



Opioid Stewardship and Taper Principles

Clinical Considerations for Ambulatory Practice

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Conflict of Interest Declarations

- I have no financial or personal relationships to disclose

Learning Objectives

1. Discuss the key recommendations for opioid taper and rotations from the 2017 Canadian Guideline for Opioid Therapy in Chronic Non-Cancer Pain
2. With regards to opioid therapy adjustments:
 - Identify when an opioid taper or rotation would be indicated
 - Describe how one would facilitate a conversation about tapering with patients
3. Apply clinical principles to guide an approach for opioid tapers or rotations.
4. Describe common challenging opioid taper scenarios through case discussions.

New stats show opioid deaths on the rise in Canada

Canadian Press
More from Canadian Press

Published:
September 18, 2018

Updated:
September 18, 2018 5:38 PM



Toronto Public Health seeks input on drug policy in midst of opioid crisis

Residents urged to participate in two upcoming meetings, online survey

NEWS MAY 10, 2018 | TORONTO.COM



‘The crisis is not abating’: Opioids killing more than 11 Canadians daily

CARLY WEEKS >
PUBLISHED SEPTEMBER 18, 2018

COMMENTS

More than 11 Canadians are dying every day on average because of opioids, according to new data from the federal government.

“The crisis is not abating,” Theresa Tam, Canada’s chief public health officer, said in an interview on Tuesday.

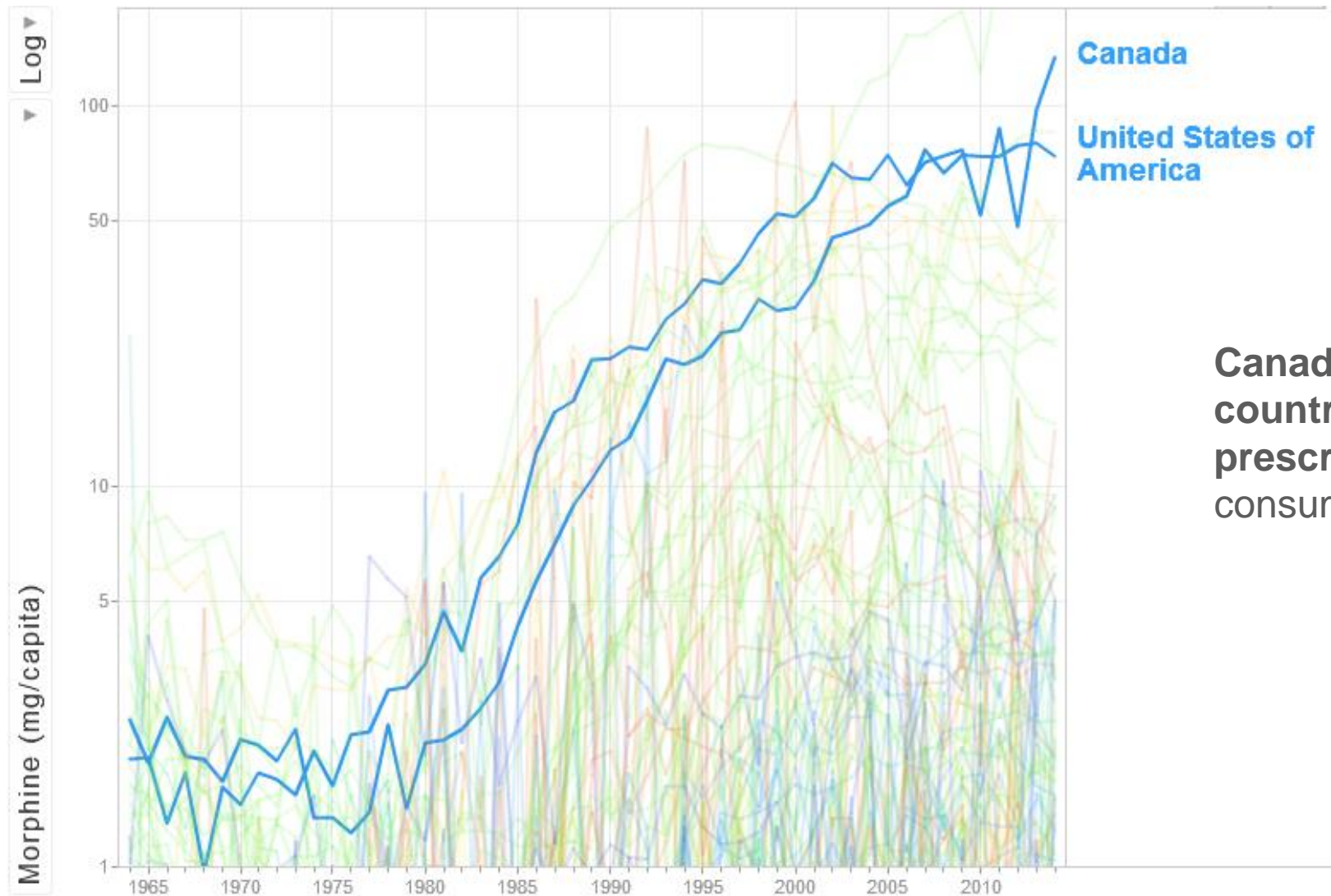
Canada is the world’s second highest per-capita consumer of opioids, after the United States, which has led to widespread misuse, dependence and addiction.

TRENDING

- 1 Family of Barry, Honey announce \$10-million information, criticize T
- 2 Doug Ford was right to for new university can
- 3 Colin and Justin: What and second homes say
- 4 Ottawa’s \$1.5-billion c



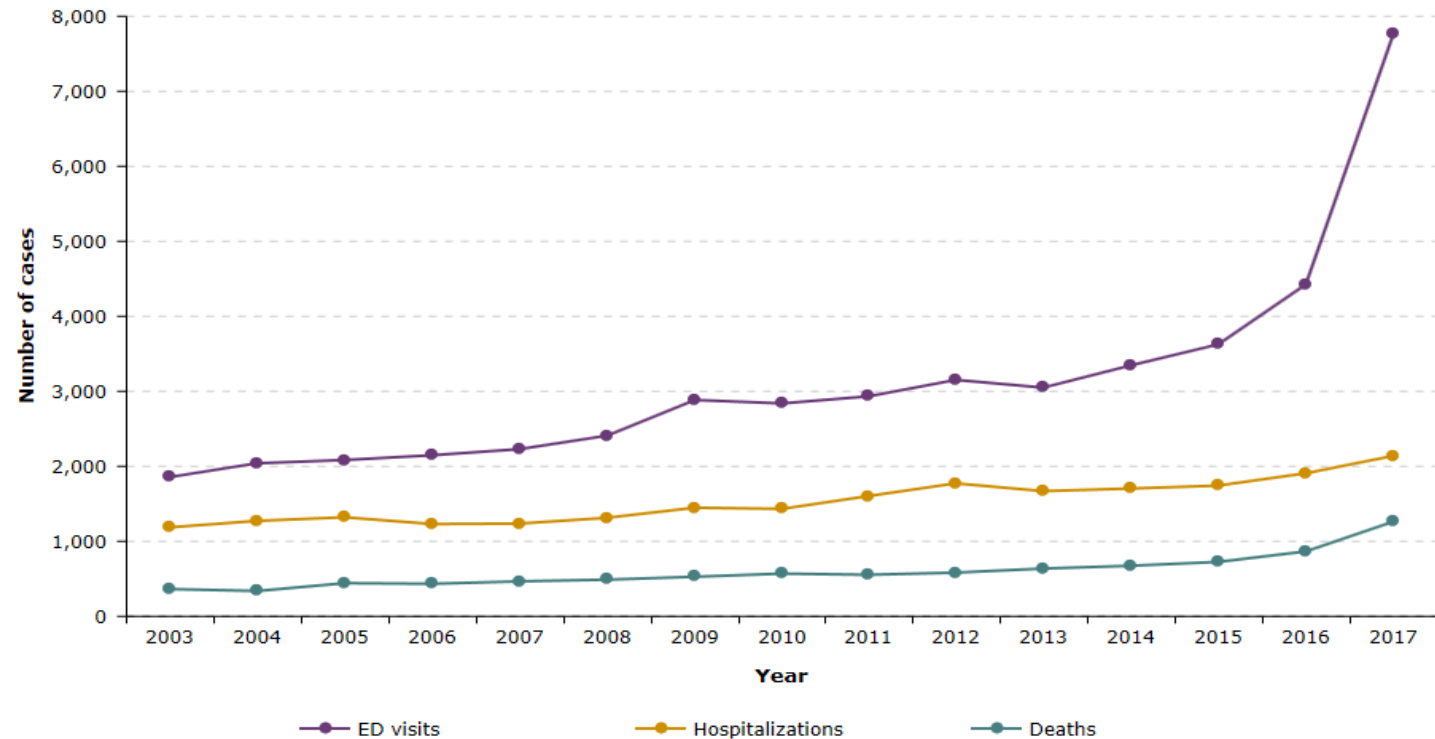
National Opioid Prescribing Trends



Canada is one of the **top two countries** having the **highest prescription opioid consumption** in the world (2015)

Cases of Opioid related Morbidity/Mortality - Ontario

Cases of opioid-related morbidity and mortality,
Ontario, 2003 – 2017



Data last updated: 2018-09-13

Efficacy of Opioids

- Opioids may have **little to no difference in pain** compared to NSAIDs, TCAs or nabilone
- Opioids may have **little to no difference in improvements in physical function** compared to NSAIDs, anticonvulsants, TCAs or nabilone

- Opioids have a moderate effect on pain (10-20% difference on pain scale)
- Opioids have a small effect on function (<10% change on function scale)

Efficacy of Opioids-SPACE trial

12-month, single blind, randomized trial

P	240 Veterans Affairs patients with moderate to severe chronic back pain or hip/knee osteoarthritis pain Mean age- 58.3 years; women (13.0%)
I	Step 1- morphine IR, oxycodone, or hydrocodone/acetaminophen Step 2 -morphine SR, oxycodone SR. Step 3 was transdermal fentanyl. Max: 100 MEQ
C	Step 1- acetaminophen and NSAIDs Step 2 -nortriptyline, amitriptyline, gabapentin) and topical analgesics (ie, capsaicin, lidocaine). Step 3 pregabalin, duloxetine and tramadol
O	<p>Primary outcome: pain-related function (Brief Pain Inventory [BPI] interference) Secondary outcome: pain intensity (BPI severity scale) Primary adverse outcome: medication-related symptoms (patient-reported checklist)</p> <ul style="list-style-type: none"> • Groups did not significantly differ on pain-related function • Pain intensity significantly better in the nonopioid group than opioid group (4 vs 3.5) • Adverse medication-related symptoms occurred more in the opioid group

Risks of Opioids

Side effects

- Constipation
- Pruritis
- Dry mouth
- Fragmented sleep
- Cognitive dulling, Dizziness
- Nausea, vomiting

Medical Complications

- Sexual dysfunction
- Osteoporosis and fractures
- Immune dysfunction
- Abuse and misuse ~5-10%
- Increase pain perception - “hyperalgesia”
- Central sleep apnea

Opioid Dose and Mortality

ORIGINAL INVESTIGATION

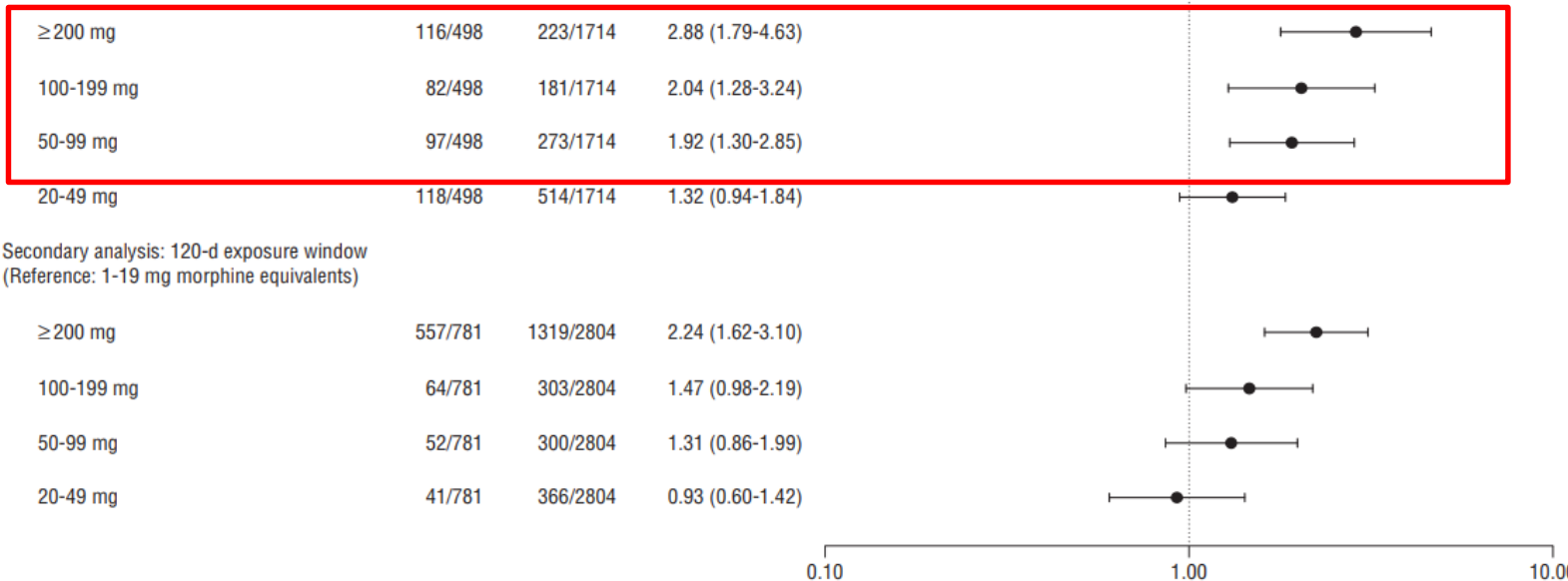
LESS IS MORE

Opioid Dose and Drug-Related Mortality in Patients With Nonmalignant Pain

Tara Gomes, MHS; Muhammad M. Mamdani, PharmD, MA, MPH; Irfan A. Dhalla, MD, MSc;
J. Michael Paterson, MSc; David N. Juurlink, MD, PhD

Arch Intern Med. 2011;171(7):686-691

Primary analysis: overlapping opioid prescriptions
(Reference: 1-19 mg morphine equivalents)



Gomes T. et al. *Arch Intern Med* 2011

Opioid Dose and Overdose

Risk/year of fatal and non-fatal opioid overdose in patients with chronic pain is DOSE dependent

- <20mg MED: 0.1% (fatal), 0.2% (non-fatal)
- 20-49mg MED: 0.14% (fatal)
- 50-99mg MED: 0.18% (fatal), 0.7% (non-fatal)
- >100mg MED: 0.23% (fatal), 0.8% (non-fatal)

Balancing Act



- Ten key recommendations
- Qualifying remarks, values and preferences are important parts of the Guideline recommendations meant to facilitate accurate interpretation.
- Strong recommendations indicate that all or almost all fully informed patients would choose the recommended course of action
- Weak recommendations indicate that the majority of informed patients would choose the suggested course of action, but an appreciable minority would not.

Guidelines

2017 Canadian Guideline for Opioids for Chronic Pain

The 2017 Canadian Guideline for Opioid Therapy and Chronic Non-Cancer Pain was developed in response to concerns that Canadians are the second highest users per capita of opioids in the world, while the rates of opioid prescribing and opioid-related hospital visits and deaths have been increasing rapidly.

The guideline's recommendations for clinical practice have been developed by an international team of clinicians, researchers and patients, led by the Michael G. DeGroot National Pain Centre at McMaster University and funded by Health Canada and the Canadian Institutes of Health Research. The guideline was published by the [Canadian Medical Association Journal \(CMAJ\)](#).

The guideline incorporates medical evidence published since the previous national opioid use guideline was made available in 2010. They are recommendations for physicians, but are not regulatory requirements.

The guideline does not look at opioid use for acute pain, nor for patients with pain due to cancer or in palliative care, or those under treatment for opioid use disorder or opioid addiction



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2017 Canadian Guideline
for Opioids for
Chronic Non-Cancer Pain



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Recommandations Canadiennes
2017 sur l'utilisation des opioïdes
pour le traitement de la douleur
chronique non cancéreuse.



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Canadian Guidelines for Opioids 2017

Initiation and Dosing of Opioids for CNCP

WEAK RECOMMENDATIONS	STRONG RECOMMENDATIONS
Consider adding opioids in patients without current or past substance use disorder, or other active psychiatric disorders	Optimize non-opioid pharmacotherapy and non-pharmacological therapy, rather than a trial of opioids
For patients with active psychiatric disorders, stabilize the disorder before a trial of opioids is considered.	For patients with an active substance use disorder we recommend against the use of opioids
For patients with a history of substance use disorder, continue nonopioid therapy rather than a trial of opioids.	Restrict to less 90mg morphine equivalents daily rather than no upper limit or a higher limit on dosing
For patients who are beginning opioid therapy, restrict the prescribed dose to less than 50mg morphine equivalents daily.	

Canadian Guidelines for Opioids 2017

Rotation and Tapering of Opioids for CNCP

For patients who have persistent problematic pain and/or problematic adverse effects on opioids rotation to other opioids rather than keeping the opioid the same

WEAK

For patients who are currently using 90mg morphine equivalents of opioids per day or more taper opioids to the lowest effective dose, potentially including discontinuation, rather than making no change in opioid therapy.

WEAK

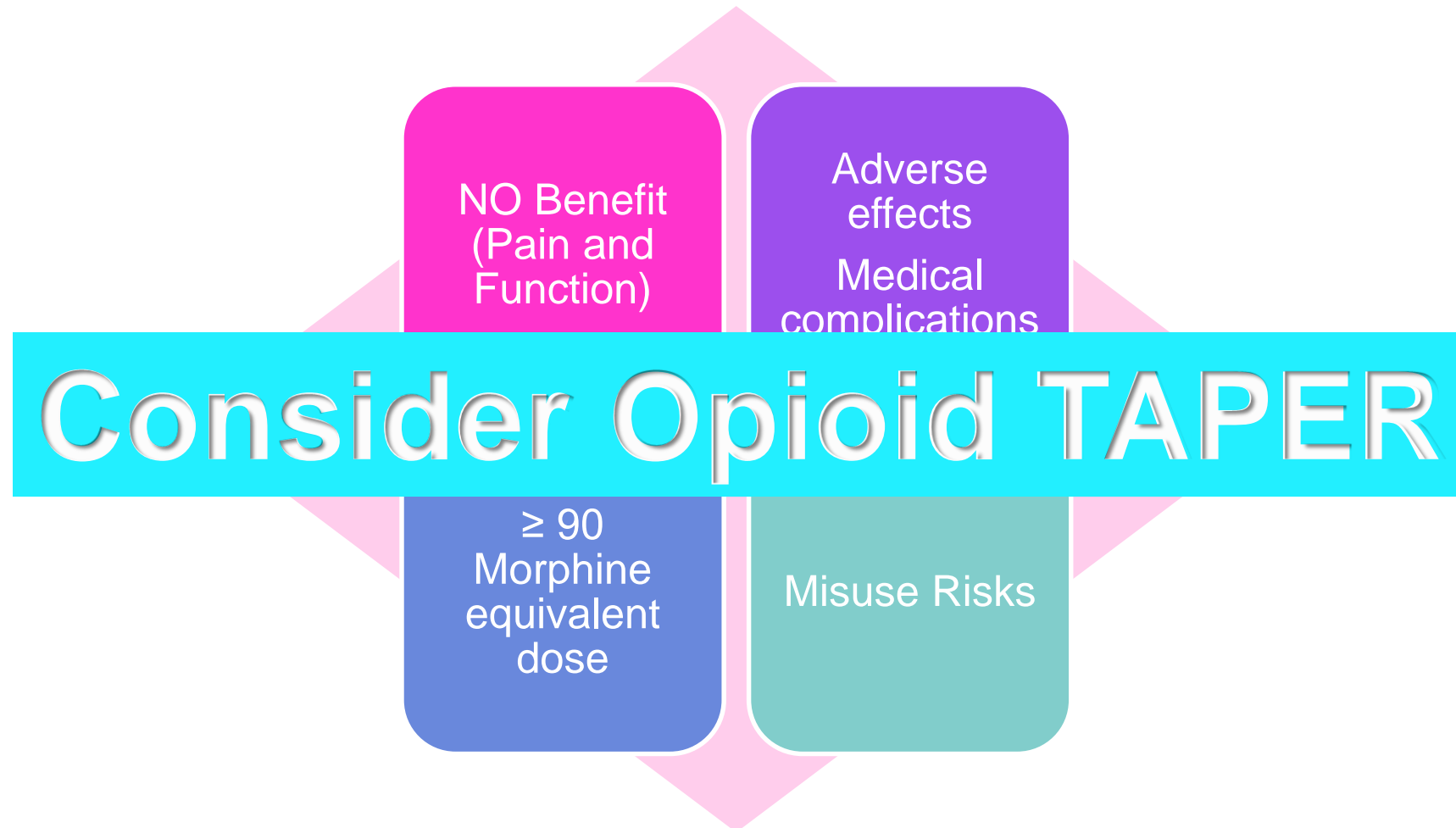
For patients who are using opioids and experiencing serious challenges in tapering: a formal multidisciplinary program.

STRONG

When are Opioids not Appropriate?

<i>Relative Contraindications</i>	<i>Absolute Contraindications</i>
<ul style="list-style-type: none">• Low back pain, headache, and fibromyalgia• Irresponsible opioid management• Social instability• Acute psychiatric instability, high suicide risk• Past substance abuse• Pregnancy	<ul style="list-style-type: none">• Current substance abuse• Absence of pathology• Illegal activity: diversion, prescription forgery, active illicit drug use, history of significant illegal activity

WHEN to Consider Tapering



WHY Consider a Taper

- Available evidence and clinical experience suggest that the BENEFITS of a taper include:
 - Same or improved subjective pain ratings
 - Improved function and mood

Why does tapering help?

- Resolution of end-dose withdrawal symptoms
- Opioid-induced fatigue, sedation, dysphoria
- Patients more active, energetic so pain perception improves

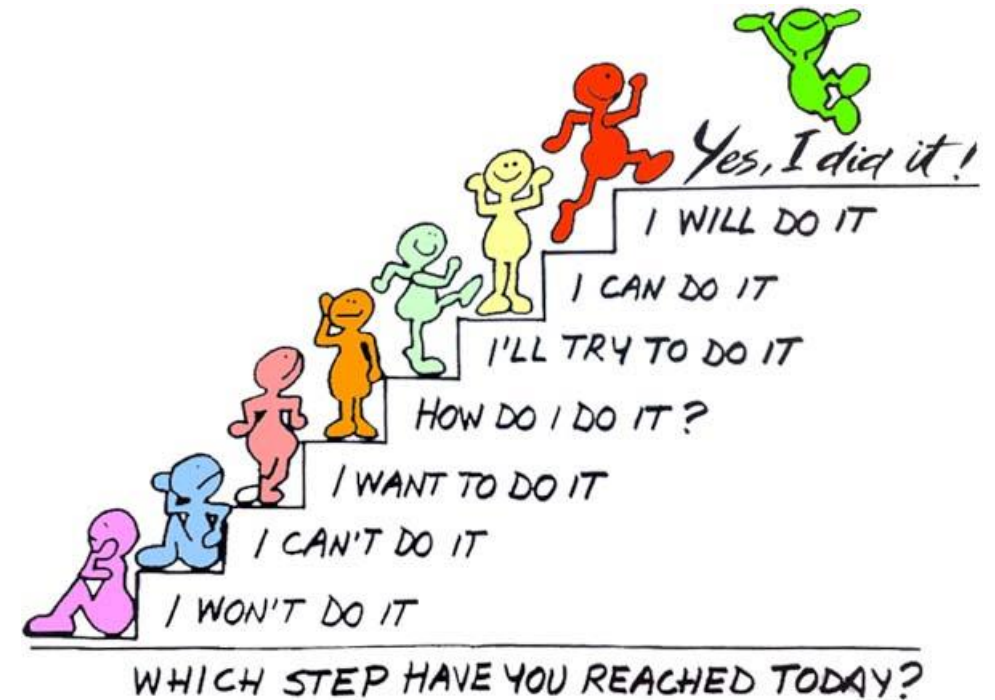
HOW to Prepare for a Taper

- Mobilize team- allied health, patient's friends/family supports
- Optimize non-opioid agents as well as non-pharmacological strategies
- Address mood and sleep issues
- **Strategies**
 - Opioid rotation
 - Opioid tapering
 - Proactive management of withdrawal symptoms

HOW to Intervene

- **Develop a Therapeutic Relationship**


- Trust, respect, support, non-judgmental
- No power imbalance or negotiation
- Empathy towards their pain and suffering
- Assess readiness for change
- Manage expectations
- May take several encounters



Clinical Precautions

1. *Pregnancy:* Rapid and severe opioid withdrawal is associated with premature labour and spontaneous abortion.
2. *Unstable medical and psychiatric conditions:* Opioid withdrawal can cause significant anxiety and insomnia which may exacerbate unstable medical and psychiatric conditions.
3. *Misuse to opioids (multiple doctors or “street use:”)* Outpatient tapering is unlikely to succeed if patient regularly accesses opioids from other sources; such patients are usually best managed in an opioid agonist treatment program (methadone or buprenorphine).
4. *Concurrent medications:* Avoid sedative-hypnotic drugs (benzodiazepines)

Guidance on opioid tapering in the context of chronic pain: Evidence, practical advice and frequently asked questions

Laura Murphy, BScPhm, ACPR, PharmD ; Roshina Babaei-Rad, BScPhm, PharmD; Donna Buna, BScPharm, PharmD; Pearl Isaac, RPh, BScPhm; Andrea Murphy, BScPhm, ACPR, PharmD; Karen Ng, BScPhm, ACPR, PharmD; Loren Regier, BSP, BA; Naomi Steenhof, BScPhm, ACPR; Maria Zhang, BScPhm, PharmD, MSc; Beth Sproule, BScPhm, PharmD

Opioid Taper – Scenarios

1. If a patient is on both short and long-acting opioids how should one initiate the taper?
 - Consolidate and rotate all opioids to one new, extended-release oral opioid.
 - Ask patient to consider which formulation they may want to start tapering
2. How rapid can opioids be tapered?
 - Dose reduction can range from **5-10%** of the total daily dose every 3 days, weekly, monthly or every 2 months.
 - Once 1/3 of the original dose is reached, smaller dose reductions (e.g. 5% every 2-4+ weeks) may be required. The taper rate can vary from patient to patient
3. What is the role of short/fast acting opioids during a taper?
 - Avoid fast acting opioids- fluctuations in short-acting opioids delay the taper process and may increase inter-dose withdrawal symptoms
 - May be a role at the end of tapers, when extended-release medications are at the lowest available strength and patients are not able to discontinue further

Opioid Taper Precautions

- Warn patients not resume original dose of opioids after their taper has begun
 - Increased risks of overdose

- Provide opioid overdose education and dispense naloxone kit
- It takes as little as ~3-7 days to lose tolerance, patients are at risk of overdose if they resume original dose



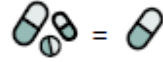
Opioid Taper Precautions

- NEVER QUICKLY OR ABRUPTLY STOP OPIOIDS
- Patients experience severe withdrawal and may turn to the illicit market for relief, or obtain from other sources
 - They are then at high risk for overdose because of lost tolerance
 - Fentanyl added to illicit opioids

Opioid Rotation- Approach

MORPHINE EQUIVALENCE TABLE

Opioid conversion table.



Opioids* Oral preparations (mg/d)	To convert to oral morphine equivalent, multiply by:	To convert from oral morphine, multiply by:
Buprenorphine ³	<ul style="list-style-type: none"> • 5 µg/h patch = 9–14 mg MED/d • 10 µg/h patch = 18–28 mg MED/d 	<ul style="list-style-type: none"> • 15 µg/h patch = 27–41 mg MED/d • 20 µg/h patch = 36–55 mg MED/d^{4,5}
Buprenorphine/ naloxone SL ³	16 mg SL = 90 mg MED	
Codeine	0.15 (0.1–0.2)	6.67
Hydromorphone	5.0	0.2
Methadone	Dose equivalents unreliable	
Morphine	1.0	1
Oxycodone	1.5	0.667
Tapentadol	0.3–0.4	2.5–3.33
Tramadol**	0.1–0.2	6
Fentanyl ^{6***}	60–134 mg morphine = 25 µg/h patch 135–178 mg morphine = 37 µg/h patch 180–224 mg morphine = 50 µg/h patch 225–269 mg morphine = 62 µg/h patch 270–314 mg morphine = 75 µg/h patch 315–359 mg morphine = 87 µg/h patch 360–404 mg morphine = 100 µg/h patch	

Patients who have not responded to or do not tolerate one opioid may respond to a switch

2004 Cochrane review most reports concluded that opioid switching is a useful clinical technique for improving pain control and/or reducing opioid-related side effects.

Rotation to other opioids may result in a large improvement in pain and physical function

Discount new opioid dose by 50% to account for incomplete cross tolerance

Opioid Rotation

Evidence to support the practice and method of opioid rotation is anecdotal or based on observational and uncontrolled studies

- Indicated for patients experiencing **unacceptable adverse effects** or **insufficient opioid effectiveness** from one particular opioid
- Rationale based on the wide inter-individual variability in opioid sensitivity

METHOD 1 (Incomplete cross tolerance)	METHOD 2 (Cross Taper Method)
25-50% of less of previous opioid (converted to morphine equivalent)	Decrease the total daily dose of the current opioid by 10–25%/week while titrating up the total daily dose of the new opioid weekly by 10–20% with a goal of switching over 3–4 weeks

Meet Mr. NP

- 48 year old with spinal stenosis and degenerative disc disease complicated with chronic neck and back pain. Past medical history significant for COPD, depression and sleep apnea. He has been on the current opioids for 5 years, with gradual dose escalations. He continues to work part time but is finding that his pain is worsening.
 - Hydromorphone Contin 18mg at BID
 - Short-acting hydromorphone 8mg: 1-2 tablets TID → 6 tabs/day → 48mg/day
- Is it time to decrease his dose or stop his opioid?
 - Opioid effective?
 - Risks outweighs benefits?
 - Presence of side effects and medical complications?
 - Opioid being used to regulate mood?
 - Aberrant behavior?



Goal of a Taper

- **End-point of taper:** Dose < 90 mg MED if possible
- Improved or no change in pain
- Decrease opioid side effects and risks
- Increased function
 - Discuss meaningful patient goals



Patient Barriers

- Fear of increased pain
- Fear of withdrawal symptoms
- Fear of dying
- Drug liking, Drug diversion and misuse
- Pessimism about non-opioid options to manage pain
- Low perceived risk of overdose

**Patient engagement may be more
important than any specific tapering
protocol**

Patient Barriers- Resistance

- “It is just not a good time for me now.”
- “Every-time I have tried to cut back my pain worsens”!
- “If you take my medication away, what will I do to manage pain?”
- “It is the only thing that helps me to get through the day!”



Elements of Patient-Provider Communication

<p>Explaining reasons for tapering</p> <ul style="list-style-type: none">✓ Understanding individual reasons for tapering✓ Focus message on patients' individual challenges with opioids and not external factors (addiction, overdoses)	<p>Negotiating the tapering plan</p> <ul style="list-style-type: none">✓ Give patients options so that they have some control over the tapering process✓ Collaboration on length and rate of taper
<p>Managing difficult conversations</p> <ul style="list-style-type: none">✓ Disconnect between patient-provider perception of opioid risks and benefits✓ Stigma associated with opioid use✓ Patient's loss of autonomy	<p>Assuring patients that they will not be abandoned</p> <ul style="list-style-type: none">✓ Stand by patients through the whole tapering process, good and bad✓ "not gonna pull the rug out from under you"

Patient Education

- Patient education may be harmful when:
 - Patients feel disrespected (worsens resistance and ambivalence)
 - Spoken down to
 - Education focused on external motivators (stats, arguments, scare tactics)
 - Too general
- **INSTEAD TRY:**
 - Asking permission first
 - Goal: Keep client in “driver’s seat” of change
 - Avoid taking the expert role and patient taking the passive role
 - Provide education that takes into account patient experience
 - Check in on their understanding
 - Talk about what other patients say/experience

Communication with Patients

- Collaboration with the patient/family
 - Elicit buy in from patient and their support network
 - Work within patient's stage of change
 - Utilize motivational interviewing
 - Biopsychosocial approach to care

Facilitators for a Taper

- Social support
 - Friends, family, partners
 - Lived experience from other patients who have gone through the same
- Role of a Trusted Health Care Provider
- Skill-full provision of information and education to address knowledge gaps

Tapering Opioids - Approaches

Motivational interviewing (MI)
Stages of Change

Specific Measurable Achievable
Relevant Timely goals

Education and Support for patient

Three Communication Skills of MI

- LISTENING
- ASKING
- INFORMING

GOAL: Enabling behavioural change

OARS- additional Communication skills

Open ended questions invite patients to tell their story.

“what are some of the concerns you have about taking opioids?”

Affirmation: genuine statements, recognizing strengths and validates patient’s feelings and experience, it’s not praising.

“You have given this taper a lot of thought and have made the difficult decision to begin”

Reflections: forming a hypothesis of what the patient means, shows that you are listening

“you are afraid that if we make changes to your dose too quickly you will suffer from withdrawal”

Summary: check the understanding of the situation, link ambivalence to change talk

“So what I hear you tell me is...”

“you say you don’t want to decrease the opioids, yet they just take the edge off and you hate feeling groggy and constipated”

Eliciting Tapering Change Talk



Stages of Change Key Questions

Pre-contemplation

From your perspective, what are the upsides and downsides to continuing to taking opioids?

How is your life now, compared with before you started taking opioids?

Suppose you continued taking opioids for the next 5 years. What would that be like?

Contemplation

How can I help you get past some of your concerns about opioid tapers?

Are there any benefits to not taking opioids anymore?

Preparation

What are the ways we can approach the taper together?

Why is it important for you at this time to taper?

Change Talk Statements - DARN CAT

- Preparatory
 - **D**esire (I want or wish to change)
 - **A**bility (I can, might, could change)
 - **R**eason (It's important to change)
 - **N**eed (I must, should change)
- Implementing
 - **C**ommitment (I will, try, am ready to make changes)
 - **A**ctivation (I am ready and willing)
 - **T**aking steps (I am taking action)

“I suppose I will need to do something about my opioids soon

“I don't want to spend the rest of my life on Fentanyl.”

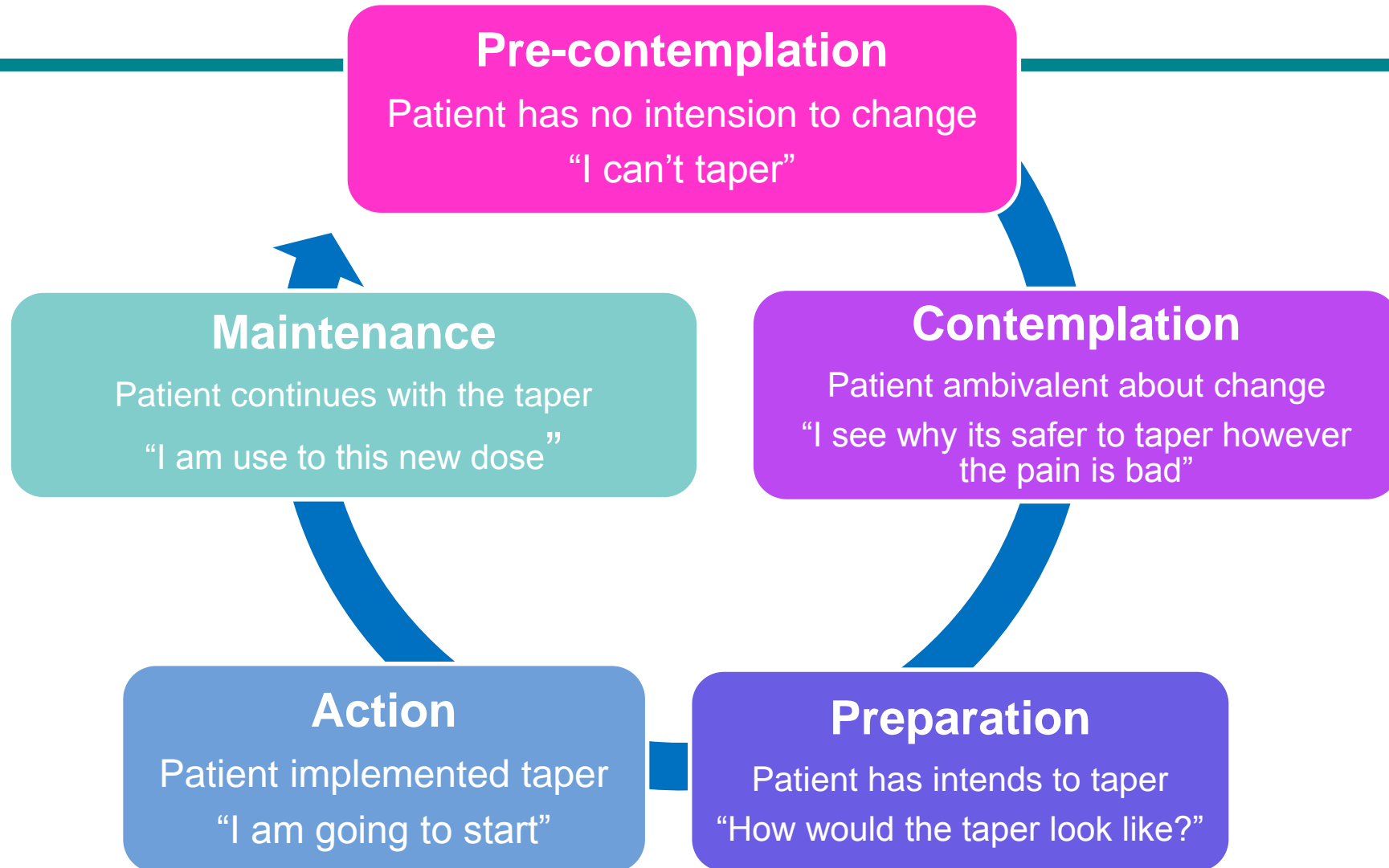


Principles of MI: RULE

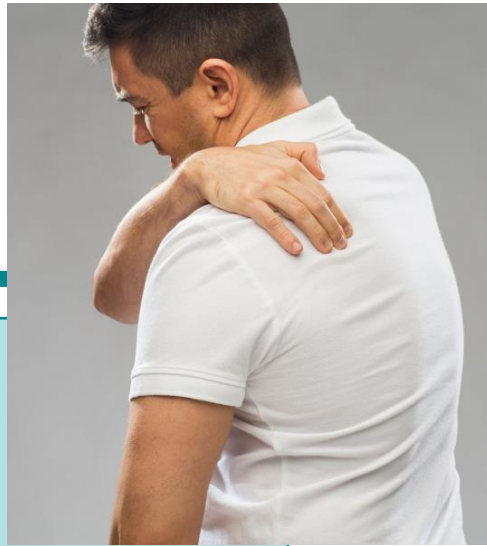


- **R**esist the righting reflex
- **U**nderstand and explore patient motivation
- **L**isten with empathy
- **E**mpower your patient

Stages of Change



Back to Mr. NP



Precautions	<ul style="list-style-type: none">• Check unstable medical or psychiatric condition• Evaluate for aberrant behaviors• Avoid sedative-hypnotics, especially benzos
Before taper	<ul style="list-style-type: none">• Emphasize goals of taper- S.M.A.R.T• Review opioid agreement: do not fill if runs out early• Optimize non-opioid options, non-pharmacological therapy
First session	<p><i>Develop plan collaboratively with Mr. NP</i></p> <p><u>OPTION 1</u>: Rotate all Hydromorphone to long-acting morphine</p> <p><u>OPTION 2</u>: Streamline all Hydromorphone to long acting formulation then taper</p> <p><u>OPTION 3</u>: Taper either IR or contin hydromorphone</p>

Option 1: Opioid Rotation

- Calculate total daily dose of opioid(s):
 - Hydromorphone Contin 18mg at BID → 36mg/day
 - Short-acting hydromorphone 8mg: 1-2 tablets TID → 6 tabs/day → 48mg/day
 - Total: 84mg/day
- Calculate total MED: $84 \times 5 = 420$ MEQ
- Reduce the calculated dose by 25–50% to minimize the risk of overdose: $420/2 = 240$ MEQ
- Calculate the new daily dose using the daily MED: 240 MEQ
- Determine new opioid dosage regimen: Morphine SR 120mg BID
- Discontinue previous opioid prescriptions

Back to Mr. NP



Tapering week 2, week 3 ...	Dispense at frequent intervals (maybe weekly) Reduce ~10% of daily dose every 1-2 weeks No p.r.n When 60mg MEQ per day → slow taper to 5% per week or longer
Monitoring taper	TAPERS: Hold dose if severe withdrawal, worsening of pain, mood or function Schedule frequent telephone calls (internal of the taper) <ul style="list-style-type: none">• Monitor for pain, function, SMART goals, sleep, mood Random urine screening to assess compliance ROTATION: Contact patient in ~3-days for a “tolerance check” to assess for over-sedation and that pain relief is comparable to the pre-switch treatment.
Completing taper	Be patient, it may take months to taper off 100% Celebrate!

Meet Ms. LM

Ms. LM is a 69 year old retired teacher who injured her left knee when she slipped on ice 4 years ago. Her knee pain has progressively worsened and now it is persistent, deep, and aching at rest, her pain intensity averages 7/10 and can flare to 9/10. She also experiences burning pain radiating down her legs and notes that the skin around her knee is very sensitive to light touch. She has a history of left knee osteoarthritis. She is taking:

- OxyNeo 60mg q12h (started 4 years ago)
- Oxycocet (She takes 2 tablets TID between her OxyNeo)
- Duloxetine 30mg daily (for past 6 months)

These opioids only take the edge off of the pain and she is tired of taking so many pills.

Dr. KT wants to switch her to Fentanyl, what dose of Fentanyl would you recommend and how would you advise Dr. KT to proceed?

Switching to Fentanyl Patch

- Current total Oxycodone dose: 150mg/day
- Convert to MEQ: 150mg/day x 1.5 = 225mg MEQ
- Discount by 50% to account for incomplete cross tolerance: 112.5mg/day (new MEQ dose)
- Convert to Fentanyl patch:

Fentanyl^{6***}

60–134 mg morphine = 25 µg/h patch

135–178 mg morphine = 37 µg/h patch

180–224 mg morphine = 50 µg/h patch

225–269 mg morphine = 62 µg/h patch

270–314 mg morphine = 75 µg/h patch

315–359 mg morphine = 87 µg/h patch

360–404 mg morphine = 100 µg/h patch

- When would you apply the patch, other considerations?
 - Same time as her last OxyNeo 60mg dose
 - May consider given 7-10 days of short acting opioids to titrate new opioid to effect

Lessons Learned

- ✓ DO Engage patients
- ✓ DO highlight how new evidence now shows harm of opioids in recent years
- ✓ DO work with patient to create taper plan
- ✓ DO commit to a patient-centered, multimodal care plan
- ✓ DO have a withdrawal management plan
 - *DON'T just focus on the opioid crisis, emphasize outcomes patients care about*
 - *DON'T be judgmental*
 - *DON'T taper during a time of unstable or uncontrolled psychosocial issues*
 - *DON'T wait too long to follow up with patient*

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