Methadone for Opioid Use Disorder

Site Applicability

PHC: All sites

Practice Level

Basic Skill: RN, RPN, LPN

Requirements

- An Independent Double Check (IDC) is required when preparing and administering oral liquid methadone.

Need to Know

- Methadone is a long-acting, synthetic opioid agonist used in the treatment of opioid use disorder.
- Most patients* that are prescribed methadone require having their daily methadone witnessed at a community pharmacy. Patients will also have an authorized methadone prescriber who may or may not be their general practitioner (GP).
- Methadone, in oral liquid form, is supplied in a concentration of **10 mg/mL** and is a **high alert medication** that requires an independent double check prior to administration.
- When admitted to hospital, a patient's daily methadone dose is often split into BID or TID dosing initially. This is done for safety reasons so that prescribers can assess for proper dosing based on potential drug interactions, and/or clinical status. If tolerated, split doses can then be consolidated again within several days in most cases.

*patient: refers to patient, client, or resident receiving care

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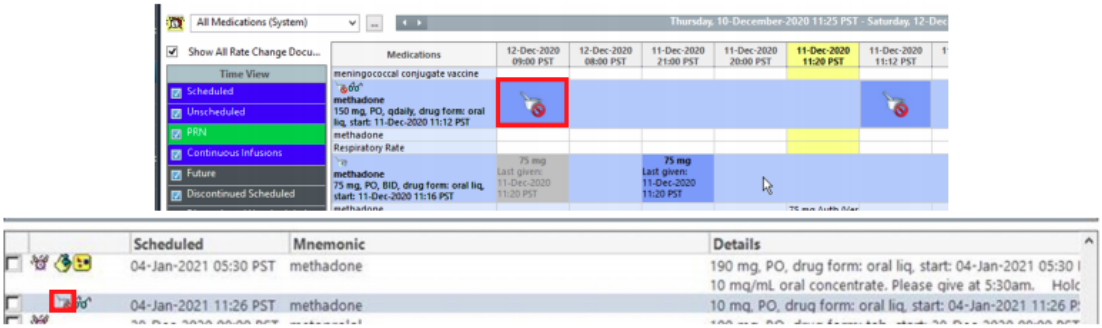
Procedure

Prescriber Orders

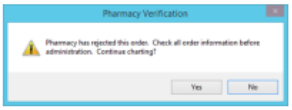
A PowerPlan or written prescriber order will be completed by the prescriber. The medication will appear on the Medication Administration Record (MAR). The PowerPlan also contains orders for monitoring and naloxone PRN.

Only physicians who have special training and authorization can prescribe methadone at PHC. If methadone is ordered by a non-approved prescriber, pharmacy will reject the order (see image below). **Do not proceed with administration**. Contact the prescriber and/or pharmacy for clarification.

When the order is rejected it will appear on the MAR and MAW with a rejected symbol



If attempting to document against a rejected order—a popup will appear:



Initial Assessment

Prior to administration:

- Obtain baseline respiratory rate (RR) and status (rate, depth, regularity, airway patency, and level of sedation (LOS) using the Pasero Opioid-induced Sedation Scale (POSS) [see Appendix A]. Sedation scales, such as POSS, are used to assess sedation level and can be a useful to make decisions about timing of medication interventions and when to intervene based on patients' sedation levels.
    - If patient shows signs of increased LOS (i.e., POSS of 3 or 4), **hold the dose and notify the prescriber/Addiction Medicine Consult Team (AMCT)** or most responsible physician (MRP) if after hours.
    - If patient discloses using non-prescribed opioids, assess LOS using the POSS [modified] and proceed with administering methadone if POSS is S, 1 or 2. Hold the dose if POSS is 3 or 4.
    - The POSS is designed to correlate a level of sedation with a specific intervention providing additional support in clinical decision making, and appropriate and timely escalation of care. See Appendix A for additional interventions that may be required for increased LOS.

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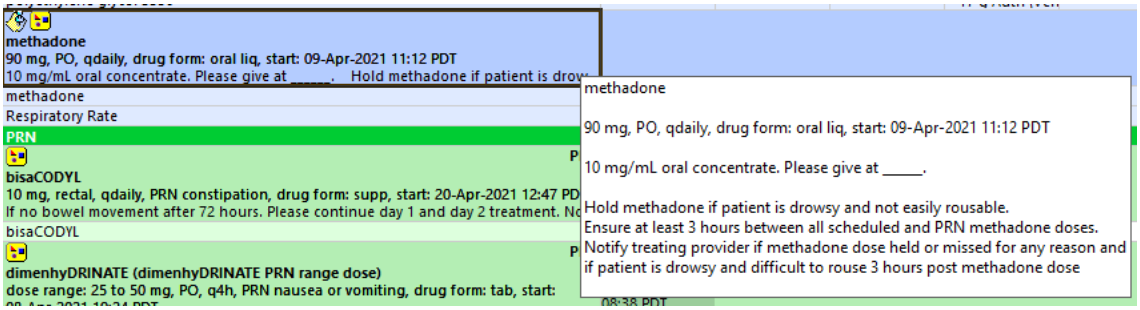
Administration

- Verify methadone orders on the MAR and **review all the order comments**.
    - In Cerner, this may require hovering (the mouse) over the medication entry on the MAR or right clicking on the medication and selecting "Order Info…" to open order details. The order comments can be found under the "Comments" tab. Administration instructions may not be visible by just looking at the MAR.



- **Ensure at least 3 hours between all scheduled and PRN methadone doses.** Onset of effects occur 30 minutes after ingestion and average time to peak plasma concentration and peak clinical effect is 3 hours (with a range of 2-6 hours).
- Ask a colleague for an independent double check (required) prior to administration.
- Methadone must be administered directly to the patient via oral syringe.
    - *Exception:* If patient prefers methadone diluted in juice, dilution by nurse must occur at the bedside; the patient must be able to witness dose volume of methadone prior to dilution.
- Administration time of regularly scheduled methadone doses may be adjusted or rescheduled up until 23:59 on the same day as long as the dose is administered **3 hours apart** from any other scheduled or PRN doses of methadone and the patient is not too sedated (POSS of 3 or 4, see Appendix A). Nurses are not required to call AMCT when they do an adjustment within these parameters.

  After midnight, there is the danger of this dose being too close to their next morning dose. Offer alternative opioid PRNs.
    - *Example: A patient was off the unit for a test and missed their 09:00 daily methadone dose. The patient left the unit after the test and returned at 17:00 requesting their 09:00 dose. If the POSS score is less than 3 and they have not received any scheduled or PRN doses of methadone in the past 3 hours, it is acceptable per AMCT to reschedule and administer the 09:00 dose at 17:00.*
- If a dose is held for any reason or missed *and not able to be rescheduled*, contact prescriber/AMCT or MRP if after hours.
    - **Patients will go into withdrawal if they do not receive their methadone.** Tolerance is lost rapidly when methadone treatment is interrupted or discontinued.

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Ongoing Assessment

- Monitor patient post dose for signs and symptoms of toxicity (e.g., nausea, vomiting, stomach spasms, low blood pressure, weak pulse, confusion, dizziness, cold/clammy skin). Peak toxic effects (somnolence, respiratory depression) occur around 2.5 to 4 hours after the dose. Notify methadone prescriber/AMCT if patient is drowsy and difficult to rouse 3 hours post methadone dose.
- **If patient has PRN doses of methadone** ordered, in addition to regularly scheduled dose(s), AMCT is likely trying to titrate the patient to a higher regularly scheduled dose(s).
    - **Offer the PRNs** if safe to administer based on assessment as outlined above **and 3 hours apart** from any other scheduled or PRN doses of methadone.
    - If patients receive and tolerate the PRN doses, the prescriber can consolidate/add the PRN doses to the scheduled dose the following day.

  The hospital setting allows for monitoring of the patient's tolerance and sedation during titration so we are able to titrate doses faster than in community.
- In the case of suspected opioid overdose (poisoning), naloxone can be administered with or without an order. Methadone ordered within a PowerPlan for opioid use disorder will be accompanied by naloxone PRN orders for 0.1 mg or 0.4 mg IV and IM. Notify prescriber/AMCT and/or MRP if any naloxone is administered.
- Assess/ask patients about opioid withdrawal symptoms (e.g., nausea/vomiting, diaphoresis, anxiety) opioid cravings, and pain and offer PRNs accordingly.
    - Patients can receive short-acting opioids (e.g., morphine oral solution) at the same time as their methadone doses as long they are not too sedated per the POSS scale (see Appendix A).

Documentation

- Document medication administered on the MAR, including the Independent Double Check (IDC) performed prior to administration.
    - In Cerner, the IDC can be signed using the 'Witnessed by' box at the time of administration at the bedside or documented after administration has occurred. After administration, this can be done by the IDC nurse by right clicking the administered dose in the MAR -> click 'Modify...' then fill in the 'Witnessed by' section and sign (see Appendix B for images).

  Document pre- and post-administration LOS assessments on the POSS located in 'Interactive View and I&O' -> 'Adult Quick View' -> 'Sedation Scales' -> double click the empty box that you would like to document in and the 'Sedation Scale Used' box will appear -> select POSS (see Appendix A).
- Document any abnormal or significant findings and/or interventions in narrative charting.

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Patient and Family Education

- Encourage the patient to tell you if they are experiencing pain, withdrawal symptoms, or cravings. Advise them of available PRN doses.
    - Patients may require education as to the indication for the PRN doses (e.g., to titrate and increase their regularly scheduled dose). Ten milligrams is a low dose and patients may not see the therapeutic benefit and decline the PRN.
- Advise patient to tell you if they are using non-prescribed substances while in hospital and offer education regarding harm reduction and safer substance use if appropriate.
- Offer a Take Home Naloxone Kit, harm reduction supplies as appropriate and associated education.

Related Documents

- BD-00-11-40028 - High-Alert Medications Policy
- B-00-11-10125 - Philosophy for Care of Patients and Residents with Substance Use (Policy)
- B-00-13-10175 - Dispensing Take Home Naloxone Kits to Clients at Risk of Opioid Overdose (Adults and Youth)
- B-00-07-10096 - Harm Reduction and Managing Substance Use - Acute Care
- B-00-07-10098 - Independent Double Check and Double Check of Medication
- BD-00-13-40094- Opioid Overdose (Suspected): Management, Including Naloxone Administration Without a Provider Order
- BD-00-07-40094– Opioid Overdose: Management of Suspected Opioid Overdoses in Community Settings (Adults & Youth) for Allied Health and Unregulated Care Providers
- BCCSU/MOH/MMHA: A Guideline for the Clinical Management of Opioid Use Disorder - 2023 Update
- Practice Standard for Registered Nurses, Registered Psychiatric Nurses, Licensed Practical Nurses, and Nurse Practitioners: Medication

Additional Education

- UBC Continuing Professional Development (UBC CPD) Addiction Care and Treatment Online Course (free)

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References

British Columbia Centre on Substance Use, BC Ministry of Health, and BC Ministry of Mental Health and Addictions. (2023, November). *A guideline for the clinical management of opioid use disorder: 2023 update..* BCCSU. https://www.bccsu.ca/opioid-use-disorder/

BC Mental Health & Substance Use Services. (2023). *Opioid agonist treatment.* BCMHSUS. http://www.bcmhsus.ca/health-professionals/clinical-professional-resources/opioid-agonist-treatment

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Pasero, C. (2009). Assessment of sedation during opioid administration for pain management. *Journal of PeriAnesthesia Nursing, 24*(3), 186-190. doi:10.1016/j.jopan.2009.03.005

Pasero, C., & McCaffery, M. (2002). Monitoring sedation: It's the key to preventing opioid-induced respiratory depression. *American Journal of Nursing, 102(*2), 67-69.

Definitions

"Opioid agonist treatment", often called "OAT", refers to the use of medication-based treatment for people who are dependent on opioids (e.g., HYDROmorphone, fentanyl). These medications (e.g., methadone) act slowly in the body, prevent withdrawal and reduce cravings for non-prescribed opioids (i.e., drugs). Opioid agonist treatment has been shown to reduce risk of drug-related harms, such as hepatitis C and HIV transmission and fatal drug poisoning (overdose), drug use and retain patients in treatment and engage in their care.

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Appendix A: Pasero Opioid-induced Sedation Scale (POSS) [Modified to include interventions]

Located in Cerner PowerChart in 'Interactive View and I&O' under 'Sedation Scales' (see next page and below)

Level of Sedation (LOS)	Appropriate Action
S = Sleep, easy to arouse	Acceptable; no action necessary; may continue with opioid dose
1 = Awake and alert	Acceptable; no action necessary; may continue with opioid dose
2 = Slightly drowsy, easily aroused	Acceptable; no action necessary; may continue with opioid dose
3 = Frequently drowsy, arousable, drifts off to sleep during conversation	Unacceptable; hold opioid until improved; monitor respiratory status and sedation level closely until sedation level is stable at less than 3 and respiratory status is satisfactory; ask patient to take deep breaths every 15-30 minutes
4 = Somnolent, minimal or no response to verbal or physical stimulation	Unacceptable; hold opioid; consider administering naloxone; notify prescriber/MRP; stay with patient, stimulate, and support respiration as indicated by patient status; call Code Blue if indicated; monitor respiratory status and sedation level closely until sedation level is stable at less than 3 and respiratory status is satisfactory

Modified from: Pasero, C. (2009). Assessment of sedation during opioid administration for pain management. *Journal of PeriAnesthesia Nursing, 24*(3), 186-190. And: Hall, K. R., & Stanley, A. Y. (2019). Literature review: Assessment of opioid-related sedation and the Pasero Opioid Sedation Scale. *Journal of PeriAnesthesia Nursing, 34*(1), 132-142.

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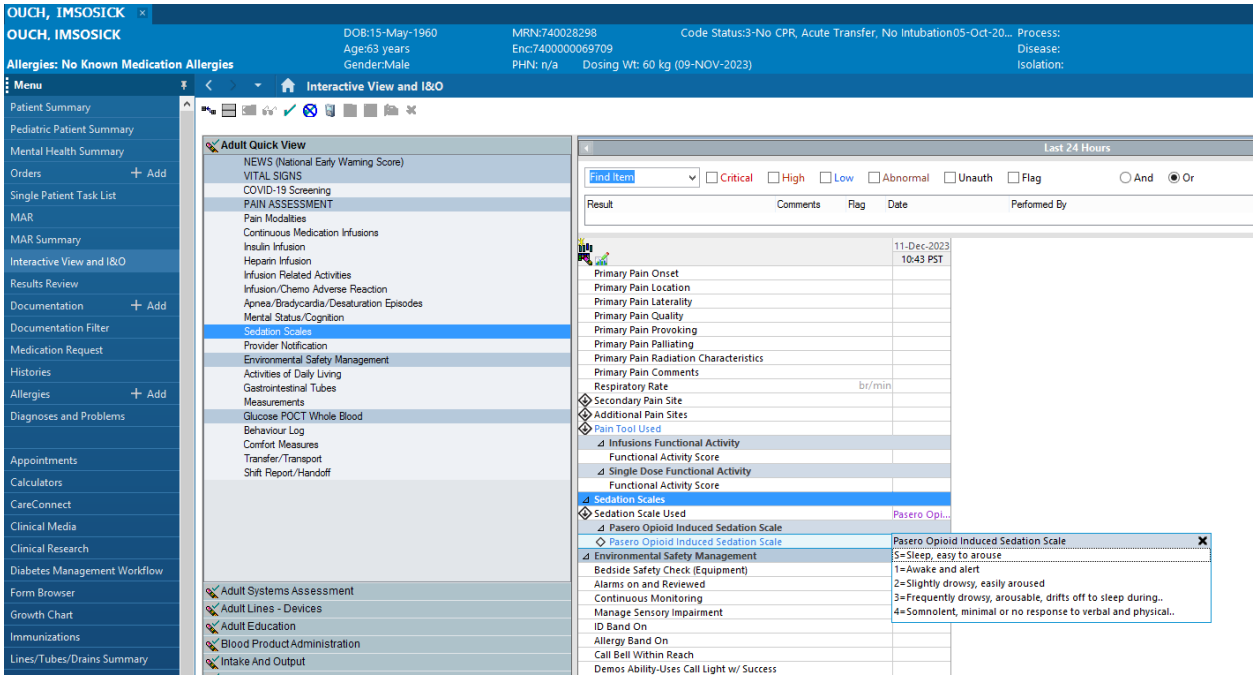

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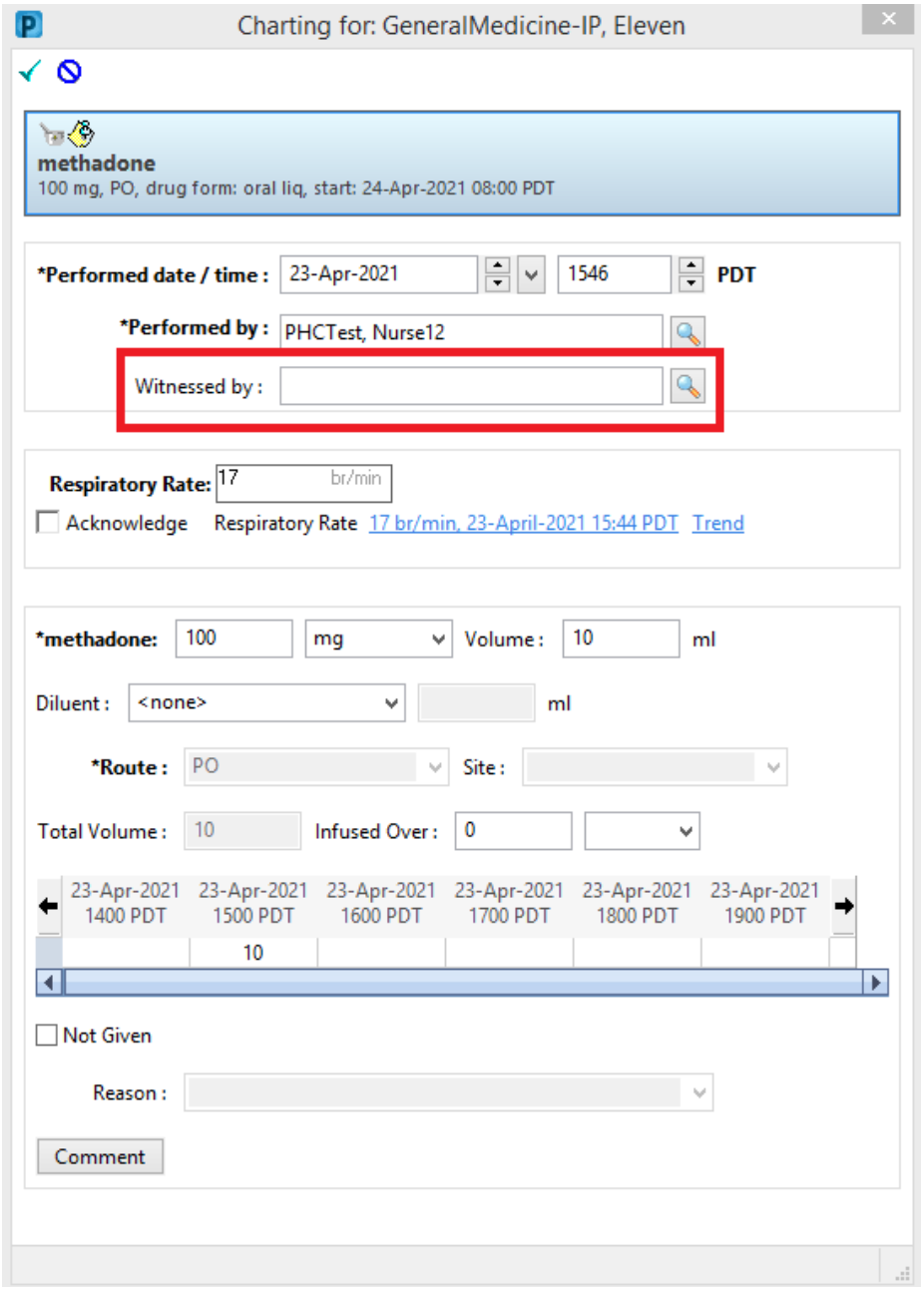
Appendix B: Documenting Independent Double Check (IDC) in Cerner



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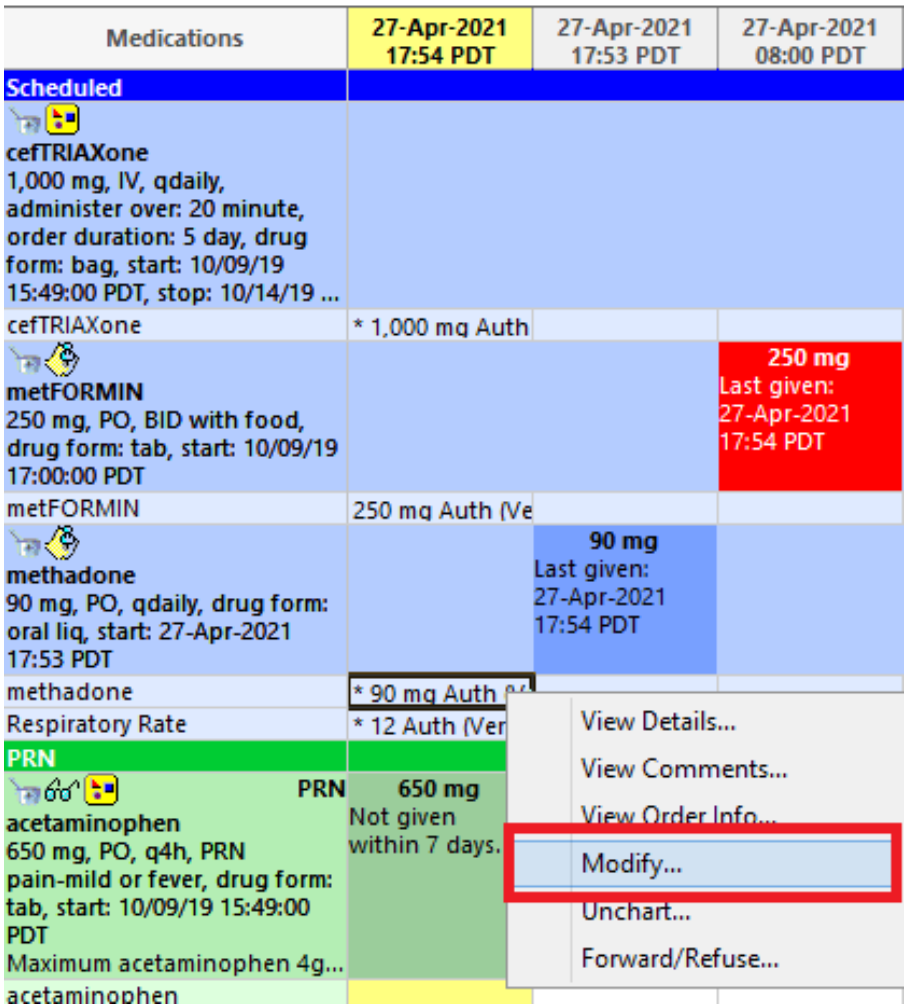
After administration:



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