Practical Tools to Successfully Taper Prescription Opioids

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Objectives

• Understand how to calculate morphine equivalents per day
• Understand the steps necessary to plan a successful opioid taper
• Describe several opioid taper case scenarios
Step 1: Identify Reason for the Opioid Taper

- Substance Use Disorder
  - including opioid use disorder (OUD), alcohol use disorder, etc
- Diversion
- At risk for severe opioid harms
  - Aspiration, hypoxia, bowel obstruction, overdose, etc
  - Refusing monitoring (urine drug testing, abstain from marijuana or alcohol, etc)
- At risk for less severe opioid harms (>50-90 MED, benzos)
  - High dose long term use of prescription opioids without OUD
  - Concomitant benzodiazepines
  - Sleep apnea
- Therapeutic Failure
  - Persistently high pain, opioid induced hyperalgesia, reduced functional status
Prescription Opioid use disorder diagnosis may be difficult to make in patients prescribed long term opioids

- **For the illicit opioid user**
  - Procurement behaviors and consequences
- **For the patient with pain – much more complex**
  - Enduring adaptation produced by established behaviors
  - Continuous prescribed opioid therapy prevents opioid seeking
  - Memory of pain, pain relief and possibly also euphoria
  - Even if the opioid seeking appears as seeking pain relief, it becomes an adaptation that is difficult to reverse
  - It is hard to distinguish drug seeking from relief seeking

Step 2: Calculate the Morphine Equivalent Dose

**DO NOT USE FOR OPIOID ROTATION**

<table>
<thead>
<tr>
<th>Opioid</th>
<th>Conversion factor*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Codeine</td>
<td>0.15</td>
</tr>
<tr>
<td>Fentanyl transdermal (in mcg/hr)</td>
<td>2.4</td>
</tr>
<tr>
<td>Hydrocodone</td>
<td>1</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>4</td>
</tr>
<tr>
<td>Methadone</td>
<td></td>
</tr>
<tr>
<td>1–20 mg/day</td>
<td>4</td>
</tr>
<tr>
<td>21–40 mg/day</td>
<td>8</td>
</tr>
<tr>
<td>41–60 mg/day</td>
<td>10</td>
</tr>
<tr>
<td>≥61–80 mg/day</td>
<td>12</td>
</tr>
<tr>
<td>Morphine</td>
<td>1</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>1.5</td>
</tr>
<tr>
<td>Oxymorphone</td>
<td>3</td>
</tr>
<tr>
<td>Tapentadol†</td>
<td>0.4†</td>
</tr>
</tbody>
</table>


*Neilsen, et al

Second option
Methadone
4.7*
CALCULATE THE **MED** (or “MME”)

### Opioid Dose Calculator

**Instructions:** Fill in the mg per day* for whichever opioids your patient is taking. The web page will automatically calculate the total morphine equivalents per day. Learn how to add this calculator to your smart phone or tablet home screen here: [Android](#) or [iPhone/iPad](#).

<table>
<thead>
<tr>
<th>Opioid (oral or transdermal):</th>
<th>mg per day: *</th>
<th>Morphine equivalents:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Codeine</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Fentanyl transdermal (in mcg/hr)</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Hydrocodone</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Methadone</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Morphine</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Oxycodone</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Oxymorphone</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Tapentadil</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Tramadol</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

**TOTAL daily morphine equivalent dose (MED) = 0**

*NOTE: All doses expressed in mg per day with exception of fentanyl transdermal, which is expressed in mcg per hour*

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**CAUTION:** This calculator should NOT be used to determine doses when converting a patient from one opioid to another. This is especially important for fentanyl and methadone conversions. Equianalgesic dose ratios are only approximations and do not account for genetic factors, incomplete cross-tolerance, and pharmacokinetics.

**AMDG on-line calculator**

www.agencymeddirectors.wa.gov

“Opioid Dose Calculator”

- **Methadone**
  - 1-20 mg 4x
  - 21-40 mg 8x
  - 41-60 mg 10x
  - ≥61-80 mg 12x
Calculating Morphine Equivalent Dose

• Fentanyl 25mcg/hr patch
  – 25 x 2.4 conversion factor (CF) = 60mg MED

• Hydromorphone 2mg every 4 hours + Oxycodone 60mg BID
  – 2mg x 6 = 12mg x 4 CF = 48mg MED
  – 60mg x 2 = 120mg x 1.5 CF = 180mg MED
  – TOTAL 228mg MED

• Methadone 20mg TID
  – 20mg x 3 = 60mg x 10.0* CF = 600mg MED
Step 3: Taper plan and start taper

- Discuss goals of taper — how and when will you know if it is successful?
  - Establish dose target and timeframe
  - Maintain current level of analgesia (*may not be possible in short term*)
- Discuss potential opioid withdrawal symptoms
  - Temporary increase in pain
  - Schedule follow-up or nurse check ins
- Identify at least one self-management goal
# How to approach an opioid taper/cessation

<table>
<thead>
<tr>
<th>Indication for Taper</th>
<th>Recommended Length of Taper</th>
<th>Degree of Shared Decision Making about Taper</th>
<th>Intervention/Setting</th>
</tr>
</thead>
</table>
| Substance Use Disorder| No taper, immediate referral| None – provider choice alone                 | *Intervention*: Transition to medication assisted treatment (MAT, ie. buprenorphine or methadone) for OUD, Naloxone rescue kit  
*Setting*: Detox, inpatient or outpatient treatment with MAT |
| Diversion             | No taper to rapid taper (days) | None – provider choice alone                | Determine need based on actual use of opioids, if any |
| At risk for severe harms | Weeks                     | Moderate – provider led & patient views sought | *Intervention*: Supportive care  
Naloxone rescue kit  
*Setting*: Outpatient opioid taper or inpatient withdrawal management  
*Option*: Buprenorphine (OBOT) |
| Therapeutic failure   | Months to year              | Moderate – provider led & patient views sought | *Intervention*: Supportive care  
Naloxone rescue kit  
*Setting*: Outpatient opioid taper  
*Option*: Buprenorphine (OBOT) |
| At risk for less severe harms | Months to Years | Moderate – provider led & patient views sought | *Intervention*: Supportive care  
Naloxone rescue kit  
*Setting*: Outpatient opioid taper  
*Option*: Buprenorphine (OBOT) |
ALWAYS Use a Risk-Benefit Framework

NOT...

- Is the patient good or bad?
- Does the patient deserve opioids?
- Should this patient be punished or rewarded?
- Should I trust the patient?

RATHER...

Do the benefits of opioid treatment outweigh the untoward effects and risks for this patient (or society)?

Judge the opioid treatment – NOT the patient

Outpatient Tapering Options

• Gradual taper:
  – 5-10% decreases of the original dose every 5-28 days
    • Once 30% of the original dose is reached, then decrease each taper step by 10% of the remaining dose every 5-28 days
  – You may elect to taper Extended release (ER) or Immediate release (IR) first
    • generally taper ER first and use IR for breakthrough pain
  – Provide the patient a copy of the taper plan for reference and to help keep patient moving forward
Outpatient Tapering Options

• Rapid taper:
  – Daily to every other day reductions over 1-2 weeks as appropriate

• Medication assisted taper:
  – Adjuvant opioid withdrawal medications only
  – Office based buprenorphine withdrawal assistance (i.e. detox) or maintenance transition
  – Referral for Methadone maintenance treatment
<table>
<thead>
<tr>
<th><strong>Adjuvant Opioid Withdrawal Medications</strong></th>
<th><strong>Geriatric (&gt;65 years) Considerations</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>For sweating, anxiety, agitation</strong></td>
<td>Do not use if baseline SBP &lt; 110</td>
</tr>
<tr>
<td>Clonidine 0.1mg by mouth three times daily PRN anxiety</td>
<td>Caution with patients who are at risk for falls (On Beers list*)</td>
</tr>
<tr>
<td>Hold for sedation or dizziness</td>
<td></td>
</tr>
<tr>
<td><strong>For anxiety</strong></td>
<td>Hydroxyzine 12.5-25 mg by mouth every 8 hours PRN anxiety</td>
</tr>
<tr>
<td>Hydroxyzine 25-50 mg by mouth every 4-6 hours PRN anxiety</td>
<td>Increased potential for anti-cholinergic side effects (on Beers list)</td>
</tr>
<tr>
<td><strong>For nausea or vomiting</strong></td>
<td>Alternative: Zofran 4 mg by mouth every 12 hours PRN for nausea or vomiting</td>
</tr>
<tr>
<td>Phenergan 12.5-25 mg by mouth every 4-6 hours PRN nausea/vomiting</td>
<td>Phenergan associated with anticholinergic side effects and somnolence in older adults (on Beers list)</td>
</tr>
<tr>
<td>OR</td>
<td>Caution with patients who are at risk for falls</td>
</tr>
<tr>
<td>Zofran 4mg every 12 hours PRN nausea/vomiting</td>
<td></td>
</tr>
<tr>
<td><strong>For abdominal cramping/diarrhea</strong></td>
<td>Avoid use in this age group due to potent anticholinergic side effects and uncertain effectiveness (on Beers list).</td>
</tr>
<tr>
<td>Hyoscyamine 0.125mg by mouth every 4-6 hours PRN abdominal cramping</td>
<td></td>
</tr>
<tr>
<td><strong>For increased pain with taper and from opioid withdrawal</strong></td>
<td>Alternative: Acetaminophen 1000 mg by mouth three times daily if not contraindicated</td>
</tr>
<tr>
<td>Ibuprofen 400-600 mg by mouth three times daily PRN with food and water for pain</td>
<td>Ibuprofen contraindicated in chronic kidney disease, history of GI bleed, chronic warfarin use, etc. (on Beers list)</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>Tylenol 500mg by mouth every 4-6 hours PRN pain (Maximum dose 3,250mg in 24 hours)</td>
<td></td>
</tr>
</tbody>
</table>

*The AGS 2012 Updated Beers Criteria for Potentially Inappropriate Medication Use in Older Adults (AGS 2012 Beers Criteria) J Am Geriatr Soc. 2012 Apr;60(4):616-31

**It is not legal or safe to prescribe Methadone for opioid withdrawal in the outpatient setting.**

**It is not advised to prescribe benzodiazepines for opioid withdrawal.**
Medication Assisted Treatment

• Some patients will be “unable” or intolerant of taper
  – Methadone >30mg
  – MED >200mg
  – Long term use > 5 years
  – Mental illness, history of adverse childhood experiences (ACEs),
    history of substance use disorder, poor social supports
• Buprenorphine/naloxone is an important resource for these patients
• Interdisciplinary pain programs +/- MAT have good outcomes
  – Huffman, et al. Opioid use 12 months following interdisciplinary
Case 1: Severe Risks

• 50 yo man on opioids for LBP x 5 years develops severe constipation with small bowel obstruction due to opioid use. You decide the severe risks outweigh the small benefit of him remaining on morphine ER 15mg BID

• Taper Plan:
  – Step 1: convert his morphine to IR and reduce it to morphine IR 7.5mg Q8H for 2 weeks
  – Step 2: Reduce morphine IR 7.5mg BID for 2 weeks
  – Step 3: Morphine IR 7.5mg daily for 2 weeks
  – Step 4: stop morphine
Case 1: Severe Risks

• What if that same 50 yo man on opioids for LBP x 5 years is prescribed fentanyl 75mcg/72 hours.

• **Taper Plan:**
  
  – Step 1: convert his fentanyl to a different opioid that is easier to taper like morphine ER or oxycodone ER. Ex. Morphine ER 45mg/30mg/30mg.
  
  – Step 1: Morphine ER 30/30/30mg TID x 2 weeks – 1 month
  
  – Step 2: Continue in 10-20% reductions until done
Case 2: Substance Use Disorder

- 50 yo male prescribed hydromorphone 4mg every 3 hours and fentanyl 50mcg patch for chronic pancreatitis. You detect alcohol on a routine urine drug screening, and he admits that he has relapsed on alcohol.
- What do you do?
  - Decide that the risks greatly outweigh the benefit
  - Refer for detoxification from alcohol and opioids
  - Stop prescribing opioids immediately
  - Consider buprenorphine/naloxone, if alcohol abstinent
Case 3

• 28 yo female prescribed opioids for chronic abdominal pain. She states she has lost her opioid prescription for the third time. She has had two negative urine drug tests for the opioid that is prescribed and refuses to come in for a pill count.

• You suspect diversion.
• Check PDMP
• Taper Plan: None. You stop prescribing opioids immediately.
Case 4: “Lost Generation” with therapeutic alliance

- 68 yo female with rheumatoid arthritis pain. She is prescribed a total of 350mg MED for the last 5 years with no adverse events. She is moderately functional. Your clinic has developed a new opioid policy stating that patients prescribed doses >120mg MED need to attempt an opioid taper. She is concerned that she might develop serious harms from her opioids.

- Taper plan: Slow taper by 10% per month over a year to a safer dose. May elect to slow down the taper if she experiences periods of worsening pain and/or opioid withdrawal.

- If her disease continues to generate active nociceptive pain not controlled with DMARDs, she may well be a candidate for long-term opioids, but at a safer dose.
Case 5: “Lost Generation” with Hopelessness

- 63 yo man with history of low back pain and severe depression after a work injury in 1982.
- He has not worked since and spends most of his day being sedentary.
- He has been unwilling to engage in additional pain modalities despite multiple offers.
- He is prescribed oxycodone IR 30mg every 4 hours. You have tried other opioids but he has not had improvements.
- He refuses an opioid taper and states he will seek another provider if you start to taper his opioids.

**Taper Plan:** Offer buprenorphine, subacute detox program, OR a 1 month rapid opioid taper
Questions? weimerm@ohsu.edu
@DrMelissaWeimer

www.coperems.org

www.scopeofpain.com

www.pcssso.org

www.pcsssmat.org