Opioid Agonist Treatment Maintenance

Note: This document provides information on opioid agonist treatment (OAT) options. Regional health authorities may opt to develop relevant pre-printed orders (PPOs), decision support tools (DSTs), workflows, or other tools to support implementation

Preamble

On presentation to acute care facilities, continue community OAT as soon as it is safe to do so

- Some patients may need their OAT dose reduced or stopped due to clinical indications, such as acute illness and/or missed doses
- Doses may need to be adjusted (see **Missed Doses** and **Titrations** below)

Some patients on OAT may continue to use unregulated opioids

Continuity of Care

Identify the patient's current OAT dose, and check for any new medications through:

- PharmaNet
- CareConnect or UCI (Unifying Clinical Information) Network
- Medication reconciliation or best possible medication history on admission
- Community pharmacy: connect with the patient's community pharmacy (if available) to confirm recent dose administration and discontinue any existing OAT prescriptions

Contact the hospital pharmacy for any questions on drug–drug interactions

Methadone has several drug–drug interactions

Medications administered in the hospital are not automatically recorded on PharmaNet

To avoid double dosing, consider manually entering hospital-administered medications into PharmaNet using the transaction medication update (TMU) function, (if available at your site) or notify the patient's pharmacy

Continuation of OAT doses

Continue current OAT dose if there are:

- No missed doses
- No unmanaged cravings or withdrawal symptoms

  If the patient has unmanaged cravings or withdrawal symptoms, consider dose increase

Do not lower stable OAT doses, unless clinically indicated (i.e., for severe acute medical illness) or as part of shared decision-making with the patient.

Consider splitting OAT doses for safety.

- OAT dose may be split TID (3 hours apart)
- Aim to ideally reconsolidate split doses prior to discharge
- It is encouraged to consult the local inpatient consult team, 24/7 Addiction Medicine Clinician Support Line, RACEapp, or other local addiction medicine resources

Missed Doses Protocols and guidance on Titrations can be found below

Missed Doses Protocols

Tolerance can be lost rapidly when OAT doses are missed. Dose adjustments may be required.

There is a possibility of over-sedation and overdose if doses are not adjusted

Assess and verify how many doses were missed

Assessment can be difficult, especially if the patient is on take-home doses

Determine missed doses:

Check PharmaNet or contact the patient's community pharmacy

- PharmaNet may not accurately reflect doses for the day. Call the community pharmacy or discuss with the patient to confirm the last dose
- PharmaNet does not provide information on the patient's community pharmacy
  - Contacting the PharmaNet Medical Practitioner Line if the patient cannot identify their community pharmacy
  - Toll-free: 1-866-905-4912. Select any option and wait to speak to an available agent

Discuss with the patient to try to determine the number of missed doses

Increased monitoring and post-dose assessments may be ordered to ensure safety

If the number of missed doses is known, doses should be reduced according to the missed doses protocols

If there is a possibility of lost tolerance consider splitting OAT doses for safety

Use shared-decision making with the patient to support decisions on resuming or re-titrating OAT doses

Consult the local inpatient consult team, 24/7 Addiction Medicine Clinician Support Line, RACEapp, or local addiction medicine resources to support decisions regarding missed dose protocols or if considering splitting OAT doses

Buprenorphine

There are 2 missed dose protocols for buprenorphine, based on whether the patient has returned to full agonist use (e.g., hydromorphone, fentanyl) since their last buprenorphine dose

Table 1. Suggested Protocols for Managing Missed Buprenorphine Doses Without Return to Full Agonist Use

No return to full opioid agonist use	
Number of consecutive missed once-daily doses	**Action**
≤5 consecutive missed once-daily doses	Resume dose
≥6 consecutive missed once-daily doses	Re-titrate See *OAT Initiation*

Table 2. Suggested Protocols for Managing Missed Buprenorphine Doses With Return to Full Agonist Use

Return to full opioid agonist use	
Number of consecutive missed once-daily doses	**Action**
≤3 consecutive missed once-daily doses	Resume dose
4 consecutive missed once-daily doses	Consider the risk of precipitated withdrawal and weigh against the benefits of continuing the existing buprenorphine dose
≥5 consecutive missed once-daily doses	New induction may be required See *OAT Initiation*

Extended-release Buprenorphine (Sublocade)

Table 3. Suggested Protocols for Managing Missed Extended-release Buprenorphine Doses

Number of Weeks Delay in Injection	Action
Up to 2 weeks delay in monthly injection (i.e., up to 42 days after last dose)	• Occasional delays of up to 2 weeks are not expected to significantly impact treatment effect • If patient misses a monthly extended-release buprenorphine injection, administer their next dose as soon as possible. • Resume monthly injections thereafter
More than 2 weeks delay in monthly injection (i.e., >42 days after last dose	• Re-induction is warranted • Re-start the patient on sublingual buprenorphine • Transition rapidly to extended-release buprenorphine. Consult with local inpatient addiction team, 24/7 Addiction Medicine Clinician Support Line, RACEapp, or other regional addiction medicine supports

Methadone

Table 4. Suggested Protocols for Managing Missed Methadone Doses

Number of consecutive missed once-daily doses	Action
≤3 consecutive missed once-daily doses	Resume dose
4 consecutive missed once-daily doses	Reduce dose by 50% or to 30–40mg (whichever is higher)
≥5 consecutive missed once-daily doses	Re-titrate See *OAT Initiation*

Slow-release Oral Morphine (SROM; Kadian)

Table 5. Suggested Protocols for Managing Missed SROM Doses

Number of consecutive missed once-daily doses	Action
≤3 consecutive missed once-daily doses	Resume dose
4 consecutive missed once-daily doses	Reduce dose by 50% of dose or return to initiation dose (whichever is higher) See *OAT Initiation*
≥5 consecutive missed once-daily doses	Re-titrate See *OAT Initiation*

Titrations

Titrate OAT dose if:

- The patient reports ongoing withdrawal symptoms or cravings while on OAT
- The patient reports using unregulated opioids to manage withdrawal symptoms or cravings prior to admission
- Indicated by missed dose protocols
- The patient is in the middle of titration with a community prescriber. If possible, connect with community prescriber to discuss titration plan

Titrate to the lowest effective dose that effectively eliminates cravings and withdrawal symptoms

- It may take several days for the medications to reach a steady concentration and for the patient to feel the full effects
- Additional PRN opioids may be given for withdrawal symptoms and cravings during titration (see *Managing Acute Opioid Withdrawal*)

Assess the patient prior to dose increases

- The POSS can be used to assess the patient for sedation
- Do not administer opioids if POSS is 3 or greater

Buprenorphine

Table 6. Suggested Titration Protocol for Buprenorphine – Traditional Inductions

Titration Dose	Frequency	Maximum Dose
2mg–4mg buprenorphine	q1–3h, until cravings and withdrawal symptoms are resolved	32mg buprenorphine

Note: This protocol is for traditional inductions, which require a period of abstinence from opioids prior to the first order to avoid precipitated withdrawal. For more information on traditional inductions, see OAT Initiation.

Extended-release Buprenorphine

Patients may experience breakthrough withdrawal while on extended-release buprenorphine

Consider strategies for managing breakthrough withdrawal

Supplemental PRN SL buprenorphine

- Patients may need PRN SL buprenorphine during:
  - The first few months of extended-release buprenorphine treatment
  - The several days before their next injection is due
  - The duration of extended-release buprenorphine treatment
- Breakthrough withdrawal and cravings can generally be managed by between 2mg–8mg SL buprenorphine, daily as needed

  If an individual requires more than 8mg per day, consult the local inpatient consult team, 24/7 Addiction Medicine Clinician Support Line, RACEapp, or other regional addiction medicine supports
- Discuss in advance an individualized plan for tapering supplemental PRN SL buprenorphine once withdrawal symptoms and cravings subside
- Prescribe PRN SL buprenorphine as take-home doses if the patient is being discharged

Methadone

Clinical experience indicates that doses of 150mg or higher may be needed to meet therapeutic goals in those with high tolerance due to unregulated fentanyl use

After a dose increase, it can take 5 days for methadone to reach a steady concentration and maximum therapeutic effect. Can cause a delayed emergence of serious adverse effects, including respiratory depression

Titration protocol differs based on tolerance

Table 7. Suggested Titration Protocols for Methadone

Opioid tolerance	Dose increase
High tolerance (current fentanyl use and experience with methadone)	Increase by maximum 15mg every 3 days Daily dose 85mg or more: titrate to a maximum of 10mg every 3–5 days
Lower or unknown tolerance (no active fentanyl use, no experience with methadone, or patients with severe comorbidities that affect toxicity risks)	Increase by maximum 5–10mg every 3–5 days
Concerns of methadone toxicity: monitor the patient at 3-hours post-dose after each dose for 5 days	

Rapid Methadone Titration

- In the hospital setting, a rapid titration may be appropriate for individuals who use fentanyl and other highly potent synthetic opioids
- This is advanced knowledge practice; consult the local inpatient consult team, 24/7 Addiction Medicine Clinician Support Line, RACEapp, or local addiction medicine resources as needed to support decision-making before starting a rapid titration

Slow-release Oral Morphine (SROM; Kadian)

Table 8. Suggested Titration Protocol for SROM

Titration Dose	Frequency	Maximum Dose
up to 100mg	q24–48h, until cravings and withdrawal symptoms are resolved	Doses greater than 1200mg per day may be required to achieve therapeutic dose

Rapid SROM Titration

- In the hospital setting, a rapid titration may be appropriate for individuals who use fentanyl and other highly potent synthetic opioids
- This is advanced knowledge practice; consult with the local inpatient consult team, 24/7 Addiction Medicine Clinician Support Line, RACEapp, or local addiction medicine resources

Reversal of Overdose

Naloxone 0.1—0.2mg IM/IV q2min PRN

- If the cause of overdose is unclear, administration of naloxone in incremental doses is still recommended
- Start with a lower dose to avoid precipitated withdrawal

Table 9. Reversal of Overdose

Administration	If the RR is less than 10 or oxygen saturation (SpO2) is less than 90% (less than 88% for those diagnosed with COPD) and decreased level of consciousness (LOC) Administer q2min until RR is greater than 10 and Sp02 is greater than 90% If there is insufficient response to the initial dose, administer subsequent doses q2min IM/IV: • 0.4mg • 0.8mg • 2mg • 4mg • 10mg Titrate doses to improve spontaneous respiratory effort and minimize withdrawal symptoms
Monitoring	Vital signs: q15min for the first hour In some facilities, patients may need to be transferred to another unit/ward for more frequent monitoring
Observation Period	
Minimum 2 hours	Less than 0.8mg of naloxone administered and the opioid was smoked, snorted, or injected
Minimum 6 hours	More than 0.8mg of naloxone was administered and oral ingestion of opioid
Minimum 4–6 hours	High possibility of co-occurring substance use or concern of overdose secondary to long-acting opioids (e.g., methadone or SROM)
Opioid half-life may exceed the half-life of naloxone (approximately 1.5 hours) and overdose symptoms may resume once naloxone wears off • Do not administer opioids (OAT or PRN) after naloxone has been administered until the patient is assessed for risk of overdose symptoms returning • Consult with the local inpatient consult team, 24/7 Addiction Medicine Clinician Support Line, RACEapp, or other local addiction medicine resources as needed	

Discharge Planning Considerations for OAT Maintenance

Provide discharge prescriptions or medications

- **Buprenorphine** can be given or prescribed as take-home doses
  - If the patient had a current buprenorphine prescription, write a prescription with the same number of take-home doses, unless clinically indicated otherwise
  - If the patient did not have a current buprenorphine prescription, write a prescription for a minimum of 7 days of take-home doses
- **Methadone** and **SROM** prescriptions to be filled by a community pharmacy must be written by a prescriber who has completed POATSP and a preceptorship
  - Liaise with the local inpatient consult team, virtual addiction clinic, or community OAT clinic to ensure a discharge prescription is faxed to a community pharmacy
  - Follow organizational protocols on how to discharge a patient when a prescriber is not immediately available
  - If the patient had an existing methadone or SROM prescription, write a prescription with the same number of take-home doses, unless clinically indicated otherwise
  - If the patient did not have an existing methadone or SROM prescription, follow take-home dosing protocols (see p.152 in the BCCSU's *Guideline for the Clinical Management of Opioid Use Disorder [2023]*)

Contact the community pharmacist and/or prescriber directly, when possible, before patient is discharged

Send relevant information to the community prescriber, including a discharge summary and pertinent investigations, procedures, consultations

Further discharge planning considerations can be found in Acute Care and Opioid Use Disorder

Consultation

Consult with an addiction specialist, such as the local inpatient addiction medicine consult team (available at some acute care sites), for any questions or concerns.

24/7 Addiction Medicine Clinician Support Line

- Consult with an addictions medicine specialist 24 hours a day, 7 days a week
- Available to physicians, nurse practitioners, nurses, midwives, and pharmacists who are involved in addiction and substance use care and treatment in BC
- 778-945-7619

Rapid Access to Consultative Expertise (RACE)

- Online application where primary care providers (physicians and nurse practitioners) can receive specialist advice

Resources

BCCSU: *A Guideline for the Clinical Management of Opioid Use Disorder (2023)*

BCCSU: *The Provincial Opioid Addiction Treatment Support Program*