Hennepin Healthcare

Buprenorphine Initiation: Troubleshooting and Next Steps

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Disclosures

- I have no financial conflicts of interests
- I will not discuss off-label use of medications

Learner Objectives

1. Identify pharmacologic principles underlying buprenorphine initiation strategies in pregnancy
2. Recognize next steps in buprenorphine management stabilization
3. Develop mental model for troubleshooting unexpected behaviors

Buprenorphine Initiation and Stabilization

1. Start buprenorphine
2. Avoiding precipitated withdrawal
    - Managing precipitated withdrawal
3. Dose stabilization

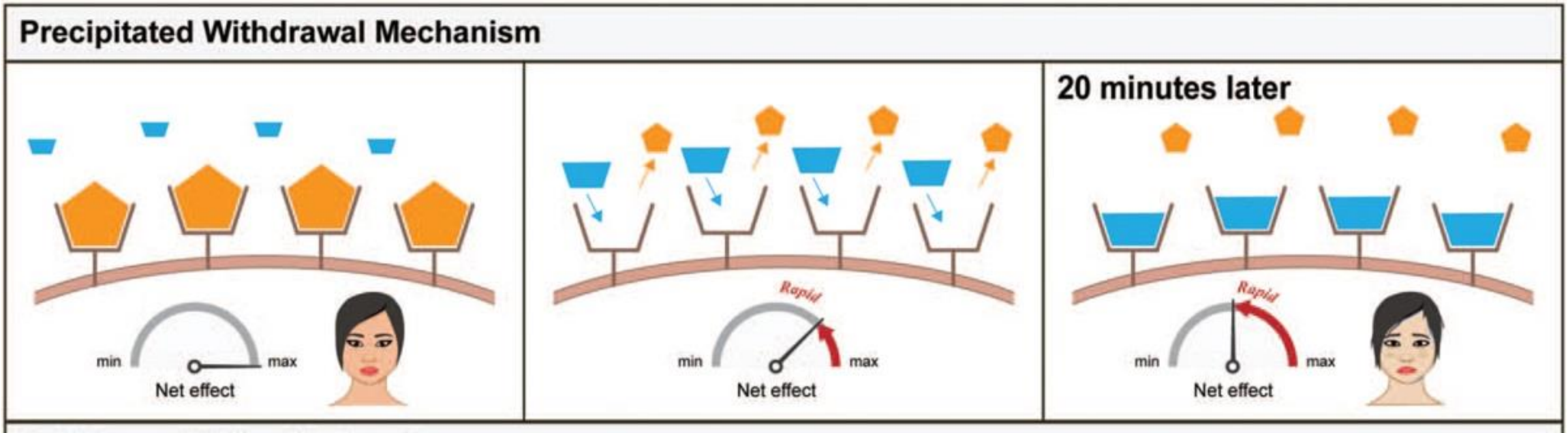
- Clinical circumstances when *outpatient* opioid withdrawal isn't tolerable/feasible:
  - Poor cardiovascular capacity
  - **Mid-late third trimester pregnancy or high-risk for premature labor**
  - Patient on high dose opioid with tolerance
  - Patient unable to tolerate withdrawal (without return to illicit use)
- Illicit drugs don't act as expected

Pharmacology Review: Precipitated Withdrawal

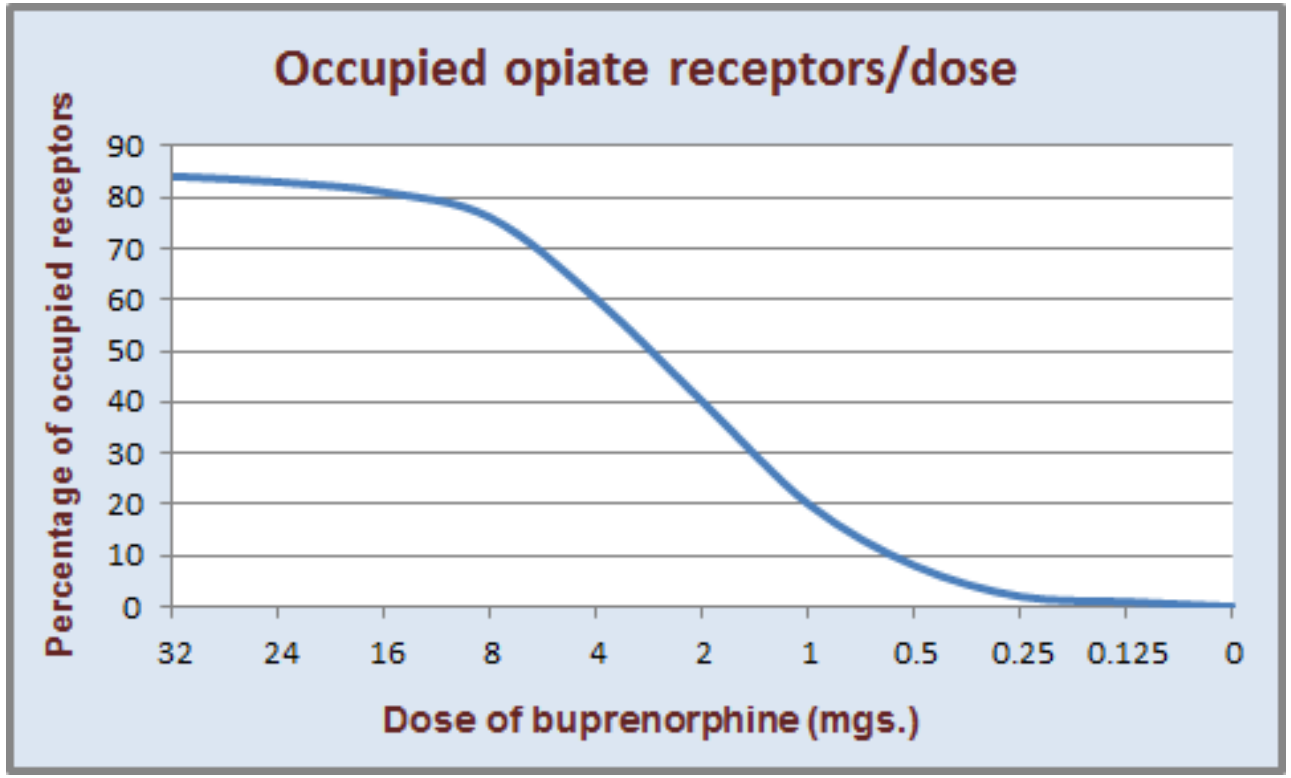
- Requires opioid tolerance
  - Reduced mu-opioid receptor (MOR) activity in several brain regions with an up-regulation in total opioid receptor number

- Rapid reduction in downstream signaling from MORs
  - Not *necessarily* introduction of buprenorphine

Pharmacology Review



Pharmacology Review: Buprenorphine



Greenwald et al, 2007; 2014

Precipitated Withdrawal Management

- Load with opioids!
- Increase activation (cell signaling) at the mu opioid receptor
  - More buprenorphine OR other full opioid agonists
- Push adjunct medications for withdrawal
  - Ondansetron, clonidine, hydroxyzine. Consider gabapentin
- Clinical setting depends on gestational age

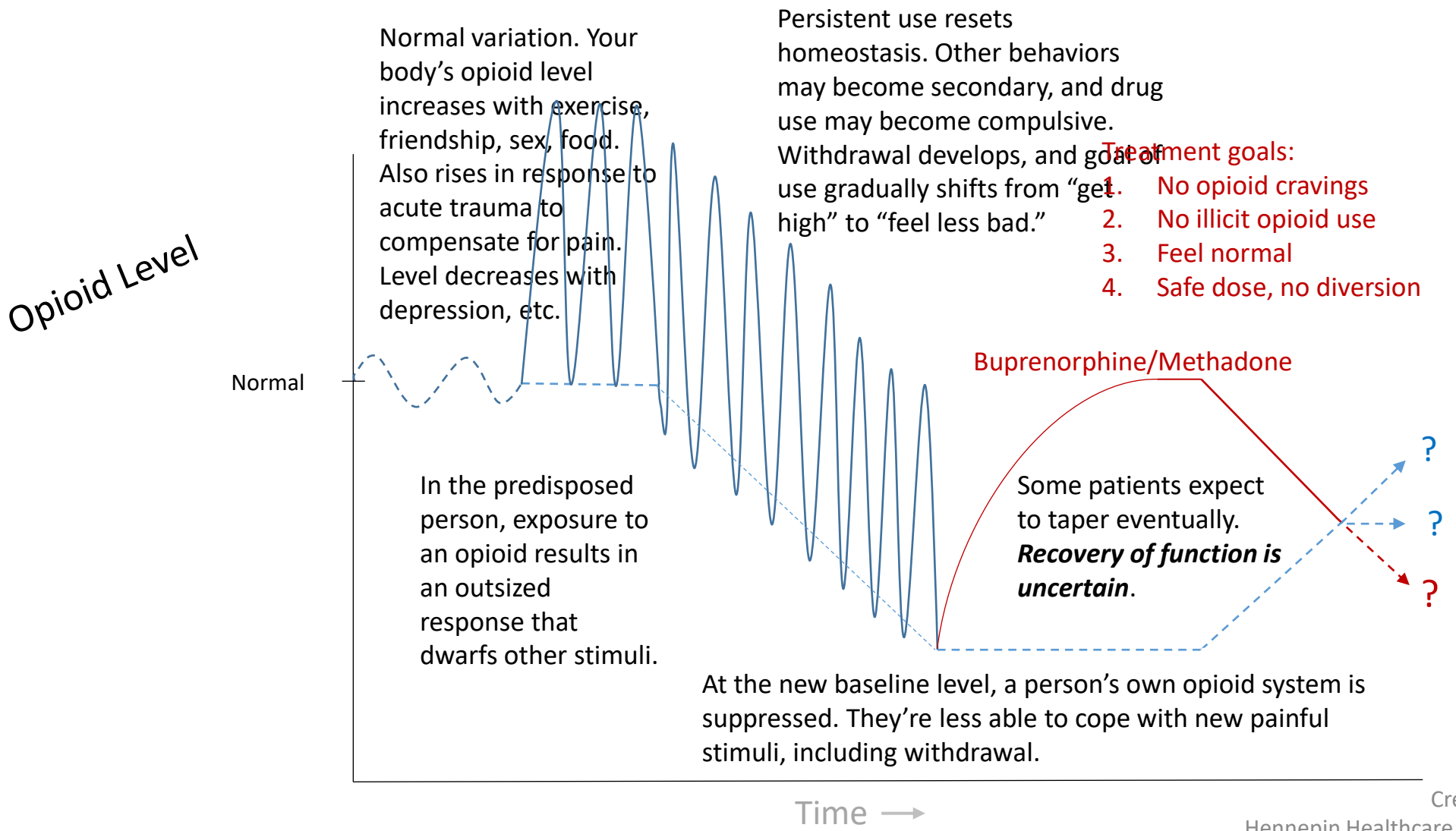
“Right” dose

- Average dose: 16mg total SL buprenorphine daily

- Treatment goals:
  - No opioid cravings
  - No illicit opioid use
  - Feel normal
  - Safe dose, no diversion

How to talk about the “right” dose?

Diagram describing impact of chronic opioid use and opioid agonist maintenance therapy



Studies suggest ***>85% of people relapse without agonist medication***. A few people do well; unfortunately, we poorly predict who, how, or when to taper successfully.

Planned tapers should include close support, and recommendation to continue buprenorphine if destabilizing symptoms arise.

Created by Brian Grahan, MD, PhD on 4/1/18
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Acute pain management

- Recall that buprenorphine displaces less potent opioids

- Use of opioids after buprenorphine won't have negative side effects
  - Buprenorphine first blocks euphoria, not necessarily analgesia
  - Analgesia from lower affinity opioids may be blocked, and higher doses of buprenorphine will block more effects

Warner et al, 2020; Quaye & Zhang, 2019

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Questions?