Opioid Weaning

Withdrawal Prevention/Wean Algorithm

Evidence Based Outcome Center

- Monitor all patients for withdrawal/oversedation and manage accordingly. Modify weans per algorithm if patient has symptoms of withdrawal.
- When weaning multiple medications, ensure doses of medications are timed to prevent overlap in administration to avoid the risk of oversedation.
- In weaning ultra-high-risk patients, please consult with the pharmacy, as certain patients may need a more gradual wean.

Risk Criteria: Weaning course relative to duration of continuous infusions

- **Minimal (≤ 3 days)**: No wean necessary. Monitor for withdrawal and use PRNs as needed
- **Low-Risk (> 3 to 5 days):** Wean infusion(s) off over 24 hours. Monitor for withdrawal and use PRNs as needed
- **Moderate Risk (> 5 to 10 days):** Use below conversions and follow directions below
- **High Risk (> 10 to 21 days):** Use below conversions and follow directions below
- **Ultra High Risk (> 21 days):** Use below conversions and follow directions below

Opioid Conversion: Convert current IV infusion dose to equivalent enteral therapy

FENTANYL: Multiply current fentanyl drip rate (mcg/kg/HR) X 0.05 = _____ mg/kg/dose enteral methadone q6h (max dose 0.2 mg/kg/dose or 10 mg/dose)

HYDROMORPHONE: Multiply current hydromorphone drip rate (mg/kg/HR) X 3.4 = _____ mg/kg/dose enteral methadone q6h (max dose 0.2 mg/kg/dose or 10 mg/dose)

MORPHINE: Multiply current morphine drip rate X 0.5 = _____ mg/kg/dose enteral methadone q6h (max dose 0.2 mg/kg/dose or 10 mg/dose)

Methadone IV to ENTERAL = 0.8 to 1

Moderate Risk Patients –
Infusion wean: Starting with 2nd dose methadone wean infusion by 25% after every dose
Enteral wean: Once stable on methadone for 24h, move to next step

Step 1 -	Wean to 80% of starting dose and divide q6h x 4 doses
Step 2 -	Continue same dose, change frequency to q8h x 3 doses
Step 3 -	Continue same dose, change frequency to q12h x 2 doses
Step 4 -	Continue same dose, change frequency to q24h x 1 dose
Step 5 -	If needed, decrease dose by 50% q24h x 1 dose

High Risk Patients –
Infusion wean: Starting with 2nd dose methadone wean infusion by 25% after every/ every other dose
Enteral wean: Once stable on methadone for 48h, move to next step

Step 1 -	Wean to 80% of starting dose and divide q6h x 8 doses
Step 2 -	Continue same dose, change frequency to q8h x 6 doses
Step 3 -	Continue same dose, change frequency to q12h x 4 doses
Step 4 -	Continue same dose, change frequency to q24h x 2 doses
Step 5 -	If needed, decrease dose by 50% q24h x 2 doses

Ultra High Risk Patients –
Infusion wean: After 2nd or 3rd dose methadone wean infusion by 10-20 % after every other dose
Enteral wean: Once stable on methadone for 48h wean to the next step

Step 1 -	Wean to 90% of the total daily starting dose and divide q6h x 8 doses
Step 2 -	Wean to 80% of the total daily starting dose and divide q6h x 8 doses
Step 3 -	Wean to 70% of the total daily starting dose and divide q6h x 8 doses
Step 4 -	Wean to 60% of the total daily starting dose and divide q6h x 8 doses
Step 5 -	Wean to 50% of the total daily starting dose and divide q6h x 8 doses
Step 6 -	Wean to 40% of the total daily starting dose and divide q6h x 8 doses
Step 7 -	Continue same dose, wean frequency to q8h x 6 doses
Step 8 -	Continue same dose, wean frequency to q12h x 4 doses
Step 9 -	Continue same dose, wean frequency to q24h x 4 doses
Step 10 -	If needed, decrease dose by 50% q24h
Step 11 -	OFF

Due to methadone's longer half-life, some providers may consider consolidating the same TOTAL daily dose earlier to less frequent dosing (e.g., moving from q6h to q8h, then q12h more rapidly). However, this should be done cautiously as higher, less frequent doses can lead to oversedation. Please contact your pharmacist for assistance.

Alpha Agonist Weaning

Withdrawal Prevention/Wean Algorithm

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- Monitor all patients for withdrawal/oversedation and manage accordingly. Modify weans per algorithm if patient has symptoms of withdrawal.
- When weaning multiple medications, ensure doses of medications are timed to prevent overlap in administration to avoid the risk of oversedation.
- In weaning ultra-high-risk patients, please consult with the pharmacy, as certain patients may need a more gradual wean.

Risk Criteria: Weaning course relative to duration of continuous infusions

- **Minimal (≤ 3 days):** No wean necessary. Monitor for withdrawal and use PRNs as needed.
- **Low-Risk (> 3 to 5 days):** Wean Dexmedetomidine off over 24 hours, monitor for withdrawal with WAT-1 and use PRNs as needed.
- **Moderate Risk (> 5 to 10 days):** Use conversion and follow directions below.
- **High Risk (> 10 to 21 days):** Use conversion and follow directions below.
- **Ultra High Risk (> 21 days):** Use conversion and follow directions below.

Alpha agonist (Dexmedetomidine) Conversion

- Dex infusion < 0.5 mcg/kg/HR, use 4 mcg/kg/DAY clonidine enteral, divided every 6 hours (Max dose 0.1 mg/dose)

- Dex infusion > 0.5 - 1 mcg/kg/HR, use 8 mcg/kg/DAY clonidine enteral, divided every 6 hours (Max dose 0.2 mg/dose)

- Dex infusion > 1 - 1.5 mcg/kg/HR, use 10 mcg/kg/DAY clonidine enteral, divided every 6 hours (Max dose 0.3 mg/dose)

- Dex infusion > 1.5 mcg/kg/HR, consider weaning to < 1.5 mcg/kg/HR if hemodynamically unstable or use clonidine 12 mcg/kg/DAY divided every 6 hours (Max dose 0.3mg/dose)

See Guidelines for Clonidine patch alternative

Moderate Risk Patients –
Infusion wean: Starting with 2nd dose Clonidine wean infusion by 25% after every dose
Enteral wean: Once stable on clonidine for 24h, move to next step

Step 1 -	Continue same dose, wean frequency to q8h X 3 doses
Step 2 -	Continue same dose, wean frequency to q12h X 2 doses
Step 3 -	Wean dose by 50% keep frequency q12h X 2 doses
Step 4 -	Discontinue clonidine

High Risk Patients –
Infusion wean: Starting with 2nd dose Clonidine wean infusion by 25% after every/ every-other dose
Enteral wean: Once stable on clonidine for 48h, move to next step

Step 1 -	Continue same dose wean starting dose by 20% q6h X 8 doses
Step 2 -	Continue same dose wean frequency to q8h X 6 doses
Step 3 -	Continue same dose wean frequency to q12h X 4 doses
Step 4 -	Wean dose by 50% keep frequency q12h x 4 doses
Step 5 -	Discontinue clonidine

Ultra High Risk Patients –
Infusion wean: Starting with 2nd dose Clonidine wean infusion by 25% after every other dose
Enteral wean: Once stable on clonidine for 48h, move to next step

Step 1 -	Wean to 90% of the total daily starting dose and divide q6h x 8 doses
Step 2 -	Wean to 80% of the total daily starting dose and divide q6h x 8 doses
Step 3 -	Wean to 70% of the total daily starting dose and divide q6h x 8 doses
Step 4 -	Wean to 60% of the total daily starting dose and divide q6h x 8 doses
Step 5 -	Wean to 50% of the total daily starting dose and divide q6h x 8 doses
Step 6 -	Wean to 40% of the total daily starting dose and divide q6h x 8 doses
Step 7 -	Continue same dose , wean frequency to q8h x 6 doses
Step 8 -	Continue same dose , wean frequency to q12h x 4 doses
Step 9 -	Decrease dose by 50%, keep frequency continue q12h x 4 doses
Step 10 -	Discontinue clonidine

Benzodiazepine Weaning

Withdrawal Prevention/Wean Algorithm

Evidence Based Outcome Center

- Monitor all patients for withdrawal/oversedation and manage accordingly. Modify weans per algorithm if patient has symptoms of withdrawal.
- When weaning multiple medications, ensure doses of medications are timed to prevent overlap in administration to avoid the risk of oversedation.
- In weaning ultra-high-risk patients, please consult with the pharmacy, as certain patients may need a more gradual wean.

Risk Criteria: Weaning course relative to duration of continuous infusions

- **Minimal (≤ 3 days)**: No wean necessary, monitor for withdrawal, and use PRNs as needed
- **Low-Risk (> 3 to 5 days):** Wean infusion(s) off over 24 hrs., monitor for withdrawal with WAT-1, and use PRNs as needed.
- **Moderate Risk (> 5 to 10 days):** Use conversion and follow directions below
- **High Risk (> 10 to 21 days):** Use conversion and follow directions below
- **Ultra High Risk (> 21 days):** Use conversion and follow directions below

Benzodiazepine Conversion

BENZODIAZEPINE: Multiply current Midazolam drip rate X 0.5 = _____ mg/kg/dose lorazepam q6h (max dose 0.2 mg/kg/dose or 4 mg/dose)

Lorazepam IV to ENTERAL = 1:1

Moderate Risk Patients –
Infusion wean: Starting with 2nd dose Lorazepam wean infusion by 25% after every dose
Enteral wean: Once stable on Lorazepam for 24h, move to next step

Step 1 -	Wean to 80% of starting dose and divide q6h x 4 doses
Step 2 -	Continue same dose, wean frequency to q8h x 3 doses
Step 3 -	Continue same dose, change frequency to q12h x 2 doses
Step 4 -	If needed, decrease dose by 50% q12h x 2 doses
Step 5 -	Discontinue lorazepam

High Risk Patients –
Infusion wean: Starting with 2nd dose Lorazepam wean infusion by 25% after every/ every-other dose
Enteral wean: Once stable on Lorazepam for 48h, move to next step

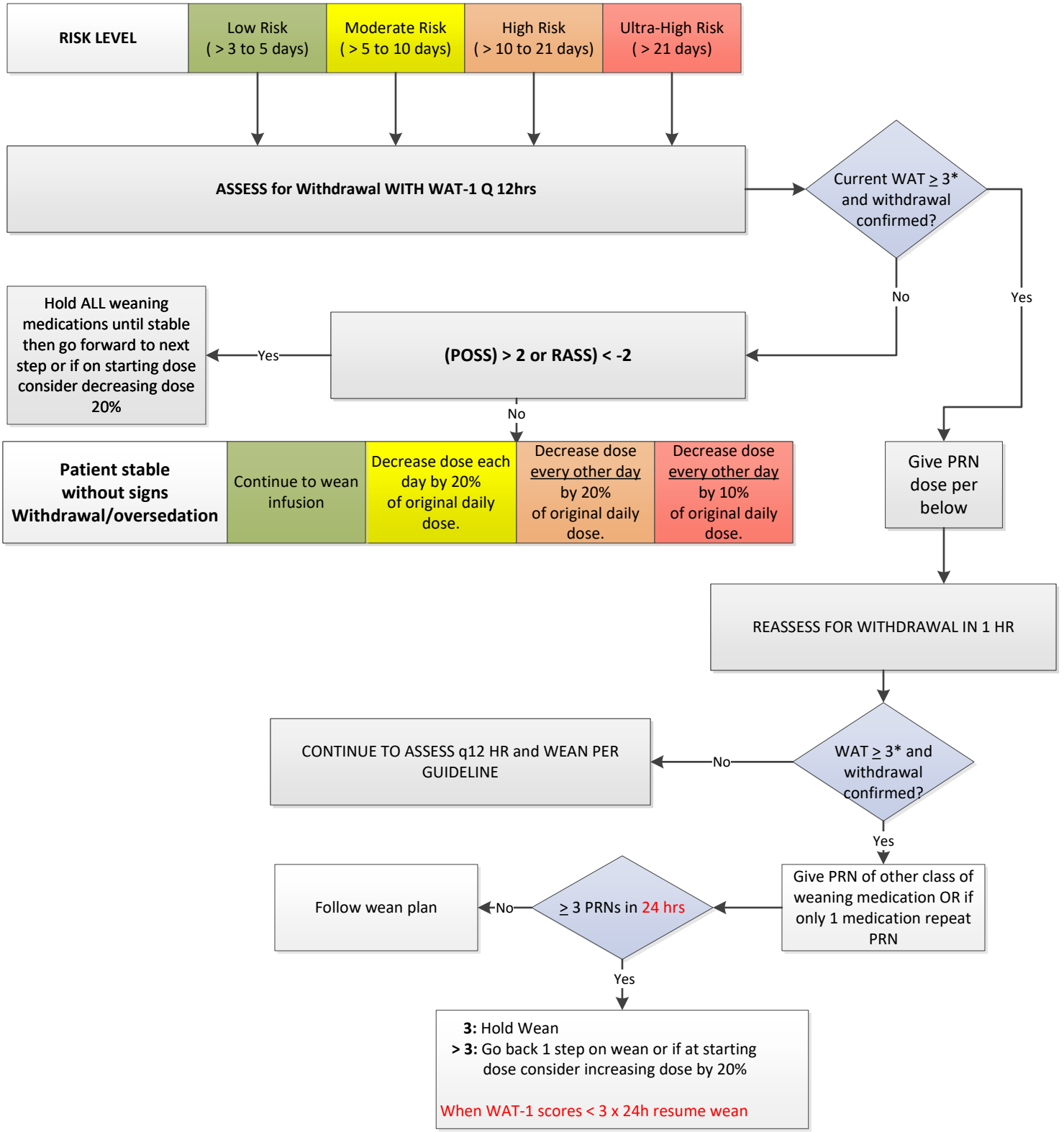
Step 1 -	Wean to 80% of starting dose and divide q6h x 8 doses
Step 2 -	Continue same dose, wean frequency to q8h x 6 doses
Step 3 -	Continue same dose, change frequency to q12h x 4 doses
Step 4 -	If needed, decrease dose by 50% q12h x 4 doses
Step 5 -	Discontinue lorazepam

Ultra High Risk Patients –
Infusion wean: Starting with 2nd dose Lorazepam wean infusion by 25% after every other dose
Enteral wean: Once stable on Lorazepam for 48h, move to next step

Step 1 -	Wean to 90% of the total daily starting dose and divide q6h x 8 doses
Step 2 -	Wean to 80% of the total daily starting dose and divide q6h x 8 doses
Step 3 -	Wean to 70% of the total daily starting dose and divide q6h x 8 doses
Step 4 -	Wean to 60% of the total daily starting dose and divide q6h x 8 doses
Step 5 -	Wean to 50% of the total daily starting dose and divide q6h x 8 doses
Step 6 -	Wean to 40% of the total daily starting dose and divide q6h x 8 doses
Step 7 -	Continue same dose, wean frequency to q8h x 6 doses
Step 8 -	Continue same dose, wean frequency to q12h x 4 doses
Step 9 -	Wean dose by 50 %, keep frequency q12h x 4 doses
Step 10 -	Discontinue Lorazepam

Withdrawal / Oversedation Algorithm

Evidence Based Outcome Center



Rescue Doses
Morphine 0.05-0.1 mg/kg IV (max 5 mg/dose)
Lorazepam 0.05-0.1 mg/kg IV (max 4 mg/dose)
Clonidine 2 mcg/kg PO (max 0.3 mg/dose)

*WAT Score
≥ 3 or > 2 above baseline
Consider differential diagnosis e.g. sepsis, cardiac or respiratory failure etc.
For Clonidine high WAT OR HR and/or BP >20% sustained above baseline

Note: This information is a guide. Individual patients may require deviation from this guideline and clinical judgement is advised.

Last Updated 03/12/2025

Revision History

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