Rethinking Opioid Tapers, Buprenorphine Induction, and Perioperative Buprenorphine

The BRAVO Protocol:
A Biopsychosocial Approach to Opioid Tapers

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STR-TA

Disclosures

I have been retained as an expert witness on the plaintiff side in federal and state litigation against opioid manufacturers and other defendants.

Overview

- How to taper opioid dependent, chronic pain patients down and/or off of long-term opioids.
- How to transition patients from full opioid agonists to buprenorphine using transdermal buprenorphine.
- How to manage buprenorphine in the perioperative period.

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HOW TO TAPER PATIENTS OFF OF CHRONIC OPIOID THERAPY

ONLINE CME COURSE

Internet Enduring Material Sponsored by the Stanford University School of Medicine. Presented by the Department of Psychiatry and Behavioral Sciences at Stanford University School of Medicine

COURSE DETAILS

Original Release Date: 08/02/18

Expiration Date: 08/02/21


https://www.oregonpainguidance.org/guideline/tapering/
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Tapering – Guidance & Tools
Overview
Risk Benefit Assessment & Flowchart
Opioid Tapering Flowchart
BRAVO Overview
Tapering – Guidance & Tools
Clinical Update Dec. 2018
Overview
Over the last 20 years, the liberal prescribing of opioids for chronic pain has created a population of patients who been on long term opioid therapy (LTOT) for several years if not decades. Many patients are on doses well above the CDC recommended upper limit of 90 Morphine Equivalent Dose (MED) for new starts. Patients, however, may be reluctant to taper, fearing withdrawal and increased pain. Prescribers are also asking whether or not tapering is necessary if the patient is stable and compliant on their current dose. Yet, overdose rates continue to be high compared to historical standard and it is well established that patients on

B=BROACHING THE SUBJECT

Sherry's story (composite case)

- At age 18, developed a mysterious pain in her abdomen that spread to her whole body.
- All medical work-up negative.
- Saw many doctors over time, and was diagnosed with fibromyalgia and rx'd opioids.
- By age 30 was taking ~800 MED's, prescribed by "the most compassionate doctor I ever saw."
- Sherry always took her opioids exactly as prescribed.

Sherry's story

- Despite meds, pain no better, function worse.
- On high dose opioids, Sherry spent more time in bed.
- Her husband remarked she was "detached from family life." Sherry was not aware of being more detached.
- Her pain increased over time.

B=Broaching the subject Summary points

- Suggesting an opioid taper can trigger anxiety.
- Identify this feeling for patients, normalize it and express empathy.
- Make clear that the opioid taper was carefully considered, not impulsive and not punitive.

B=Broaching the subject
How to talk to patients

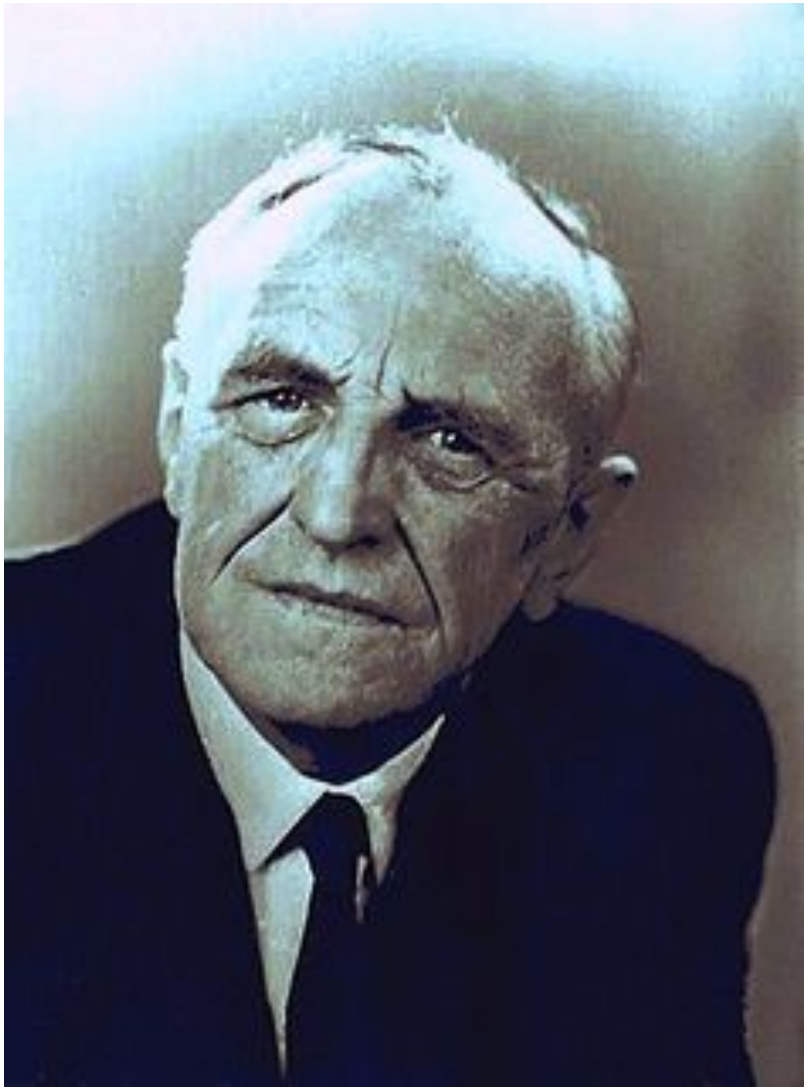
- Carefully Considered: “Sherry, I scheduled some extra time for us today because I want to discuss a very important topic with you. ***I’ve been thinking a lot about your chronic pain*** and how to help you with that.”
- Gentle Introduction: “I would like to suggest that we taper you down and maybe even off your opioid medication.”
- Anticipate Fear: “Now, I know the very thought of an opioid taper is terrifying for you, and you’re not alone in that … it’s totally normal to feel afraid about going down on your dose, especially after you’ve been taking opioids for so long. But, please hear me out, and let me tell you the reasons why I think it’s a good plan for you.”

B=Broaching the subject Medicolegal considerations

- Medicolegal considerations for the inherited high-dose opioid patient. It's okay to continue the high dose at first, as long as you:
  - Demonstrate and document you are weighing the risks and benefits of a taper, discussing the topic with the patient, and building a therapeutic alliance to optimize the chances of a successful taper.
  - Monitoring the patient, including checking the PDMP, urine toxicology, and other screening for opioid use disorder.
  - Offering naloxone and overdose prevention education.

Take more time, and get support

Donald Winnicott's "holding environment"

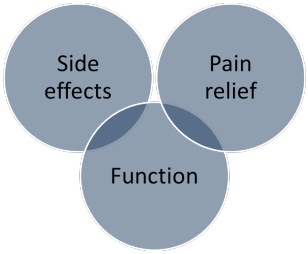


"I've been thinking a lot about your chronic pain …"

R=RISK BENEFIT CALCULATOR

R=Risk benefit calculator Summary points

- Consider the risks of long term opioid therapy and weigh against the benefits in this patient (PDMP, toxicology, collateral information)
- Is MED > 90 mg? Are there medical comorbidities? Are there side effects? Is there a lack of functional improvement? Is there a lack of significant pain relief despite dose increases?
- Is there dangerous co-prescribing such as benzodiazepines?



R=Risk benefit calculator
How to talk to patients

- First Do No Harm: “I think we need to get you off opioids because they’re doing more harm than good. Your pain is no better than before you started on opioids, and may even be worse.”
- Medicating Withdrawal: “I know you feel like opioids are helping your pain, but they’re most likely medicating withdrawal from your last dose.”
- Functionality: “More importantly, you’re less functional than you used to be, spending most of the day in bed. Your husband reports you are detached from family life. Opioids can do that, even when we’re not aware of them doing that.”
- Medical Decision-Making: “For all of those reasons, we’re going to work together to slowly taper you off these medications.”

R=Risk benefit calculator

REVIEW

Annals of Internal Medicine

The Effectiveness and Risks of Long-Term Opioid Therapy for Chronic Pain: A Systematic Review for a National Institutes of Health Pathways to Prevention Workshop

Roger Chou, MD; Judith A. Turner, PhD; Emily B. Devine, PharmD, PhD, MBA; Ryan N. Hansen, PharmD, PhD; Sean D. Sullivan, PhD; Ian Blazina, MPH; Tracy Dana, MLS; Christina Bougatsos, MPH; and Richard A. Deyo, MD, MPH

Background: Increases in prescriptions of opioid medications for chronic pain have been accompanied by increases in opioid overdoses, abuse, and other harms and uncertainty about long-term effectiveness.

Purpose: To evaluate evidence on the effectiveness and harms of long-term (>3 months) opioid therapy for chronic pain in adults.

Data Sources: MEDLINE, the Cochrane Central Register of Controlled Trials, the Cochrane Database of Systematic Reviews, PsycINFO, and CINAHL (January 2008 through August 2014); relevant studies from a prior review; reference lists; and ClinicalTrials.gov.

Study Selection: Randomized trials and observational studies that involved adults with chronic pain who were prescribed long-term opioid therapy and that evaluated opioid therapy versus placebo, no opioid, or nonopioid therapy; different opioid dosing strategies; or risk mitigation strategies.

Data Extraction: Dual extraction and quality assessment.

Data Synthesis: No study of opioid therapy versus no opioid therapy evaluated long-term (>1 year) outcomes related to pain, function, quality of life, opioid abuse, or addiction. Good- and fair-quality observational studies suggest that opioid therapy for chronic pain is associated with increased risk for overdose, opioid abuse, fractures, myocardial infarction, and markers of sexual dysfunction, although there are few studies for each of these outcomes; for some harms, higher doses are associated with increased risk. Evidence on the effectiveness and harms of different opioid dosing and risk mitigation strategies is limited.

Limitations: Non-English-language articles were excluded, meta-analysis could not be done, and publication bias could not be assessed. No placebo-controlled trials met inclusion criteria, evidence was lacking for many comparisons and outcomes, and observational studies were limited in their ability to address potential confounding.

Conclusion: Evidence is insufficient to determine the effectiveness of long-term opioid therapy for improving chronic pain and function. Evidence supports a dose-dependent risk for serious harms.

Primary Funding Source: Agency for Healthcare Research and Quality.

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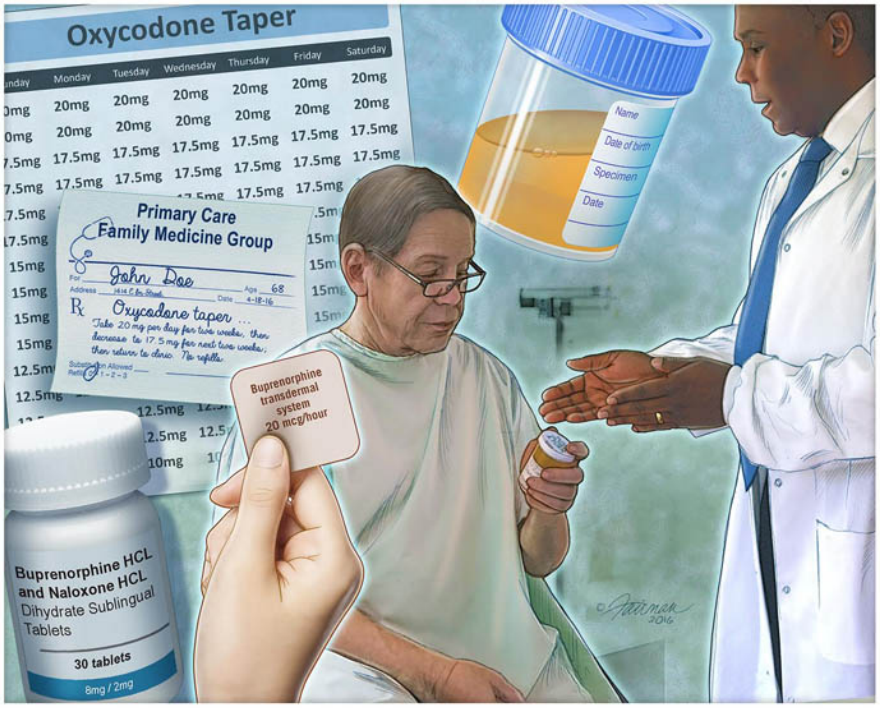
For author affiliations, see end of text.
This article was published online first at www.annals.org on 13 January 2015.

R=Risk benefit calculator



Weighing the Risks and Benefits of Chronic Opioid Therapy
American Family Physician, Lembke, A., 2016 ◆ Volume 93

Involve family in risk assessment

- 2016 Washington Post Kaiser Family Foundation Survey of patients on chronic opioid therapy
- 33% of patients worried about addiction
- >50% of family members worried about addiction

Rx Naloxone and educate about overdose risks (now law in California)

Family Practice
123 Main Street | Anytown, USA

℞ Naloxone HCl 1mg/mL

2 x 2mL as pre-filled
Luer-Lock needleless syringe

2 x Intranasal Mucosal
Atomizing Device (MAD 300)

For suspected opioid overdose.
Spray 1mL in each nostril.
Repeat after 3 minutes if no or
minimal response.

MD_____

Signature _____

Benefits?
SPACE Randomized Clinical Trial

Research

JAMA | Original Investigation

Effect of Opioid vs Nonopioid Medications on Pain-Related Function in Patients With Chronic Back Pain or Hip or Knee Osteoarthritis Pain
The SPACE Randomized Clinical Trial

Erin E. Krebs, MD, MPH; Amy Gravely, MA; Sean Nugent, BA; Agnes C. Jensen, MPH; Beth DeRonne, PharmD; Elizabeth S. Goldsmith, MD, MS; Kurt Kroenke, MD; Matthew J. Bair; Siamak Noorbaloochi, PhD

IMPORTANCE Limited evidence is available regarding long-term outcomes of opioids compared with nonopioid medications for chronic pain.

OBJECTIVE To compare opioid vs nonopioid medications over 12 months on pain-related function, pain intensity, and adverse effects.

DESIGN, SETTING, AND PARTICIPANTS Pragmatic, 12-month, randomized trial with masked outcome assessment. Patients were recruited from Veterans Affairs primary care clinics from June 2013 through December 2015; follow-up was completed December 2016. Eligible patients had moderate to severe chronic back pain or hip or knee osteoarthritis pain despite analgesic use. Of 265 patients enrolled, 25 withdrew prior to randomization and 240 were randomized.

Supplemental content

Why the SPACE trial is the gold standard

- Key finding: **No benefit of opioids** above non-opioids; fewer side effects with non-opioids
- 12 months in duration
- Studied opioid-naïve patients in a primary care setting, including patients with severe depression and post-traumatic stress disorder
- Not sponsored by an opioid manufacturer

Tapering may improve pain

American Pain Society
RESEARCH
EDUCATION
TREATMENT
ADVOCACY
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The Journal of Pain, Vol ■, No ■ (■), 2016: pp 1-11
Available online at www.jpain.org and www.sciencedirect.com

Prescription Opioid Taper Support for Outpatients With Chronic Pain: A Randomized Controlled Trial

Mark D. Sullivan, Judith A. Turner, Cory DiLodovico, Angela D'Appolonio, Kari Stephens, and Ya-Fen Chan

Department of Psychiatry and Behavioral Sciences, University of Washington, Seattle, Washington.

Abstract: **Patients receiving long-term opioid therapy for chronic pain and interested in tapering their opioid dose were randomly assigned to a 22-week taper support intervention (psychiatric consultation, opioid dose tapering, and 18 weekly meetings with a physician assistant to explore motivation for tapering and learn pain self-management skills) or usual care (N = 35). Assessments were conducted at baseline and 22 and 34 weeks after randomization. Using an intention to treat approach, we constructed linear regression models to compare groups at each follow-up. At 22 weeks, adjusted mean daily morphine-equivalent opioid dose in the past week (primary outcome) was lower in the taper support group, but this difference was not statistically significant (adjusted mean difference = −42.9 mg; 95% confidence interval, −92.42 to 6.62; *P* = .09). Pain severity ratings (0–10 numeric rating scale) decreased in both groups at 22 weeks, with no significant difference between groups (adjusted mean difference = −.68; 95% confidence interval, −2.01 to .64; *P* = .30). The taper support group improved significantly more than the usual care group in self-reported pain interference, pain self-efficacy, and prescription opioid problems at 22 weeks (all *P*-values < .05). This taper support intervention is feasible and shows promise in reducing opioid dose while not increasing pain severity or interference.**

Perspective: ***In a pilot randomized trial comparing a prescription opioid taper support intervention to usual care, lower opioid doses and pain severity ratings were observed at 22 weeks in both groups. The groups did not differ significantly at 22 weeks in opioid dose or pain severity, but the taper support group improved significantly more in pain interference, pain self-efficacy, and perceived opioid problems. These results support the feasibility and promise of this opioid taper support intervention.***

Key words: *Chronic opioid therapy, opioid dose taper, pain intensity, pain interference, pain self-management.*

A=ADDICTION HAPPENS

A=Addiction happens Summary points

- Opioid misuse and addiction in long term opioid therapy is common.
- Physical dependence, withdrawal and tolerance by themselves do not define addiction.
- Addiction refers to behaviors associated with opioid use. Think of the 4 C's: Control, Compulsion, Craving, Continued Use (despite Consequences).
- Normalize the concept of addiction to medications prescribed for pain and reassure patients that there are effective treatments.

A=Addiction happens
How to talk to patients

- Mea Culpa: “When we [doctors] first started prescribing opioids more liberally for chronic pain in the 1980s, we believed the risk of becoming addicted, as long as we were prescribing them for a medical condition, was very low. Now we know better.”
- Pain Patients Get Addicted Too: “Since then, we have learned a lot and now know that even when patients are being prescribed opioids for a legitimate pain condition, and take them as prescribed, they can become addicted to those opioids.”
- Anticipation: “So, if in the process of a slow and medically supervised taper, you are unable to come off opioids, it is possible that you too have become addicted. If that’s true for you, you’re not alone. Millions of people have become addicted to prescription opioids through a doctors’ prescription.”

Risk of opioid misuse ~ 25%
Risk of opioid addiction ~ 12%

- Systematic review and meta-analysis from 38 studies. Across most calculations, **rates of misuse** averaged between **21% and 29%** (range, 95% confidence interval [CI]: 13%-38%). **Rates of addiction** averaged between **8% and 12%** (range, 95% CI: 3%-17%).
- Used real world and population based studies.
- Vowles, K.D. Pain, 2015.

Using the DSM-V criteria to diagnose “opioid use disorder” in the context of a medically managed opioid taper

- Tolerance and withdrawal: These criteria don’t count when patients taking opioids as prescribed.
- DSM-V Criteria (need at least 2 beyond tolerance and withdrawal)
  - Control
  - Compulsions
  - Craving
  - Consequences

Sherry's story

- At the start of the taper (800 MED's), Sherry did not meet DSM-V criteria for opioid use disorder.
- But as we attempted to taper her over 18 months, it became apparent she had developed an opioid use disorder, based on:
  - Her inability to adhere to even minimal dose decrements (Control)
  - Her inability to taper despite ongoing serious medical consequences as a result of opioids, including hypoxemia, somnolence, depression, cognitive dysfunction (Consequences)

Sherry's story

- We transitioned her to buprenorphine
- She experienced improvements in mood, cognition, activity level, alertness, breathing
- Her pain did not improve, but also did not get worse

Sublingual buprenorphine

- FDA approved treatment for opioid use disorder
- 3 unique properties
  - Long half life
  - High binding affinity
  - Ceiling effect on euphoria and respiratory depression

NAM MAT report: http://nationalacademies.org/hmd/Reports/2019/medications-for-opioid-use-disorder-save-lives.aspx

Typical buprenorphine induction in our outpatient clinic

- 12-48 hours no opioids, then …
- See patient in clinic and assess for opioid withdrawal
- Send patient home with prescription for home induction, typically 2 mg TID prn daily for the first week (for patients on 150 MED or less)
- Follow up by phone during the week prn
- RTC day seven for seven day refill, urine tox screen, PDMP check

Buprenorphine equivalents (courtesy of Dr. Paul Coelho)

Morphine	Methadone	Buprenorphine
250mg	30	8mg
500mg	40	8-16mg
750mg	60	8-24mg
1000mg	80	8-32mg

The Bernese Method: Transdermal buprenorphine

Use of microdoses for induction of buprenorphine treatment with overlapping full opioid agonist use: the Bernese method

This article was published in the following Dove Press journal:
Substance Abuse and Rehabilitation
20 July 2016
Number of times this article has been viewed

Robert Hämmig[1]
Antje Kemter[2]
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Background: Buprenorphine is a partial μ-opioid receptor agonist used for maintenance treatment of opioid dependence. Because of the partial agonism and high receptor affinity, it may precipitate withdrawal symptoms during induction in persons on full μ-opioid receptor agonists. Therefore, current guidelines and drug labels recommend leaving a sufficient time period since the last full agonist use, waiting for clear and objective withdrawal symptoms, and reducing pre-existing full agonist therapies before administering buprenorphine. However, even with these precautions, for many patients the induction of buprenorphine is a difficult experience, due to withdrawal symptoms. Furthermore, tapering of the full agonist bears the risk of relapse to illicit opioid use.

Cases: We present two cases of successful initiation of buprenorphine treatment with the Bernese method, ie, gradual induction overlapping with full agonist use. The first patient began buprenorphine with overlapping street heroin use after repeatedly experiencing relapse, withdrawal, and trauma reactivation symptoms during conventional induction. The second patient was maintained on high doses of diacetylmorphine (ie, pharmaceutical heroin) and methadone during induction. Both patients tolerated the induction procedure well and reported only mild withdrawal symptoms.

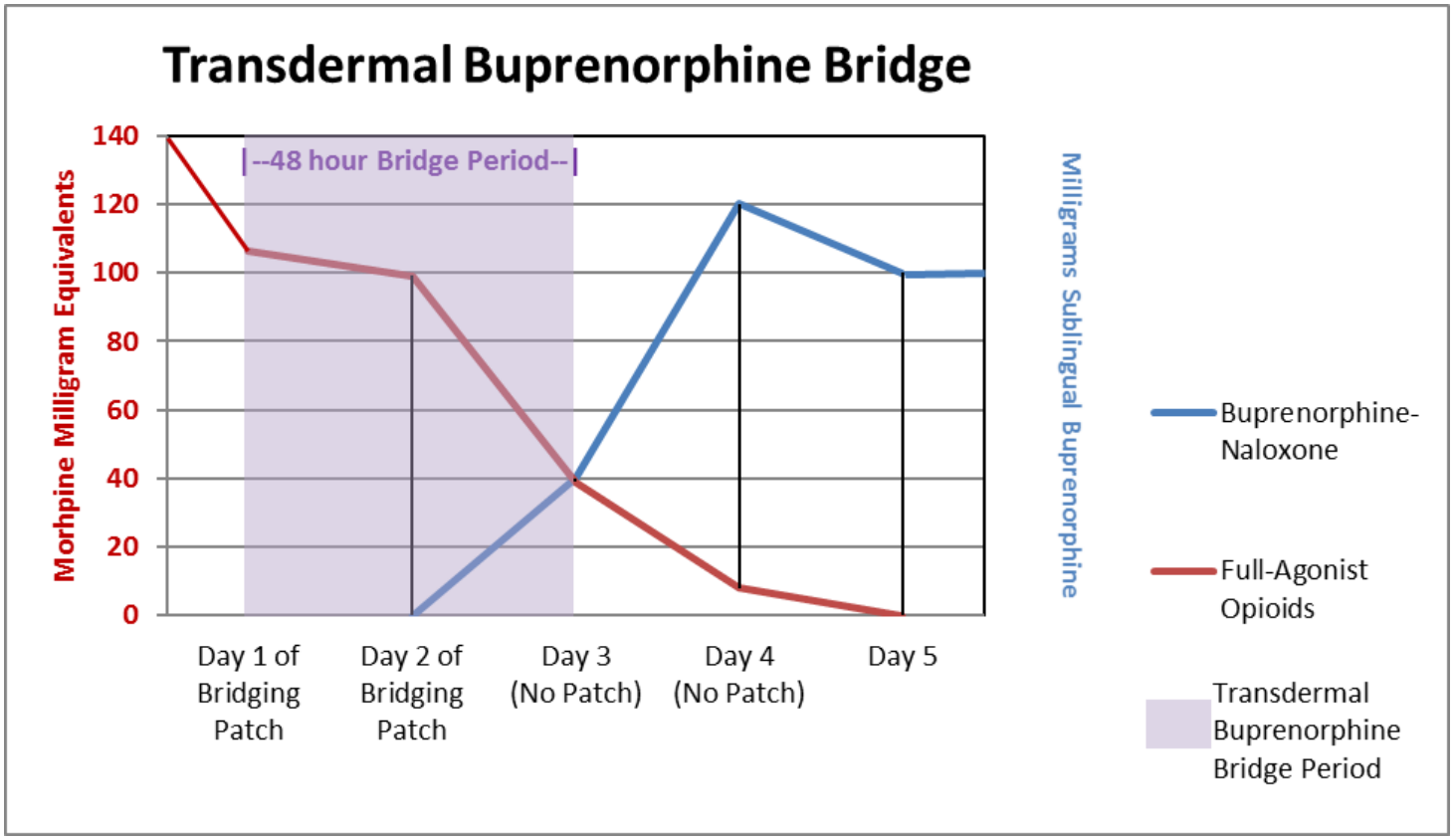
Discussion: Overlapping induction of buprenorphine maintenance treatment with full μ-opioid receptor agonist use is feasible and may be associated with better tolerability and acceptability

Butrans patch

"Initiating Opioid Agonist Treatment for Opioid Use Disorder in the Inpatient Setting" A Teachable Moment, JAMA, 2019

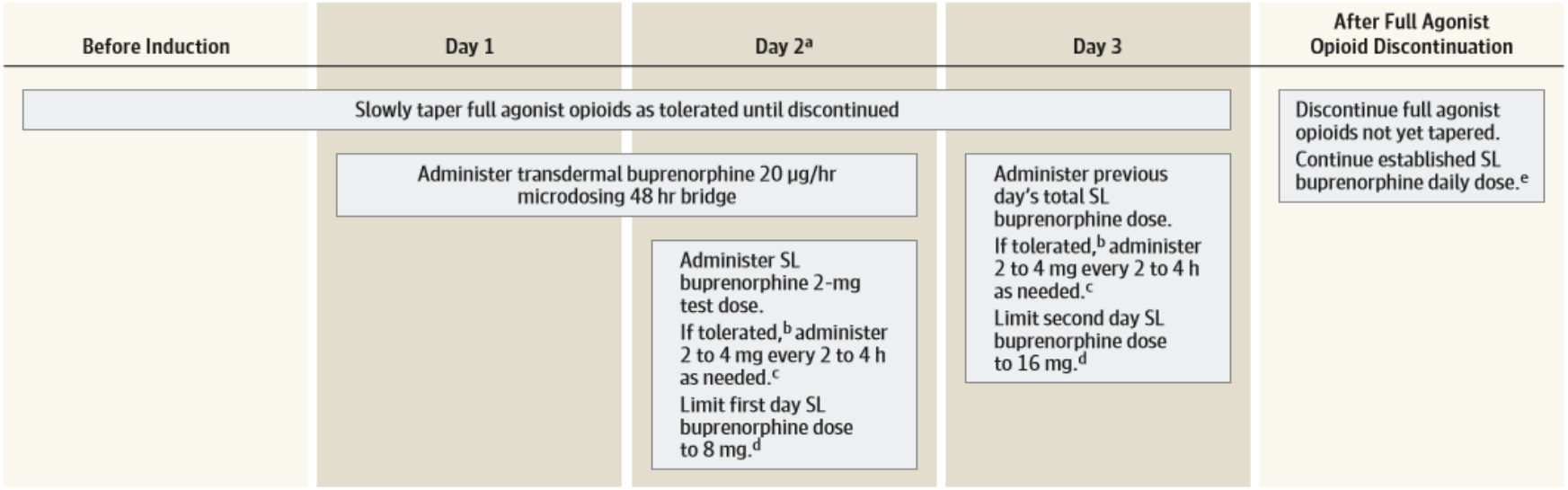
A 21-year-old woman with a history of multiple hospital admissions for sepsis secondary to injection heroin use presented to the hospital with a right thigh abscess and dyspnea. Her diagnostic workup revealed pulmonic valve endocarditis, with both abscess and blood cultures growing methicillin-sensitive *Staphylococcus aureus*. The patient developed sepsis with respiratory failure and was intubated. Despite 11 days of treatment with antibiotics, her condition worsened and necessitated pulmonic valve replacement. She improved after surgery and received intravenous antibiotics for 6 weeks. She also received 220 morphine milligram equivalents for postoperative pain. Based on concerns that she would be at high risk to use her peripherally inserted central catheter to inject heroin as an outpatient, the decision was made to keep her hospitalized while completing the course of antibiotics.

Using transdermal buprenorphine to transition patients to sublingual formulations



Raheemullah, A., Lembke, A. Initiating Opioid Agonist Treatment for Opioid Use Disorder in the Inpatient Setting: A Teachable Moment, JAMA Internal Medicine, 2019

Figure. Buprenorphine Induction With Transdermal Buprenorphine Microdosing



[a] Algorithm would require adjustment for longer-acting opioids such as methadone.

[b] Delay extra doses of buprenorphine for adverse effects such as oversedation. Minor withdrawal symptoms can be treated with nonopioid medications such as alpha-2 adrenergic agonists, loperamide for diarrhea, and ondansetron for nausea.

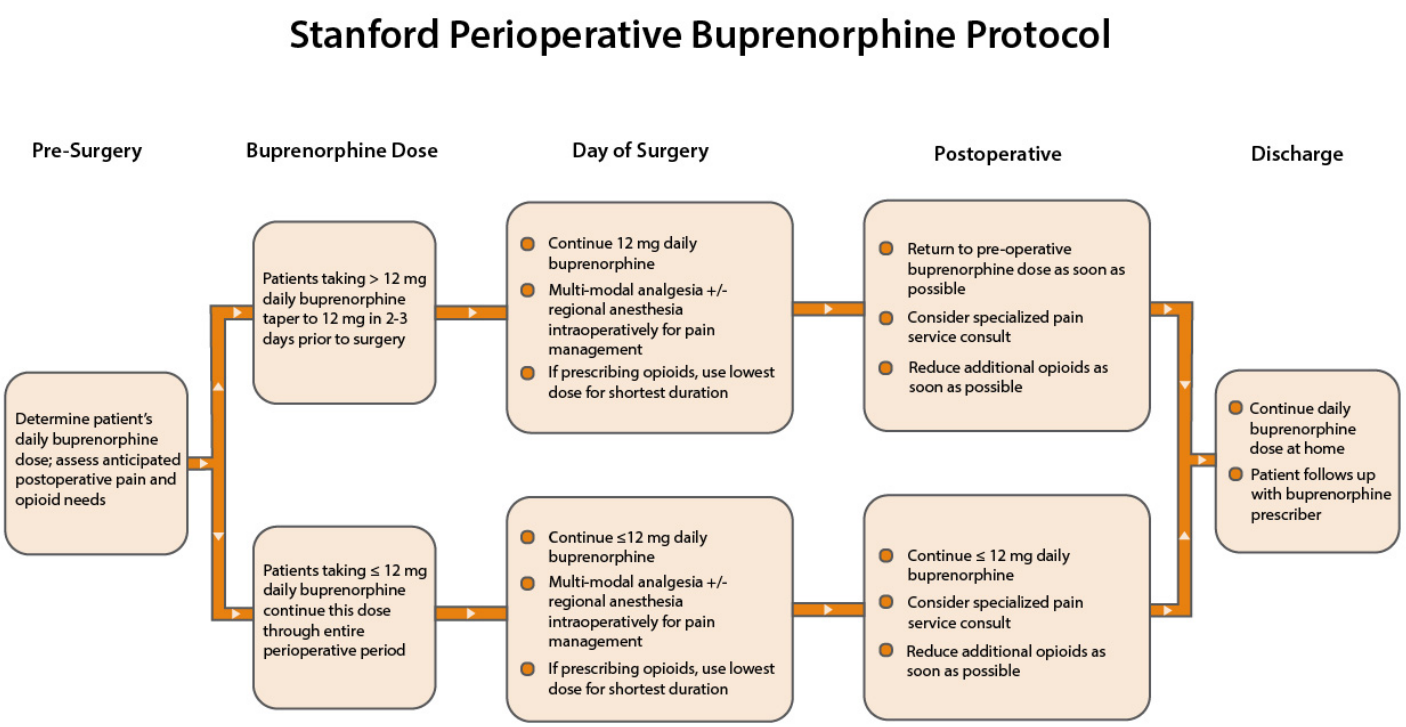
[c] Titrate to an effective dose that relieves opioid withdrawal, suppresses cravings, avoids adverse effects such as sedation, and has stable treatment effects for 24 hours.

[d] On average, buprenorphine doses after induction and titration should be at least 8 mg/d. The US Food and Drug Administration approves up to 24 mg/d, and there is limited evidence regarding the relative efficacy of higher doses. Sublingual (SL) buprenorphine-naloxone can be used in place of SL buprenorphine.

[e] The daily dose can be divided and administered every 6 to 8 hours to take advantage of its analgesic properties. The ratio of buprenorphine to morphine is 10 mg to 1 mg.

Raheemullah, A., Lembke, A. Initiating Opioid Agonist Treatment for Opioid Use Disorder in the Inpatient Setting: A Teachable Moment, JAMA Internal Medicine, 2019

Perioperative bup: Reduce bup to 12 mg 2-3 days before surgery, and maintain through the perioperative period



Lembke, A. Ottestad, E., Schmiesing, C. Patients Maintained on Buprenorphine for Opioid Use Disorder Should Continue Buprenorphine Through the Perioperative Period, Pain Medicine, 2018 https://doi.org/10.1093/pm/pny019

V=VELOCITY AND VALIDATE

V=Velocity and Validate Summary points

- Tapering too fast is the most common mistake physicians make.
- It's ok to take breaks in the taper schedule, but never go backwards during the taper!
- Validate the patient's experience of opioid withdrawal, which may initially increase body pain. Pain from withdrawal will resolve and doesn't mean any underlying condition is worsening.
- Use other medications to mitigate some of the symptoms of withdrawal.

V=Velocity and Validate
How to talk to patients

- Validation: “I know this is scary, but we’ll do this together, and I’ll support you as much as I can.”
- Autonomy: “Let’s start wherever you feel comfortable. You want to taper your fentanyl patch before your oxycodone? That’s fine.”
- Velocity: “You’ll get a say in how fast we taper. If you need to take breaks from going down, we can hang out at one dose for a couple of months, until you’re ready to continue. The important thing is not to go backwards, because you’ll lose all that hard work you put in.”
- Expectations: “Every time you decrease your dose, your pain will increase. This isn’t the pain you’ll have to live with. This also isn’t a sign of your underlying pain disorder getting worse. This is opioid-withdrawal-mediated pain. If you can just stick with it, you’ll feel better in 2-4 weeks. If you don’t, we’ll slow down the taper.”
- Outcomes: “There’s a chance your pain may actually improve off of opioids. Opioids taken every day for a long period of time can make pain worse, by changing pain perception thresholds.”

Adjunctive meds to treat withdrawal

- Antidepressants to manage irritability, sleep disturbance (e.g., trazodone)
- Hydroxyzine for insomnia and anxiety
- Anti-epileptics for neuropathic pain
- Clonidine for autonomic withdrawal symptoms such as rhinorrhea, diarrhea, sweating, tachycardia, hypertension
- NSAIDS for myalgia (e.g., ibuprofen)
- Anti-diarrheal agents for diarrhea
- Opioid Withdrawal Attenuation Cocktail (Appendix F)
- BE WARY OF BENZOS

O=OTHER TREATMENTS FOR PAIN (AND WAYS TO TALK ABOUT PAIN)

O=Other ways to talk about pain Summary points

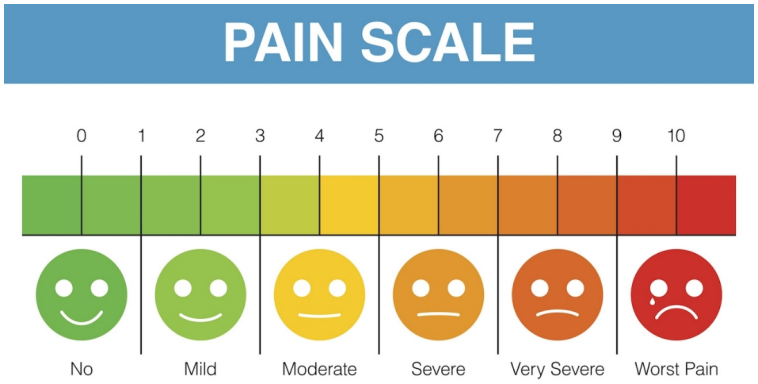
- Non-opioid medications
- Non medication treatments
- Mindfulness
- Opposite action
- Radical acceptance

O=Other ways to talk about pain Mindfulness

- Attention without judgement.
- “Acknowledge pain and notice if something in the environment is making it worse at the moment.”
- “Make adjustments.”

O=Other ways to talk about pain Opposite action

- Act opposite to the emotional urge in the service of pursing values or goals.
- “Do the opposite of dialing into pain, and instead, engage in activities, within reason, in spite of pain being present.”
- “Hurt does not equal harm.”



O=Other ways to talk about pain Radical Acceptance

- Radical acceptance is accepting reality as it is, not as we wish it would be.
- “Your pain may likely never go away, but life can still be worth living even if it includes pain.”

Sherry's story

- Sherry **continues on buprenorphine** SL 8 mg daily **two years later.**
- Overall pain is slightly improved. Function is significantly improved.

New insight, or old news?

- “Morphine is not the answer to chronic pain. Because of the development of tolerance to the analgesic effects of morphine, alleviation of pain becomes inadequate. Under such circumstances the physician, by gradually withdrawing narcotics, does not deprive the patient of any actual benefit but protects him and his family from the possible legal, social, or economic difficulties attendant on opiate addiction. The administration of morphine to a patient with chronic pain is a short-lived type of kindness. Longterm kindness would begin when opiates are withheld or withdrawn in favor of other therapeutic measures.”

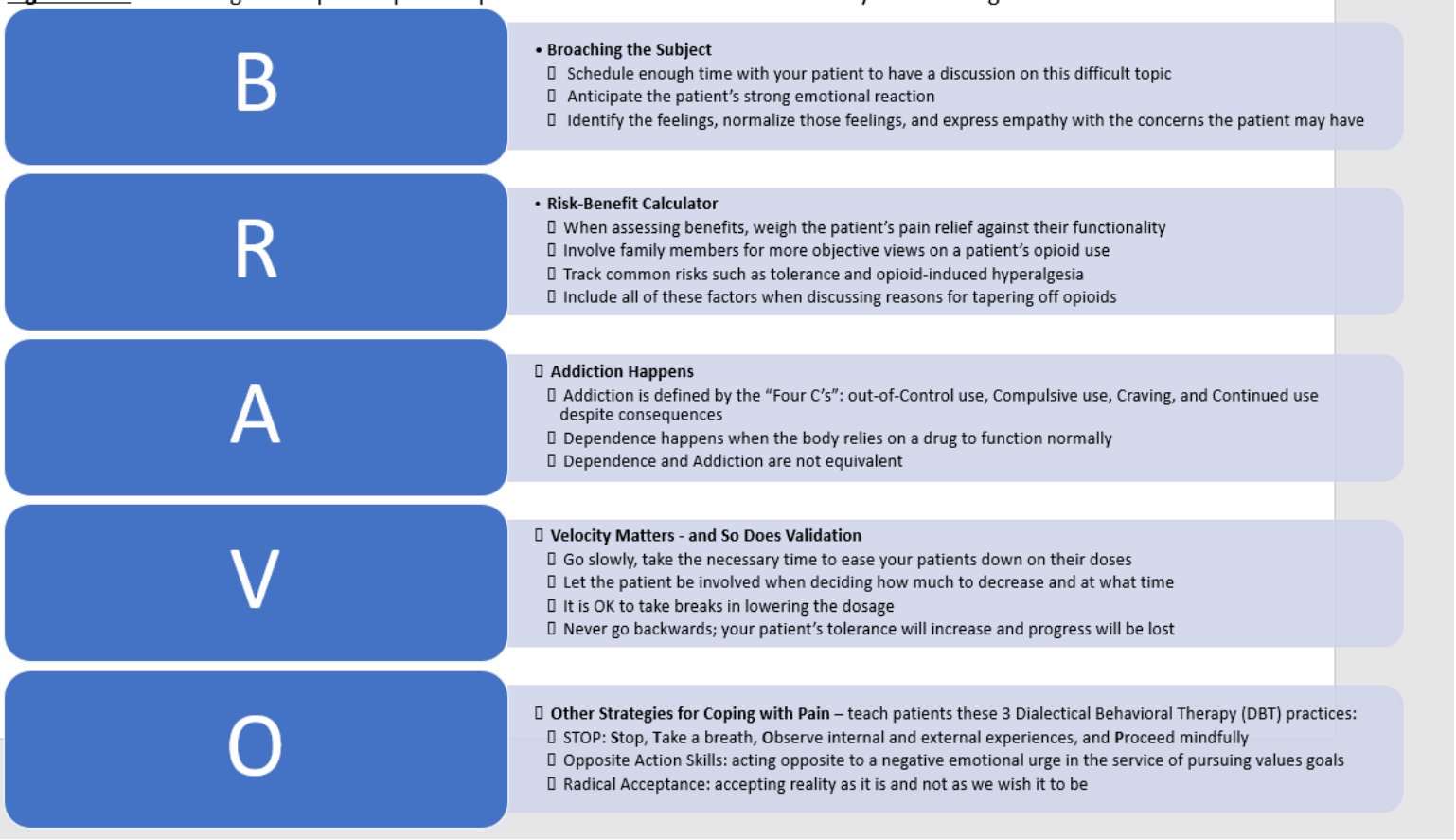
- Rayport M. “Experience in the Management of Patients Medically Addicted to Narcotics,”JAMA, 1954

More references

- Manhapra A, Arias AJ, Ballantyne JC. The conundrum of opioid tapering in long-term opioid therapy for
- Dowell D, Haegerich TM, Chou R. CDC guideline for prescribing opioids for chronic pain-United States, 2016. JAMA - J Am Med Assoc. 2016;315(15):1624-1645. doi:10.1001/jama.2016.1464
- Darnall BD, Ziadni MS, Stieg RL, Mackey IG, Kao MC, Flood P. Patient-centered prescription opioid tapering in community outpatients with chronic pain. JAMA Intern Med. 2018. doi:10.1001/jamainternmed.2017.8709
- Winnicott DW. Playing and Reality. Abingdon, Oxon: Routledge; 2012.
- Lembke A, Humphreys K, Newmark J. Weighing the risks and benefits of chronic opioid therapy. Am Fam
- Diagnostic and Statistical Manual of Mental Disorders. Washington, DC: American Psychiatric Association; 2013.
- Vowles KE, McEntee ML, Julnes PS, Frohe T, Ney JP, Van Der Goes DN. Rates of opioid misuse, abuse, and addiction in chronic pain: A systematic review and data synthesis. Pain. 2015. doi: 10.1097/01.j.pain.0000460357.01998.f1
- Porter J, Jick H. Addiction rare in patients treated with narcotics. N Engl J Med. 1980;302(2):123.
- Strang J, Babor T, Caulkins J, Fischer B, Foxcroft D, Humphreys K. Drug policy and the public good: evidence for effective interventions. Lancet. 2012;379(9810):71-83. doi:10.1016/S0140-6736(11)61674-7
- Sullivan MD, Turner JA, DiLodovico C, D'Appollonio A, Stephens K, Chan Y-F. Prescription Opioid Taper Support for Outpatients with Chronic Pain: A Randomized Controlled Trial. J Pain. 2017. doi:10.1016/j.jpain.2016.11.003

BRAVO summarized

Figure 14-4: Discussing Prescription Opioid Dependence with Patients in the Primary Care Setting



http://stan.md/taper-off-opioids