



Opioid Dose Adjustments

Examples of Opioid Rotations and Dose Reduction Strategies

1. Opioid Rotation (Does NOT Apply to Methadone or Fentanyl)

- When converting from a weak opioid analgesic to a stronger opioid, use the recommended initial doses of the new opioid
- Consider augmenting with a non-opioid medication and discuss non-pharmacologic options (stretching, gentle activity, meditation, relaxation, application of heat/cold, and hobbies) during the opioid rotation process
- For opioid rotations involving high dose or step wise rotation, consider discussing with advanced pain care provider

Opioid Rotations: Steps for Converting One Opioid to Another

1. Determine the total 24 hour dose of the current opioid
2. Calculate the equivalent dose of the new opioid
3. Reduce the dose calculated in step 2, providing 50–67% of new opioid to account for the incomplete cross tolerance
4. Consider the rescue opioid therapy during the conversion process (5–15% of target dose)

Single-Step Rotation (Commonly Used Tapering Strategy)	Step Wise Rotation (May Be Preferable When Rotating from Large Doses of Opioids)
i. Stop the current opioid ii. Start the new opioid iii. Provide sufficient immediate release opioid during the rotation process in case dosing changes prove insufficient; this minimizes risk of the patient self-medicating, which can be fatal	i. Reduce the original opioid by 10–30% per week while increasing the new opioid by 10–30% per week based on clinical need and safety; process usually completed in 3–4 wks ii. Provide sufficient immediate release opioid during the rotation process in case dosing changes prove insufficient; this minimizes risk of the patient self-medicating, which can be fatal
Example:	Example:
Patient X is on oxycodone SA 40 mg Q8hr and you would like to change the Veteran to morphine. (30 mg morphine = 15–20 mg oxycodone)	Patient X is on oxycodone SA 40 mg Q8hr and you would like to change the Veteran to morphine. (30 mg morphine = 15–20 mg oxycodone)
Step 1.	Step 1.
Oxycodone SA 40 mg Q8hr = 120 mg/day oxycodone SA	Oxycodone SA 40 mg Q8hr = 120 mg/day oxycodone SA
Step 2.	Step 2.
$15 \text{ mg oxycodone}/30 \text{ mg morphine} = 120 \text{ mg oxycodone}/x \text{ mg morphine}$ $x = [120 \text{ mg oxycodone} (30 \text{ mg morphine})]/(15 \text{ mg oxycodone})]$ $x = 240 \text{ mg morphine}$	$15 \text{ mg oxycodone}/30 \text{ mg morphine} = 120 \text{ mg oxycodone}/x \text{ mg morphine}$ $x = [120 \text{ mg oxycodone} (30 \text{ mg morphine})]/(15 \text{ mg oxycodone})]$ $x = 240 \text{ mg morphine}$
Step 3.	Step 3.
Due to incomplete cross tolerance, the starting dose of morphine should be 50–67% of the equianalgesic dose. Therefore, your goal dose of morphine would be 120–160 mg/day given in divided doses.	Due to incomplete cross tolerance, the starting dose of morphine should be 50–67% of the equianalgesic dose. Therefore, your goal dose of morphine would be 120–160 mg/day given in divided doses
Answer:	Answer:
- Stop oxycodone SA 40 mg Q8hr - Start morphine SR 60 mg Q12hr	*Adjust to Morphine/Oxycodone SA forms and frequency *Inform the patient if they experience sluggishness or become drowsy to call the clinic immediately
Step 4. Determine Rescue Opioid Therapy Dose	
- If patient is already receiving a short acting agent for breakthrough pain continue this medication - If no short acting agent is on profile start opioid at 5–15% of dose calculated in step 3	Day 1: Reduce oxycodone SA by 10–30%; start morphine at initial doses used <ul style="list-style-type: none"> • Oxycodone SR 40 mg Q12hr • Start morphine SA 15 mg Q8hr Day 7: Reduce oxycodone by 10–30%; Increase morphine by 10–30% <ul style="list-style-type: none"> • Oxycodone SA 20 mg Q8hr • Morphine SA 30 mg Q12hr Day 14: Reduce oxycodone by 10–30%; Increase morphine by 10–30% <ul style="list-style-type: none"> • Oxycodone SA 20 mg Q12hr • Morphine SA 30 mg Q8hr Day 21: Stop oxycodone and increase morphine based on patients function and pain <ul style="list-style-type: none"> • Stop oxycodone SA • Morphine SA 60 mg Q12hr (target goal)
Example:	
- Goal dose of morphine 120 mg/day $120 \times 0.05 = 6 \text{ mg}; 120 \times 0.15 = 18 \text{ mg}$ - Give morphine IR 15 mg BID PRN for breakthrough pain	

2. Opioid Dosage Reductions and/or Discontinuation

- Opioid tapers should be individualized to the specific patient situation and care should be taken to engage and provide support to the patient throughout the process
- Gradual dosage reduction (appropriate for most patients): reduce dose by 10–25% every 1–4 weeks, larger initial dose reductions (25–50%) can be used
- Rapid dosage reduction (medically dangerous situations): Decrease dose every 1–7 days (see pocket cards for examples)
- Stop immediately (clear signs of unsafe or illegal behavior): Educate the patient about potential withdrawal and provide appropriate referrals
- Opioid discontinuation: rotating to another opioid can be employed to assist and shorten the taper process

Example of an Opioid Rotation and Discontinuation

Patient X is prescribed oxycodone SA 80 mg Q8hr. **You must confirm the patient is taking this dose.**
(morphine 30 mg = oxycodone 15–20 mg)

Step 1. Determine Total 24 Hour Dose of Current Opioid

Oxycodone SA 80 mg Q8hr = 240 mg oxycodone SA daily

Step 2. Calculate the Equivalent Target Dose of New Opioid

30 mg morphine/ 20 mg oxycodone = x mg morphine/ 240 mg oxycodone
 $x = [240 \text{ mg oxycodone} (30 \text{ mg morphine})] / (20 \text{ mg oxycodone})]$
 $x = 360 \text{ mg morphine}$

The morphine to oxycodone ratio of 30:20 was chosen to provide a slightly decreased dose following conversion, thus assisting with a faster discontinuation/taper schedule for this example.

Step 3. Due to Incomplete Cross Tolerance, Starting Dose of Morphine Should Be 50-67% of the Equianalgesic Dose

$360 \times 0.5 = 180 \text{ mg}$; $360 \text{ mg} \times 0.67 = 241 \text{ mg}$; Target Dose = 240 mg/day given in divided doses

Step 4. Determine Rescue Opioid Therapy (ROT) Dose

- 5–15% of the target dose: $240 \times 0.05 = 12 \text{ mg}$
- Give morphine IR 15mg BID PRN; continue ROT throughout taper as medically appropriate

Step 5. Initiate Taper for Discontinuation (Morphine SR 240 mg/Day)

(Adjust to SA forms and frequency and decreased by 10–25% every 1–4 weeks)

- 1) 60 mg Q8hr for 4 weeks; then
- 2) 45 mg Q8hr for 4 weeks; then
- 3) 60 mg Q12hr for 4 weeks; then
- 4) 30 mg Q8hr for 4 weeks; then
- 5) 30 mg Q12hr for 4 weeks; then
- 6) 15 mg Q8hr for 4 weeks; then
- 7) 15 mg Q12hr x 4 week then discontinue SR; then

Taper ROT (Morphine IR 15 mg BID)

Speed of reduction will vary by indication and patients pain levels and function

- 8) 7.5 mg Q8hr for 2 weeks; then
- 9) 7.5 mg Q12hr for 2 weeks; discontinue

Speed of reduction will vary by indication and patients pain levels and function

Assess:

- Check for aberrancy (run a state prescription drug monitoring program report and obtain a urine toxicology screen)
- Evaluate for adverse effects and effectiveness of the current medication
- Screen for mental health disorders such as PTSD, depression and substance use disorders and refer to mental health or treat accordingly

These are general recommendations only; specific clinical decisions should be made by the treating provider based on an individual patient's clinical condition.

