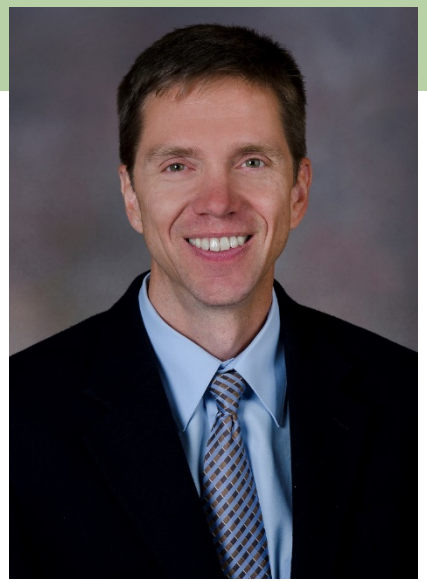
Northwest (HHS Region 10)
ATTC Addiction Technology Transfer Center Network
Funded by Substance Abuse and Mental Health Services Administration

Northwest ATTC & CTN Western States Node present:

Buprenorphine for the Treatment of Opioid Use Disorders: An Overview

P. Todd Korthuis, MD, MPH
Oregon Health & Science University
Western States Node, NIDA CTN



ADAI ALCOHOL & DRUG ABUSE INSTITUTE

Today's Presenter

P. Todd Korthuis, MD, MPH

- Professor of Medicine & Public Health at Oregon Health & Science University
  - Chief of Addiction Medicine and Program Director for OHSU Addiction Medicine Fellowship
- Co-Principal Investigator of the Western States Node of the NIDA Clinical Trials Network

Buprenorphine for the Treatment of Opioid Use Disorders, an Overview

P. Todd Korthuis, MD, MPH

November 7, 2018

Objectives

1) Understand the biological basis of medications to treat opioid use disorder.
2) Review recent data on the effects of buprenorphine on patient outcomes.
3) Introduce tools for integrating buprenorphine treatment into your current treatment setting.

Medications are Current Standard of Care for Treatment of Opioid Use Disorder

- Use of medications like buprenorphine, methadone, or naltrexone to treat opioid use disorder is now considered best practice.

- States are increasingly requiring treatment programs to offer medications for opioid use disorder (MOUD) in order to participate in Medicaid programs or SAMHSA funding.

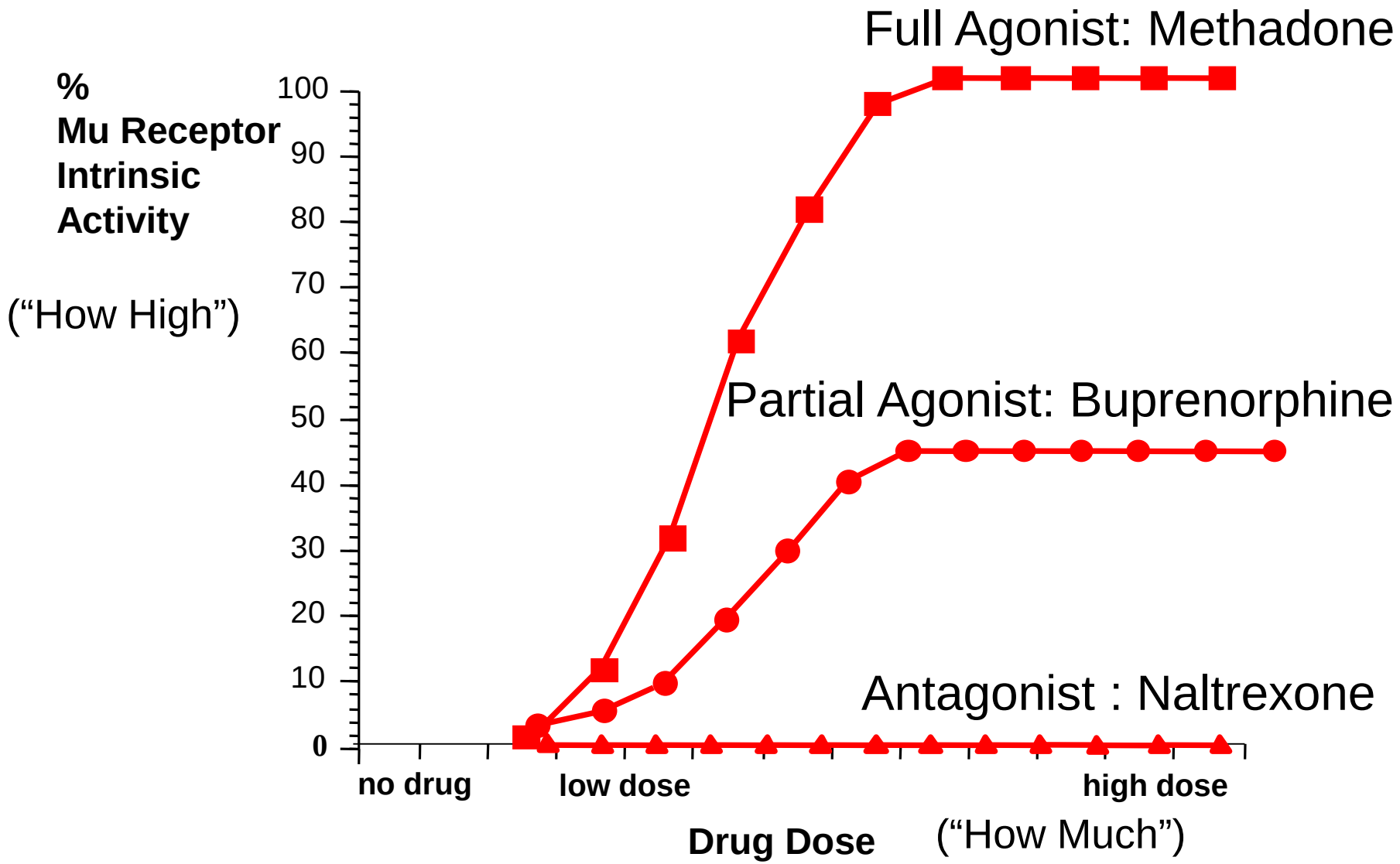
SAMHSA TIP-63
HR-6 SUPPORT Act

Limited Uptake of Buprenorphine

- Only one third of addiction treatment programs offer medications for treatment of OUD[1]
- 43% of U.S. counties have no waivered buprenorphine prescriber[2]
  - Many waivered providers don't prescribe
- Barriers to adoption include:[3]
  - Lack of belief in agonist treatment
  - Lack of time for new patients
  - Belief that reimbursement rates insufficient

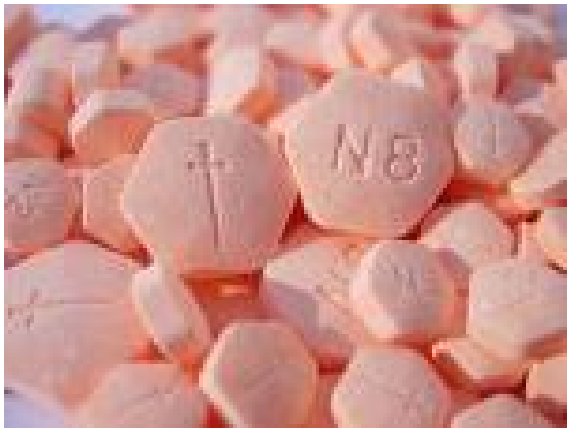
[1] Knudsen HK, J Addict Med 2011
[2] Stein BD, Milbank Quarterly 2015
[3] Huhn AS, JSAT 2017

Medications for Opioid Use Disorder



Buprenorphine/naloxone
(4:1 combination)

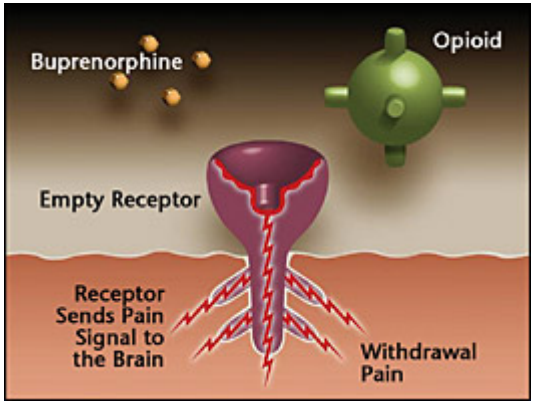
- Partial opioid agonist
  - Decreased overdose risk
- Naloxone inactive unless injected –then precipitates withdrawal
  - Decreased abuse risk
- Sublingual, once daily
  - Safe for flexible dosing

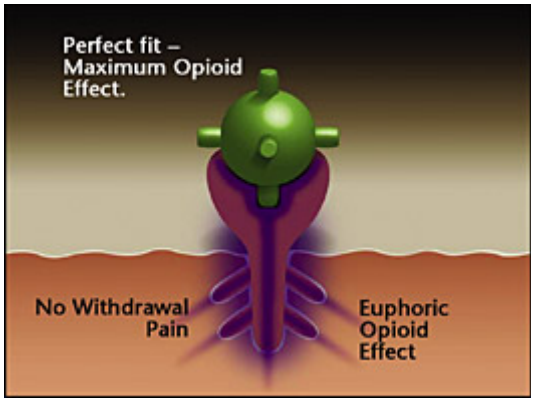


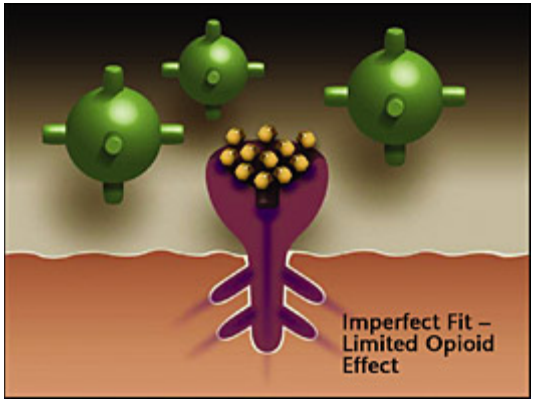
2mg/0.5mg

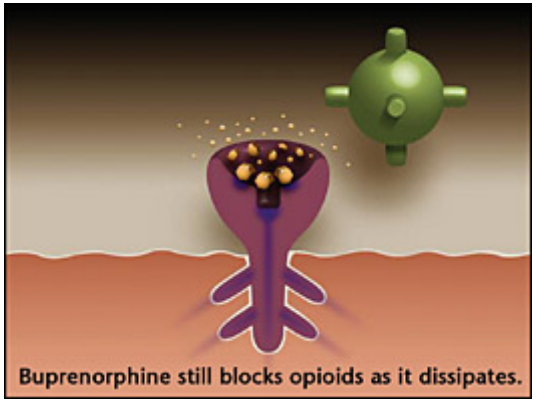
8mg/2mg

How Does Buprenorphine Work?



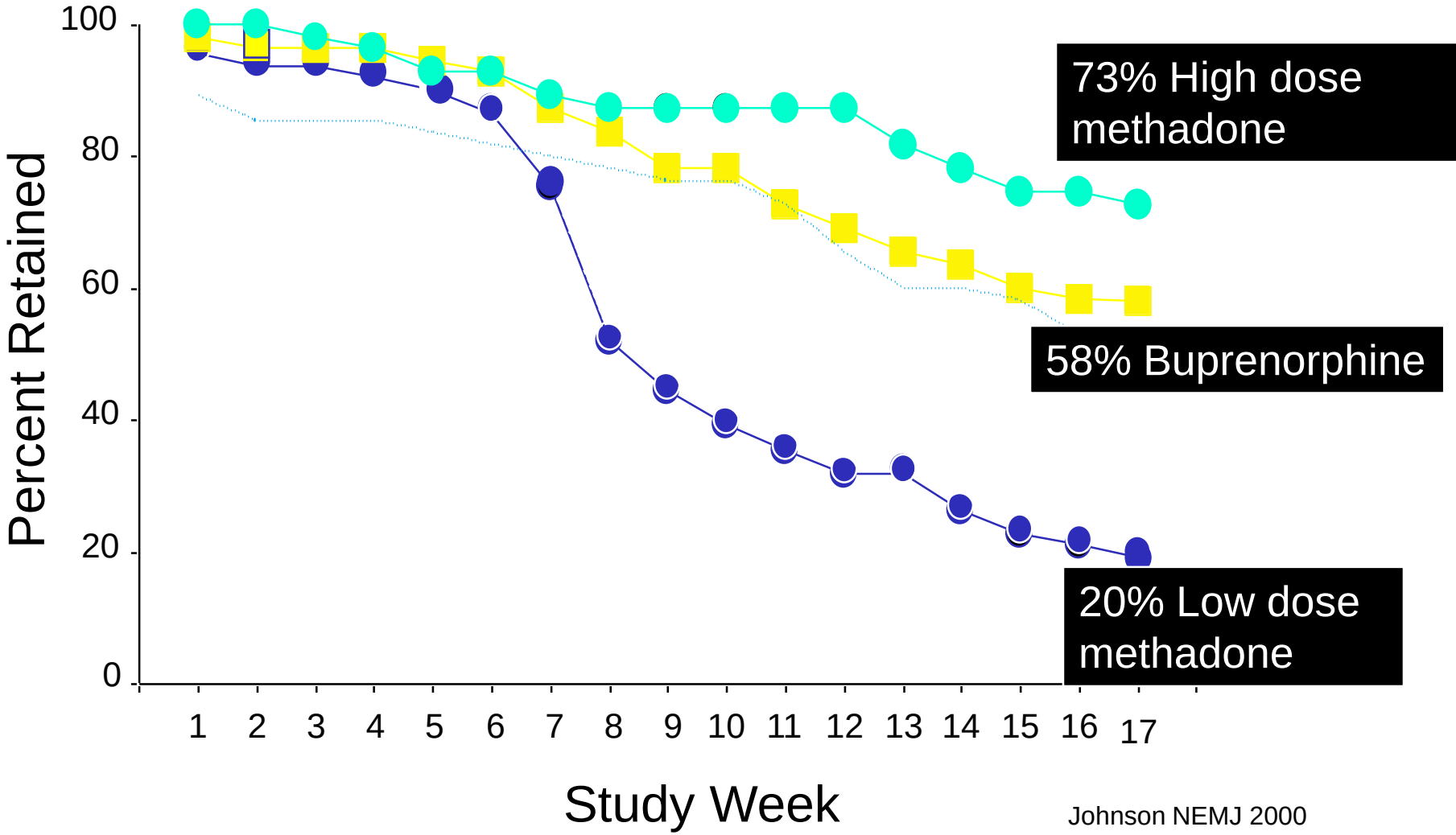






Buprenorphine vs. Methadone

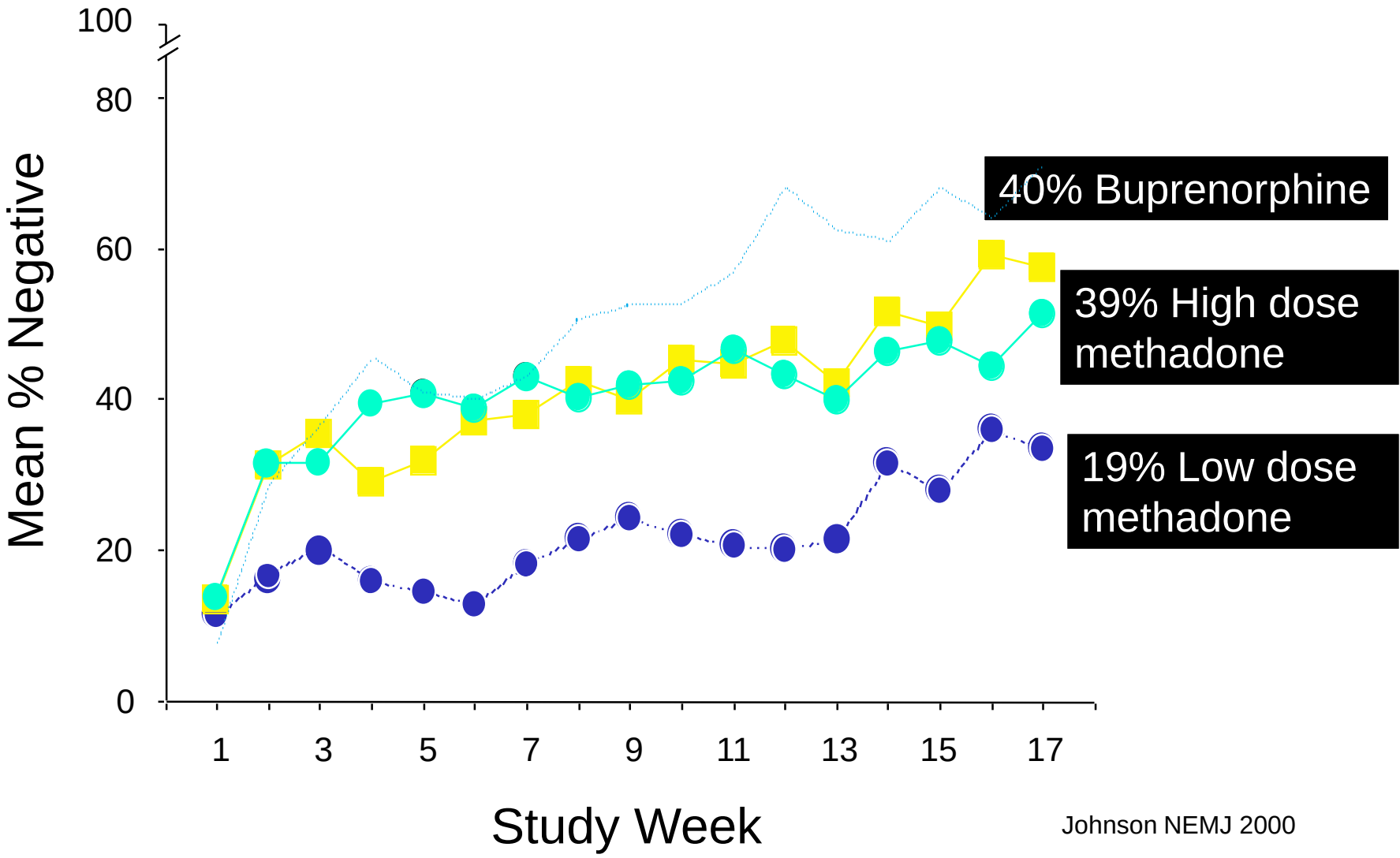
Treatment Retention



Johnson NEMJ 2000

Buprenorphine vs. Methadone

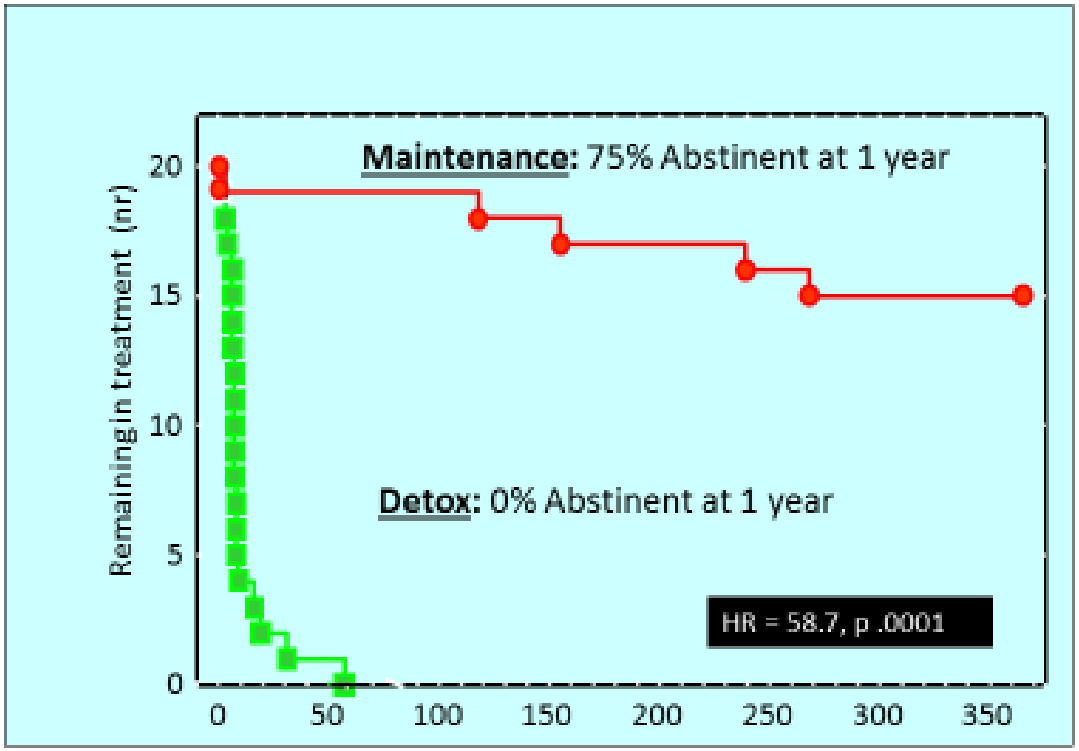
Opioid Urine Results



Johnson NEMJ 2000

Buprenorphine Maintenance is Effective… Detox Is Not

Treatment Retention:
Buprenorphine Detox vs. Maintenance



Kakko, Lancet 2003

Deaths:

0% Maintenance

20% Detox

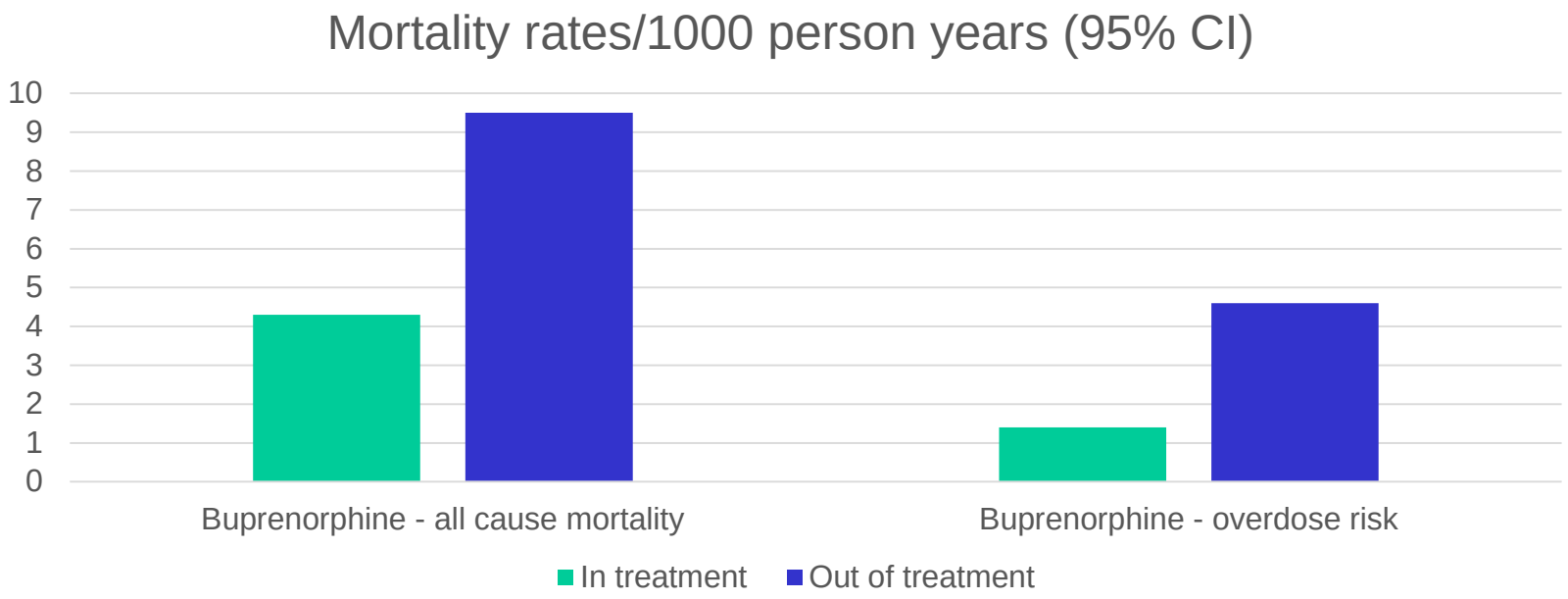
Detox vs. Maintenance:
Which is Better?

- Multi-site trial of buprenorphine/nx for 653 prescription opioid-dependent patients in 10 primary care clinics
- Detox phase followed by maintenance phase for those who relapse
- “Success” = minimal or no use on UDS & self-report

Success at 12 Weeks:	
Detox Phase:	**6.6%**
Maintenance Phase:	**49.2%**

[1] Weiss Arch Gen Psych 2011

Mortality Risk During and After Buprenorphine Treatment



Sordo, BMJ 2017

Tools for Implementing Buprenorphine Clinical Practice

Updated OUD Treatment Guidelines

Integrating Buprenorphine into Clinical Practice

- Preparing the Whole Team
  - Front desk/phone room staff
  - Medical assistant
  - Nurse
  - Physicians
  - Counselor
  - Clinic medical director
- Designate a coordinator (“the glue person”)
- OK to start small and slow -- just start!

Essential Treatment Team Training

Goal: Develop Shared Philosophy and Scope

- Recognizing & monitoring withdrawal symptoms (vs. “acting out”)
- Importance of timely buprenorphine refills
  - (vs. “we’ll let the provider know…”)
- Embrace substance use disorder as medical condition (vs. moral failure)
- Urine toxicology screening as medical safety, (vs. policing activity)
- Relapse is common and does not equal failure
  - Goal is to limit duration and build on success
- Timing of buprenorphine induction

Who Does What?

- Front desk/phone room staff
  - Scheduling, face/voice of practice
- Medical assistant or Nurse
  - Measure COWS during induction; collect/run UDS; PDMP checks
- Primary care provider
  - Confirm DSM-5 diagnosis, assess comorbid conditions, monitor progress
- Counselor
  - Behavioral counseling, monitoring
- Clinic medical director
  - Ensure protocols

Prior to Induction

- Counsel patient on
  - Alternatives
  - Induction timing
  - Precipitated withdrawal
  - Need for behavioral treatment
- Treatment agreement
- Labs:
  - UDS, HIV, HCV, HBV, HCG, liver enzymes
- Write prescription

Timing of Buprenorphine Induction

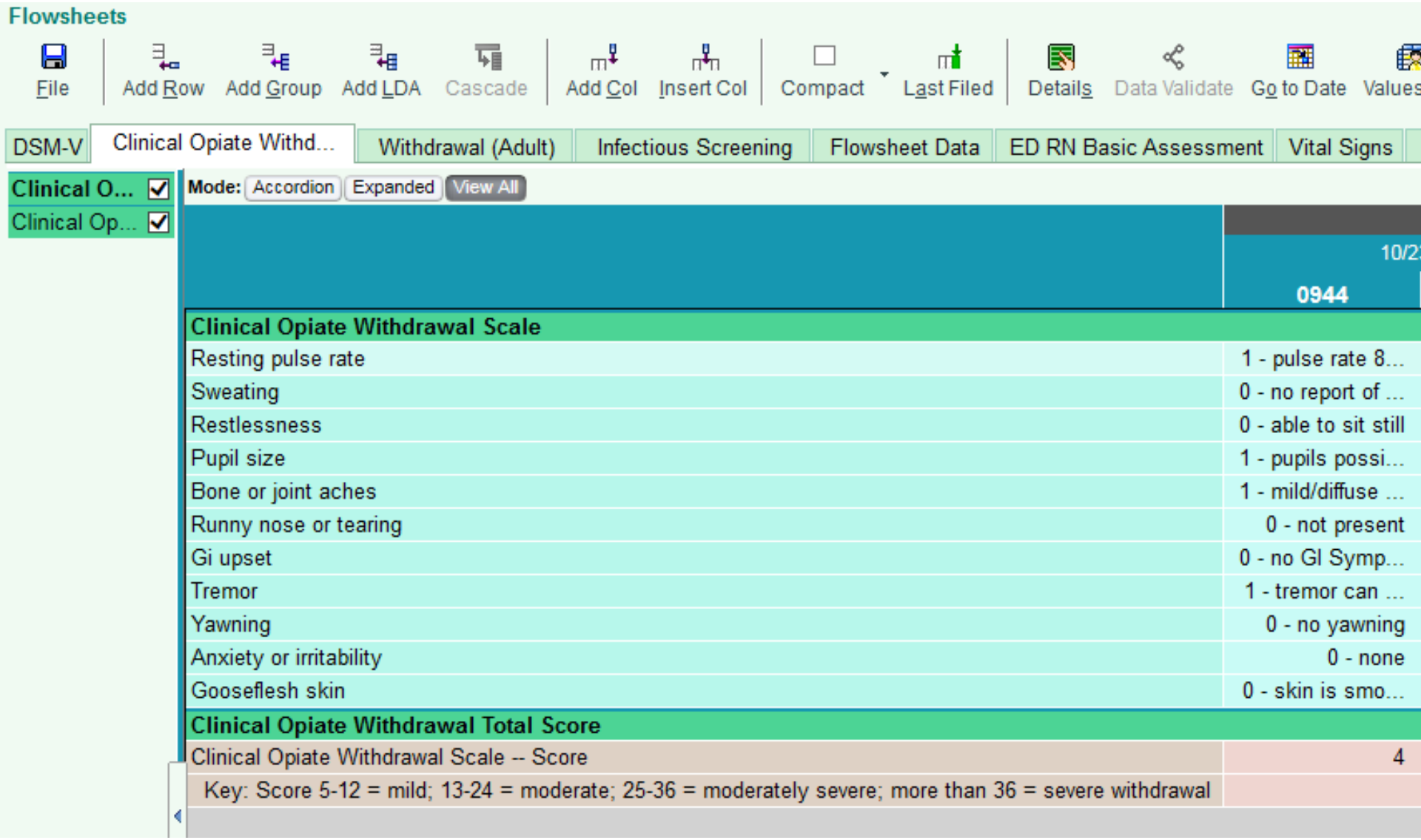
- Schedule patient for induction soon after intake visit
- Must be in at least mild-to-moderate opioid withdrawal in order to begin induction
  - The more severe the withdrawal, the greater the relief
- Withdrawal symptoms typically begin
  - 12-24 hours after last dose of a short-acting opioids like heroin
  - 2-4 days after last dose of long acting opioids like methadone

Clinical Opioid Withdrawal Scale (COWS)

Rates 11 Withdrawal Symptoms:

- Resting pulse rate
- Sweating
- Restlessness
- Pupil size
- Bone or joint aches
- Runny nose
- GI upset
- Tremor
- Yawning
- Anxiety or irritability
- Goose bumps

- Guides timing of first dose of buprenorphine
- Typically safe to give 1st dose when COWS > 8



<u>Withdrawal severity:</u>

Mild 5-12; Moderate 13-24; Moderately severe 25-36; Severe >36

Buprenorphine/Naloxone Treatment Phases

- Induction (1-3 days)
  - Must be in moderate withdrawal
  - Start with 4mg and gradually increase
  - Titrate to effect (average dose 16mg)
- Stabilization/Maintenance
  - Combine with random UDS & counseling, if available
    - Lack of counseling shouldn't prevent treatment
    - Provider medical management as "counseling"
  - Patients typically continue buprenorphine for years

SAMHSA, *Medications for Opioid Use Disorder.* Treatment Improvement Protocol (TIP) Series 63; 2018. Available at https://store.samhsa.gov/product/SMA18-5063FULLDOC

Induction & Stabilization Dosing Schedule

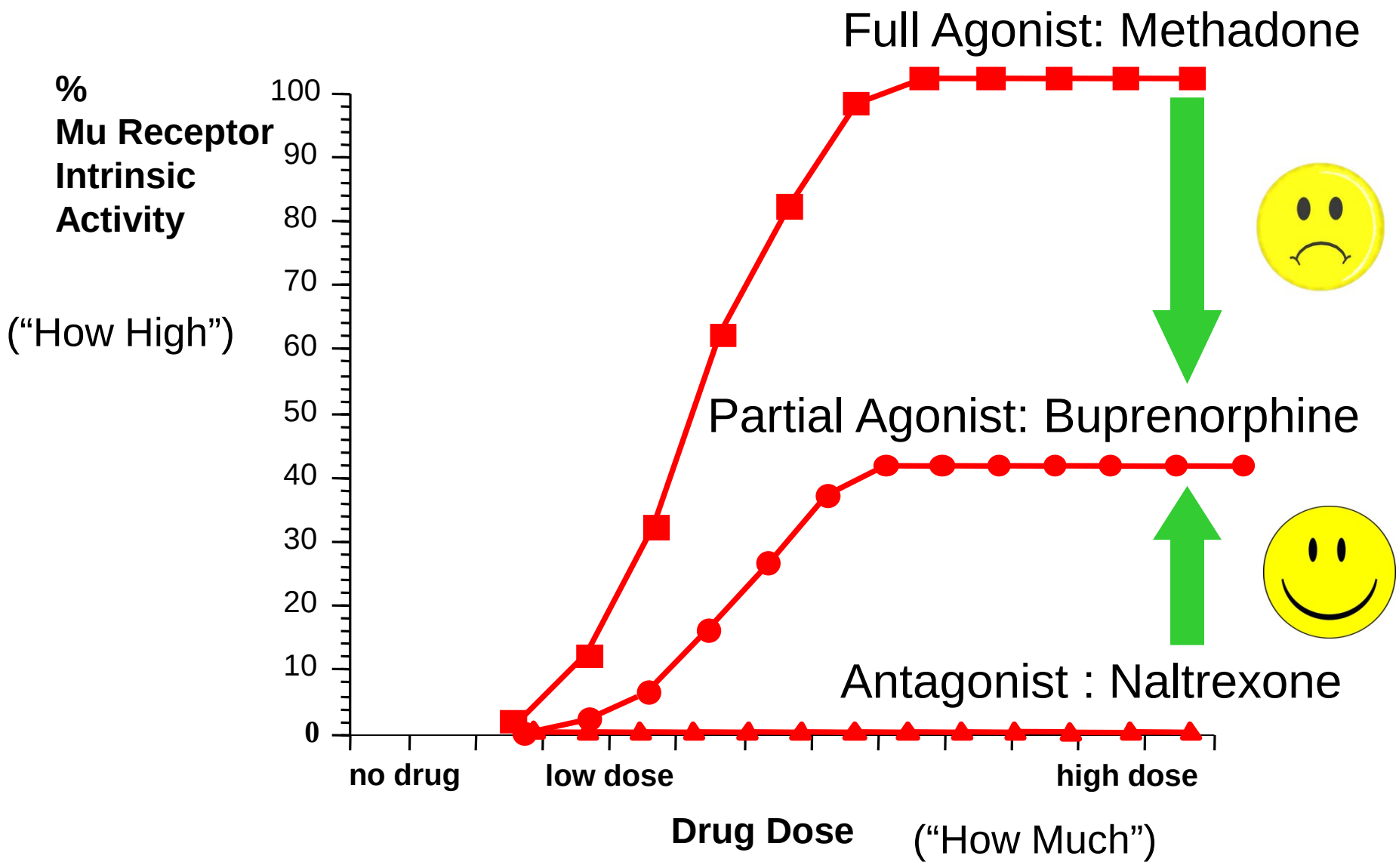
Tailor to Patient

	Suggested Dosing*	Maximum Dose*
Day 1	2-4mg (wait 45 min) + 4mg if needed	8-12mg
Day 2	Day 1 dose + 4mg if needed (single dose)	12-16mg
Day 3	Day 2 dose + 4mg if needed (single dose)	16mg
Day 3-28	May increase dose 4mg per week, if needed (single dose)	24mg

*Suboxone equivalents dose:
8mg Suboxone = 5.7mg Zubsolv, 4.2mg Bunavail

SAMHSA, *Medications for Opioid Use Disorder.* Treatment Improvement Protocol (TIP) Series 63; 2018. Available at https://store.samhsa.gov/product/SMA18-5063FULLDOC

Avoiding Precipitated Withdrawal



Management of Precipitated Withdrawal

- If a participant develops signs or symptoms of opioid withdrawal after dosing with buprenorphine, the medical clinician can:
  - Administer non-narcotic medications that provide symptomatic relief
  - Increase the dose of BUP/NX to overcome withdrawal symptoms

Typical Office-Based Treatment Schedule

A Rough Guide—Tailor to Practice & Patient

	Before Induction	Induction (Days 1-3)	Month 1	Month 2	Month 3 and after
Prior auth	X				
Treatment Agreement	X				
Clinic Visit	X	2x/week	Weekly	Every 2 weeks	Every 4 weeks
Counseling	X		Weekly	Every 2 weeks	Every 4 weeks
Refill	-	1-3 day supply	7 day supply	14 day supply	28 day supply
UDS	X	X	weekly	every 2 wks	monthly
Labs	X (HIV, HCV, HBV, urine HCG)				
PDMP	X (then with refills at least monthly)				

- Very stable patients often require less frequent visits & UDS
- Recurrence of use reverts to Month 1 schedule until stable again

Timing of Buprenorphine Induction

- Schedule patient for induction soon after intake visit
  - Or provider education on home induction
- Must be in at least mild-to-moderate opioid withdrawal in order to begin induction
  - The more severe the withdrawal, the greater the relief
- Withdrawal symptoms typically begin
  - 12-24 hours after last dose of a short-acting opioids like heroin
  - 2-4 days after last dose of long acting opioids like methadone

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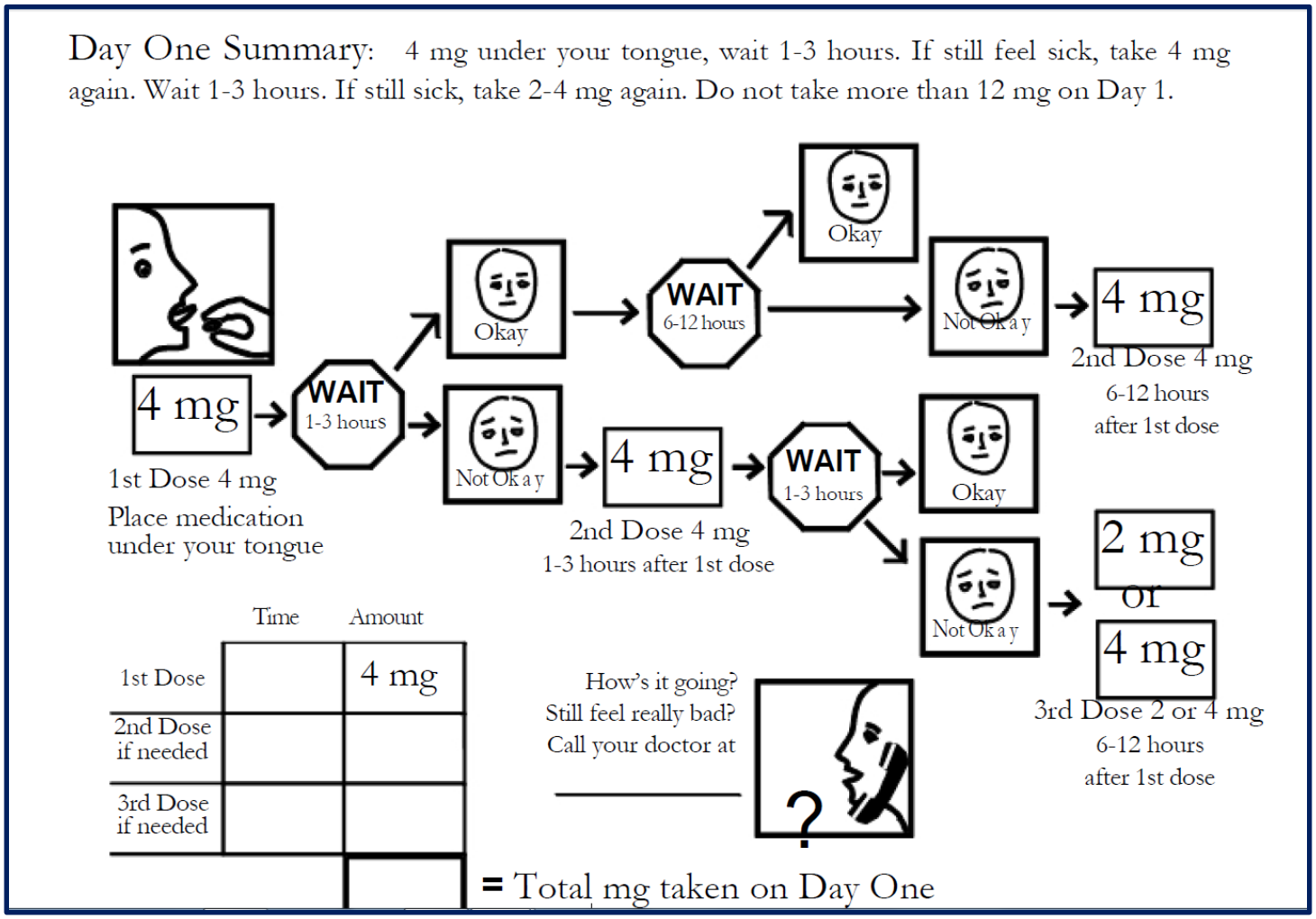
Home Induction

- Office-based induction can be a barrier to initiation
- Pilot trials of home vs. office-based inductions demonstrate comparable retention rates and safety
- Patient selection:
  - Understands induction process
    - Prior bup experience predicts success
  - Can contact provider for problems
- Provider available for phone consultation

Lee, JD, JAM 2014
SAMHSA, TIP-63

Home Induction Hand-Out



Lee, J. D., Vocci, F., & Fiellin, D. A. (2014). *Journal of Addiction Medicine, 8*(5), 299–308.

When Patients Misuse or Divert

- Stress willingness to continue working together, and…
- Consider higher level of care
  - Increase visit frequency?
  - Referral for dispensary-based buprenorphine/methadone?
  - Referral for residential treatment?

  (but…make sure “higher level of care” ≠ “no care”)
- Consider switch to long-acting naltrexone or buprenorphine

Provider Implementation Resources

- USCF Substance Use Consultation “Warm Line”
  - (855) 300-3595; Mon-Fri, 10:00am-6:00pm ET
- Provider Clinical Support System (PCSS)
  - https://pcssnow.org/
- STR-Technical Assistance – Practice & systems mentoring
  - https://www.getstr-ta.org/
- ECHO – Provider mentoring
  - https://echo.unm.edu/opioid-focused-echo-programs/
- SAMHSA, *Medications for Opioid Use Disorder.* Treatment Improvement Protocol (TIP) Series 63; 2018. Available at https://store.samhsa.gov/product/SMA18-5063FULLDOC

Q&A

Questions? Please type them in the chat box!