longer relapse with loss of clinical stability.



Monitoring Compliance with Take-Home Doses

There are several ways that pharmacists can monitor a patient's compliance with take home doses which include a take-home dose audit.

Patients shall be advised that they may be asked at any time to return to the pharmacy with the remainder of their take-home doses and empty vials. This procedure, known as a “take-home dose audit”, may be used to deter patients from diverting their take-home doses. This audit may be initiated by either the prescriber or the pharmacist. If there are issues of concern with the patient’s compliance with their take-home doses or evidence of diversion, the pharmacist should notify the prescriber immediately.

D. Responding to Special Circumstances

Intoxication

Prior to dispensing buprenorphine, pharmacists must assess all patients for signs of intoxication including, but not limited to:

- slurred speech,
- incoordination,
- smelling of alcohol,
- unusual behavior,
- ataxia.

To assess a patient for intoxication or sedation, consider their general demeanor and behavior in comparison to what you know as their usual behavior. If necessary:

- Ask the patient to remove sunglasses and observe their eyes for pin-point pupils, alertness, or sedation.
- Talk to the patient, asking questions to determine if they are slurring or incoherent.
- Ask the patient to walk to the counter and observe their gait.

If there is evidence of intoxication or sedation, the pharmacist should withhold the dose from the patient to prevent a possible overdose. The prescriber must be notified within 24 hours that the dose has been withheld.



Missed Doses

Missed doses may indicate a variety of problems, including relapse to alcohol or drug use. Due to buprenorphine's partial mu agonist properties and lower risk of overdose, re-titrating and adjusting patients' doses likely does not require the same degree of vigilance as with the full mu agonist methadone. Missed doses may be handled by the pharmacist in accordance with the Prescriber-Pharmacist agreement ([Appendix C: Sample Prescriber-Pharmacist Agreement](#)).

Administration Errors

In the event of a confirmed or suspected medication dosing error, the pharmacist must take appropriate and necessary action to minimize harm to the patient, ensuring transparency throughout the entire process. This includes prompt consultation with the patient's other health care provider(s) for determination of appropriate action.

In addition to the following standards specific to buprenorphine/naloxone, it is expected that pharmacists will manage the error in accordance with the NAPRA Model Standards of Practice for Canadian Pharmacists and the individual pharmacy's medication error management policy.

Buprenorphine Overdose

- Tell the patient. If the patient has left the pharmacy, contact them by telephone. If the patient has no phone, you may need to contact the patient's prescriber or clinic to obtain a contact number or send police to the home.
- Advise the patient to seek medical attention immediately. If the patient refuses medical attention, document the time and details. Ask the patient to remain in the care of a friend or relative for the day.
- Advise the patient of the symptoms of overdose. Make follow-up contact with the patient throughout the day.
- Advise the patient's prescriber or clinic.
- Reassess the patient's health condition before administering the next daily dose.

Buprenorphine Under dose

- Advise the patient's prescriber or clinic and the patient as you would with an overdose.
- Should the patient refuse to return for the dose, advise them of the possibility of withdrawal and the symptoms related to opioid withdrawal.
- If the patient cannot be reached during business hours, advise them of the error at their next administration.



Appendix A: Comparison of Methadone and Buprenorphine/Naloxone

	Methadone	Buprenorphine
Format	- Oral liquid	- Sublingual tablet, injectable, implant
Pharmacology	<ul style="list-style-type: none"> - Long-acting, orally effective full mu opioid receptor agonist - No ceiling effect - Peak plasma levels 2-4 hours after ingestion - Steady state in 5-7 days 	<ul style="list-style-type: none"> - Long-acting partial mu opioid receptor agonist - Has a ceiling effect - Peak plasma levels 90 minutes after ingestion (sublingual) - Steady state in 5-10 days - Addition of naloxone does not have effect sublingually (added to prevent diversion)
Duration of action	- 24-36-hour duration of withdrawal management effects	- 48-72-hour duration of withdrawal management effects
Advantages	<ul style="list-style-type: none"> - No concern of precipitated withdrawal - Less expensive - More flexible dosing range - Preferred in pregnancy 	<ul style="list-style-type: none"> - Ceiling effect result in less opioid effect (respiratory depression) at high doses - Ceiling effect allows for quick titration - Fewer clinically significant drug interactions
Disadvantages	<ul style="list-style-type: none"> - Clinical response to a given dose difficult to predict - “Start low and go slow” due to increased risk of toxicity - More clinically significant drug interactions 	<ul style="list-style-type: none"> - More expensive - Less flexible dosing range because of available tablet strengths
Common Side Effects	<ul style="list-style-type: none"> - Constipation - Sedation - Sweating - Weight gain - Insomnia - Sleep apnea - Nausea - Sexual dysfunction - Psychoactive changes - Urinary retention - Cardiovascular effects 	<ul style="list-style-type: none"> - Constipation - Sedation - Sweating - Weight gain - Insomnia - Sleep apnea - Nausea - Headaches



PRINCE EDWARD ISLAND
COLLEGE OF PHARMACY

Member organization of National Association of Pharmacy Regulatory Authorities (NAPRA)

	Methadone	Buprenorphine
Drug Interactions	<ul style="list-style-type: none">- Pharmacokinetic interactions due to extensive metabolism by CYP3A4 (also 1A2, 2B6, 2C8, 2C9, 2C19 and 2D6)- Pharmacodynamic interaction potential with CNS depressants, anticholinergics, and recreational drugs	<ul style="list-style-type: none">- Pharmacokinetic interactions due to primary metabolism by CYP3A4 (also CYP2C8)- Pharmacodynamic interaction potential with CNS depressants, anticholinergics, and recreational drugs
Cautions	<ul style="list-style-type: none">- QT Prolongation (increasing the risk of Torsades de Pointes)	<ul style="list-style-type: none">- Precipitated withdrawal

Pharmacists should consult up-to-date drug interaction references for more detailed information on potential drug interactions with methadone and buprenorphine.

More information on QT prolongation including drugs known to cause QT prolongation can be found at <https://crediblemeds.org/>.



Appendix B: Sample Patient-Pharmacist Agreement Methadone or Buprenorphine/Naloxone

Patient-Pharmacist Agreement

Name: _____ Address: _____

Telephone #: _____ Postal Code: _____

Date of Birth: _____ Prescriber: _____

OUR COMMITMENT TO YOU:

As your pharmacists, we believe in the principles of the opioid agonist treatment program, and the valuable role it can play in improving people's lives and their health. To help you succeed in the program we make the following promises:

We will always treat you professionally and respectfully.

We are part of your health care team and will communicate with your prescriber when necessary. The kinds of issues we will discuss with your prescriber include:

- missing one or more doses,
- refusal to consume the full prescribed dose,
- being intoxicated or sedated when you arrive at the pharmacy,
- doses for replacement of lost, stolen, or vomited doses, and
- visiting another prescriber and being prescribed mood-altering medications by another prescriber.

We will provide your dose to you exactly as your prescriber has prescribed it.

We are not able to give you extra doses, early doses, take-home doses unless your prescriber prescribes it.

We are required to watch you ingest your dose and have a conversation with you afterward unless your prescriber specifically directs otherwise on your prescription. You may also be required to drink water after swallowing your dose.



We will not dispense your take-home doses to anyone other than you unless directed to do so by your prescriber on your prescription.

We welcome any comments or suggestions you may have regarding our services.

As our patient, we have several expectations of you, too

YOUR COMMITMENT TO US:

I will not arrive at the pharmacy before the pharmacy is open. I will arrive for my daily dose between the hours of ____ and ____ daily (preferably in the morning and should be a consistent time each day).

I will respect the pharmacy's neighborhood. I will ensure that all pharmacy packaging materials and litter are disposed of in the garbage containers provided.

I will be respectful of others, including staff, other patients, and neighbors of the pharmacy.

If I am prescribed take-home doses, I will store them safely and securely in my home.

I realize that I may be asked to present identification before receiving my first dose of methadone from the pharmacy and when receiving doses from any new pharmacist on staff.

I realize I may not be given my dose if I am under the influence of other substances.

I will not participate in any illegal activity at the clinic/office/pharmacy etc.

I will not abuse any staff person verbally or otherwise.

I realize that my doctor, pharmacist, nurse, and other health professionals directly involved in my care may openly communicate with each other concerning any aspect of the opioid dependence treatment program.

I realize any drug abuse will be reported to the prescriber.

If I see a doctor other than the opioid agonist maintenance treatment program prescribing doctor, I will inform them that I am in the opioid agonist maintenance treatment program.

I agree to undergo supervised urine drug screening on a periodic basis, as may be required of my opioid agonist maintenance program.



I will not stockpile my doses.

I will be observed swallowing my dose and this will be confirmed by speaking to the pharmacist after swallowing the dose and/or drinking water.

I will dispose of the container used to dispense my dose in the pharmacy.

I realize it is best to spread the time between doses by at least 16 hours. There will be no twice daily dosing.

I realize that all doses must be made up in Tang, unless specified otherwise by the prescriber on each prescription (applies to methadone only.)

I will ensure that all caps on all take home doses are tightly secured and that the doses will be kept in a secure place away from others, especially children.

I will confirm I have received the appropriate number of doses and I will sign for the doses. I may periodically be expected to present remaining carry bottles to the pharmacy.

I realize I require a valid prescription and no doses will be dispensed without one. It is my responsibility to make sure the prescription does not expire before a new prescription is presented to the pharmacy.

I realize that any doses vomited, or any take home doses lost, will not be replaced without a written prescription from the prescriber.

I realize that a missed day means a missed dose which will not be made up.
If I am required to pay for my doses, I will pay at the time I receive the dose.

Failure to pay for my doses may result in discharge from the program.
The pharmacist may obtain information about my medication use from other pharmacies.

I understand that failure to honor this agreement may result in no longer being serviced at this pharmacy.

I have read the above agreement and understand and agree with its content

Patient Name: _____ Patient Signature: _____

Pharmacist Name: _____ Pharmacist Signature: _____

Date: _____



Appendix C: Sample Prescriber-Pharmacist Agreement

Prescriber's Name and Clinic: _____

Address: _____

Phone: _____

Fax: _____

Dear Pharmacist,

My patient attends your pharmacy for Opioid Agonist Maintenance Treatment. We encourage active communication between pharmacist and prescriber.

I have already discussed the following safety measures, dispensing practices, and clinic policies with the patient. Please feel free to contact me to discuss any of these matters or any further suggestions that your team may have for this patient's clinical care.

You may call/page me at _____ during regular office hours and _____ after hours. Please do not give this pager/phone number to the patient.

Patients are required to drink methadone dispensed in approximately 100 mL of diluent in front of the pharmacist or pharmacy technician. You must witness ingestion of methadone every day for patients receiving daily prescriptions and, on the day that patient's pick up their doses for patients receiving take-home doses. Ask the patient to speak after their dose to ensure that it has been swallowed or observe drinking water after ingestion of their dose. Pharmacists or pharmacy technicians should witness buprenorphine/naloxone being placed under the patient's tongue and should discreetly check for dissolution after one to two minutes.

The pharmacy team shall inform me or another member of the clinic of any information or observed evidence of diversion of methadone.

The pharmacist shall inform me or another member of the clinic of missed methadone doses by the patient

If the patient misses _____ or more doses in a row, the pharmacist is to withhold the dose from the patient to prevent an overdose and the prescriber is to be contacted. The prescriber must reassess the patient before treatment is restarted.



PRINCE EDWARD ISLAND
COLLEGE OF PHARMACY

Member organization of National Association of Pharmacy Regulatory Authorities (NAPRA)

If there is any evidence of intoxication, sedation, or impairment (slurred speech, stumbling gait, disorientation), the pharmacists must withhold the dose from the patient to prevent a possible overdose. The pharmacy team must contact myself or another member of the clinic to inform them of the observation. If the patient returns within eight hours of their originally scheduled witnessed ingestion, and the pharmacist is satisfied that the patient is no longer intoxicated, sedated, or impaired, the pharmacist may give the patient the withheld dose. However, the pharmacists must not release any take-home doses until reauthorized.

If the pharmacist observes evidence of an overdose, they must advise the patient to received urgent medical care. The pharmacist may call 911 for transport to the hospital. The pharmacist will contact myself directly to inform me of the overdose and treatment directives.

Dispense take-home doses in childproof containers. Patients are advised to store any take-home doses in an impenetrable locked box to ensure community safety (i.e., to avoid misplacement/loss and consumption by someone other than to whom it is prescribed). The pharmacist may require that the patient present the locked box prior to issuing take-home doses.

The start and end date recorded on the prescription are the first and the last day the patient is authorized to receive a dose for that prescription. The pharmacist must not dispense after the end date, regardless of the fact that there may be doses remaining on that prescription.

A patient may be authorized to receive take-home doses based on their clinical stability. Providing take-home doses to a patient before they are clinically stable puts them and the public at risk of overdose and diversion. Providing take-home doses for patients because the pharmacy is closed is a last resort when all other steps outlined in the *Opioid Agonist Maintenance Treatment - Practice Directives for Community Pharmacists* have been exhausted, and then only in accordance with the document.

Sincerely,

/Signature/

Name of prescriber

Registration number



Appendix D: Opioid Agonist Maintenance Treatment Prescriber Fax Notification Form

To: _____
Prescriber Name Fax #

Date: _____

RE: _____
Patient Name PEI Health Card

From: _____
Pharmacy Name Pharmacist Name

_____ Phone # Fax #

Type of Incident

- The patient missed his/her dose on (date): _____
- The patient vomited his/her dose on (date): _____
- The patient reported a lost or stolen take-home dose on (date): _____
- The patient was refused his/her dose on (date): _____
because he/she presented at the pharmacy in an intoxicated or sedated state.

Additional Detail:

Follow-up Plan:



Appendix F: Resources for Pharmacy Professionals

	CAMH Buprenorphine / Naloxone for Opioid Dependence Clinical Practice Guideline	CPSO Methadone Maintenance Treatment Program Standards and Clinical Guidelines	CAMH Opioid Agonist Maintenance Treatment: A Pharmacist’s guide to methadone and buprenorphine for opioid use disorder
<i>Dosing</i>	Section 3 Appendix G	Section 6	Section 7
<i>Pharmacology</i>	Supplement 2		Section 2
<i>Observed Doses</i>	Supplement 5		Section 6
<i>Take-Home Doses</i>	Section 3	Section 8	Section 6
<i>Switching Treatments</i>			Section 7
<i>Pregnancy and Breastfeeding</i>	Supplement 8	Appendix L	Section 7
<i>Special Populations</i>	Supplement 7 Supplement 9	Section 13	Section 7
<i>Acute and Chronic Pain</i>	Supplement 10		Section 7
<i>Hospitalized Patients</i>		Section 15	Section 9
<i>Incarcerated Patients</i>		Section 14	Section 9
<i>Drug Interactions</i>	Supplement 2	Appendix B	Appendix 2
<i>Ending the Relationship</i>		Section 9	Appendix 10

CAMH Buprenorphine / Naloxone for Opioid Dependence Clinical Practice Guideline available from <https://www.cpso.on.ca/admin/CPSO/media/Documents/physician/your-practice/quality-in-practice/cpgs-other-guidelines/buprenorphine-naloxone-guidelines.pdf>

CAMH Opioid Agonist Maintenance Treatment: A Pharmacist’s guide to methadone and buprenorphine for opioid use disorder is available to order from CAMH. See <https://store-camh.myshopify.com/products/p6500>.

CPSO Methadone Maintenance Treatment Program Standards and Clinical Guidelines available from <https://www.cpso.on.ca/admin/CPSO/media/Documents/physician/your-practice/quality-in-practice/assessments/mmt-guidelines.pdf>



References

1. Alberta Alcohol and Drug Abuse Commission (AADAC) (2007). Opioid Dependency Program Information for Pharmacists. Retrieved from http://www.aadac.com/documents/odp_info_for_pharmacists.pdf.
2. Alberta College of Pharmacy. (2014). Medication-Assisted Treatment for Opioid Dependence: Guidelines for Pharmacists and Pharmacy Technicians. Retrieved from <https://abpharmacy.ca/sites/default/files/ODTGuidelines.pdf>.
3. British Columbia Centre on Substance Use and B.C. Ministry of Health. (2017). A Guideline for the Clinical Management of Opioid Use Disorder. Retrieved from <http://www.bccsu.ca/care-guidance-publications>.
4. British Columbia Centre on Substance Use, B.C. Ministry of Health, B.C. Ministry of Mental Health and Addictions, & Perinatal Services BC. (2018). A Guideline for the Clinical Management of Opioid Use Disorder—Pregnancy Supplement. Retrieved from <http://www.bccsu.ca/care-guidance-publications>.
5. Centre for Addiction and Mental Health (CAMH). (2019). Stigma: Understanding the Impact of Prejudice and Discrimination. Retrieved from <https://camh.ca/en/health-info/guides-and-publications/stigma>.
6. College of Pharmacists of British Columbia. Professional Practice Policy #66: Policy Guide Methadone Maintenance Treatment. (2013). Retrieved from http://library.bcpharmacists.org/6_Resources/6-2_PPP/1029-PPP66_Policy_Guide_MMT.pdf.
7. College of Pharmacists of British Columbia. Professional Practice Policy #66: Policy Guide Buprenorphine/Naloxone Maintenance Treatment. (2018). Retrieved from http://library.bcpharmacists.org/6_Resources/6-2_PPP/1048-PPP66_Policy_Guide_BMT.pdf.
8. College of Pharmacists of British Columbia. Professional Practice Policy #66: Policy Guide Slow Release Oral Morphine Maintenance (SROM) Treatment. (2018). Retrieved from http://www.bccsu.ca/wp-content/uploads/2018/03/CRISM_NationalGuideline_OUD-ENG.pdf.
9. College of Pharmacists of Manitoba. (2018). Opioid Replacement Therapy Guidelines for Manitoba Pharmacists. Retrieved from <https://cphm.ca/uploaded/web/Guidelines/ORT%20Opioid%20Replacement%20Therapy%20Guidelines%20for%20Manitoba%20Pharmacists.pdf>.
10. College of Physicians and Surgeons of Ontario. (2010). Methadone Maintenance Treatment for Opioid Dependence. Retrieved from <http://www.cpso.on.ca/admin/CPSO/media/Documents/physician/policies-and-guidance/policies/methadone-maintenance-treatment-for-opioid-dependence.pdf>.



11. College of Physicians and Surgeons of Ontario. (2011.) Methadone Maintenance Treatment Program Standards and Clinical Guidelines. Retrieved from <http://www.cpso.on.ca/admin/CPSO/media/Documents/physician/your-practice/quality-in-practice/assessments/mmt-guidelines.pdf>.
12. College of Physicians and Surgeons of PEI. Standard on Prescribing Buprenorphine. (2018). Retrieved from <http://cpspei.ca/wp-content/uploads/2018/06/BUPRENORPHINE-Standard-for-Opioid-Dependency-June-2018.pdf>.
13. College of Physicians and Surgeons of PEI. Standard for Prescribing Methadone. (2018). Retrieved from <http://cpspei.ca/wp-content/uploads/2018/06/Methadone-Prescribing-Standards-June-2018.pdf>.
14. CRISM National Guideline for The Clinical Management of Opioid Use Disorder. (2018). Retrieved from http://www.bccsu.ca/wp-content/uploads/2018/03/CRISM_NationalGuideline_OUD-ENG.pdf.
15. Indivior UK Limited. Sublocade™ Product Monograph. 2020. Retrieved from https://pdf.hres.ca/dpd_pm/00054686.PDF.
16. Isaac, P., Janecek, E., Kalvik, A. & Zhang, M. Centre for Addiction and Mental Health (CAMH). (2018). Opioid Agonist Maintenance Treatment: A Pharmacist's Guide to Methadone and Buprenorphine for Opioid Use Disorder.
17. Knight Therapeutics Inc. Probuphine™ Product Monograph. 2020. Retrieved from https://www.gud-knight.com/wp-content/uploads/PM_approved_20May2020_v3.0_EN.pdf.
18. Lauriault, G., Lebel, M.J., Lodge, B.A., et al. (1991). Stability of Methadone in Four Vehicles for Oral Administration. *Am. J. Hosp. Pharm.* (48): 1252-1256.
19. Newfoundland and Labrador Pharmacy Board. (2018). Standards for the Safe and Effective Provision of Opioid Agonist Maintenance Treatment. Retrieved from <http://www.nlpb.ca/media/SOPP-OAMT-May2018.pdf>.
20. Public Health Agency of Canada Special Advisory Committee on the Epidemic of Opioid Overdoses. (2019). National report: Apparent opioid-related deaths in Canada (January 2016 to December 2018). Web Based Report. Retrieved from <https://health-infobase.canada.ca/datalab/national-surveillance-opioid-mortality.html>.
21. Stringer, J., Welsh, C., & Tommasello, A. (2009). Methadone-associated QT Interval Prolongation and Torsades de Pointes. *Am J Health Syst Pharm* 66(9): 825-833.



PRINCE EDWARD ISLAND
COLLEGE OF PHARMACY

Member organization of National Association of Pharmacy Regulatory Authorities (NAPRA)

22. Wong, S., Ordean, A., & Kahan, M. (2011). SOGC clinical practice guidelines: Substance use in pregnancy. *International Journal of Gynaecology and Obstetrics* 114(2): 190-292.
23. Ayanga, D., Shorter, D., & Kosten, T.R. (2016). Update on pharmacotherapy for treatment of opioid use disorder. *Expert Opinion on Pharmacotherapy* 17(17): 2307-2318.